Schools : eighth report from the Select Committee on Estimates together with the Minutes of Evidence taken before Sub-Committee E and Appendices, Session 1952-1953.

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EIGHTH REPORT

FROM THE

SELECT COMMITTEE ON ESTIMATES

TOGETHER WITH THE MINUTES OF EVIDENCE TAKEN BEFORE SUB-COMMITTEE E AND APPENDICES

Session 1952—1953

4

SCHOOLS

Ordered by The House of Commons *to be Printed*
20th May 1953

LONDON
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NOTE

This edition contains the following correction to Annex 9 of the Report as first issued—

Page 223, section III 4, line 3:—

As first printed:— "are unable to obtain"

Now corrected to read:— "are able to obtain"

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Session 1952—1953

SCHOOLS

Ordered by The House of Commons *to be Printed*
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Monday, 10th November, 1952

Ordered, That a Select Committee be appointed to examine such of the Estimates presented to this House as may seem fit to the Committee, and to suggest the form in which the Estimates shall be presented for examination, and to report what, if any, economies consistent with the policy implied in those Estimates may be effected therein:—

Ordered, That the Committee do consist of Thirty-six Members.

The Committee was accordingly nominated of:—Mr. *Albu*, Mr. *Anstruther-Gray*, Mr. *Blackburn*, Mr. *Bossom*, Mr. *Dryden Brook*, Miss *Burton*, Mr. *Norman Cole*, Viscountess *Davidson*, Mr. *Donner*, Sir *Ralph Glyn*, Sir *Fergus Graham*, Mr. *Hobson*, Lord *John Hope*, Mr. *H. Hynd*, Mr. *A. J. Irvine*, Mr. *T. W. Jones*, Mr. *James Johnson*, Mr. *MacColl*, Mr. *Malcolm MacPherson*, Major *Markham*, Mr. *Mulley*, Mr. *Godfrey Nicholson*, Mr. *Nigel Nicolson*, Mr. *Ian L. Orr-Ewing*, Mr. *Peyton*, Brigadier *Peto*, Sir *Leslie Plummer*, Mr. *Profumo*, Mr. *William Ross*, Mr. *Norman Smith*, Mr. *G. P. Stevens*, Mr. *Summers*, Mr. *Wade*, Miss *Ward*, Mr. *Ian Winterbottom* and Mr. *Yates*.

Ordered, That Seven be the Quorum of the Committee.

Ordered, That the Committee have power to send for persons, papers, and records, to sit notwithstanding any Adjournment of the House; to adjourn from place to place; and to report from time to time.

Ordered, That the Committee have power to appoint Sub-Committees and to refer to such Sub-Committees any of the matters referred to the Committee.

Ordered, That Three be the Quorum of every such Sub-Committee.

Ordered, That every such Sub-Committee have power to send for persons papers and records; to sit notwithstanding any Adjournment of the House; and to adjourn from place to place.

Ordered, That the Committee have power to report from time to time Minutes of Evidence taken before Sub-Committees.—(Mr. *Kaberry*.)

Friday, 27th November, 1952

Ordered, That Mr. *Profumo* be discharged from the Select Committee on Estimates; and that Mr. *William Shepherd* be added to the Committee.—(Mr. *Wills*.)

Tuesday, 28th April, 1953

Ordered, That Lord *John Hope* be discharged from the Select Committee on Estimates; and that Mr. *Ormsby-Gore* be added to the Committee.—(Mr. *Wills*.)

The cost of preparing for publication the Shorthand Minutes of Evidence taken before Sub-Committee E was £219 3s. 9d.

The cost of printing and publishing this Report is estimated by H.M. Stationery Office at £899 0s. 0d.

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MINUTES OF EVIDENCE TAKEN BEFORE SUB-COMMITTEE E

Wednesday, 10*th December*, 1952

MINISTRY OF EDUCATION—

Mr. G. N. Flemming, C.B., Mr. B. L. Pearson, C.B., D.S.O., M.C., and Mr. D. M. Nenk 1

Wednesday, 17*th December*, 1952

SCOTTISH EDUCATION DEPARTMENT—

Sir William Murrie, K.B.E., C.B., Mr. A. G. Rodger, O.B.E., and Mr. R. S. Morton ... ...

Wednesday, 11*th February*, 1953

ASSOCIATION OF EDUCATION COMMITTEES—

Dr. W. P. Alexander and Mr. Stanley Hirst 30

Wednesday, 18*th February*, 1953

NATIONAL UNION OF TEACHERS—

Mr. E. Britton, Mr. W. Griffith and Mr. R. G. K. Hickman 48

EIGHTH REPORT

The Select Committee appointed to examine such of the Estimates presented to this House as may seem fit to the Committee, and to suggest the form in which the Estimates shall be presented for examination, and to report what, if any, economies consistent with the policy implied in those Estimates may be effected therein, have made further progress in the matters to them referred, and have agreed to the following Eighth Report:—

SCHOOLS

INTRODUCTION

1. Your Committee have examined the Estimates for public education in England, Wales and Scotland (Civil Estimates, 1953-54, Class IV, Vote 1 (Ministry of Education) and Class IV, Vote 13 (Public Education, Scotland)). The gross Estimates amount to £244,593,292 for England and Wales, of which 84 per cent. is for grants to local education authorities, and £33,971,942 for Scotland, of which 90 per cent. is for the general aid grant; it is these amounts, totalling respectively £204,720,000 and £30,441,842, which reflect most directly the money which is being spent on schools and services associated with public education.

2. The net education Estimates amounted to £258,576,934. Grant is paid to the local authorities to the extent of 60 per cent. of their approved expenditure; the remainder is borne on the rates.

3. Your Committee have heard evidence from the Ministry of Education, the Scottish Education Department, the National Union of Teachers, the Educational Institute of Scotland, the Association of Education Committees, the Association of County Councils in Scotland, the Scottish Counties of Cities Association, the London County Council, the Birmingham Corporation, the Manchester Corporation, the Cardiff Corporation, the Hertfordshire County Council, the Warwickshire County Council and the National Federation of Building Trades Employers. Members of Your Committee have visited schools at Coventry, Manchester and Slough and the new secondary modern school at Wokingham, Berkshire, while it was in the course of construction.

4. Your Committee were confronted with the possibility of examining every aspect of education in Great Britain, except University education. They considered this to be a task far beyond the time at their disposal, and preferred to concentrate on a few major problems. They therefore turned their attention to schools and immediately found themselves faced with a most disquieting situation.

5. The background to any educational enquiry is naturally the Education Act of 1944 and its Scottish counterpart of 1945, which was consolidated in the Act of 1946. Before these Acts were passed, school conditions were described in 1942 in the following terms*:

> "The full-time schooling of the children of our country is in many respects seriously defective. It ends for some 90 per cent. of them

* Education, 1900–1950. The Report of the Ministry of Education and the statistics of public education for England and Wales for the year 1950. (Cmd. 8244.)

far too soon (fourteen). It is conducted in many cases in premises which are scandalously bad."

6. The Acts of 1944 and 1946 were designed to end this unsatisfactory state of affairs and children from the ages of five to fifteen were to be assured of a high standard of free education in schools which would be light, airy and educationally efficient. No new schools had been built during the war and there were many unsatisfactory school buildings, particularly in districts from which bombing had driven the population or which were scheduled for slum clearance: the families affected were to be housed on new estates where the schools would be new and modern and overcrowding would be unknown.

7. Education, though compulsory only between the ages of five and fifteen would not, of course, begin and cease at those ages since there were to be the nursery schools for children under the age of five and many more facilities for further education than had been known before for those of fifteen and over. Great expectations lay in recruiting teachers as soon as war ended and demobilisation began because, of course, a great many teachers would be required in the new primary and secondary schools.

8. It was against this background that Your Committee began their enquiry, only to find that the real situation was vastly different from what had been hoped. At every point they were confronted with overcrowding, lack of schools, heavy transport costs, a shortage of teachers and often rapidly deteriorating and even dangerous school buildings. The Acts of 1944 and 1946 took into account the conditions prevailing at the time but the imminent events which were to change the whole position could not have been foreseen. These later factors have affected the situation profoundly and Your Committee have had to bear them constantly in mind; for this reason, it is important, as well as convenient, to mention them now. They are:—

(i) The high birth rate between 1944 and 1948 which has swollen the population in primary schools beyond what may be regarded as an average annual expectation. This increased number of children will soon be entering secondary schools which, with their requirement for smaller classes, will experience even greater difficulties than the primary schools have done. — Annexes 1, 2, and 9. Qs. 210, 787, 889, 933, 950–3. Qs. 141, 603, 637–40, 1268.

(ii) The general shortage of materials and labour which have proved far worse over a longer period than had been foreseen in 1945.

(iii) The impact made by the defence programme upon the supply of materials and labour. — Qs. 690, 852.

(iv) The competing demands upon materials and labour made by the housing programme which, in their present expanding form, make it difficult for schools to keep pace with houses in spite of evidence before Your Committee which clearly stated that "it is the policy of the Government that the school building programme should, in general, keep pace with the housing programme". — Q. 420. Annex 2.

(v) The cuts in capital expenditure made in 1951 and the subsequent three months moratorium, which undoubtedly had an adverse effect on the school building programme. — Annexes 1 and 5. Q. 1984.

schools in an even reasonable state of repair; Your Committee were told of one case where it would be impossible to decorate or paint even one out of 257 schools, and another authority stated that it needed £125,000 for sanitary expenditure alone to remove "what are practically scandalous conditions in a number of schools".

Annex 10. Qs. 1739–40. Qs. 797, 800.

14. Another factor is the provision under the Act of 1944 whereby voluntary schools can choose controlled status; those which so choose become the responsibility of the local authority, and their buildings are often found to be in a very bad state of repair. This was often the result of air-raids and the use of the buildings for civil defence and other purposes, of wartime difficulties over painting and repair, and of uncertainty on the part of managers about their obligations and the future of their schools under the new Act. In Warwickshire, the local authority has benefited from acquiring such schools. In urban areas the effect is usually to add an enormous extra burden to an already overloaded programme of repair and maintenance. The situation has, in effect, got beyond the control of local authorities because of financial stringency.

Annexes 9 and 10. Qs. 1691, 1874, 1907.

Q. 798.

15. Your Committee had hoped to get detailed information about old schools throughout the country from the Ministry of Education, where such information should reside, but the Ministry witnesses were unable to give it. They agreed that the problem was enormous, "so big we have not got the measure of it", that it was of direct concern to them and that the neglect of adequate repairs may be a false economy.

Qs. 1937, 1945, 1947–61.

Qs. 1889, 1897, 1903, 1905, 1907.

16. Despite the Ministry's evidence, Your Committee are convinced that a national survey of the older schools in the country should be undertaken by the Ministry of Education. This would seem to amount to no more than a careful collation of up-to-date information which can readily be obtained from local education authorities. They therefore recommend that this survey should be undertaken at once.

Qs. 1887–1963.

17. On the basis of a formula allowing 9s. per head of average attendance plus £25 per school, the Ministry of Education make an allocation of money to each authority for the purpose of minor building work, which may produce additional school places or effect essential improvements, subject to a limit of £6,500 for each project. In practice, this formula, which by its very nature is inflexible, does not meet the needs of the situation and is an unsatisfactory basis for additional allocation. For example, Your Committee heard evidence concerning three large urban areas, London, Birmingham, and Manchester.

Annex 9. Q. 969.

Qs. 744–5.

Qs. 895, 1735, 1916–20, 1924–7.

(1) For 1953-54, London, on the basis of the formula, should receive £217,925. This has been increased by the Minister to £300,000 no doubt on representations by the local authority and for purposes which Your Committee do not for one moment doubt are urgent and fully justified.

Annex 9.

(2) Birmingham, again on the basis of the formula, should receive about £80,000 but, in the words of a witness it gets "something of the order of £140,000".

Qs. 796–7.

(3) Manchester is entitled to £43,000 and has received this amount and no more. It is possible, perhaps probable, that more would have been granted if application had been made and the evidence reveals why they did not do so.

Qs. 1703–6. Qs. 1723–4, 1736–7.

There is a high degree of luck in the allocation of these sums and Your Committee think that a more equitable system could be devised. One local authority, for instance, may be in the fortunate position of no longer needing additional classrooms and extensions and can spend the whole of their allocation on improvements. Another and comparable authority may need to spend the whole of their allocation on providing more school places, while watching their old schools falling into conditions of still greater disrepair, and they will eventually have to spend on them much more money than would have been necessary originally. Qs. 1916–20, 1924–7. Qs. 1923, 1930.

18. Conflicting evidence, regarding the use of money for minor building work, has been submitted to Your Committee. They were reassured to hear, at the end of their inquiry, that, in fact, it has never been the intention on the part of the Ministry of Education to limit expenditure to work which would provide additional places. This being so, Your Committee recommend that careful consideration be given by the Ministry to the condition of old schools throughout the country and that they should consider the wisdom of restricting next year's minor building expenditure to works solely related to improvements. For this purpose they will need the survey referred to earlier in paragraph 16. Moreover, it may well be necessary to increase the limit of £6,500 for a single project. Money spent at this stage will, in the opinion of Your Committee, effect considerable saving in the future and result in economy for the central government as well as benefiting local ratepayers. Annexes 9 and 10. Qs. 402–3, 803, 1710, 1718–20, 1910, 1930.

Scotland

19. There are thoroughly unsatisfactory old schools in Scotland, as well as in England and Wales. There is no formula system, as in England and Wales, which provides a basis for allocating money for minor building projects. Allocation is made to local authorities by the Scottish Education Department according to need although the resources available cannot, of course, meet the demands made upon them. Annex 4. Q. 243. Qs. 1126–7. Q. 1123.

20. Of the current year's allocation of £7,000,000 for all school building purposes, £1,500,000 or 21½ per cent. will be spent on repairs and maintenance, including improvements which may result in additional school places; last year an equally high percentage of the total allocation was devoted to this purpose. This money is allocated according to need and the initiative comes from the local authorities; even if they cannot always receive all that they would wish to have at least no money goes where it is not strictly needed for repairs and maintenance. The evidence shows that the system is working well and to the satisfaction of the Scottish Education Department and the local authorities and Your Committee have no recommendations to make in this connection. Qs. 1541–51. Annex 3. Q. 1537.

Effect on recruitment of teachers

21. Your Committee have heard evidence which reveals the influence which school buildings have upon the recruitment of teachers and they are in no doubt that the overcrowded and unsatisfactory conditions of a great many schools have slowed down recruitment, especially of teachers for infant schools. Men and women are often unwilling to Qs. 577–8, 1252–8. Q. 1259.

teach in those conditions which they disliked so much when they were themselves being taught as children and, while loyalty to an individual head teacher or the team spirit which may exist in many schools helps to keep men and women in the profession, it is often the case that
Q. 399. unsatisfactory conditions outweigh even these considerations.

THE TIME-LAG BETWEEN HOUSE AND SCHOOL BUILDING

Annex 1. 22. It was clearly stated in evidence that "the main objects of the Government in educational building, like those of its predecessor, are to provide sufficient new school places to maintain the present ten-year statutory period of school attendance, to provide for those who stop on at school voluntarily after the age of 15 and to extend the facilities available for technical education in order to increase productivity." Your Committee's conclusion is that the building programme is at present quite inadequate to meet the need in accordance with the aims so specifically stated. Schools certainly do not exist in sufficient number and there is a wide gap between the number of school children and the number of school places; this gap must be closed before the Acts of 1944 and 1946 can be put into practical effect. Furthermore, the building of schools lags seriously
Q. 624. behind the building of houses in most places and this aggravates over-
Qs. 182–4. crowding, compels local authorities to hire temporary school accom-
Annexes 2, 4, 6, 10 and 11. modation and commits them to exceptional and heavy expenditure on transport beyond that allowed for by statute.

23. In Birmingham, for instance, as is so often the case in the large cities, it is on the new housing estates that school building lags so
Qs. 846–8. far behind house building, and this problem will not be solved, so far as primary schools are concerned, for another five years. It was stated in evidence that there is the closest co-operation between the
Qs. 856, 858. various groups and committees of the City Council to try to prevent school building from lagging behind house building. Furthermore, a time lag between the two was not inevitable. A complicating factor, apart from the overriding policy decision about national investment,
Qs. 147–9, 852. is the shortage of labour which exists in Birmingham and other midland towns. The witness also said that school building was slowed up owing
Qs. 865–6. to the higher rates of pay given to labour employed on house building. This was confirmed by the Ministry of Education, one of whose
Q. 1977. witnesses said, "if one were to pay the labour on schools the kind of bonuses and incentive payments which are paid on houses, the total cost of school building would be increased".

Q. 889. 24. The evidence submitted by Warwickshire was that the urban areas of the county enjoyed a reasonably satisfactory position so far as school places were concerned but that in the rural areas the position was very different and that a time lag existed between house and school building. A contributory factor in this midland county is the shortage of building labour and materials. In one respect the county was for-
Q. 798. tunate in that a great many church schools gained controlled status under the 1944 Act and money spent on 80 per cent. of these has resulted in the production of many additional school places. The
Qs 898–9. building of secondary modern schools, such an urgent need in all rural areas, awaits in this county a policy decision by the Minister.

25. Your Committee were not concerned to investigate the conditions which existed in a number of selected local authorities, but rather to obtain an impression, through an examination of a few representative cities and counties, of the situation which exists throughout England and Wales. Their general conclusion is that while the gap between house and school building on new estates may not widen appreciably, it cannot possibly be closed while the amount of capital investment now going into school building is insufficient to carry out the policy of the Government that "the school building programme should, in general, keep pace with the housing programme". Often, however, the gap can be narrowed by close co-ordination on the part of local authorities. Annex 2.

26. While the evidence suggested that on the whole co-operation was good between the Ministry of Education, the Scottish Education Department and the local authorities, it is obvious that districts vary in this respect. To avoid schools lagging unduly behind houses the closest co-operation is essential not only between the Government on the one hand and local authorities on the other but between those different bodies within the same authority which have responsibility for housing and education. Where one and the same committee is responsible obviously co-ordination presents fewer problems. Your Committee recommend that the Ministry of Education, the Ministry of Housing and Local Government, the Scottish Education Department and the Department of Health for Scotland should make every effort to ensure the utmost co-ordination between all those concerned, so that the gap between house and school building should be narrowed during the immediate years ahead. Qs. 341, 1060–84, 1140–2, 1217–9, 1397, 1570–85, 1628–31, 1819–22, 1991–8.

TRANSPORT

27. One of the results of the time lag between school and house building is the necessity for local authorities to spend a considerable amount of money on the provision of extra transport to take children to schools which are some distance from their homes. It was not possible to obtain from the Ministry of Education a statement of the amount spent on the transport of children in England and Wales directly resulting from insufficient school accommodation. One witness did, however, submit an estimate for 1952-53, obtained from forty-seven local education authorities, which totalled £135,000. Evidence of the magnitude of this problem was given by Birmingham, which showed that 1,500 children were being transported from one estate, and that in some cases children living on new estates were being transported to old schools in the districts from which they had moved. In this city there has been a steep rise in transport costs from £800 in 1946-47 to £17,000 in 1952-53. These figures do not include normal transport costs under the Act of 1944 which alone amount to £5,000,000 annually in England and Wales. Qs. 2000–1. Annex 6. Q. 854. Q. 847. Qs. 873–4. Annex 11. Q. 2005.

28. In Scotland during 1951-52, the annual expenditure on transport was approximately £125,000, of which Glasgow accounted for £103,900. In evidence on behalf of that city it was stated that economies imposed since 1949 would have been sufficient to build at least four secondary schools and that the annual expenditure on transport, which is being used to convey children from the housing estates on the periphery of the city to the old schools in the central areas where they previously Annex 4. Qs. 263–4, 1066. Qs. 1117, 1119.

lived, would suffice to build one primary school. This would have resulted in a drastic reduction in transport costs, but, instead, annual expenditure on transport, so it was stated, is still increasing.

29. Apart from the evidence already referred to, that it was the policy of the Government that the school building programme should keep pace with the housing programme, it was also stated that "it was never contemplated that transport should be used as a matter of set policy in default of new building . . ." These transport costs are a heavy additional burden to local authorities and are deprecated by everybody, especially by the parents of very young children; a long bus journey is not the best prelude to a day's schooling. The final solution of the problem of extra transport costs depends on closing the gap between the provision of houses and the provision of schools, which is the subject of an earlier recommendation.

Annex 2.

THE BUILDING OF NEW SCHOOLS

Planning

30. The procedure in England and Wales for planning and building new schools is efficient and, in Your Committee's opinion, satisfactory. The Architects and Building Branch of the Ministry of Education, established in 1949, fulfils an essential role and from the evidence it is obvious that local authorities have found this a valuable source of technical information as well as a constructive help in implementing the school building programme.

Annex 1. Qs. 53–4, 57–62, 85–8, 397, 703, 2064–8.

31. It was stated in evidence that in the autumn, that is, half way through the financial year, a local authority is given its annual allocation for the next year commencing on the 1st April. At the same time, it will receive its provisional allocation, in terms of a provisionally agreed programme, for the next financial year but one. Before the remaining six months of the current year have expired all sketch plans are agreed between the Ministry and the local authority. The early part of the new year, beginning on the 1st April, is taken up by the preparation of quantities and work on the particular projects which may commence in the late summer or early winter of that year. The following table, based on evidence from Manchester, makes this position clear:—

Qs. 1640–50.

Time		*Action*
Autumn	Year 1	... Annual allocation for Year 2. Provisional allocation for Year 3.
Winter	Year 1	... Sketch plans for Year 2 finally agreed between Ministry and L.E.A.
Spring & Summer	Year 2	... Quantities and tenders for Year 2. Early drawings for Year 3.
Late Summer Early Autumn	Year 2	... Starts on Year 2 projects. Completion first stage of drawings for Year 3.

32. The provisional allocation for building schools eighteen months ahead makes it possible for local authorities to proceed with early sketch drawings and perhaps some quantities in the light of experience gained, although the progress made depends on what other burdens are being imposed on the architect's office at the same time. Large

authorities with a big staff of architects and quantity surveyors are in a more favourable position than other authorities who, through force of circumstances or because of the local situation which prevails, find it more economical and efficient to place contracts for building schools in the hands of private architects. This strengthens the view of Your Committee that a definite economy would result from organising the country's school building programme on a three year basis; if an authority can plan with certainty for at least three years ahead, it would be easier to co-ordinate school with house building, bulk orders for prefabricated parts at cheaper prices could be placed, and economies would result in the drawing offices of local authorities. Interesting evidence was heard from the Hertfordshire County Council who were faced with an exceptional problem after the war. Between 1945 and 1953 their school population rose from 55,000 to 83,000 and the county had to accommodate two L.C.C. housing estates and three new towns. It was planned to spend £7,000,000 over five years and thus build just over fifty primary schools, an objective which has been achieved. This number precluded the use of traditional labour and materials because of competing demands, but the size of the order and the length of time over which it was spread resulted in lower costs and a willingness on the part of the manufacturer to adapt, develop and experiment in consultation with the local authority.

Qs. 393, 1559–66.

Qs. 1313–7.

Q. 1320.

Qs. 1389–91.

33. Your Committee wish to make it clear, as does the evidence, that although the planning in this case was for the period mentioned, the financial sanction remained a strictly annual one; there was throughout an element of chance but the risk justified itself by the result. This is not an ordeal which Your Committee think should be imposed on local authorities and, in fact, it is doubtful whether the risk would have been justified except in what amounts to almost unique circumstances in the case of one authority which was spending a great deal of money. Certainly the financial margin in the case of the great majority of local authorities is far too tight to permit work to proceed except on an agreed and authorised scale. It is Your Committee's opinion that longer term planning is essential. They do not expect firm financial sanction for an actual total expenditure to be given in advance of the Estimates but they think it should be possible for the Ministry of Education to approve for three years in advance a large percentage of the amount in the light of all the facts and information available at the time. The low water mark of educational building expenditure would seem to have been during the first six months of 1952 so that a cautionary standard on which the approved totals might be based already exists. They therefore recommend that the school building programme should be organised on a three year basis, because they are confident that economy would result throughout the country.

Qs. 1327–9.

Starting dates

34. Even if a long term plan can be agreed it is still necessary to have a more speedy method of building schools and one way in which delay can be avoided is for the local authority to give the builder firm notice of the starting date. This responsibility is a joint one shared by the Ministry of Education and local authorities and not always easy to exercise. One difficulty is the need to avoid at any time overloading the building industry in an area with the result that its total resources are spread out over starting new factories, houses,

Q. 1968.

schools or other buildings, and only a minor part of its efforts devoted to completion. Another difficulty, although this relates particularly to the first half of 1952, during which the three months moratorium was in force, is that a local authority's tender may be returned from the Ministry in modified form and the builder, who is urgently wanting to know when the project may be started, has to await further drawings and modifications which the local authority architect, through pressure of other authority work, cannot always undertake at once. This delay often prevents schools from being started in the summer which is the most favourable period for the building industry. Evidence from the National Federation of Building Trades Employers clearly showed the difficulties which such delay imposes on contractors. One of their witnesses stated, "We tendered for a job about this time last year. It hung fire all through the spring. In the middle of the summer we were told the job was going to be cut down, and we started work at the back end of the year, about November last, doing excavation work in the winter, which of course is a costly business. . . ." He added that this was a general complaint of builders.

Qs. 1450–64, 1964–73, 1987–9.

Q. 1450.

35. Your Committee's impression is that the progress made by all local authorities as well as the Ministry of Education in the technique of planning is at a sufficiently advanced stage to avoid such ill-timing in the future. It should be possible, with all the experience gained hitherto, to reduce the time between the submission of a tender by the local authority and the Ministry's approval, and to give a builder a provisional starting date at the time he submits his tender. He could then arrange his commitments accordingly and only in exceptional circumstances should the timetable be varied. Your Committee recommend that the procedure for approving tenders should be closely examined and action taken, not only to expedite the notice of starting dates given to builders, but to spread them more evenly over the year.

Qs. 1964–73.

Qs. 1450–64.

The effect of local bye-laws

36. Evidence was submitted to the effect that local bye-laws sometimes hamper school building, particularly when prefabricated components cannot conform to certain heights and measurements. Your Committee realise that this may occasionally give rise to local difficulties, but the building of schools is too urgent a matter to permit any delay beyond what is absolutely unavoidable, and Your Committee recommend that the powers, which exist under the Act of 1944, to exempt school buildings from the operation of local bye-laws be used on all necessary occasions.

Q. 1999.

Prefabrication

37. Your Committee have considered prefabricated as well as traditional methods of building and opinions about these two methods were amongst the most important evidence submitted to them and occupied a large part of their enquiry. It has been stated quite categorically that the school building programme cannot be completed unless 50 per cent. of the schools are built by prefabricated methods, and Your Committee accept this fact which the evidence overwhelmingly supports. By prefabricated methods they do not mean only the production of schools which are wholly prefabricated, conveyed to the site and then erected as one piece; these exist in many areas and their

Annex 1. Qs. 475, 2010.

use is spreading since they meet adequately the needs of certain authorities, especially for primary schools. What is also implied by prefabrication is the use in a school of a high proportion of prefabricated components.

38. The experience seems to be that while prefabricated methods of construction reduce the time taken to build a school, and thereby effect a saving in wages and overheads, the components are often more expensive than traditional ones. The evidence tends to show that the costs of traditional and prefabricated methods are roughly the same, although Your Committee think that prefabrication of school components has not reached a satisfactory degree of standardisation and that production has not, hitherto, been big enough to reflect a reduction in prices. Your Committee hope that the stage is now being reached where these two aims will be realised and so contribute to a reduction in the cost of the secondary schools which will soon begin to take first place in the building programme. Qs. 453, 653–6, 661, 707, 825, 903, 1015, 1432–4, 1492, 1754–6, 2007–17.

39. The use of prefabricated methods of construction varies amongst local authorities according to the labour available and the supply of materials locally. In those parts of the country where building labour and traditional building materials are plentiful, the only advantage to be derived from using prefabricated parts would be saving of time. One such region is evidently the North Riding of Yorkshire, and Your Committee have no doubt that the same position exists elsewhere. Where, however, labour and traditional materials are scarce increasing use will have to be made of prefabrication; Your Committee are satisfied that those authorities who, by force of circumstances, have had to experiment with those methods over a longer period than others are pleased with the result and are stimulating the manufacturers to improve their products and to lower their prices. Your Committee are not satisfied, however, that all authorities who could benefit from the use of prefabricated methods and thereby accelerate their school building programmes are in fact doing so. They recommend that the Ministry of Education should urge local authorities, who do not expect to fulfil all their school building needs by the use of traditional methods, to study in detail the experience of authorities like Hertfordshire, Coventry and others and to adopt the prefrabricated methods most suitable to their own regions. Qs. 1531, 2021–2. Q. 455.

40. One unknown factor relating to prefabrication is that of maintenance costs; there was a general fear that these would be high although all witnesses were agreed that it was still too soon to form considered opinions and that longer experience would be needed before any conclusions which might be of benefit could be formed. Your Committee realise that maintenance costs must always play an integral part in deciding methods of construction. Where a choice of constructional methods exists the long term charges are a vital part of the initial decision. It is false economy to erect a school at a low price if the initial saving will be more than offset by running costs. Your Committee recommend that the Ministry of Education should ask all local authorities to report upon the maintenance of prefabricated schools after a reasonable period, perhaps in 1958. This would be a valuable guide to the future planning of the school building programme. Qs. 464–7, 474, 480–4, 657, 684, 812, 829, 903, 983, 1022, 1493–4. Q. 166.

The design of schools

41. Another point connected with school building relates specifically to design. Your Committee have heard much evidence on design and have been interested in the technical achievements, by the Ministry of Education and the local authorities, which have resulted in more teaching space at the expense of less " circulation " space. Some innovations give cause for concern, and Your Committee think that there is still room for improvement in the design of schools. A great deal of glass is used in the construction of modern schools. It was stated in evidence that medical and scientific advice on the necessary amount of daylight decided the amount of glass which is necessary in schools and that this was usually in the proportion of one-third glass to two-thirds wall. The more the expanse of glass the greater the glare and the need for blinds, which add considerably to the expense. Your Committee think that, while pre-war schools have sometimes fallen below the desirable standard of lighting, some modern schools may have been designed with too high a standard in this respect. The evidence also shows that a reduction in window space would help to reduce heating costs. Your Committee were impressed, during their visits to certain new schools, by the fact that the heating system did not always seem to be adequate—perhaps because the window space made too high a demand upon it. They therefore recommend that the Ministry of Education, in consultation with local authorities, should pay close attention to the proportion of glass incorporated in school designs, with a view to effecting economies without harm to the eyesight of the children.

Annex 1. Qs. 97–110, 665, 1339–41. Qs. 548–53, 1353–6. Qs. 1465, 2023–41. Q. 2045. Qs. 1474–5.

42. Your Committee think that it is important to consult teachers about the planning and design of new schools and that, for this purpose, it is desirable that all local authorities should establish consultative committees consisting of experienced teachers and those officials employed by the Councils who are directly concerned with the planning of schools. These committees should act in an advisory capacity. Your Committee are of course aware that co-option to a varying degree is practised by 143 out of 146 local authorities. They recognise the undoubted value of this and hope that it will be developed and extended. They do not think that co-option by itself ensures that the specialised knowledge of teachers is made available to the architect: as one witness said: " It is absolutely vital that the practitioner who has got to live and work in the school should be consulted in the beginning about what is put up ". They recommend that the Ministry of Education should impress upon all local authorities the importance of establishing such consultative committees.

Qs. 519–26, 696–702, 1035, 1346–50, 1757–63. Q. 1350.

Equipment in schools

43. Your Committee think that there may be room for economy in small matters affecting school building, such as the expenditure on equipment; they agree that such items of expenditure cannot be scrutinised in detail by the Ministry of Education and that even for a local authority to do so requires staff and time. Your Committee were impressed by the evidence submitted on behalf of Hertfordshire to the effect that, within a fixed total, a head teacher is given complete discretion as to how he or she may spend money on certain equipment for the school and they think that, in addition to the good psychological

Q. 81. Qs. 1412–3.

effect which such action must have, economy will result from this practice. In spite of certain criticisms, Your Committee are of the opinion that experience over three years is proving the system to be a success. They recommend that the Ministry of Education and the Scottish Education Department should examine this experiment with care and should not hesitate to urge local authorities to adopt the system if they think that economy and increased efficiency will result. Qs. 2061–2. Q. 2063.

Costs

44. The cost of school building is controlled by enforcing a limit on cost per place. In 1949 ceiling figures of £170 per place in primary schools and £290 per place in secondary schools were announced for projects started in 1950-51. At the same time, it was also laid down that the costs in 1951-52 and subsequent years were to be reduced to £140 and £240 respectively. In March of this year, however, it became necessary to raise these limits slightly to £143-£146 per place for primary schools and £246-£250 for secondary schools. In view of the fact that general building costs have risen during these years by almost 35 per cent., the maintenance until recently of the original limits of £140 and £240 and the comparatively small increase now authorised is a remarkable achievement on the part of local authorities and one to which the Ministry of Education, through their Architects and Building Branch, have contributed in full measure. Annex 1. Qs. 126–32, 386.

SCHOOL BUILDING IN SCOTLAND

45. Unlike the Ministry of Education, the Scottish Education Department does not contain a separate branch in which architects, administrators and inspectors work together as a team to co-ordinate the efforts of local authorities and to advise them on the latest technical information. Evidence shows quite clearly that such an organisation is needed in Scotland and that the place for it is within the Scottish Education Department. Your Committee recommend that this organisation be established forthwith. From the English experience they are confident that such an estabishment need not increase overhead expenditure since it is largely a question of re-grouping certain existing offices rather than recruiting additional staff. The economies, which should result through the dissemination of useful technical advice where it is most needed and from quicker approval of authorities' school building projects, will show themselves in additional school places throughout Scotland. To this conclusion Your Committee have one proviso to add; speed in the approval of building projects will not be reached until maximum net costs per place for primary and secondary schools are imposed by the Scottish Education Department, and they recommend that this be done immediately. Efforts have been made, and have succeeded to a certain extent, to ensure economy by fixing standards of size and thereby implying a financial limit. This is not satisfactory because design remains the task of the local authorities and architects have their individual approach to problems; the evidence showed that very often plans, which had been submitted to the central government, were returned for modification and that weeks, sometimes months, were lost which could otherwise have been saved if the authority concerned had known for certain the financial figure of cost per place within which Q. 1564. Q. 54.

Qs. 323, 669. they had to work. It is, moreover, stimulating to know that certain standards have to be achieved within definite financial limits and while, no doubt, architects might have objected to the limitation which such an order imposed upon orthodox design, it cannot be doubted that they would have met the challenge and held school building costs in face of a high percentage rise in building prices generally.

46. Your Committee have no reason to doubt that Scotland, like England and Wales, would benefit from being able to plan their school building for three years ahead rather than having to proceed on a year to year basis, and they recommend, accordingly, that the same measures which they have recommended for England and Wales be taken in Scotland to effect a similar result. This should help to extend the starting dates more evenly over the year; in Scotland the Scottish Building Committee is the body which has responsibility for seeing that the building industry does not become overloaded and it is they who determine starting dates. Your Committee think that the Scottish Building Committee, as well as the Scottish Education Department, would find their task in this respect much easier if the programme was spread over three years.

Annexes 3 and 8. Qs. 300–1. Qs. 308–9. 47. From the evidence submitted to Your Committee it is clear that the Scottish experience in the use of prefabrication has been the same as that in England and Wales except that Scotland has experienced additional transport costs because the components often come from south of the border. This is understandable in the case of aluminium schools which have usually come from Bristol, although their production is now being undertaken by certain Scottish firms; it is not clear to Your Committee why the transport element should always be a high feature in the cost of prefabricated schools since the production of standard components, of the kind referred to earlier, would seem to be well within the capabilities of Scottish manufacturers. They recommend that the Secretary of State for Scotland should make every effort to encourage Scottish manufacturers to produce the necessary standard components, in order that local authorities may be able to make greater use of prefabricated methods of building.

48. Your Committee think that occasionally local bye-laws will make it difficult for some authorities to execute their plans and they therefore recommend that the Secretary of State for Scotland should be given the same powers to waive bye-laws which are already enjoyed by the Minister of Education in England and Wales.

Q. 301. 49. On the building of schools in Scotland, Your Committee have two more observations to make. They recognise that building sites in Scotland often present greater problems than most of those in England and Wales and that this tends to increase costs in various ways. They think that often schools are more strongly built, and Qs. 294–6, 298. therefore more expensive, than is necessary; the climate is expected to be harsher in Scotland than in England and the summer usually Q. 297. shorter but, as was said, while this may be true if a comparison is made between Torquay and Thurso it is not likely to reflect the difference between Durham and Hawick. The second point concerns the use of glass and Your Committee think that their observations in respect of England and Wales apply equally to Scotland, with the

added force that in a country of such variable climate the use of more wall space in place of windows would seem to have even greater justification.

50. Finally, Your Committee think that there should be close consultation between local authorities and teachers about the design and planning of new schools. At present, teachers cannot expect to wield even the same influence as teachers in England and Wales exert through their co-option to certain committees, or sub-committees, of a local authority. Your Committee do not regard as sufficient the existing Scottish practice whereby teachers can be nominated to management sub-committees, which are concerned only with such matters as the maintenance of buildings, the wages of cleaners, etc. They recommend that the Scottish Education Department should urge local authorities to establish at once consultative committees consisting of teachers and those officials, employed by the authorities who are directly concerned with the planning and design of new schools. Your Committee, while emphasising the paramount importance they attach to the establishment of these committees, also think that the same powers of co-option should be given to Scottish local authorities as have been given to local authorities in England and Wales. They recommend that Scottish local authorities should be given such powers.

Qs. 1179–81, 1199–1201, 1205–12, 1251, 1586–98.

SUMMARY OF RECOMMENDATIONS

51. The recommendations of Your Committee may be summarised as follows:—

(1) Closer consultation should take place in the future between the Ministry of Education on the one hand and the local education authorities or their representative body on the other so that a more accurate estimate of the number of school places needed may be agreed upon by less haphazard methods (paragraph 11);

(2) The Ministry of Education should undertake a national survey of the older schools in the country (paragraph 16);

(3) The Ministry of Education should give careful consideration to the condition of old schools throughout the country and they should consider the wisdom of restricting next year's minor building expenditure to works solely related to improvements (paragraph 18);

(4) The Ministry of Education, the Ministry of Housing and Local Government, the Scottish Education Department and the Department of Health for Scotland should make every effort to ensure the utmost co-ordination between all those concerned so that the gap between house and school building should be narrowed during the immediate years ahead (paragraph 26);

(5) The school building programme in England and Wales should be organised on a three-year basis (paragraph 33);

(6) The procedure for approving tenders should be closely examined and action taken, not only to expedite the notice of starting dates given to builders, but to spread them more evenly over the year (paragraph 35);

(7) The powers, which exist under the Education Act of 1944, to exempt school building from the operation of local bye-laws should be used on all necessary occasions (paragraph 36);

(8) The Ministry of Education should urge local authorities, who do not expect to fulfil all their school building needs by the use of traditional methods, to study in detail the experience of authorities like Hertfordshire, Coventry and others and to adopt the prefabricated methods most suitable to their own regions (paragraph 39);

(9) The Ministry of Education should ask all local authorities to report upon the maintenance of prefabricated schools after a reasonable period, perhaps in 1958 (paragraph 40);

(10) The Ministry of Education, in consultation with local authorities, should pay close attention to the proportion of glass incorporated in school designs, with a view to effecting economies without harm to the eyesight of the children (paragraph 41);

(11) The Ministry of Education should impress upon all local authorities the importance of establishing consultative committees consisting of experienced teachers and those officials employed by the Councils who are directly concerned with the planning of schools (paragraph 42);

(12) The Ministry of Education and the Scottish Education Department should examine with care the experiment of Hertfordshire in giving head teachers complete discretion in spending money, within a fixed total, on certain equipment for schools and should not hesitate to urge all local authorities to adopt the system if they think economy and increased efficiency will result (paragraph 43);

(13) An organisation comparable with the Architects and Building Branch of the Ministry of Education should be established in the Scottish Education Department (paragraph 45);

(14) Maximum net costs per place for primary and secondary schools should be imposed immediately by the Scottish Education Department (paragraph 45);

(15) The school building programme in Scotland should also be organised on a three-year basis (paragraph 46);

(16) The Secretary of State for Scotland should make every effort to encourage Scottish manufacturers to produce the necessary standard components, in order that local authorities may be able to make greater use of prefabricated methods of building (paragraph 47);

(17) The Secretary of State for Scotland should be given the same power to waive bye-laws as is already enjoyed by the Minister of Education in England and Wales (paragraph 48);

(18) The Scottish Education Department should urge local authorities to establish at once consultative committees, as recommended for England and Wales (paragraph 50);

(19) Scottish local authorities should be given the same power as English and Welsh local authorities to co-opt teachers (paragraph 50).

MINUTES OF EVIDENCE TAKEN BEFORE SUB-COMMITTEE E

WEDNESDAY, 10TH DECEMBER, 1952.

Members present:

MR. YATES in the Chair.

Mr. Norman Cole.
Mr. James Johnson.
Mr. T. W. Jones.
Mr. Malcolm MacPherson.
Brigadier Peto.
Miss Ward.

Mr. G. N. FLEMMING, C.B., Permanent Secretary, Mr. B. L. PEARSON, C.B., D.S.O., M.C., Under Secretary for Finance and Accountant General, and Mr. D. M. NENK, Assistant Secretary in charge of the Architects and Building Branch, Ministry of Education, called in and examined.

Chairman.

1. Gentlemen, we are pleased you are able to come and give some evidence on this question of the Education Estimates. I think, Mr. Flemming, you are the Permanent Secretary?—(Mr. *Flemming.*) Yes.

2. Would you, for the purposes of our record, be good enough to tell us what your duties are at the Ministry, and also perhaps your colleagues, Mr. Pearson and Mr. Nenk, would do the same?—Do you really want any other description than that I am Permanent Secretary to the Ministry, because my duties there are the same as those of the Permanent Secretary to any Department?

3. It is customary for us to be told what that means?—So long as that is what you want, it will be a purely generalised account. I am responsible for the organisation of the office, for the work of all the staff under the Minister. I am Accounting Officer, in that I am responsible for the preparation of Estimates and the accuracy of the accounting.

4. Thank you. Mr. Pearson is the Under-Secretary for Finance and Accountant-General?—(Mr *Pearson.*) I am responsible, under Mr. Flemming, for the supervision of the general financial policy as laid down by the Minister and for the preparation of Estimates and accounting for money spent.

5. So that you have very close contact with all the local education authorities, have you? You are the main link?—No more so than my colleagues. I am in close contact with them and their accounting officers.

6. And, Mr. Nenk, you are the Assistant Secretary in charge of the Architects and Building Branch?—(Mr. *Nenk.*) Yes, I am joint head of that branch with the Chief Architect to the Ministry.

7. Thank you. Now, you have been good enough to submit to us a memorandum* on the educational building programme in England and Wales. Perhaps it would be for the convenience of the Sub-Committee if we go through this memorandum and ask some questions about it. I do not know whether there is anything in addition to this that you wish to say at the outset?—(Mr. *Flemming.*) No. I was hoping you would do as you suggest and go through this memorandum.

8. First of all, this memorandum sets out fairly clearly the position, the scope and so on, of the educational building programme. In paragraph 4 you make reference to the black-listed schools. You say: "The fullest possible use of all existing accommodation, including some 600 schools 'black-listed' in 1925, is required". Could you give to the Sub-Committee some more details about these black-listed schools, especially in regard to the costs? Have you any separate figures at all as to what is the cost of these old schools as compared with modern schools?—You mean the money spent on building them when they were built?

9. No, on maintaining them?—No. They are mostly fairly small schools, and I do not think the cost of maintenance in relation to this kind of school varies very much.

10. If they were black-listed in 1925, then they must be in a frightful condition today?—Not necessarily, because they might have been black-listed on account of defects, which so long as you continue them you just put up with. It does not necessarily mean they were black-listed for a leaky roof or anything of that sort.

11. What are the main defects of these black-listed schools?—I am afraid it is so long ago I have not got a precise memory of it. It may be related to the conditions of lighting or sanitation or it may be badly designed, the actual size and shape of the rooms, and so forth; but if you put up with it at all you have to put up with it as it is. (Mr. *Nenk.*) There is another point about this. The whole recording of the black list was stopped when the war broke out, and a number of these schools were on the black list not because of any particular defect in the building, but because the building was unsatisfactory for the number of children who used it. In many cases these are village schools, and the number of children has dwindled because of re-organisation or for some such reason, and

* Annex 1.

it may be that many of these schools are better in point of building and condition than many which were not originally on the black list at all. In other words, it is a rather phoney category, to use an unparliamentary phrase.

Mr. *James Johnson.*

12. Were most of these black-listed schools—I think 571 out of 760 at the time—Church of England schools?—(Mr. *Flemming.*) The greater part of them are Church of England village schools.

13. If we had anything up to 800 almost 30 years ago, and we are going to continue with them, how many do you think there are now in that category you call black-listed? Is it over 1,000 now?—We have not tried to apply this same criterion since then, and I certainly could not put any number to it in that sense. There are many schools which, if we had not got to deal with these other requirements mentioned here, housing estates and growth in the number of children, we would like to see replaced or substantially improved. It is a question of variable standard. One cannot draw a line and say these are above and these below

Chairman.

14. What is the number?—I am trying to say it is impossible to give a number because there is no precise standard. It is a question of how far one can go at any particular time.

Mr. *James Johnson.*

15. Would it be fair to say that there must be a much larger number now than there was in 1925?—No, I would not even accept that, because there has been a considerable volume of school building going on all the time and schools being closed as redundant through changes, falls in population and movement of population, and reduction through reorganisation and so on. I do not think one could necessarily infer that at all. On the other hand, what is perfectly true is what I have said, that there are many schools we would like to see replaced if we had no other building jobs to tackle.

Mr. *T. W. Jones.*

16. Would it be true to say that these schools that were black-listed in 1925 would be in the same category as houses condemned then, and the fact that they are still used and were still used as a result of the war, would be true also of a condemned house? I am rather under the impression that these schools were supposed to be replaced at the earliest possible moment?—Replaced or substantially improved. It does not always follow replacement is necessary. I would accept that in very general terms, but there are other variable conditions, and you may alter the character of a school in a way that is rather easier to do than altering the character of a house. In general one is often carrying on what one would like to see ended.

Miss *Ward.*

17. I have seen quite a number of these schools, and, of course, some of the buildings structurally are quite good, because I consider that in those days some of the buildings that were put up were much stronger and superior to some of the buildings put up today. What I really wanted to know was this. When it became apparent that the black-listed schools were not going to be replaced, a certain amount of money was spent on making these schools as reasonably practical and attractive as possible; there has been a good deal of painting done, and presumably there has been some attention to the sanitation and to the heating and all that kind of thing. There has been an attempt at any rate to make them reasonably comfortable and habitable, even if they are somewhat inconvenient judged by modern standards. Have you got any kind of figures of how much money has been spent on the black-listed schools in this connection?—Not any figures, but in general terms I can most readily accept that explanation, and that is one reason why under successive Governments for many years past we have not paid any attention in returns to this particular list of 1925. They have been changing as individual schools all the time.

18 In other words, it is rather unfortunate that the word "black-listed," which has a particular significance really, has been applied and kept on being applied to this section of schools?—I quite agree. The problem as we see it—and I am sorry we have raised this herring by this reference here—is in a sense much narrower and in a sense much wider. Many of these schools may now be quite tolerable and there may be many other schools which have now fallen into bad condition. It is really a general problem of how much of our resources we can afford to devote to improving schools.

19. You have no actual figure of what has been spent on trying to make these schools as habitable and as convenient as is possible?—No. It has been spread over far too many years. (Mr. *Pearson.*) A large part of it would be voluntary funds raised by the managers of Church schools. We do not estimate that.

Chairman.

20. You do know what it costs to maintain a black-listed school?—(Mr. *Flemming.*) No, we should not have that.

21. You have no information?—Not as a separate item. The cost of maintenance of schools falls on the local authorities, and for reasons which I have been mentioning it would be quite unreasonable to set up these black-listed schools as a rigid separate category which had any meaning and which we would be justified in asking people to give special separate returns about.

22. Do not the local education authorities provide separate returns?—Their returns are under the headings we ask for, but we should not dream of asking them for a separate category of black-listed schools as distinct from others. (Mr. *Pearson.*) Nor do they give separate figures for the maintenance of each school.

23. I have in my own constituency, for instance, a school black-listed in 1925. As far as I am able to see, it must be frightfully costly to maintain, especially in regard to the heating, and as far as I know improvements have not taken place. It happens to be that I am in a rather peculiar position in so far as in one ward of my constituency there is no Council school at all; they are all Church schools. I cannot see how great improvements could take place in schools of this kind, and it must be that they are frightfully costly to maintain?—(Mr. *Flemming.*) Some of them are. It is a thing you have to look into school by school. It is not a question of generalised returns or figures for the country as a whole.

Mr. *Malcolm MacPherson.*

24. What are the numbers of children who are in schools—I will not say black-listed—but which are really bad schools?—I cannot give that for the same reason I have given, that we have not got any line which we draw to say these are above it and these below.

25. Following on that, do we take it that in your policy about the building of schools in the future the existence of a black list of this sort plays very little part in it?—At the present moment it plays very little part because practically all our resources are required for the increased population and for new housing. Where marginally and incidentally they can be used to enable bad accommodation to be given up or improved, that is a marginal consideration of importance, but at the moment it is regrettably marginal.

Miss *Ward.*

26. Would it be possible to make a comparison? For instance, the Chairman has referred to part of his constituency as an area of Church schools. Have you ever tried to compare the maintenance of schools in such an area with the maintenance of schools in an area where they are mostly schools which have been built at a more recent date, because, of course, some industrial areas have developed very considerably, and there must be a considerable number of schools in those areas that you can get a comparison of the maintenance costs from?—It would only be possible for an individual authority looking into it school by school.

27. Would not you do it?—For any area, however you draw it, there is a hopeless cross tangle of contrasting circumstances. Our concern is not to burden people with unnecessary returns of information, and one would not dream of putting on them a job which would cost tens of thousands unless one could see some results.

Brigadier *Peto.*

28. I gathered Mr. Nenk to be giving us the information that the term "black list" is wrong, and there might be for one reason or another certain schools which were black-listed which now would not come under that category?—(Mr. *Nenk.*) It is quite possible, because several million pounds a year are being spent on improvements of the kind Miss Ward referred to to existing schools, some of which may have been on the black list at one time.

29. From a population point of view, I should imagine—overcrowded?—Yes. (Mr. *Pearson.*) There is another consideration. Quite a number of the so-called black-listed schools were black-listed because they were not suitable for the number of children in them at the time. Those considerations will have altered, and if the numbers have gone down the continuance of the school on the so-called black list would be altered. There are quite a large number of schools of that category.

Mr. *T. W. Jones.*] In the light of modern requirements I sincerely believe that all these schools are not fit for the present requirements and that they were meant to be demolished. That is my honest opinion in regard to them. I am hoping we will not change this adjective of black list; it is black.

Brigadier *Peto.*] It is not true of some places. I can think of one school that is beautifully built and perfectly adequate. That is on the black list. It is not a black-listed school to my way of thinking.

Mr. *T. W. Jones.*] Why was it black-listed?

Brigadier *Peto.*] Because there were too many children going to it.

Mr. *James Johnson.*

30. It is interesting to hear that, say, twenty years ago schools were black-listed because they had too many youngsters for the actual size and shape of the building. Does this mean we are going to black-list many more schools in the future if we have too many children—I always thought it was

a question of the building, heating defects and the architecture, and all the other things, hygiene and comfort of working conditions for the teachers and children?—A building may be suitable for x children but not suitable for 2x. For instance, the office accommodation would be suitable for x but not twice that.

Chairman.

31. The typical building I had in mind was the building where the main hall had to be divided into about four classes, with curtains drawn across. That is the sort of school I had in mind as black-listed?—(Mr. *Flemming.*) I would agree with what Mr. Johnson is implying. The original list was not drawn up on specific scientific principles. I do not want to be grilled about the detailed instructions given to the inspectors in 1923, because I do not carry them in my head. I would say it was a basis for subsequent administration. It was never a scientific category which I would like to sit here and defend as being right.

Mr. *Malcolm MacPherson.*

32. When we come across a statement about 600 black-listed schools, am I right in assuming the great majority would be primary schools and very few secondary and technical or other special schools?—Yes.

Mr. *T. W. Jones.*

33. All would be primary?—The great majority would be primary, and many of those will have become primary schools since the black-listing, as one of the examples of what my colleagues have mentioned, the smaller numbers.

Chairman.

34. It seems to me that is an interesting point that we have raised, and probably we might like to ask for more information about it. In the meantime shall we move on? In this same paragraph you make the statement that "it was decided to write off a deficiency of about 110,000 places". What does that mean?—It is not a very happy expression. If you go back to the previous sentence, it suggests we were trying to build 2 million places, the difference between 4,700,000 and 6,700,000, less 300,000 which were available in existing schools, from which one might have arrived at the conclusion that we were trying to build 1,700,000. The "write-off" of the deficiency of 110,000 means that in the light of the experience gained when the building programme was going rather slowly we decided to be less ambitious and to describe the aim as only 1,590,000. That might have been put more clearly, but that is what writing off the deficiency means.

Mr. *James Johnson.*

35. You said it was an unhappy expression. It means actually there ought to be those places found, but since it was awkward to find them they just went, so to speak, they were lost?—The other reason I did not mention is that the lower number is more closely related to what seems to be realistically possible in relation to teachers, and you put the two together, of course. There is a variable in the whole of this calculation as to what you expect to achieve in the way of size of classes. For that you require both buildings and teachers.

36. It does mean larger classes than were originally contemplated?—It means in effect we are hoping to maintain the 1950 staffing standards and not improve on them.

Chairman.

37. And therefore the increase in the number of new places needed is as a minimum 200,000?—Yes. It will be rather more over the next three years to achieve the slightly reduced total I have been describing. It is still nearly 200,000 a year, and over the next three years—this runs up to 1955—it would be a little over 200,000 a year.

Miss *Ward.*

38. Can I raise a point on paragraph 8? I notice in reference to the economic crisis of 1949 a reduction of expenditure was made mainly by reducing the cost of individual projects. I do find it a little puzzling, if I may say so, if it was possible to reduce the costs in order to meet that particular period of economic stress, that the original costs, which must have been in excess, so to speak, of what they ought to have been, were allowed to pass? I should like that to be developed, because I do find it somewhat disturbing and disconcerting?—It is not really a question of allowing them to pass. It is a question of building up enough knowledge, experience and skill to enable one to discover what to do and how it can be done. In the first post-war years I have got to confess straight away, though I do not think it requires a very white white sheet, we had no knowledge and experience and skill. As we have progressed we have acquired more knowledge and experience and skill, as set out in the later paragraphs, and that has enabled us to achieve economies while getting as good or in many cases better schools.

39. Would you now say that knowledge and experience is in advance of construction?—Some of the schools now being finished, which were started just after the war, are schools of which with our present knowledge we are heartily ashamed. I will say that straight away. We could do much

better if those schools were being started now.

40. Are you satisfied that now technical knowledge and experience will always be in advance of the programme, so to speak? —I do not quite understand that.

41. Or perhaps we cannot make any further progress?—I hope, though, of course, it is only a hope, one may always improve. One is never satisfied with where one has got to, and never able to say, "This is perfection". If we were continually to improve, what you are saying would be true. The school built tomorrow will always be better than the school built yesterday. Whether we shall be able to improve I cannot say, but we are always seeking to. We do not sit back complacently.

Brigadier *Peto.*

42. May I ask a question on Table A, England and Wales, 1952-53 Educational Building Programme? Under the heading, "Special Schools for Handicapped Children," I have found there are not enough of those schools. What number of schools does 0.9 represent in new building?—(Mr. *Nenk.*) This particular programme includes three completely new special schools and a number of other jobs, such as converting existing houses to special schools. The number of new special schools in the programme will, we expect, increase from now on, because up to now they have been mainly converting existing premises of one kind and another which they have bought.

43. And the limit of the amount you can do is limited by cash?—Partly by cash and partly by physical resources, labour and material. (Mr. *Flemming.*) The whole of this programme is in terms of limited physical resources for building.

Chairman.

44. Do you have classes for handicapped children in the ordinary schools?—Not under that name. This is a term of art for those children who should be in separate and special schools.

45. They do not have special schools in Scotland, do they?—(Mr. *Nenk.*) Yes. (Mr. *Flemming.*) I do not know whether they use the same term. They have the same thing.

Mr. *James Johnson.*

46. Is it not a fact that we have not got special schools for the educationally subnormal and that we have to use the term "backward classes" in the normal day schools?—We should readily admit there are some children in the ordinary schools whom we would like to see in special schools.

47. I know we cannot discuss policy here, but in the middle of this paragraph 8 there are four words, "the shortage of steel," as one of the fundamental factors in the difficulty of building new schools. We look like having a glut of steel in the near future. Will that make any difference at all?—(Mr. *Nenk.*) Can I put it this way. We do not expect steel supplies to affect our progress in the next 12 months.

Chairman.] I wonder if we could consider that question when we get to economy of materials, which is a separate paragraph?

Mr. *James Johnson.*

48. Very well. There are two words in the last line of this paragraph, "increased inconvenience." Again it is a little euphemistic. Does that mean the inconvenience of poor conditions for the staff or, for example, cloakrooms for the youngsters coming on a wet morning to put their clothes in, and suchlike?—(Mr. *Flemming.*) Primarily teaching, but I should not like to exclude anything else as a possibility. In the circular the reference was primarily to teaching conditions, using rooms continuously which one would prefer to see not used throughout the school day, and so on. (Mr. *Nenk.*) It partly referred to the fact that some children will have to go rather further to school than would be desirable.

Chairman.

49. Shall we pass on now to "The background of the Ministry's present educational building practice"? In paragraph 12 you say: "Within these principles, the Ministry's first aim was to achieve quantity. This was done first by developing the technique, instituted in 1947, of compiling annual building programmes so that the local education authorities could know in advance precisely which projects they should plan for the start in a given period." How is that done, by what sort of machinery?—(Mr. *Flemming.*) The local authorities submit a list of all the projects which they wish to start in a programme year, and those are then scrutinised in the Ministry in relation to our knowledge of the total resources which will be available under general Government policy, and the result of that is that the authority is given a list for a year in advance of projects which they will be allowed to start. Does that meet your point?

50. Do you ask for all local education authorities' opinions about this first of all before you draw it up?—We receive a list from them of those things they desire to carry out, which may in certain cases be accepted completely. If it has to be reduced it depends on the circumstances. There would always be consultation.

51. Then you say in the following paragraph you decided to set up an Architects and Building Branch. One of the chief aims, you say, is to maintain close contact with the authorities and their officers by visits and meetings and in other ways. Can you tell us a bit more about that? You say: "For example, in the autumn of 1951 two successful conferences were held". Have you considered further conferences, or what sort of meetings do you have, and of what frequency?—Perhaps I may make a general answer, and then ask Mr. Nenk to carry on? The best contrast is with what we are trying to avoid, that is school planning being carried to an advanced stage, after which we come in and with the experience we have gained weigh in with a lot of criticisms, which means that a lot of paper has to be torn up and the thing started again. The purpose of this closer contact is to see that the common fund of new ideas is taken in from the beginning so that everything is planned in the most modern and efficient way from the word go. Perhaps I could ask Mr. Nenk to explain the various forms these contacts take?—(Mr. *Nenk.*) "Visits, meetings and in other ways", it says here. When an authority's programme for a year is settled we as a rule have a meeting with both the education officer and the architect to discuss that programme, what methods of construction will be used, what kind of designs they are going to adopt, what kind of starting dates they will require during the year, how they will distribute the steel that we expect to be able to give them, and any other problems of that kind. Then as each job is planned it may be sent to us in the form of sketch designs, or there may be another meeting at which the sketch designs for several projects are discussed together in detail, and finally there may or may not be the necessity for further consultations when the final plans are sent in for final approval. The conferences to which you have referred were a device for getting a rather more general approach to the series of problems even than that. We do hope to have some more conferences of that type.

52. But you have not had one since 1951? —No.

53. What is the staff of this Architects and Building Branch?—The whole staff is about 100. That includes administrative officers, architects, executive officers, clerical officers, and so on.

54. Does this mean that the Ministry decided in 1949 to set up an Architects and Building Branch, and that means you had a large number added to your staff?—No. Most of the staff were already employed in other branches, for instance, the Schools Branch, the Priority Branch and the Architects Branch as it existed. They were taken out of three or four separate branches and brought together in one branch.

55. Do you have separate meetings with every Chief Education Officer in the country?—Not every one. It depends. Certainly with the ones which have substantial programmes; with the others as and when they wish it.

Mr. *T. W. Jones.*

56. They come up to London, I suppose? —Not necessarily—either in London or in their own areas.

Brigadier *Peto.*

57. From our point of view, it seems to me possibly the result of such conferences as were held in 1951 might give us very useful information as to efficient standardisation and cheapest cost, which is really one of the points we thought we would look into. Probably as a result of your conference you drew certain conclusions for future building?—(Mr. *Flemming.*) I would rather say those are drawn from the day to day work of the branch and its many contacts with the local authorities on one side and industry on the other. The conference was merely a means of interchange of general ideas. I do not think that reports on the conferences give the best possible information about the standardisation or economising work of this branch which Mr. Nenk is trying to describe.

58. I should have thought the architects and other representatives could have come to some conclusion as to standardisation?—(Mr. *Nenk.*) I am afraid it does not work like that.

Mr. *James Johnson.*

59. Can Mr. Flemming tell us how successful those conferences were? Could he tell us what were the main comments made by the local education authorities' officials and other elected members about your policy in this connection? Were they in favour of it or did they make adverse comments?—(Mr. *Flemming.*) As far as I know, they welcomed it. They were sales conferences in a sense. As far as the Ministry is concerned, we learn more by looking at particular cases at the kind of *ad hoc* conferences than from the big conferences. These big conferences were to put across some general ideas which were emerging from our experience, and they were in our view highly successful in the sense that we seemed to put our ideas across successfully and they were welcomed. There was no battle about it; there was a welcomed interchange of ideas. (Mr. *Nenk.*) A number of authorities have since asked for further similar conferences.

60. There is a feeling—it may be mistaken—that often they are putting up ideas but often they are turned down, and the Ministry disposes of what they have proposed at the other end Were there many

comments that their suggestions were not accepted?—I should not have thought that was the general feeling.

Miss *Ward.*

61. Supposing when ideas do come up from the local education authorities to the Ministry and you consider that some sound new idea is being put forward, roughly then what happens? Do you circulate the idea for consideration by other local authorities? Are you, so to speak, the initiating body? You said the local authorities came and discussed things with you when they wanted to, but how much initiation do you do?—(Mr. *Flemming.*) The bulletins, which are our chief means of circulating things, embody this. We have learned in every conceivable way. Some ideas have emerged from our initiation, but many will have emerged from the individual proposals coming in from day to day. We do not claim copyright. We are taking up ideas wherever we can.

62. How do you exercise influence on local authorities that are perhaps not quite so ready to absorb and make use of new ideas as others?—That is where these informal discussions and personal contacts which are rather difficult to describe play the biggest part, because the less rigid and more informal it has to be the more merit is in these personal talks and meetings.

Chairman.

63. To follow that up, if the Architects and Building Branch decide that the cost of a particular project of an education authority is too high, do they advise, for instance, against granting a building licence for that?—(Mr. *Nenk.*) We do not control the cost of licensed jobs. Let us get that clear. That is a separate category altogether. (Mr. *Flemming.*) We are talking of local authority jobs.

64. If a local authority puts before you a building project which they consider is necessary and you consider it is too high, do you exercise the initiative, for instance, to say no?—(Mr. *Nenk.*) We try; but our whole policy is designed to prevent that situation arising. We try to give them their terms of reference including the permitted cost before they start designing, so that they know what they have got to build with. In fact, the number of cases in which authorities have come along with jobs above the cost limits we have set is now relatively small, because they know the rules of the game and their skill is increasing.

65. Is it part of your business to know whether the industry in the locality can carry out the building?—We have regional priority officers in the different regions who are in close touch with the labour situation and with the local regional office of the Ministry of Works, and that is our channel of information on that kind of subject.

66. If, for instance, you found that the industry was not capable, in your opinion, in a particular locality of carrying out the project that was put to you, would you then advise against it? Is it your business to find that out as the Architects Branch?—I do not think, if I may say so, that is a very realistic way of putting the thing, because in fact the building industry is not as local as that. There are national firms who are undertaking work all over the country, and indeed some of them abroad as well. There is no constructional job anywhere in the country which cannot be carried out by some firm in the country.

67. So that you do not have any difficulty in that connection?—(Mr. *Flemming.*) I do not think we have got this right. The primary responsibility for controlling the amount of building that goes on in a region is not our Ministry but the Ministry of Works. We are all the time in close touch with them, and we are able to ensure that work is not started which would, from the point of view of the Government's overall policy, and indeed resources, be excessive.

68. If, for example, you approved of a building project and did not consider the amount was too high, it would automatically go through; it would be done? It is not your job to find out any difficulties that might be in the way?—We would not approve it. It would not get approved and allowed to start unless in the opinion of the Ministry of Works and ourselves, acting together, it was reasonable in relation to the local as well as the national resources. That is the whole purpose of having the programme procedure; it is related to an assessment of realistic possibilities.

69. The basis of your work is not necessarily the need in the area of the school?—You mean the detailed application of it?

70. Yes?—Not necessarily. The spread of it over the country has, to some extent, to take into account physical possibilities.

71. Where there was a very populous area where you needed a new school, for example, it does not necessarily mean you would not have that new school because after conferences with the Ministry of Works the Architects and Building Branch might decide there could not be a school?—That would be a theoretical situation. It has never in fact arisen, and I think if it did arise we should find some means of putting it right.

Mr. *James Johnson.*

72. This means that nowhere in your experience is there an area where, because of the claims of house building or factory building or other calls, you could not construct a new school that you desired?—Not with the word "desired". That is one of the factors which might prevent us

doing as much as we should like. It has never come to the extreme pitch the Chairman has suggested of the case of a school being out of step with housing needs.

73. Is it fair to say in some areas you planned to build new schools, but unfortunately owing to the economic conditions you did not give final permission to start building?—(Mr. *Nenk.*) It is only a question of timing. It might be the school would be delayed by three months waiting for a starting date. It is not a question of being prevented altogether.

Mr. *T. W. Jones.*

74. Let us take a hypothetical case. Supposing a school cost £20,000 to build and you rejected that as too costly, would you modify the scheme and reduce it to £15,000 in order to save £5,000, and advise the authority how this could be done?—(Mr. *Flemming.*) Can I put in a correction? That is just the kind of thing that might have happened before the war. For some time now we have been making very great efforts, 90 per cent. successful, to prevent that situation arising. We put out now limits of costs and advice and suggestions, and we discuss the matter personally at an early stage. That is designed to prevent that time wasting, frustrating situation you have mentioned from arising. I would rather say that that hypothetical case is so rare we need hardly discuss it. The authority may at a very early stage have to revise their ideas in a way they do not like, but it does not get to the point of tearing up a plan, which is most annoying and frustrating, and we are very anxious to avoid that situation ever arising.

Mr. *Malcolm MacPherson.*

75. With reference to the regional priority officers, are they Ministry of Works officials?—(Mr. *Nenk.*) No; they are officials of the Ministry of Education.

76. You have a team of such officials who are purely concerned with educational building?—Yes, there is one in each region. There are ten altogether, including Wales.

77. Would you say a bit more about their duties?—Their duties involve liaison with the Regional Building Committee, which is an Interdepartmental Committee responsible for allocating starting dates in the region. They are responsible for advising the authorities on the local availability of labour in the region, on the materials question, and for administering a certain amount of minor building work which would otherwise have to go to the headquarters of the Ministry. A great number of jobs costing less than £6,500 are administered wholly from the regional priority officers' offices. They are also responsible for reporting to the Ministry on the progress of each job when it starts on the ground.

Miss *Ward.*

78. What I am rather anxious to discover is this. Are you aiming, or have you arrived indeed, at a design for a school which you think is the best and the most economical in every way, or is there still a very wide variation? The second question, which perhaps really should not come into this particular discussion, is this. The local education authorities have got very wide powers with regard to what I call the frills and trimmings that they put into each individual school. I remember a terrific discussion on the expenditure of £200 on curtains for a stage. The frills and trimmings are left to the local education authorities. What control do you exercise on the money they can spend on that?—Dealing with the second point first, the term "frills", I suppose, must be included within the general category of furniture and equipment.

79. Well, it is referred to by the ratepayers as frills?—Curtains are furniture. (Mr. *Flemming.*) Let us treat these as items not included in the cost of the building. (Mr. *Nenk.*) Furniture and equipment, which includes such things as curtains, is controlled. We have a yardstick, and if the authority want to spend more than that, then they have to think up some good reason.

80. Could they reduce the standard of furniture in order to put up a better type of curtain? Supposing some headmaster was very keen on theatricals?—Theoretically they could. In practice I do not think it is likely to happen, because even £200 on a curtain is quite a small item in relation to the furnishing of a whole new school.

81. Oh, yes, but take care of the pennies?—I agree, but equally the authorities have a certain amount of discretion, and it seems best to operate it by controlling by a general yardstick rather than haggling about a number of small items; for instance, whether 15s. is too much for a waste paper basket. An enormous amount of man-power can be used in that way. Therefore, with respect to furniture and equipment, as in the building, we go for general control of cost within which authorities have discretion. The first question was whether we think we have got the best possible design for a school. We do not think we have got the ideal design, or anyone ever will have. We think that certain schools are very much better designed than others, but education is changing gradually all the time, and we do not believe that it is possible for anybody to design a model school, which would then necessarily be the best or the right school for another situation or another site.

82. No, I realise that, but I meant for next year's building programme have you got a school in mind that you will try and encourage?—(Mr. *Flemming.*) A set of ideas in mind to be applied to the problem of the particular school, but I would rather call it a plan of ideas than a plan of a school.

83. I am wondering whether any economies could be achieved by arriving at some standard school which might possibly be sold properly to the local authorities? —Our experience is that minimum requirements vary very much, and that is as far as one can go, and beyond that you would defeat the object of getting a good school and getting economy. They are not just airy-fairy ideas; they are down on paper, and things that can be discussed sitting round the table.

Mr. *T. W. Jones.*] Go back forty years, and you had then the McKenna School, and whoever the Minister was the school was named after him. I would not like to see a Horsbrugh School established in the way we had the McKenna School, and so on. I think that individuality in the matter of school building is as important, maybe more important, than individuality in the matter of housing.

Mr. *James Johnson.*

84. Is it a fact that the local authorities have got their own architects on the spot who know the local conditions and often are an enormous help to you at the Ministry? —We have got a happy compromise, which is not really a compromise but a method of co-operation. On the one side it would be quite wrong for us to sit back and wait for a plan to be put up. Then you get the absurd position that work is done and you start criticising from the point of view of cost or other points of view, and that means annoyance and frustration. On the other hand, it would be equally wrong to tell the people how to do it. What we have done is to put up and give wide circulation to suggestions and ideas, perhaps, which can be used by the men at the other end who know the local problems and conditions, and which can be discussed; and we have introduced the two streams of thought from the beginning into the result.

Mr. *Norman Cole.*

85. I am glad to hear this point about the ideas being put out, but is there any method in existence of allowing education authorities to know what has been produced by other education authorities throughout the country and which has been approved by the Ministry, and which might go some way to meeting their own requirements?—(Mr. *Nenk.*) We have in fact done that. One Building Bulletin shows details of about twenty schemes by various authorities.

86. With illustrations?—Yes, and in our day to day consultations various schemes are produced, and we say: "Perhaps you would like to see what So-and-so is doing about this same kind of problem." There is a good deal of interchange, and the conferences are another forum in which that kind of swapping of experience takes place.

87. Is that only done when a particular scheme is under consideration? Is it circulated to all education authorities under the Ministry?—The Building Bulletins are circulated. The informal consultations take place as and when the authorities wish.

88. When the authority has a scheme in mind?—Not necessarily, but in relation to the whole programme, for instance.

Chairman.

89. Would it be possible for you to give us examples at all of schools you have considered to be projects which are valuable and economic as compared with perhaps schools or projects which are uneconomic? —Yes.

90. In order that we might be able to see such schools if possible?—Yes.

91. You could give us examples of what you consider a good school as against what you consider an uneconomical one?—Yes.

Mr. *Norman Cole.*] Could we have some illustrations?

Miss *Ward.*

92. Could we have a copy of the Bulletin?—Copies of the Bulletin have been sent.

Mr. *Norman Cole.*

93. I meant some blackboard illustrations to look at in large scale?—I do not know whether *these* diagrams* would be relevant here. They were produced for another purpose. *This* shows the kind of school which was being built very commonly in 1949. The black is what we call circulating space, space used for getting from A to B. One kind of hatching shows teaching space and another shows the cloakrooms and lavatories and kitchens and administrative space. The horizontal is administrative areas and so on. The diagonal is the classrooms. *That* is a later designed school which has been finished recently, showing a very much more compact plan, very much less circulating space and less ancillary space such as cloakrooms, lavatories, kitchens, and more teaching space.

Chairman.

94. Are those examples in the Bulletin? —These specific examples are not in the Bulletin, but the principles lying behind this development in design are fully dealt

* Passed round for Members of the Sub-Committee to see.

with in the Bulletin. *That* is a plan analysis of these two schools showing how the area has been reduced. The circulating space has been reduced from 16 square feet per place to about 5; and the teaching area has been increased in the second school, although the total area of the school is about one-third less.

Miss *Ward.*

95. Have you decided whether you want a single-storey school or a double-storey school? Has that controversy been settled?—I do not think that is a thing one can generalise about altogether. Practically all the secondary schools are on more than one storey, and about half the primary schools are now being built on more than one storey. (Mr. *Flemming.*) It depends very much on the site and local conditions. (Mr. *Nenk.*) Generally speaking, the only schools on one floor now are those built for the five to seven year olds.

Mr. *James Johnson.*

96. By and large the policy now is to have two-storeyed schools; the upper floor would conserve site space?—Yes, broadly speaking.

Chairman.

97. Can we come to the question of economy of costs? (Mr. *James Johnson.*) In paragraph 18 one is talking of economies and this question of circulating space and corridors. Would you think sometimes it can be a false economy to have narrow corridors in view of the congestion and the large numbers in the classes?—That is the sort of economy we do not recommend. The idea is to have as little useless space as possible, and corridors cannot be used for anything very useful. You have got to get from A to B, but the less corridor you have the better. We like people to design a corridor adequate for its purpose. We do not try to chip away at the width of corridors, but try to put out a principle of planning which involves devoting less space to circulation pure and simple.

Chairman.

98. In this paragraph you say: "Area per place has been reduced by about a third since 1949; this has been achieved not by whittling down standards but by thinking out afresh the fundamental educational requirements of each type of school." What steps did you take in considering this as to whether or not the changes you recommend do effect teaching efficiency?—We start at that end. That is what is meant by saying "thinking out afresh the fundamental educational requirements". We start with what the teachers are asking for and try to provide them with what they are asking for as economically as possible. Teachers for a long time have been saying that classrooms of 520 or 480 square feet are too small for primary schools. We agree, and in the second of those schools in the diagrams you will see the classrooms are 800 square feet, whereas in the earlier school which provides a total of over 70 square feet per place compared with 45 in the later, the classrooms are only about 520 square feet.

99. Did you have conferences with teachers to discuss this?—We have not ourselves directly had conferences with teachers. We are in touch with a number of teachers up and down the country, and through the inspectorate we keep in very close contact with what is going on in the developments of educational methods and ideas.

Mr. *James Johnson.*

100. In (*c*) you say perhaps 60 per cent. of the total consists of things which are not usable for teaching purposes. I would have thought, for example, the teaching of hygiene is important; you have to teach them to wash, and things of that kind. I regard that as direct teaching in a way?—Certainly, but a great deal depends on how you plan your lavatories. The old style of school, where you have a battery of wash basins and W.C.s is not, according to our information, a good way of teaching children hygiene. You need something very much more domestic in scale. In this, as in so many other ways, you find that when you get down to providing what the educators want you can do it more economically if you break down your lavatories into a number of dispersed units in different places in the school, which takes up less space.

101. Do I take it now the lavatories are all inside the schools. In the old days we had them in the yards. In the new plans the lavatories are all inside the schools?—Yes.

102. You say in (*d*) there are many highly specialised rooms which, because they are suitable for only one form of teaching, are in use for only part of the school day. Can you tell me what you are thinking of there on which you can economise apparently?—One example is the second gymnasium which was commonly provided in a four form entry secondary school. That was provided because you could not get the requisite number of P.T. periods in one gymnasium in a school of that size, and it had not been regarded as suitable that the assembly hall should in part be used for physical training. Now we provide one gymnasium instead of two, and the hall for part of the time is used as a second gymnasium.

103. Are you building any schools now without gymnasia?—Not complete schools, no. (Mr. *Flemming.*) Primary schools. (Mr. *Nenk.*) Primary schools, of course, did not have a gymnasium, anyway.

104. You say here many highly specialised rooms. Are you there thinking of science laboratories and things of that kind?—Yes. Another example is the domestic science flat, which is very commonly provided. That was a very specialised form of accommodation which really did not get fully used; means have been found of designing in a way which will make it more flexible so that it can be used not only for instructing children in housecraft but also for certain other purposes.

105. What other purposes—perhaps medical inspection and things like that?—Possibly that, or perhaps a retiring room for the older girls, or perhaps a small room for private study for small groups.

106. May I take it you are actually here on the side of Miss Ward, talking of economies? It is only the sort of non-essentials you are talking of, the second gym, the domestic science flat, and you are not thinking of science laboratories and domestic science teaching rooms as such?—Those remain, but what has happened is that instead of providing, shall we say, a classroom for each class in addition to all the practical rooms, you have rather fewer classrooms and the same number of practical rooms, so that when the children are in the practical rooms there is not an empty classroom waiting for them to go back to; somebody else is using that classroom.

107. Do you think that was a common thing, that there were many parts of the schools in the 1945-50 period which were not in use?—(Mr. *Flemming.*) In the schools which were being planned. This is comparing one plan with another rather than what existed. Schools were being planned on that basis.

108. I got the impression that somewhere you suggested that perhaps it was only used for 50 or 60 per cent. of the school timetable?—(Mr. *Nenk.*) That is so. I think this reference to many very specialised rooms is misleading, because we always think of the ordinary classroom as the most highly specialised.

109. Whereas somebody like myself would be thinking of woodworking and metalworking and so on?—Yes. The number of those has not been reduced.

Mr. *T. W. Jones.*

110. Art rooms and things of that kind: do they come into the definition?—(Mr. *Flemming.*) All this depends on the size of school, and again it is a general principle rather than a precise rule. There might be cases where to avoid having extravagant space one of the things would be to use the art rooms for other purposes.

Mr. *Norman Cole.*

111. Could I ask one question about the plans? The second plan is more compact than the first one. On the second plan, it does seem a compression of corridor. It is one thing to economise in corridor space, but surely it is another thing to make it awkward for people to travel from one part of the school to the other?—(Mr. *Nenk.*) That must be a misunderstanding, I think. *This* is the assembly hall here.

112. Yes, but the black is corridor and other spaces?—Each of those leads to two classrooms.

113. Yes, but I was thinking about somebody who wanted to go, say, from the north-west corner of that particular school down to another corner. He would have to go through an awful lot of classrooms and the assembly hall to get to it?—You do not have to go through any classrooms but you go through the assembly hall. The point is that when the school is working practically nobody has to go from one class across the school to another. That is how the school works, and that is one of the considerations which have led to this type of planning instead of the other.

Chairman.] We can come back to this again. We would like to go through this memorandum. Can we go on to paragraph 22?

Mr. *James Johnson.*

114. On paragraph 21, can Mr. Flemming tell me who is the official or officer who hands over the completed school to, shall we say, the local education officer at the end of the building, because one sometimes has found, for example, in one school in Yorkshire, that the heating passed through the woodwork room, and the heat had warped the timber? Whose job is it to see those things are checked?—That sounds like a piece of bad design. The design is in the hands of the local authority's architect, and the school is handed over to the Education Committee by the architect.

115. So it is not a job for the Ministry at all, this final handing over?—No. Once we have approved the final plan and the tender we do not come into it again until the final cost is reported, which may be two years after the school has been opened.

Mr. *T. W. Jones.*

116. Paragraph 21 is a good example of a great saving. Are the local authorities informed of all this before they start the project?—Yes, that is part of this process of consultation and advice going on all the time.

Miss *Ward.*

117. When you have had one form of heating installation which perhaps was on the more expensive level, and then some new technique comes out, do schools ever switch over from the more expensive to the less expensive?—(Mr. *Flemming.*) You mean existing schools?

118. Yes.—(Mr. *Nenk.*) In existing schools it is pretty difficult in such a thing as heating installation to change from one to another, because you have a boiler which has a certain run of pipes and so on, which you cannot very readily alter without great expense. It would not be economic to alter the heating installation in existing schools just because something better had come out. If the old system broke down, I suppose the architect responsible would consider the advantages of installing a different system.

119. You think under no circumstances would it ever pay to introduce a more modern system?—Not unless the old system had broken down. (Mr. *Flemming.*) We must not go to the extreme of "under no circumstances". As with any other business undertaking, it is an extremely subtle calculation. It certainly would not be common practice, just because something had been discovered, but it is something any prudent person would be on the lookout for and make calculations about. In the main, capital costs are so high that there would have to be some revolutionary discovery to warrant it.

Miss *Ward.*] Paragraph 22 refers to the prefabricated system of construction. You have considered that in later paragraphs, so we can defer that.

Mr. *James Johnson.*

120. In paragraph 23 it is said; "The main defect of the early post-war schools was not so much undue luxury as wasteful use of space (particulars the areas such as corridors. . . .)." It seems to me that that factor is insufficient to account for your amazingly high economies. You have got it down from £290 per place to £240?—(Mr. *Nenk.*) It is not only corridors. (Mr. *Flemming.*) This paragraph is not concerned to describe our major economies, but is concerned primarily with the Building Regulations which themselves are largely concerned with prescribing areas and so on. The sentence quoted implies that, so far as we have secured economies by reductions in space, this has been by better arrangements for areas such as corridors. This has made a substantial contribution, but you are quite right, the main reduction in cost has been secured in quite different ways not mentioned in this paragraph at all.

Chairman.

121. On paragraph 26, I wonder whether these variations did in any way affect equipment, or is there any standardisation of equipment?—These costs relate entirely to what we should call building and not what we would think of as equipment.

122. It is nothing to do with equipment?—Not furniture and the like. This is the cost of putting up the building. There is always the borderline as to what is building; some movable items may be called building or equipment.

123. In paragraph 28 you say: "The Ministry are not satisfied that the limit of economy has yet been reached in educational building". That is where we would very much like to have something on this. What do you think about this?—I did deal with this rather earlier. It is psychological rather than practical. It would be a fatal weakness to assume that one has reached perfection, and I am not doing it. I have not got some nice cards up my sleeve of particular propositions which we are on the edge of putting forward. On the other hand, we see no reason why we should assume we have come to the end of improvements.

Mr. *Norman Cole.*

124. Could I, therefore, ask why it is so categorically said: "Progress will, however, be slower than hitherto"?—That should be read in context. In the early years after the war we had no experience of this, and therefore we were slashing away at something on which one could start from the assumption it would be a long way from perfect. I think the figures show we have made reasonable progress in the last few years, and it would not be reasonable to expect that to go on as the continuous line of a graph.

Mr. *James Johnson.*

125. Would the two-tier or three-tier schools as opposed to the school which was entirely dissipated on the site be more economical?—I would rather repeat what Mr. Nenk said. This change is not by any means solely, if mainly, one of ideas of economy. It is because the building programme is changing its character. The first building was very much concerned with the primary schools. As the birth rate increase passes up the schools we are thinking of building for the secondary children, and that is one of the facts to be taken into account. (Mr. *Nenk.*) It is a general matter, I think. In certain circumstances there are economies to be gained by going up rather than along. Above four storeys it becomes very much more expensive, partly because you need lifts.

Miss *Ward.*

126. On paragraph 28, I am rather interested in the last sentence. I think, of course, it is a most remarkable performance to be able to hold the price per place against a 30 per cent. increase in general costs. That is why I am quite interested in how far costs have been gone into at an earlier stage, if it has been possible to achieve that remarkable result. The second point is—I am sure I should know this, but I do not—why must the change affect

secondary schools before other types of educational building?—There is no abstract reason there. It merely is that according to tenders we get in for primary schools and secondary schools our judgment is that the cost limit shoe is pinching rather more tightly in secondaries than in primaries.

127. I suppose I must be very dull, but I do not quite understand why the increase should affect secondaries more than primaries?—I do not think there is any reason why it should, nor does it. It is really the result of having picked on £140 and £240 three years ago, when we did not know as much as we do now. If we had known what we know now, we might have picked £135 and £240, in which case the shoe would be pinching equally hard on primaries.

128. I see?—There had to be a certain element of guesswork. In choosing £140 and £240, as things have worked out, we have made relatively greater economies in primaries, so the shoe at the moment is pinching rather harder on the secondary, partly because we have not yet gained as much experience of secondary, because fewer have been built.

129. Do you think you may be able to progress with a programme of economy in secondary, as in primary?—In time. (Mr. *Flemming.*) There is more to be learned. The emphasis of the programme is now switching to secondary school building, and it is there we are most likely to learn new lessons for the next few years.

130. Could you say something about holding the cost per place against the rise of 30 per cent. in costs?—Do you mean how it has been done?

131. It is rather remarkable that you have held it against a 30 per cent. rise in costs? —We certainly think so. We are very pleased with ourselves.

132. I quite agree, but perhaps it might have been held at an earlier stage?—That is what I was trying to say before. If one had not had a war and this had been going on continuously, we should have had our experience stored up in 1945-46, but it was only after the post-war programme got under way that we did gain that experience and set up our machinery and organisation for using that experience and taking advantage of it.

Mr. *James Johnson.*

133. Is it not a fact that you would get more economies if you cut down your standards? I think it is fair to say you have reduced the standard in new schools with regard to gymnasia and that kind of thing. Are not the standards lower now? —(Mr. *Nenk.*) In point of teaching space, new schools are no smaller than the old, speaking generally, and in primary schools at any rate, there is more teaching accommodation than there was in the 1949 schools.

Chairman.

134. What about amenities?—(Mr. *Flemming.*) May I go back to the paragraph? When we say: "The Ministry are not satisfied that the limit of economy has yet been reached", we do not mean we are not satisfied we could not cut standards further. That is easy; that is anybody's game to say with a stroke of the pen children should have smaller rooms. That is not what we are talking about. What we mean is we are not satisfied that with more use of experience and more skill and more getting together generally it may not be possible to take economy further and produce the same school or an equally useful school more economically.

Mr. *James Johnson.*

135. I was merely speaking about this 30 per cent., because we have not got 30 per cent. by more technical efficiency?— In the main. We should describe it all as technical efficiency if you include in technical efficiency not merely the architect considered in isolation but the architect and the teacher working together to produce what is wanted.

Mr. *Malcolm MacPherson.*

136. When you talk about the lessons learned and the skill and experience, it is not merely a case of lessons you have learned. Presumably you are also thinking what are the areas in which you are likely to acquire these. Could you indicate the areas in the secondary school just now in which you think the advance of experience and skill would be likely to be most useful?—(Mr. *Nenk.*) I think we would say that in all parts of the school, in all aspects, we think it is possible there are further things.

137. There are no aspects in which you feel you are more likely to be permanently satisfied than in others?—No. Whether it is heating systems or electrical installations or floor finishes or the amount of space devoted to circulation, or the way you hang up your coats, or the number of lavatories, or whatever it is, we are not taking the line that anything is settled and finished with. It is all open to further investigation and ideas.

Miss *Ward.*

138. The use of plastic materials, perhaps, instead of having to paint and wash walls so often; there might be tremendous developments in that direction, might there not?—Yes; plastic emulsion paints are being used, and, of course, the structural use of plastics is being investigated. The problem there is cost.

139. Taking it over a period it might be an economy in maintenance. One has got to balance one against the other?—Certainly.

Mr. *Norman Cole.*

140. Is the relative difference of knowledge between the secondary schools and primary schools in any way related to the degree of consultation which has taken place over the past years? Would it be that more research from the teaching angle or the Ministry's angle with regard to secondary schools or primary schools could produce more economy in future?—So far only one school in, perhaps, five that has been built since the war is a secondary school. Now the balance is turning, and we shall get more secondary schools than primary.

141. In other words, you have had an opportunity of exploring one field more than the other?—Yes.

Chairman.] Now, the question of the economy in materials. You say here, in paragraph 29: "Within the limits of cost, local education authorities have complete discretion in the choice of materials, other than steel and softwood". I think, Mr. Johnson, you were interested in steel?

Mr. *James Johnson.*

142. I do not know whether you did answer that, Mr. Nenk. The question I put to you was whether if steel were more plentiful, as it appears to be becoming in the near future—we are now smelting 17 million tons a year——?—That was the rate for the one month.

143. Yes, but by and large there is no doubt they are doing better?—There are two things. First of all there is the question of how much steel, assuming it continues to be allocated, the Government decides to give to school building. That may or may not be a limiting factor. Within our present allocation we are satisfied that our priority programme can be carried out without any insuperable difficulty, provided that people use it economically.

Mr. *Malcolm MacPherson.*

144. The shortage of steel, I take it, would have as one effect a tendency to restrict building above a certain level. The less steel you have the less you can build above the ordinary ground floor?—Not necessarily, because what you can do is to devote all the steel you have to the multi-storeyed buildings, and build your single-storeyed buildings in other materials. (Mr. *Flemming.*) We allocate steel to the local authority's programme as a whole, and it is for them to distribute it over their different projects as they find most convenient

Chairman.

145. You are not restricted in materials other than those two?—(Mr. *Nenk.*) No.

146. It would not be correct to say either the Ministry of Housing or the Ministry of Works would affect the building programme by any restriction?—(Mr. *Flemming.*) That is not so. It is, as far as it is expressed in terms of these materials. The Government also have to plan their full building programme having regard to the total amount of national resources of all kinds they wish to devote or think able to devote to them. That determines the size of our programme. It is expressed for convenience in money terms.

Mr. *James Johnson.*

147. Would you care to say in what degree the allocation of building labour to the educational programme is affecting the pace of keeping up schools?—(Mr. *Nenk.*) Labour is not allocated to educational building or anything else. It is governed by the award of starting dates. There are certain parts of the country where you cannot start whenever you want on a job because there is great pressure on the building labour, and we overcome that by encouraging the authorities to use labour-saving construction.

148. In some places you encourage them to build prefabricated schools, aluminium, for example?—Yes.

149. What are the bad areas for this?—Mainly the Midlands, and certain other parts of the country where you have major housing estates going up and New Towns.

Chairman.

150. Would it be correct to say that your building programme would be increased if you could obtain more labour and materials?—(Mr. *Flemming.*) Could I deal with that? That rather assumed a Government Department is a free agent. We operate, as do other Government Departments, in accordance with the Government's policy, and the Government's policy determines the size of our building programme.

Mr. *James Johnson.*

151. My only point was this. Say you actually planned to build 80 schools or 180 schools, how far you are held back?—(Mr. *Nenk.*) On this question of building labour we are not held back in the total.

Mr. *Malcolm MacPherson.*

152. You must find some difficulty in getting building done in areas such as the mountainous areas of Wales or the corresponding areas on the Pennines?—(Mr. *Flemming.*) Not always. It may be in relation to the small jobs there are more

local resources. It may be in places where there is a great volume of industrial or housing for using the building labour up. There is not likely to be much difficulty in the remote corners of the Pennines. There is no other competition for the resources.

153. There is generally difficulty of transport?—Providing the scale is not disproportionate it is all right. If you go building a big institution in a remote valley it would be difficult.

154. I asked because of the contrast in the comparison with Scotland, where there is very serious difficulty in getting even houses built in places like the Western Isles. I gather you have got no recent similar experience?—No, because we are dealing with very few.

Chairman.

155. You could have very popular industrial areas where huge municipal estates are going up. In those areas you require factories and other buildings as well as schools. That was the point of my earlier question, to find out whether you were restricted in any way?—That, of course, is no doubt one of the factors which the Government have in mind in planning their building programme. It is no good authorising a paper educational building programme which they do not think can be carried out. They plan a building programme which is "on the national scale" related to the total amount of resources either which can be or which in the Government's opinion should be made available for it.

156. We are coming on to the question of the transport costs. It is all bound up. If you cannot build a school in an area where it is absolutely necessary it would mean, of course, that your costs would increase in other directions, like transport? —It is very likely to happen for a time on any programme. It is not just a question of how much you build but you cannot build as quickly as you like.

157. I still want to try to find out whether you are confronted with any such difficulties. I gathered earlier you said not?—No, you cannot take it that way. Certainly there are some schools which are not completed as readily as we should like. There are cases in which very heavy expense is being incurred on transport. I am not saying that can be put down entirely to the shortage of building labour. It might be that the local authority were slow in getting off the mark; it may be there was some haggling about the site; there may be a whole host of contributory reasons, and you cannot simply say that the shortage of building labour caused the hold-up.

Mr. *Norman Cole.*

158. On the question of economy, the three paragraphs 29 to 31, if in fact one could visualise a period when there is no shortage of steel and softwood, would that result in economy of building? It points out that the shortage of these causes lack of economy, but could you tell us how there would be economy if there was no limitation of those materials?—(Mr. *Nenk.*) I think the availability of more steel in itself would not necessarily lead to greater economy. If unlimited supplies of softwood were available I think it would.

159. How would that be?—For example, you could use softwood for the construction of roofs, whereas at the moment you have to use steel or concrete.

Chairman.

160. What about hardwood?—Hardwood is very much more expensive.

161. You would consider using hardwood?—The authorities do consider using it and in one or two cases are using it, but it has not led to economy.

Mr. *Norman Cole.*

162. In short, the steel position would not help very much, but if softwood could be used in place of the dearer materials you have to use at the moment it would be an economy?—Yes.

Mr. *Malcolm MacPherson.*

163. Have you in mind when you discuss the life of a school that you expect a school building to stand for fifty years? —We think of sixty or eighty years.

164. Is there any difference in the different types of school? You would expect them all to last for sixty to eighty years? —The point is they get a loan period which is fixed in relation to the type of construction. The permanent school, by which we mean a school lasting sixty or eighty years, gets a loan period of thirty years. If the form of construction is not up to the standard laid down it will get a shorter loan period.

Chairman.

165. What about a prefabricated school? —A prefabricated school is not necessarily impermanent in any respect.

Mr. *Malcolm MacPherson.*

166. When you think about economies and materials, do you start on the assumption that a school should last sixty or eighty years and you want to use such materials as will get it to last?—Yes, and all the time, in considering the use of any particular material, one has to balance up capital cost against running cost for that sort of period.

Mr. *James Johnson.*

167. How long do you expect an aluminium school to stand up, and what about costs?—We regard them as permanent schools.

168. Sixty to eighty years?—Yes, except in certain places where you have got very high acid content in the air, the material does not corrode, and the whole of the outside of the school is either aluminium or glass.

169. I was going to ask you about this type of school. For example, asbestos walls, with youngsters sticking chairs in them, it seems to me that these prefabs, aluminium or others, will not last so long in that particular sense of the term, would not stand up to the bashing that the other more solid type of school would?—Of course, you have to be careful where and how you design it; that is really the point. It all comes back to the question of design in the end. If you have asbestos panels for the outside walling at ground level it might well be it would get broken, but if you have concrete blocks for the ground floor and asbestos sheeting for the upper floors there is no reason why the asbestos should get broken. Again, if you design your school so that there is no particular reason why the children should bash it, the fact that it is an aluminium panel instead of a 13-inch brick wall does not seem to be very important.

Chairman.

170. Could you give us some details of the schools built on prefabricated lines, where they are and what schools they are and what materials are used? I do not mean now, but could you give us a list of the different types you have experimented with?—Yes, certainly.

Mr. *T. W. Jones.*

171. Could you tell us what you regard as the ideal school of the lowest possible cost?—I can give you a list of schools which in our view represent reasonably good value for money, but, as I have said before, I do not know of any ideal school, and I do not expect to see one in my life.

Chairman.

172. You do mention pilot schemes to experiment with new ideas in school planning?—Yes.

173. Where are they?—One which is completed, the second of those I passed round, is at Coventry; that is in use. Another which is nearly finished is in Berkshire. The third, which is just started, is in Coventry. The fourth, which will be starting in the spring, is in Derbyshire. The fifth, which will start next summer, is at Worthing; and the sixth, which will also start next summer, is in Coventry again.

174. It seems we might be able to see something at Coventry?—At the moment you will only see one, because the other one is not finished.

Mr. *Norman Cole.*

175. The experimentation is in the layout, not so much in the materials?—Both. (Mr. *Flemming.*) There is a great deal of experimentation on materials which could not be described as prefabrication.

Miss *Ward.*

176. Is Coventry particularly receptive to the idea of these pilot schemes?—They have a big building programme, and in relation to this particular kind of scheme the local labour difficulty makes it worth exploring.

Chairman.

177. I would like to ask a question about transport before we conclude. In the Ministry Circular 242 it is said in paragraph 5: "The Minister finds it necessary to ask for a reduction in the expenditure on school transport, which has been steadily rising and has now reached a figure of over £4 million." I understand children aged five to eight years are expected to walk 2 miles, and aged eight to fifteen years expected to walk 3 miles?—That is in the Act.

178. Could you give us some information about the cost of transport as a separate issue?—You mean breaking up this £4 million and so on?

179. Yes?—What kind of information would you like about it?

180. In what respect it would be possible to economise in this?—Yes, we could give you a note on that. We could give you both what we have tried to do and what we think is likely to happen. Of course, the only obvious economy is to make the children walk further in the long term. There is the temporary transport which everybody regrets, which is simply done because a school on a housing estate was not built soon enough, and there is the big transport provision which we have chiefly in mind in the country districts.

181. Would not it be impossible to reduce transport costs if you cannot provide the building in time to cater for the actual need? How is it possible to reduce this figure? Is not it likely to increase it?—That is why I want to divide it under those two heads. There is the transport, which is the great bulk of this, which is in no way related to this particular building difficulty we have been discussing this morning. That is purely a marginal amount. I do not see any reason why that should be increased. That assumes our building programme is going to fall further behind requirements, and on our present information there is no reason why that should happen.

182. In Circular 245, there is this paragraph, number 10: "Futhermore, where new building is essential to meet the minimum needs specified above, it may be necessary to subordinate long-term considerations, such as the Development Plan proposals for the area, to the immediate need to reduce investment"?—May I again explain there are two kinds of transport. Circular 242 is concerned with trying to reduce the amount spent on transport in rural areas by making children walk who would otherwise have been riding in certain marginal cases. That is one set of circumstances. Then there is a quite different set of circumstances which you have now in mind, namely, transport which is undertaken because of housing development having outstepped school development. I do not know how that may work out. I quite agree it is not under control as a matter of policy. It is forced on you if your school building is falling behind. The fact that that may happen does not in any sense whatever prevent us from tackling the rural transport problem.

Miss *Ward.*

183. Those are all the taxis and things?—It is chiefly buses. The taxis get in the newspaper, but the main part of it is buses.

184. Every time transport charges go up the monies spent by the education authorities are bound to go up too?—Yes; we do not overlook the cost of petrol and so on.

185. Have all the local authorities who are actually providing children who under the Act should not have been provided with transport all been stopped now?—I should not like to say necessarily they have all been stopped. As far as any case comes to our notice we have dealt with those since the issue of this Circular, and have put the policy in front of them.

186. What does happen if local authorities continue to defy the law?—It is not the law. The law prescribes certain things which must be done. What they may do is within their discretion, but it is for the Minister to say what he will pay grants on. What we are concerned with is not the question of breaking the law, but the Minister will say certain expenditure will not attract the grant.

187. Has he taken any action in regard to any local authorities on those lines?—Yes.

Chairman.

188. In this Circular there is the very categorical statement, that "it will not be possible to build schools to serve new housing development where, by the use of transport or by the adjustment of catchment areas, the children from the new houses can for the time being be accommodated in existing schools." I would like to know what is going to be the cost of the transport as a result of this. Would it be possible to give the Sub-Committee a memorandum on that?—We can give you a memorandum*, but I do not think it will contain figures, because I should think it is quite impossible.

Mr. *James Johnson.*

189. Would Mr. Flemming care to comment on the position of denominational schools, particularly in Lancashire, where you have had Merseyside people blitzed, and so on, and many cases where you cannot build a new Catholic school, where you may have to convey large numbers of Catholic children over a large area? Is it possible to take one area like Lancashire and perhaps give some estimate?—I do not see how we can isolate all the factors that come into it. What the Chairman is after is the relationship of building and transport, and that is the most one can do, to give some very narrow illustrations, not over a whole area but on a quite big case which may have happened. Would it help if I tried to give an illustration of the order of costs of a case which has happened where the completion of the school has been delayed and we could show that carrying so many children has cost so much money? What I shall not be able to do will be to give any estimate of the extent to which by running things fine on the building programme we are increasing the risk of that happening in the future.

Mr. *T. W. Jones.*

190. I suppose transport costs have gone up in rural areas due to having to put a secondary modern school where none existed?—As part of the provision of secondary education, yes.

Miss *Ward.*

191. Could we have a memorandum on the pilot schemes?—(Mr. *Nenk.*) We have put very full details of the first of those, though it is not the first to be completed, in Building Bulletin No. 8. We have sent you copies.

Chairman.

192. Not enough for distribution?—You would like enough copies of Bulletin No. 8 for distribution?

193. Yes, please?—(Mr. *Flemming.*) We will let you have the information about different schools and a memorandum on transport on the lines which I was discussing just now.

194. Thank you very much indeed for your patience in listening to our questions?—Thank you for the stimulating questions.

* Annex 2.

The witnesses withdrew.

Adjourned till Wednesday next, at Eleven o'clock.

WEDNESDAY, 17TH DECEMBER, 1952.

Members present:

MR. YATES in the Chair.

Mr. T. W. Jones.
Mr. Malcolm MacPherson.
Brigadier Peto.
Miss Ward.

Sir WILLIAM MURRIE, K.B.E., C.B., Secretary, and Mr. A. G. RODGER, O.B.E., Assistant Secretary, Scottish Education Department, and Mr. R. S. MORTON, Deputy Chief Architect, Department of Health for Scotland, called in and examined.

Chairman.

195. Sir William, we understand you are the Secretary of the Scottish Education Department. Perhaps you would, for the purpose of our records, tell us what your special duties are, and those of your colleagues?—(Sir *William Murrie.*) As Secretary of the Department, I am responsible for the whole of the work of the Department. I have with me Mr. Rodger, who has been the Assistant Secretary in the Department responsible for building and subjects connected with building. I also have with me Mr. Scott Morton, who is one of the Deputy Chief Architects of the Department of Health for Scotland. I should explain that the Secretary of State's Departments are all housed in St. Andrew's House in Edinburgh, and there is a certain amount of common services. The Scottish Home Department and the Scottish Education Department use the architects of the Department of Health for Scotland for their work, and Mr. Morton is the Deputy Chief Architect who looks after the school building side.

196. Thank you very much. You have submitted to us quite a detailed memorandum* on the building programme in Scotland. Before we consider that, could you tell us whether you have had anything equivalent to the circulars which are sent out in England from the Minister of Education? We have circulars 242 and 245 which have been issued by the Ministry of Education here in England, which give certain instructions to local authorities. Have you had any such instruction?—We have two circulars that were sent out in Scotland, one in December, 1949, and the other in August, 1950. I think those correspond to the English circulars, but I would not like to say they were exactly the same.

197. Then you could let us have copies of those circulars?—Certainly.

198. We could see what actual instructions you have received. Looking at the memorandum which you have submitted to us, on the first page there is a section dealing with the investment programme, and reference is made to the number of places "found in existing schools where there was a surplus of accommodation or where by crowding up additional pupils could be accommodated". I wonder if you could tell us what that surplus accommodation is and whether you still have surplus accommodation?—I think it has arisen mainly in formerly closely packed urban districts where the population has thinned out as the result of slum clearance and the movement of people out into housing areas in the outskirts. Perhaps Mr. Rodger could confirm that? (Mr. *Rodger.*) That is one of the types of areas where there has been surplus accommodation. The other type is in the rural areas, particularly the Highland areas, where progressive depopulation over a long period has produced a certain amount of surplus accommodation.

Mr. *Malcolm MacPherson.*

199. With regard to the surplus accommodation in the Highland and rural areas, has that been produced entirely by the movement of population and not in part by a policy of concentrating pupils in more convenient areas?—I should say the second is a small thing compared with the first.

Mr. *T. W. Jones.*

200. Have you the same system in Scotland as in England and Wales, that is, primary, modern secondary schools, etc.?—In Scotland we have the primary school, corresponding to the English primary school, but it takes pupils up to twelve years of age, perhaps nine months to a year longer than in England. But the secondary school system in Scotland is rather differently organised from the secondary school system in England. There are grammar schools, modern schools, and some technical schools in England. In Scotland the organisation is not so much by type of course but by the length of time the pupils are going to stay at the school. There are five-year schools and three-year schools. In many cases the two types are in one school, so that there are quite a number of schools providing all kinds of courses in one building for pupils leaving at fifteen and also for pupils who are going to continue up to the University stage.

201. In Wales we have many instances (my own school was one) where they formerly had 300 children and it has been reduced to less than 100, due to two factors, the shifting population and also that Standards V, VI and VII now go to a secondary modern school. So that there is plenty of accommodation in that school now as a result of those two factors. Would

* Annex 3.

that be true also of some of these schools you have in mind in Scotland? It is not due entirely to the fact that the people have been removed, but that the children have been removed to other schools?—To some extent in the Highland areas that would be true, but only to a limited extent. Whereas formerly one school was dealing with all its pupils, now a certain measure of centralisation for secondary schools has been achieved. But in areas where transport is so difficult, as in the Highlands, even centralisation of secondary schoolchildren presents difficulties, and therefore it has not been achieved everywhere.

Chairman.

202. You have explained what you mean by surplus accommodation, but I would like to find out what you mean by crowding up. To what extent have you had to crowd children in order to provide these 22,000 places?—Where authorities have had classes much under the maximum permitted by the Code, they have sometimes allowed those classes to grow rather than build a new school. Sometimes these expedients are only temporary until such time as new schools can be built.

203. Does that mean you have got 60 in a class?—No.

204. What does it mean?—It means classes which were formerly beneath the maximum prescribed by the Code have gone up to the maximum and sometimes slightly beyond.

205. The maximum is what?—45 in the primary schools.

206. Is the surplus accommodation now all disposed of? Have you no surplus accommodation now in Scotland?—One would not say that there is no surplus accommodation. Unfortunately, part of the surplus accommodation that remains is of no use. For example, if there is still surplus accommodation in a Highland school and no children to use it, then that would just remain as surplus accommodation.

Mr. *Malcolm MacPherson.*

207. Could I ask a question about paragraph 2 in general? I would gather from the figures given here that if you add 114,000, 21,000 and 4,000, you would get the total size of the problem so far as you see it as a problem existing at this particular moment—about 140,000 places. Would that be right? That is stating it rather differently from the way you state it in the table?—Are you quoting from the second paragraph?

208. In the third sub-paragraph of paragraph 2 the increase necessary is 114,000 places; in the next sub-paragraph 21,000, and in the next 4,000?—Yes.

209. Your real problem would be the total of those three, so far as the building programme is concerned?—(Sir *William Murrie.*) Yes: these three, together with the existing deficiency, define approximately our requirements by 1957. There is a certain amount of difficulty in distinguishing precisely between the high birth rate problem and the new housing area problem.

210. I was going to ask you whether you would elaborate a little more your statement about the high birth rate problem. The second last sub-paragraph of paragraph 2 says: "The increased demand for school places due to the high post-war birth rate will be only temporary, and in many areas the need will be met either by using surplus places", and so on. What is the general policy about this problem? You do not explain fully whether you are basing your attack on it on the notion that it is temporary and therefore perhaps you are going to strain existing accommodation, or whether you are going to make a special attempt to settle it as a new problem?—We are trying to steer a middle course between doing nothing to meet the higher birth rate, and therefore having a very awkward situation during the next seven or eight years, and providing accommodation simply to meet the higher birth rate, which after that time would be completely useless. We are neither going to one extreme nor the other.

211. When you look at your general problem of building in the future, the bulge occasioned by the higher birth rate is only temporary and incidental from your point of view?—Yes.

212. Your main problem would so far as possible take that in your stride?—Yes.

Chairman.

213. In regard to the question of the number of places required as a result of the raising of the school leaving age, you say in the second sub-paragraph of paragraph 2: "About 41,000 of the 67,000 places required as a result of the raising of the school leaving age." Then on the next page, in the table headed "The general building position", you mention the number of places required as a result of raising the age is 44,700. I do not quite understand that. Ought not that to be 67,000, if you say in that sub-paragraph on the first page there are 67,000 places required? How does it come about that the figure quoted in the table is 44,700?—I think we were taking away the 22,000 places that had been found in surplus accommodation. We regard this table as a statement of the new building needed, and we therefore subtract the 22,000 from the 67,000.

Chairman.] Is there anything else any Member wants to ask on that first page?

Miss *Ward.*

214. Could I ask one question on the last sub-paragraph of paragraph 2 with regard

to The Schools (Scotland) Code, 1950? That in fact has come into full operation, has it?—Yes, it has.

Mr. *T. W. Jones.*

215. The classes are reduced to 45?—(Mr. *Rodger.*) Yes. There are a few classes, of course, above 45, but that is not in accord with the Code.

Miss *Ward.*

216. That is what I meant. Has the Code come into full operation, or is it still a Code to be achieved as the situation makes possible?—(Sir *William Murrie.*) I think it has come into full operation, but there are a few exceptional cases where the classes are allowed to be over 45 because there is a difficult situation.

217. Would it be fair to say it is a better situation in Scotland than in England so far as the classes are concerned?—No, because our size is 45 as against 40 in England.

218. That is what is sought without necessarily it always having been put into full operation?—I cannot compare it with England because I do not know how many exceptions to the limit of 40 there are there. I can say there are not very many serious exceptions to the limit of 45 in Scotland.

219. Could you put a number to the exceptions?—(Mr. *Rodger.*) There are about 2,000 classes in Scotland above the various maxima prescribed by the Code, of which about 1,200 have over 45 pupils, the prescribed maximum for normal primary classes.

Mr. *T. W. Jones.*

220. This is only incidental, but it will be of interest. I am hoping it does not happen in Scotland. I was a school teacher myself some years ago, and had over 60 in my class. I think it was in 1929 the Code stipulated that the maximum should be 49. What the Headmaster did in my case was to transfer the names from my register to another register, so that I was credited with having 49 but actually still had over 60. As Chief for Scotland, I hope you will make a note of that?—(Sir *William Murrie.*) Yes, I will.

Mr. *Malcolm MacPherson.*

221. With regard to the figures given in paragraph 3 of school places, is there any possibilty of knowing roughly how many new schools that would mean? Or do you not calculate that until the individual localities produce the problem?—(Mr. *Rodger.*) You mean how many schools does it represent?

222. Yes?—The school is a rather difficult unit to deal with. In Glasgow it is a big thing. In a country area it may be a new room that is required.

223. You know generally the topography of the problem, where most of the demands are going to come from? You would know whether you want big city schools or small rural schools?—Many more city schools than rural schools. The rural problem is not a big one.

224. You can only work in places, I suppose, where the problem presents itself practically?—Yes.

225. Is there any possibility of indicating what proportion of those places would be primary and what proportion of others secondary, technical and so on? Would the main building problem ahead of you be a problem of building primary schools?—The main problem up to now, apart from the raising of the age, has been a primary problem, largely because the post-war bulge of birth rate is hitting the primary schools first, but we are gradually moving into a period where a substantial part of the problem will be secondary.

226. Roughly what part?—About four-elevenths, roughly a third.

227. Can I ask about the continuing deficit that you foreshadow in the figures from 1952 to 1957? I suppose the investment policy might change and that sort of thing—it might not occur—but on the assumption that something like these figures work out, how would that deficit be carried? Where would the pupils be?—(Sir *William Murrie.*) Could I first make a comment on the deficit itself? I wanted to say two things: one was that since we wrote this memorandum we have again asked the Department of Health what the housing prospects are, because our need depends in large measure on the number of new houses they build, and we have been told that they expect to get on quicker than we had assumed for the purpose of this table on the previous information given by them. Therefore, the figure of 66,900 which you see at the extreme right-hand bottom of the table should probably be about 70,000. That is the first point. The second point I wanted to make was that for the purpose of this table we have assumed that we should go on providing schools at the rate of 1952, the current year. But in our investment programme for 1953 we have provided for building rather more schools, and in our investment programmes for 1954 and 1955 we hope to go on building on a higher level still, each year building a bit more.

228. In spite of the fact that more building resources will be used for housing?—Yes.

229. If housing is going to increase and school building is going to be increased and factory and hospital building not unduly slowed down, is it going to be a greater strain than the existing resources can carry?—That is the purpose of the investment programme, to adjust these things. All I can say is that we have been given a

slightly higher investment for 1953 than we had for 1952, and we have asked for more again both in 1954 and 1955. Whether we shall get what we ask for I cannot tell you.

230. So that the deficit indicated here is not likely to work out in these figures, but you will still have the problem of teaching the youngsters for whom you have not got enough buildings?—Yes.

231. What would be the policy?—What we would aim at doing is not assuming the deficit should go on increasing as shown in this table, but we shall still have a deficit, and you are asking how we are going to cope with it?

232. Yes?—I think it can only be by crowding up. (Mr. *Rodger.*) We are carrying the deficit at the moment, not comfortably. We could continue to carry it.

233. It means the figures of over-sized classes would go up a bit?—Not if the deficit does not increase. If the deficit remains at its present size the over-sized classes would not necessarily grow.

Chairman.

234. Paragraph 4 and what follows on that page seem to me to be very, very serious. In the first place you say in paragraph 4 that as a result of the capital investment allocation " much less than would be desirable has been allocated to buildings for technical education ". You say there is little need be spent on building for the training of teachers, and then you go on to say no expenditure whatever is being incurred on six items. I wonder first of all if you could tell us what the restriction in building for technical education means, what disadvantage that is or what danger is in that. Have you cut out what is absolutely vital and essential?—(Sir *William Murrie.*) I think the position is, so far as the technical colleges provided by local authorties are concerned, they have not been putting forward many proposals of that kind because they themselves have recognised that their first job, or their most urgent job, is to provide for those children who otherwise would not have had a roof over their heads. We have not felt able to press them to do more in the way of the provision of technical colleges because we realise that they have their hands full with the other problem.

Chairman.] Is the provision for technical education very inadequate in Scotland?

Mr. *Malcolm MacPherson.*

235. I think, Sir William, you would agree general opinion would be that it is. Scotland is behind England in technical education, or at least the recent advances have been less?—I have not been there long enough to be quite sure about the answer to that, but we could certainly find out. I do not think it is behind in the higher ranges, in places like the Royal Technical College in Glasgow, for example.

Mr. *Malcolm MacPherson.*] Not in quality, but in the amount of provision I should think it is.

Chairman.

236. You say " much less than would be desirable ". I am trying to find out what is desirable and what is necessary and whether your provision is really very, very inadequate, and you and your colleagues can tell us about that, whether that is so. Have you been obliged to restrict technical education?—I do not think we have ever restricted a technical education proposal. It is simply that we think more could possibly be done about technical education, and if there was not this other urgent problem of providing for the children who have to be in school, we should, I think, be pressing local authorities to put up proposals, and no doubt they themselves would be putting forward proposals more freely. I cannot say we have actually turned down proposals for technical education. (Mr. *Rodger.*) I cannot recollect a case of turning a proposal down.

Mr. *Malcolm MacPherson.*

237. What about technical institutions not under the control of local authorities? —(Sir *William Murrie.*) I mentioned the Royal Technical College in Glasgow, which is a Central Institution and has a Board of Governors. They are an exception to what I have been saying, because they are going on with a very big scheme of development.

238. In that case they would be under the University Grants Committee and not under the Department?—It is partly under the Grants Committee and partly under the Department. They get some of the money from the University Grants Committee and some from us.

239. But there are a fair number of other institutions for which the Department is responsible and in which one would imagine the present economic and industrial situation generally would call for expansion of technical education facilities? —I think the Heriot-Watt College in Edinburgh is also building at the moment and expanding. I am not seriously concerned about those Central Institutions. I think they are developing as fast as one could reasonably expect. It is the lower level of technical college that does give one more concern.

Mr. *Malcolm MacPherson.*] That would be where there is the biggest contrast between the English and the Scottish situation.

Brigadier *Peto.*

240. The difficulty appears to be mainly through the lack of capital investment. The brake has been put on the technical schools

in order to provide more school places. Can you, Sir, say by approximately what date the school places to be provided will be provided and technical schools can once again go ahead as you would wish?—It is very difficult to give a date. I should think about five to seven years.

Brigadier *Peto.*] That is the sort of thing I had in mind.

Chairman.

241. What I am trying to find out in terms of economy is whether or not your technical training and education in Scotland is so inadequate that we must be losing in other directions. Is it so difficult, or are you quite satisfied that there is no danger of loss arising from your present restrictions?—I am not satisfied that we are doing all that we should in an ideal world in the way of providing for technical education. It is simply that it has to come a little behind the essential problem of providing for children who otherwise would not have schools to go to.

242. Then you say about teachers there is little need be spent on building for the training of teachers. Yet you tell us you have got to provide for this increased number of children and places in the schools as a result of the raising of the age, which means that you must have to have a large number of additional teachers. If you do not have to build for the training of teachers does that mean at present you have a surplus of accommodation for the training of teachers?—I think our training colleges can take in more teachers. They have room for them. (Mr. *Rodger.*) They have already done so, because after the war, when all the returning soldiers and sailors and airmen were in the colleges, the colleges were able to meet that situation, and having met that situation they can meet any situation that we can foresee for some years to come.

243. You say no expenditure is being incurred on a reduction in the size of classes, secondly on the replacement of obsolete or unsatisfactory premises. Can you tell us how many schools are obsolete and unsatisfactory in Scotland? Does that approximate to what we call the black list schools in England?—(Sir *William Murrie.*) We have not got a black list in Scotland. I am not sure what the estimate is. (Mr. *Rodger.*) I could not estimate the number of bad schools there are, but there are a very considerable number. They are schools which neither the authorities nor we have been proud of for a very long time.

244. Could you let us have that information?—(Sir *William Murrie.*) We could try to make an estimate, certainly.

245. I am not asking for a lot of statistics or a lot of time, but would you have that information readily available at all?—I do not know how readily available. We have no black list in the usual sense, but we would do our best to get that information.*

Mr. *Malcolm MacPherson.*

246. When you do that, could you give some indication of whether the main number are in the industrial or the rural areas?—Yes.

Chairman.

247. You say no money is being incurred on the provision of nursery schools. Have you got a programme of nursery schools? Is there one being carried out at present, or are you not building any at all?—(Mr. *Rodger.*) There is not at the moment any definite programme for nursery schools. Sites, however, in new housing areas have been reserved for the provision of nursery schools some day, but there is no programme at the moment for building these schools. That has been in accordance with Government policy for some years past.

248. It has been in accordance with Government policy that no nursery schools should be built?—Yes.

Mr. *Malcolm MacPherson.*

249. Can I ask about day release? I take it in your needs that would come under the wider heading of technical education, but would I be correct in saying that nearly all day release teaching is being accommodated without new building? You are managing to achieve the expansion without new building?—That is very largely correct.

250. Have the buildings you have got turned out reasonably suitable?—In the main, yes.

Chairman.

251. You say there is no expenditure on the expansion of the school meals service. What happens, then, as you provide for the children on the new housing estates?—The school meals provision is made in new schools.

252. What do you mean by that, then, that there is no expenditure incurred on the expansion of the school meals service?—(Sir *William Murrie.*) Where a kitchen at a particular school provides for 300 or 400 children, we are not building it up to provide for 600 children.

253. You are having to make do?—It does not mean that where a new school is built no provision is made.

254. That does not create any special problems?—No.

255. The next item on which you say no expenditure is being incurred is the development of libraries and community centres. What do you mean by community centres? Is the Education Department in

* Annex 4.

Scotland responsible for providing community centres?—(Mr. *Rodger.*) The Education Act makes it possible for an education authority to provide a community centre. To that extent the Department are concerned. It is also possible for other local authorities, within the sphere of the Scottish Home Department, to provide community centres. There is a certain joint territory in this field.

256. If you do not develop your libraries, will that have an adverse effect on the education of the children?—(Sir *William Murrie.*) Yes, it will.

Mr. *T. W. Jones.*

257. Have you a system of circulating libraries in Scotland?—Yes.

Mr. *T. W. Jones.*] I would say this, in case we create the impression that Scotland is backward in this respect. What is tabulated here as true in Scotland would be equally true in England and Wales, unfortunately, due to the curtailment of capital expenditure. We cannot boast in England and Wales of the provision of nursery schools. We have not built one since 1945.

Chairman.

258. That might be rather interesting, to be quite clear about the curtailment of the capital expenditure programme. Since when has this happened?—(Mr. *Rodger.*) I think the White Paper on Investment in 1948 was the one which made the first announcement about it.

259. I did mention at the outset that in England and Wales the Minister of Education had issued circulars, and I wondered if something similar had been issued in Scotland, and you answered that, but you said they had been issued in 1949 and 1950. The circulars to which I have referred are 1951 and 1952. That is a new instruction, for instance, under the present Government, as distinct from what instructions were issued by the previous Government?—(Sir *William Murrie.*) We did send out a general circular about economies in educational expenditure in February, 1952, but that was not concerned particularly with building. I had assumed you were asking about Circulars mainly about building, and our 1949 and 1950 circulars are those, but we could let you also have a copy of the February, 1952, circular.

260. If you would, please?—May I say one thing about libraries? When we build a new secondary school we do provide for a library in it, and when we say nothing is being spent on libraries we mean nothing is being spent on putting up new buildings for libraries alone.

261. In regard to the community centres, even though you are building new schools in new housing areas you are not building new community centres?—Not at present. (Mr. *Rodger.*) Not as such.

262. That is not included?—No.

263. You give the details of the allocation of investment, and in paragraph 6 you say: "Deficiencies of accommodation cause waste of money," and you give an example. Before going into that question of the example, are there any other examples of the waste of money resulting from deficiencies of accommodation which you could give to the Sub-Committee?—So far as I can think, all the deficiencies arise in relation to transport. We have given you the figure for 1950-51 in Glasgow. The figure, I am sorry to say, for 1951-52 is higher; it is £103,000. In Edinburgh the figure is £9,000, and in Dundee £1,000. So far as we know, there are no other areas where this particular cost is substantial. It is probably true, therefore, that a very large part of the whole of this expenditure is in Glasgow.

264. But the point is that this expenditure has gone up from £80,000 in 1950-51 to £103,000 in 1952, and I take it it is likely to go up still further?—No, I should hope not. The building of new housing areas is always continuing in Glasgow, but beginning next year we ought to be getting the first big return in completed school buildings, which should ease the problems of Glasgow very considerably. I should hope the transport figure may improve. I should be surprised if it went up.

Mr. *Malcolm MacPherson.*

265. The cost of transport in rural areas in the borders and in the Highlands is small compared to this?—There are two types of transport to keep in mind: transport due to lack of buildings and transport to take children to school in rural areas. We are not counting the latter type at all, because it is irrelevant to the present consideration.

Chairman.

266. What regulations have you in regard to the distances children have to walk to school? Are they the same as in England? —I think they are the same. It is 2 miles for children under eight years of age and 3 miles for children over eight years of age.

Mr. *Malcolm MacPherson.*

267. Can I go back to paragraph 4? There is an item for repairs and maintenance, £1.4 million. Does that mean a programme which keeps the fabric right up to standard, doing all the repairs required to keep the buildings in the state they should be in?—(Sir *William Murrie.*) We think it means a little more than keeping them in good repair, and that a certain amount of small additions come under that heading of repairs and maintenance. It is a very difficult distinction to make. We know that sometimes, for example, a change of the lighting system in a building has been put down under repairs and maintenance.

268. Whereas it is actually an improvement?—Yes.

Mr. *T. W. Jones.*

269. Is it done by direct labour or contract?—Generally contract.

Mr. *Malcolm MacPherson.*

270. There is an item, "Other buildings (including private schools)". You describe in this memorandum the procedure in connection with schools under local education authorities. What happens about private schools? What criterion have you got on the question of whether a private school is necessary and whether capital should be allocated to the building or expansion of a private school?—We try to hold the scales absolutely fairly between private schools and education authority schools. I can think of two recent instances. In one we said a private school could not replace a rather unsatisfactory dining room because we did not feel we could replace unsatisfactory dining rooms or allow them to be replaced in education authority schools. On the other hand, where a private school needed some extra classrooms because it had not enough room for teaching, we allowed it to provide them, just as we would allow such rooms for an education authority school.

271. I can understand your policy in connection with additions or improvements to schools, but suppose you got a question of a new school being wanted. Does that question crop up in connection with private ventures or not?—I have not in my experience, and I think Mr. Rodger has not, come across any case.

Brigadier *Peto.*

272. Your jurisdiction over the private school or over its expenditure is purely a question of the licence?—Yes, we should sponsor their application for a licence.

273. That has changed slightly, I suppose, as the amount of free money to be spent without licence has increased. It has been increased in recent times?—Yes.

Chairman.] The next section of the memorandum is "Procedure for dealing with building projects". I think the information is set out clearly there.

Mr. *Malcolm MacPherson.*

274. On paragraph 9, the primary school's general size and layout is described. Does this mean that the day of one teacher and two teacher schools is over? You are not building any smaller schools?—(Mr. *Rodger.*) This does not mean the day of one and two teacher schools is over. It means, however, that the cases arising for new buildings are in the industrial areas. There are very few new little villages starting. I can think of one. In such circumstances the little school has to be built, but in most cases, if there is a little village there is already a little school. Our building is mainly in the peripheral areas of the cities and big towns.

275. What would be the policy with regard to building school houses? That has been a standard part of the ordinary small school in rural areas so far. Would you continue doing that if the need arises in new areas?—Yes; the general policy is that if it is unlikely the teacher could buy a house in an area—there might be none at all in a new little village—one should be built for him. But the city teacher is like any other member of the community and has to face the difficulties of the times.

Brigadier *Peto.*

276. In paragraph 6, is the figure of £80,000 spent by Glasgow a very exceptional one, or does it compare to your knowledge with any figure spent in a big town in England?—(Sir *William Murrie.*) We do not know what the English figures are. It is very exceptional for Scotland.

Brigadier *Peto.*] We might find that out.

Chairman.] Yes. Have you got a table for Scotland under this heading? You give three towns, Glasgow, Edinburgh and Dundee.

Mr. *T. W. Jones.*

277. What about Aberdeen?—We doubt whether Aberdeen needs to spend much, and we doubt whether there can be very much in other areas. Would you like us to try to get you some figures on this?

Brigadier *Peto.*] A comparative table* of the four or five biggest expenditures in England and Scotland would be quite interesting on transport.

Chairman.

278. Yes. In this paragraph 9 you say, speaking about the primary school, rooms are provided for arts and crafts, and the second item is for a backward class. Is it customary in Scotland to provide for mentally defective children in the ordinary primary school?—No. They would go to a special school.

279. You have special schools in Scotland, the same as in England?—Yes.

280. What does this mean, a backward class?—These are children who are above the level of mental defect but yet are temporarily retarded, or not as bright as other children.

281. Do you provide for that in all the primary schools in Scotland? Have you got a special class for backward children?—(Mr. *Rodger.*) We have since the war provided one of these rooms in the new schools. Before the war it was beginning to be a fairly common thing in schools where there was space for it.

* Annex 4.

Mr. *Malcolm MacPherson.*

282. Are they all used just now for backward classes?—I could not say. I suspect that some at least are being used to crowd in the children and used for an ordinary class, but I am not firm in that opinion.

Brigadier *Peto.*

283. I think it is customary in all schools to divide them into A and B pupils from the point of view of mentality?—(Sir *William Murrie.*) This is something different from that. This is taking aside a small number of children who for one reason or another are falling behind the others, and putting them into a separate class where there are smaller numbers and where the teacher can give each child separate attention and try to bring him on. They are not necessarily in that room all their school career.

Chairman.] I think it would be interesting to find out what provision is made in England and Wales. I do not imagine it is also done in this country.

Brigadier *Peto.*] Yes, I think it is.

Mr. *T. W. Jones.*] There is very often what is called a C class in my part of the world.

Chairman.] It does affect the planning of the schools to have a special classroom for backward children.

Mr. *T. W. Jones.*] No, I do not think so.

Chairman.] It means they will have to have more rooms.

Mr. *T. W. Jones.*

284. I think you can put all the backward children in a large school in one room?—It means only one extra room.

Mr. *T. W. Jones.*] And special teachers, or someone able to teach that type of child.

Mr. *Malcolm MacPherson.*

285. Still on paragraph 9, can I ask about the last sentence in connection with the use of secondary schools for further education? "They are sometimes provided with some extra accommodation." Would you be a little more specific about that?—I think we sometimes allow a storeroom where equipment could be stored for a further education class. (Mr. *Rodger.*) One specific type of case is in the woodwork shop in a school. Models have to be stored, and there is usually a storeroom for use by day classes; but there may be another storeroom provided in addition to store articles being made in the evening by further education groups. That is the kind of extra provision that is made.

Chairman.

286. In paragraph 15 I see you say hardwood is used for the floors of gymnasia. That would make it very expensive, would it not? Perhaps you could tell us what the difference is between hardwood and soft wood for the provision of floors? —(Mr. *Morton.*) Do you mean the difference in price?

287. Yes?—It is somewhere between two and three times as dear to provide floors of hardwood as of softwood for gymnasia, but it has always been the practice to do so because there is a certain amount of danger from splinters in providing softwood. It would be highly inadvisable to use softwood for gymnasia floors.

288. The point is that you are not using hardwood because you are obliged to, but because of choice. Even if you had softwood you would not use it?—That is the case in gymnasia. (Sir *William Murrie.*) It is not because it is not controlled but because it is the best material, and indeed the only safe material to use.

Mr. *Malcolm MacPherson.*

289. Is it used much apart from floors for gymnasia?—(Mr. *Morton.*) It is used quite a lot in addition to gymnasia.

290. For what?—Classrooms sometimes

291. Walls, panelling?—No, only floors. The gap in price between softwood and hardwood is closing.

Chairman.

292. The price of hardwood is falling, is it?—It is not falling, but it is not rising as fast as softwood.

293. The price of softwood is increasing? —Yes.

Mr. *Malcolm MacPherson.*

294. On paragraph 13, the last sentence: "Conditions, both educational and geographical, differ on the two sides of the Border". Would it be possible to be a little more specific about that? What are the main differences?—(Sir *William Murrie.*) It is very difficult to be dogmatic about climate, but we have the general impression that even though the weather may not be on any particular day any worse in Scotland than in England bad weather lasts longer in Scotland than in England.

295. In what way does that affect building? Is there enough difference to cause a difference in building policy?—It has led to the provision of heavier building in Scotland, stouter building.

296. Is that actually justified by the amount of difference there is in the climate, or is it just habit?—I think it is partly tradition, but I do not think that there is no justification for it. I think there is some justification for it, but perhaps we have tended to build rather more heavily than is strictly necessary.

297. There would be a considerable difference between the requirements of Torquay and Thurso, but not very much difference between Durham and Hawick?—Yes.

298. This really, so far as it affects building policy, should at least only affect the more northerly areas of Scotland?—Yes.

299. What would you say are the other differences?—(Mr. *Rodger.*) Sir William has spoken of geographical differences, but I think perhaps educational differences are more important. These have been referred to this morning. England has modern or grammar or technical secondary schools. We have a different system of secondary education, and different systems produce differences which are reflected in turn in buildings. I think it might be true also that a rather larger proportion of the secondary pupil's time is spent in practical rooms than is the case in England, but I do not want to state that firmly. That is just an impression of my own.

Chairman.

300. I think we are getting to a very controversial paragraph in paragraph 16, where you say that it is not been the Scottish experience that prefabricated buildings have lessened costs. Can you develop that and tell us in what respect the Scottish experience has proved that?—(Mr. *Morton.*) Yes, Sir. If I may ask, do you mean it is controversial because the experience has been the opposite in England?

301. Yes, I think so?—I can say that in Scottish housing the same experience as is stated here holds good. In Scottish housing prefabrication has made a great contribution to the speed of building, partly because factory labour is used to relieve site labour and partly because wet processes on the site are avoided. But in cost I think I am right in saying there has been no improvement in prefabricated houses over traditional houses. That has been our general experience in Scotland. There is a further reason why prefabricated schools have not been cheap in Scotland, and that is that a large number of them have been designed only for single-storey schools. Scottish schools tend to be somewhat larger than English, and the sites tend to be steeper and much more difficult to build on. Most of our sites are quite unsuitable for a large single-storey school.

302. When you say the schools are larger in Scotland, could you give an average or an example of the numbers, for instance?—Yes.

303. The numbers of children in an average school in Scotland?—An average primary school in Scotland has 650 pupils, and in England my information is that it has somewhat fewer. In the case of secondary schools I think the average number of pupils is greater in Scotland than in England. That is because of the difference Mr. Rodger mentioned. In Scotland we tend to provide comprehensive courses. In England secondary education is divided into three different types of school. There are more practical rooms in the average Scottish secondary school than in the average English secondary school.

Mr. *T. W. Jones.*

304. Would it be right to say that prefabricated material is not of necessity inferior to the traditional material, and that the idea of introducing prefabricated building, both in housing and school building, was to secure speed rather than economy?—That is so.

305. What is more, that a prefabricated building can be as permanent as the traditional building?—That is also true.

306. So that we have had wrong notions rather about prefabrication, due probably to those small houses which were constructed which were to be of a temporary nature?—That is also true. There has been a good deal of confusion about the meaning of the word "prefab". It is generally used to refer to the temporary single-storey house, whereas, as you say, prefabrication can be just as permanent for practical purposes as traditional construction.

Chairman.

307. Are not the materials used in prefabricated schools cheaper?—No, if anything they are dearer.

Mr. *Malcolm MacPherson.*

308. Does the cost of transport come into that very much?—Yes.

309. Where are the parts delivered from?—In general from England, the southern half of England, and freight charges cause prefabricated buildings to be somewhat expensive in Scotland.

310. In view of the fact that the saving in Scotland in the matter of wet working and that kind of thing should be greater than in England on prefabricated building, if you had the prefabricated parts made nearer to the building sites do you think it would be possible to foresee a time when prefabricated building would be cheaper in Scotland than other schools?—I do not think that factor of itself, the nearness of the factory, would close the gap.

311. Why not? What are the other factors?—Traditional materials by themselves are on the whole cheaper to produce than prefabricated materials. The savings in prefabrication have been in time and in labour force.

312. If prefabrication is found economic in England, one would be inclined to argue it would be found even more economic in Scotland, providing the transport costs were reduced. Apparently it has been found economic in England. What is the factor that makes the difference?—(Mr. *Rodger.*) Might I make a distinction? I am doubtful if the Scottish Education Department in writing this were referring to exactly the same thing as the Ministry were referring to when they were speaking of prefabricated building. A firm may develop a new type of prefabricated building and sell it as a complete building, and if you want it you have got to buy it as a whole or you do not get it at all. In that case you pay the firm's price for the building. It is in that sense we are using the words "prefabricated building". We have not found it cheap to go to a firm which supplies a complete building, much of which is prefabricated by that firm. We have found in general that such a building has been, if anything, a little dearer than the traditional building, perhaps because there is no competition since there is no other maker of the building. There is another sense in whtich prefabricated materials can be used. One may not buy a complete building, but the components, for example the walling or internal walling, and I think it is possible by judicious use of materials in this particular way that prefabrication can not only reduce the time but also the costs. That is why in the last sentence of paragraph 16 the Department mention that they are watching closely the Ministry of Education's experience in the development of methods of prefabrication, and we hope that any worthwhile results coming from that will be applied in Scotland also.

Chairman.

313. Even if your prefabricated schools were comparable to those of England and you were able to build similar schools, you still say it is more costly?—(Sir *William Murrie.*) What we have said is that hitherto these prefabricated methods we have used have proved more costly, but they have been mainly the buying of completely made schools. We do not necessarily say the buying of prefabricated components would prove more costly in Scotland, though we should still have to meet the transport charge.

314. Have you reduced the cost per place?—Yes.

Mr. *Malcolm MacPherson.*

315. In the Department's Report for 1951 on page 58 there is a reference to prefabrication, and it mentions six imported prefabricated timber schools. Have these proved equally uneconomic? Does this statement that prefabricated schools have proved uneconomic cover all these groups, or would there be an exception—would this be an exception?—(Mr. *Rodger.*) I do not think it is an exception.

316. In spite of the fact that prefabricated timber houses were not merely very popular but very successful?—I am not aware that timber schools have been cheaper than other forms of prefabrication. (Sir *William Murrie.*) Could we look into this point and give you an answer? Our impression is that all the different forms, though some time was saved, were more expensive in money. We will look into the question whether they have included timber as well as the others.*

Brigadier *Peto.*

317. Is it left to the local authority to decide whether they will put up prefabricated or partly prefabricated buildings?—Yes.

318. It is not directed from the Ministry?—No, the proposals come from them and they are free to put up any kind of proposal they like.

319. Is there a bias against prefabrication in Scotland?—(Mr. *Morton.*) Do you mean in the central Department?

320. I am thinking about what Sir William said about building more solid schools in Scotland. Would that mean there would be a bias against a more thinly or lightly made building like a prefabricated building?—It is difficult to strike an average. (Sir *William Murrie.*) There may have been in the past. I was in a prefabricated building in Scotland a fortnight ago, and I particularly asked the teachers whether they were comfortable and whether they liked this building, and they all said, Yes, it was perfectly warm and perfectly suitable.

Brigadier *Peto.*] It seems so strange there should be this difference in Scotland and England on the question of prefabrication.

Chairman.

321. I do not think it is if, as explained, there is a difference in the type of school. That might make a difference. But it is your experience that prefabricated schools have tended to increase the cost per place rather than reduce it?—They have turned out to be more expensive than the traditional school.

322. Paragraph 18 says: "Although no general limit of cost per pupil place has been imposed, the Department have constantly tried to keep down costs". You have done that of your own volition without any request from the Government at all to reduce costs?—Well, we do not regard ourselves as being different from the Government. We act under the instructions of our Ministers, and from 1949 onwards the aim has been to reduce the cost of

* Annex 4.

school building so as to get more places out of the limited amount of capital investment.

323. But you say no general limit of cost has been imposed?—In dealing with the education authorities we did not say to them: "We will not approve any project if it costs more than £170 per pupil place", but we limited the plan area to 55 square feet per pupil place, which at that time worked out at about £170.

Mr. *T. W. Jones.*

324. You can do what you like if you are aiming to keep within this £6.4 million allocated for Scotland for 1952?—Yes; and naturally the lower we can get down the cost per place the more places can be provided.

Brigadier *Peto.*

325. Miss Ward asked me to point out that in paragraph 20 it says: "On this basis the average cost per pupil place of the schools started in 1949 is £232", and so on, and she raised the question whether it is not possible for you to make a calculation based on the standards adopted in England. You say it is not possible to make a calculation based on the English figures, but Miss Ward felt that it should be possible to calculate the cost of a school place so that we can compare whether in fact the cost per school place is more in Scotland or more in England?—I think I can say it is more in Scotland than in England. There is no doubt about that. But the difficulty is in calculating exactly how much more it is.

326. It reads as if it is less?—I did not intend it to read in that way. It says in the last sentence: "But it is clear that, if recalculated on the English basis, the Scottish figures would be substantially higher than they are."

327. Higher than they are, but they are still higher than in England?—They would be higher than in England.

328. Miss Ward thought that was an important point to get. I rather agree. We would like to be able to compare English and Scottish schools on a similar basis?—As we explained, the Scottish secondary school is more of an all-purpose school than the English secondary school, and that is one of the reasons why it is difficult to make a precise comparison, but I have no doubt our costs are higher than the English.

Mr. *Malcolm MacPherson.*

329. Would the fact that Scottish secondary schools are more all-purpose be a reason why the cost should be higher? You say it is one reason why you cannot make a comparison. It it also one of the reasons which make the costs higher?—Yes, some of it is explained in that way, but not all.

330. You say in paragraph 20 that fifteen secondary schools have been started since the war. Have any figures been laid down for maximum size? You have in connection with primary schools given an indication of the kind of size you would like. What about secondary schools?—(Mr. *Rodger.*) We have not definitely announced a maximum size. As you know, the Advisory Council suggested a maximum size, but in practice it is found that unless a school is pretty large it tends to be more costly per pupil place, for the obvious reason that unless the school is large the top classes of the school when subdivided into their courses become very small indeed, and yet each of them is occupying a room.

331. With regard to those fifteen secondary schools, what type would they be? How many senior secondary and how many junior secondary?—I could not answer that question offhand. My guess would be about half junior secondary and half comprehensive.

332. I have one general question about building. What length of life do you expect the school to have in Scotland? When you build a new school how long is it calculated to last?—(Mr. *Morton.*) Do you mean for grant purposes? How long is it officially expected to last?

333. Yes. In England they said sixty to eighty years. Would that be roughly what you have in mind?—(Mr. *Rodger.*) One would expect any substantial building, whether traditional or in the better prefabricated materials, to have a life of from sixty to eighty years.

334. Would you do more than expect that? Would you use any assumption of that sort as part of your policy? Would you turn down, for instance, plans that looked as if they would not last more than fifty years?—It would depend on the cost. If the school were to last half the time and only cost half the amount it would be just as economic as the other. Cost and length of life are bound up with one another.

335. How long are the HORSA buildings expected to last?—The brick structure; there is no reason why it should fall down in the near future or within thirty or forty years. On the other hand, it is just possible the asbestos roofs and other parts of the building may require so much maintenance that the building becomes uneconomic. I think these buildings are likely to become uneconomic perhaps after twenty years, although they may very well stand up for a much longer period. (Mr. *Morton.*) They are neither the true temporary building in the sense of ten years, which was the life period on which grant

was given to the temporary house, nor are they in the class of permanent houses or other buildings which last from sixty to eighty years. They are somewhere in between, and I should say they could be expected to last about thirty years.

336. There has been some discussion recently about building houses with stone fronts in areas where it seems desirable from the point of view of amenity. Has that question cropped up in connection with schools? Is there any situation in which you would not want to build a school of the ordinary brick because it would not fit in with the surroundings?—(Sir *William Murrie.*) No such case has come to my knowledge, but perhaps Mr. Rodger knows of one. (Mr. *Rodger.*) Yes; we have several times had requests to build either bits of schools or facings in stone, and the general recommendations under which we are told to work are not to discourage stone completely, because it is essential that certain workers in stone should be encouraged to continue their craft in Scotland. On the other hand, we cannot encourage stone freely because it is an expensive material. The position is that if for purposes of amenity a certain amount of stone in a building is advantageous we are not against it. But, on the other hand, we just cannot allow it too freely.

Chairman.

337. I should like to ask a question about the Estimates generally. In the Estimates for Scotland there is a figure for temporary school accommodation. That is on page 82 of the Estimates, and the figure is for 1951-52 £300,000, and for 1952-53 £313,000. Could you explain what that is? Is this the Horsa schemes?—(Sir *William Murrie.*) This is money in respect of the Horsa schemes.

338. Is that bound to go on and increase, this figure of temporary school accommodation? It is a dead loss really, is it not?—Well, it has got us over the difficult period. I do not think it is going on increasing.

339. Is it not possible to plan without having to spend a lot of money in temporary accommodation?—I think these are annuities in respect of buildings already put up. (Mr. *Rodger.*) When the school leaving age was increased the Government determined through the Ministry of Works to help authorities to get the accommodation required quickly, and so these huts for the raising of the school leaving age were built, and the authorities are repaying on an annuity basis, and those are the payments.

340. I wondered why it goes up?—The reason is that agreement was reached some years back as to which huts should be built, but a few were not built at the time, often because the site could not be acquired, but when the site was acquired and the building built the annuities fell to be paid. Until the scheme is absolutely finished—it is virtually finished—but until it is absolutely finished these payments will increase in respect of the little additions to be made.

341. Are you finding good co-operation between the planning authorities and yourselves as to the accommodation required on new housing estates, for example, or do you have to provide some temporary accommodation? Do you find that you have houses going up and no schools?—(Sir *William Murrie.*) There are some areas in which houses have gone on faster than schools, but in general there is good co-operation.

342. Thank you very much indeed, Gentleman, for spending such a long time with us?—May I ask, will the Secretary let us know about any further information you would like to have from us? We will be very glad to supply it.

Chairman.] Yes. Thank you.

The witnesses withdrew.

Adjourned till Thursday, 22nd January, 1953, at Coventry.

WEDNESDAY, 11TH FEBRUARY, 1953.

Members present:

MR. YATES in the Chair.

Mr. Norman Cole.
Mr. James Johnson.
Mr. T. W. Jones.
Mr. Malcolm MacPherson.
Brigadier Peto.
Miss Ward.

Dr. W. P. ALEXANDER, Secretary, and Mr. STANLEY HIRST (Director of Education, County Borough of Middlesbrough), Association of Education Committees, called in and examined.

Chairman.

343. You, I understand, are Dr. Alexander, and with you is Mr. Stanley Hirst?—(Dr. *Alexander.*) Yes. May I just apologise for the fact that two of our members, Sir Wilfrid Martineau and Mr. Barraclough, who had hoped to be here have, by quite unforeseen circumstances, been unable to get here. Might I also just add that Mr. Hirst is at the moment the President of the Association of Education Officers, although of course he is not here in that capacity?

344. Dr. Alexander, first of all may I ask you to explain to us whether your Association of Education Committees is fully representative of all the education authorities in the country?—It represents all the education authorities or local education authorities in England and Wales, with the exception of the London County Council which is not in membership of any association, the reason being that London has always been given direct representation as an authority in matters of Burnham and other things of that kind.

345. Are you fully cognisant of the development in the London area?—I think so. Fundamentally, if you wish to have views from London, you must ask London. Nobody else can speak for London. I think you can safely say nobody would wish to speak for London.

346. The memorandum* which you have submitted to us contains, of course, quite a number of criticisms. Have those criticisms been placed before the Minister of Education from time to time by your Association?—Yes, Sir, from time to time. Indeed it would be safe to say annually we discuss these matters with the Minister, and these various points have been pressed on successive Ministers in that period.

347. Before we proceed to consider your memorandum, which is very interesting, I think it would be as well to mention to you that we are a Sub-Committee of the Select Committee on Estimates of the House of Commons, charged with the responsibility of examining expenditure with a view to recommending what economies, if any, can be made in the estimated expenditure—of course economies consistent with the policy implied in the Estimates—but it is not for us really to consider policy as such. The memorandum which you have submitted does touch, it seems, on policy in some respects, and I should like you to be clear in your minds that we are concerned with what is uneconomic, and concerned about the financial expenditure and the way it is being used?—May I just ask a question at this stage so that I will not get out of order? In examining expenditure is it proper for us to draw the attention of the Sub-Committee to where, in our opinion, the expenditure does not enable the policy to be carried out?

348. Yes, that is quite all right. I thought I would mention that to begin with so that we do not get at cross purposes?—Quite.

349. Therefore, if we can now proceed to discuss with you this memorandum, I propose to start by taking the first two paragraphs?—Yes.

Brigadier *Peto.*

350. I did not hear the body of which Dr. Alexander said Mr. Stanley Hirst was president?—The Association of Education Officers, the professional body of education officers of local authorities. I merely mention that, although he is not here in that capacity.

Mr. *Malcolm MacPherson.*

351. Does that body also exclude London and Scotland?—It excludes Scotland but it includes the chief officer of London. (Mr. *Hirst.*) I am here, of course, as a representative of the Association of Education Committees.

Chairman.

352. It is interesting to note that you also occupy that position. It will add weight to your evidence. In the second

* Annex 5.

paragraph of your memorandum you mention that the building programme had reached a level of £70 million, was reduced to £30 million and was later restored to £56 million. You also mention that your machinery had been geared to that £70 million. The £70 million was apparently a figure which had been recommended by a committee. Could you tell us the name of that committee, and why that committee decided upon a level of £70 million?—(Dr. *Alexander.*) The committee was a committee set up by the then Minister under the chairmanship of Sir William Cleary (who was at that time Deputy-Secretary at the Ministry) on the building programme, particularly on the steps which might be taken to speed up the procedures relating to the school building programme, the preparation of plans and procedures at the local authority end for the placing of contracts and so on. In this work it had occasion necessarily to examine the probable total building programme to carry out the provisions of the Act, and to make some attempt to gauge over what period of time it would be reasonable to try to do so. The then estimates, which were necessarily tentative in 1946, indicated that, if we could carry £70 million a year for fifteen years, we would make a real effort at carrying out the necessary programme, the basis of £70 million being that the policy should be carried over a period of fifteen years. It seemed to us that a longer period was too long and a shorter one was not practicable.

353. What year was that?—1946. We related the figure of £70 million also to the maximum building programme which had been carried out before the war, which was in fact £16 million in 1937-38. That was the heaviest building programme, and by a reasonable adjustment of values in terms of current prices at that time it seemed to us that with the appropriate gearing up of the local authority machine, the expansion of the architects' departments and so on a programme of £70 million a year in terms of 1946 values could be carried; it was a practicable proposition; and the recommendation was that if possible £70 million a year over a period of fifteen years should be given. That figure is in 1946 values, and therefore the figure of £70 million which was reached in 1949 is fundamentally a lower figure in terms of the number of school places and so on. However, that figure was reached in 1949, and the local education authorities had recruited the necessary architectural and other staff to carry that programme. To-day that would represent something between £90 million and £100 million in terms of current values. In fact the programme is £56 million so that it is little more than half. It is I think true to say that certainly in some authorities the machine has had to be geared down so as virtually not to waste the resources of manpower which have been established for this work.

354. When you say you geared your machinery for this £70 million does that mean that, when you were asked to alter this, you were financially at a loss in some respects? What expenditure had you incurred which had become abortive as a result of this change?—The expenditure would of course be in the recruitment of men—architects, clerks of works and similar people.

Mr. *Malcolm MacPherson.*

355. To what extent were those people specialists in education? Did you recruit architects who were specialists in school building?—Almost wholly. The great problem has been to get architects to be specialists in school building because frankly a general architect coming into school building has a great deal to learn.

356. But you found in practice that there were plenty? You were able to recruit architects who specialised in school building?—There were a great many architects who had previously been in general architectural work, but in the nature of the then situation in which house building and architectural work generally was not very plentiful they were quite glad to go into school work and into permanent employment with local education authorities.

357. These people presumably would now be able to turn to fields of architecture in which they also had knowledge?—Yes.

358. Are you suggesting that the architects are without work just now?—No. I am suggesting they may well do precisely that. In other words, authorities would virtually terminate contracts because they are not justified now.

359. Then what is the national loss?—There is no national loss. The loss will be that when you carry out the school building programme they will not be there. You cannot restore, in other words, the school building programme to the necessary level to carry out policy by just waving a magic wand and saying "Now, get all the people back to do this" because necessarily that will not be so easy.

Brigadier *Peto*

360. I cannot understand why, if you were able to recruit them in the first place, you cannot again recruit them when they are needed?—The reason surely is this. In the first instance there was no work for architects. Now I gather there is a good deal more work for architects

Miss *Ward*

361. It is no longer so attractive?—That may well be true.

Mr. *James Johnson.*

362. I think it is fair to say you may have more architects, clerks and assistants than you want. Is it fair comment to say you would have swollen your Education Department with local government officers? What has happened to those ancillary workers, if I may so call them, who are based upon the architect's plan? Are they still with the education authorities doing other jobs, or have they been dismissed? —They would be used for other work. There would be no dismissals, but replacements would be kept down. There is inevitably a turnover, and you would not replace since you in fact are transferring people who had been on your school building programme to other work.

Chairman.

363. They have not been made redundant?—No. I am not suggesting there has been a general redundancy situation created. What I am suggesting is that this is a very special machine. This was a very big new job for the local authority.

Mr. *Malcolm MacPherson.*

364. Would I be right in saying that even with this very special machine the difficulties which you are foreseeing are difficulties which simply may arise in the future; they are not there just now, because these people are in fact all actually working?—Yes. I am not suggesting anybody is out of a job, but I am suggesting that the change which has been taking place means that the policy will not be carried out for probably another ten years beyond the period expected because you cannot restore it. It took from 1946 to 1949 to gear the machine up to the level of £70 million, and therefore if you let it drop and then decide to do it again it will take another three years before it can be started.

365. If the circumstances remain similar; they may not?—Yes.

Chairman.

366. I think it better for me just to complete my questions, and then Members of the Sub-Committee will have the opportunity to raise points. The only other question I want to put on these two paragraphs is this. I think it probably arises from what you have just said. In the memorandum you say, "The present building programme does not, in our opinion, use the full resources which have been established by local education authorities." That is the point you are making now?—That is the point I am making.

367. Those resources have been established, and I am trying to think in what way——?—May I give you an example which would be helpful? I take one authority—the North Riding of Yorkshire. I take it merely because I am familiar with the circumstances there. The North Riding got off to a quick start, geared up its machinery effectively and undertook—I am speaking from memory now—a building programme of the order of £1 million three years ago, and handled it successfully. Its present allocation is, I think, £68,000 for this year. In other words here is a machine capable of doing £1 million worth of work in a year, and it has dropped to £68,000. That is one school. What is the authority to do? Hope that next year it may get a substantial increased allocation? The schools are needed. They have to be built. Is it to hope for that increase and retain its machine, trying to use it as best it can for other purposes, or let the machine wind down, so to speak, and then have to build it up again next year? It is a real problem. In the case of the North Riding they did in fact employ private architects, nominated by the President of the R.I.B.A., a good deal in their programme; they were not relying wholly on permanent staff for their programme; and of course the private architect is only under contract for a particular school, and when that is completed his job is done.

368. Could you think of any specific waste of money incurred as a result of this? —I should say it is true that necessarily the architect employed by the authority is not working to full capacity. He has got one school to take care of this year. If he had six he could do them just as easily.

Mr. *Norman Cole.*

369. I understand the local government problem. I can see what Dr. Alexander means. There is only just one point, and it is this. I think Dr. Alexander would perhaps agree with this. In the future it might lead to a certain waste of money during the time of building up the programme again because it would take time to get the people in to do the work. I am talking about the ancillary workers. That is an indefinable loss, but it could possibly lead to inefficiency?—It could. It is very difficult to say. Of course the practice of authorities varies. Some authorities rest on a permanent staff of their own; others use private architects on particular school contracts, and they may have several of those.

Brigadier *Peto.*

370. I have only one comment to make, and that is this. It seems a very wise principle on the part of the North Riding to employ civilian architects, if I may call them that, rather than education architects, because it does allow flexibility, and if the amount is cut or increased you can adjust your programme by not employing civilian architects or employing them. Surely that

is an advantage, and makes light of the problem of gearing up should it ever be needed again?—I think that is fairly general practice, that private architects are used even where there is an architectural staff. Although you employ a private architect you must employ the personnel. To take one simple example, if you employ a private architect to build a school he must be briefed very thoroughly on the nature of the problem. In the North Riding they employ an architect whose sole work is to brief the private architects so occupied, and to scrutinise their plans and bills of quantities because the secret of building a good school cheaply is very careful administration, in scrutinising bills of quantities to see if anything can be taken out which is in fact redundant to strict requirements.

Miss *Ward.*

371. Do you think, after what you have said, that the overheads, so to speak, of local authorities are too great now for the amount of work which they are asked to carry out?—I should say that in certain areas that must be so.

372. Would it be possible—I am not asking you to do it now—to give the areas, if they were asked for?—It would be possible to list the areas where the building programme has been very sharply reduced, in other words where it would be likely there was a major problem in an adjustment of that situation.

Chairman.

373. You could let us have that information?—Yes. We need to have the size of the programme for every area in each year.

Mr. *Malcolm MacPherson.*

374. With regard to the North Riding I was not clear whether you were simply arguing that, since this architect only had one school, therefore (without knowing the facts accurately) he must have time on his hands, or whether you were saying " I know Mr. Armstrong. I know that he can play golf every third afternoon." There is a difference between the two as evidence?—I can only tell you that the North Riding made the strongest possible urgent representations to the Minister in order that their programme should be increased (*a*) because of need and (*b*) because there would in fact be a sheer waste of manpower in their authority.

375. You are unable to tell us whether the architect has actually time on his hands or whether he is utilising his time perhaps as a school architect plus some other job?—I am sure he will be using his time.

376. That is a deduction of yours from the facts?—Had Mr. Barraclough been here—unfortunately he is not—he could give the precise answer.

Chairman.

377. Mr. Hirst, could you tell us something about that?—(Mr. *Hirst.*) On this particular question I was going to say I know he has not time on his hands because the North Riding have been employing so many private architects on their building programme. I would only make this comment. First, there is great variation from authority to authority; secondly, I think it will be clear that, if the authorities have a fairly uniform programme to look forward to year by year, then it will be more economically done. When you are arranging to build a school our problem now is what we are going to be building in two years' time. If there is any hesitation about that then the restrictions start being applied now, though in fact they will not be needed for two years, if you understand what I mean.

Mr. *Malcolm MacPherson.*

378. Can I ask this about Mr. Hirst's comment? The general background to this question, as you know, is the economic situation of the country?—Yes.

379. Would it not be unrealistic for an authority to say, " We will build up a staff of a particular sort, whether concerned with school building or anything else, which we will expect to be used steadily at the same pace for the next ten years "? Would it not be more realistic to say, " In the course of the next ten years we cannot foresee what economic changes or chances this country will be going through, and we will therefore refrain from building up staff "?—The answer to that is this. The schools are needed. We are not building schools in the hope that children are going to go in them. Our problem is that we have got the children, and it is a question of how we are going to deal with the schools in two, three, four or five years' time. (Dr. *Alexander.*) There is surely an additional point on this particular issue. The Minister tells the authorities what she wants them to do in this matter. It was the Ministry of Education that told them to build up their staffs because the programme was going up to £70 million, and it was going to be maintained, and they must be able to do it.

380. When was that instruction?—It started in 1946, and was maintained in 1947, 1948 and 1949 with repeated appeals to local authorities that they must get on more quickly with the building programme. Having built up the staffs the Minister then says, " It is all very difficult ". (Mr. *Hirst.*) My own area happened to be one of the areas where we have never been able to build up the staff we quite wanted. In other words, it is a question of knowing how far we can go. I want to know what my building programme is going to be in two years' time.

Mr. *T. W. Jones.*

381. We have got to face up to this fact. The schools are needed. That cannot be over-emphasised. Now, you would have spent £70 million in 1949——?—(Dr. *Alexander.*) May I just clear a point there because it could be misleading? That is the figure of buildings approved to be built. The money would not be spent in that year.

382. No, approved. That today would mean at least £90 million?—At least.

383. Therefore if you decide in 1955 that these schools must be built, cost what they may—let us say that for the sake of argument—then you will have saved nothing by the present economy?—On the contrary, you will have wasted money.

384. You will have lost £60 million?—Because you will be building at much more expensive prices than you would have done.

Miss *Ward.*

385. That is always presupposing that prices are going to continue to rise?—If they are merely maintained at their present level.

386. Is it not fair to assume that what we are trying to do is to find methods of reducing prices by increased efficiency and by the substitution of different types of building materials—you can put it both ways?—I quite accept that, but the actual increase since 1949 to date is thirty-five per cent. I am merely quoting facts.

387. I think it is only fair just to put in that so that you get the balanced argument?—I would not put the argument on that. I would put the argument on the real issue, that children are not in school who should be in school—unless these schools are built.

Mr. *James Johnson.*

388. I should hate to argue that here. Mine is a very narrow question indeed. It concerns the surplus of or superfluous manpower in the education authorities, a surplus which has been built up in anticipation of the £70 million or the £90 million extending into 1951, 1952 and 1953 as the case may be. Some of us know there was quite a bit of empire building in local government and in departments of the national government. The education authorities increased their numbers of assistants in anticipation of this building programme, and rightly so. I would like to know, Mr. Hirst, whether any of the people you engaged in 1947, 1948, 1949 and 1950 are now superfluous, still there, and doing other jobs for which perhaps they are not fitted in the department which is maintaining them on the pay books so to speak. Is that a fair question?—(Mr. *Hirst.*) It is a fair question. I can give you the answer so far as I am concerned. We have never yet been quite able to fill our establishment.

389. I am talking about the big authorities—Manchester, Leeds and so on?—I cannot answer for them. As I say the position varies very much from authority to authority. (Dr. *Alexander.*) I think there is an answer which should be given. (Mr. *Hirst.*) May I just implement this point? Our difficulty at the moment is that we do not begin our building until the end of the programme year instead of at the beginning because we have not been able to get the staff we want.

390. You may be unusual?—We are. We are in rather a difficult area.

Chairman.

391. If that is true generally, there is no waste?—There is no waste so far as I am concerned.

392. Dr. Alexander, what do you say?—(Dr. *Alexander.*) There is complete variety. There are 146 local education authorities in England and Wales. The speed at which they were able to tackle the building programme varied very considerably. Certain authorities got off to a quick start, and were able to handle a big programme as early as 1946 and 1947. Others, quite frankly, could not handle the programme they should have handled, London notably in that respect where indeed the need was much greater than what they could handle in a year.

Mr. *Malcolm MacPherson.*

393. The situation in regard to Mr. Hirst is that he cannot get a staff big enough to deal with even the present programme. If the programme had been maintained at its original level his difficulties would have been even greater. Is that right?—Except that you cannot assume a particular authority's programme is lower, and again that is a complicating factor. I do not know his programme; he will be able to tell you. It may be as high as or it may be higher than previous years, because the spread of the £56 million is quite different from the spread of the £70 million. Authorities which were doing £1 million have dropped to £68,000; those doing very little have been stepped up. In any one area you may have a shortage situation whereas in another area you may have a redundant situation. My plea is a very simple one. I know it is not easy; I am fully conscious of that. It is this: in so far as possible there should be reasonable continuity in a job of this kind. It must take a considerable number of years. In other words, if

the Ministry can say to an authority "You in this area are going to need £10 million worth of work; let us tackle it at the rate of £*x* per annum, and do that", then that is a more economical way of doing it than saying "We will do so much this year and nothing next year".

394. Are you not leaving out the whole significance of possible policy changes, not merely that our economic circumstances may change? The Government may change from year to year. We have one type of government with certain ideas on policy; another Government may have completely different ideas on matters of policy In the face of those circumstances is it not more realistic not to commit yourself too heavily? —Then the Government must tell us to do that. The Government told us to commit ourselves. I am unaware of any change of policy in this matter.

Chairman.] I am afraid we cannot step into the realms of policy.

Miss *Ward.*

395. This is perhaps a slightly embarrassing question, but in dealing with what schools shall be built within the terms of the finances available do you find that the Ministry so to speak take decisions in regard to giving continuity which might produce a very proper balanced financial expenditure or do you have difficulties with the Ministry in keeping areas, so to speak, in balance?—I think it would be fair to say that we have difficulties with the Ministry, and the Ministry have difficulties with us.

396. Who wins?—There is never a victory in a matter of that kind. The Ministry had the problem that certain authorities in the earlier stages of the building programme were unable to carry as big a programme as was intended. They were lagging behind. The Ministry were properly urging them that they must be able to carry more, the needs of the area demanded it. In other cases the authority had got off to a quicker start and could carry a bigger programme, and therefore they were given a bigger programme than would be, so to speak, a proportionate allocation, a very reasonable thing to do because they could do it, and therefore they were allowed to get on with it. To that extent it is the fault of the authorities for failing to move forward. Equally, on the other hand, the Ministry have to balance, so far as they can, the needs of 146 areas in terms of the number of children seeking admission and so on within the total amount of "cake" available. Each authority on the other hand, has the simple task of fighting for as big a part of the "cake" as they can get for the needs of their own area.

397. Do you think it is fairly satisfactory now, or do you think there is room for improvement?—I think it is as well done as it could be done in the practical situation. I would not wish to criticise the Ministry procedures. I think in fact they have done an astonishingly good job in a very difficult situation.

Chairman.

398. I think we have had rather a good introduction to your memorandum. We have only dealt with the first two paragraphs. I think we can now proceed further. I will put a few questions to you, and then Members of the Sub-Committee will again have the opportunity of putting points to you. You draw attention to the size of the building programme which you say implies two fundamental assumptions, with both of which you disagree. You say the first of those assumptions is that "at the end of the war the school buildings then available must be deemed to be acceptable for the next decade or more" and "It is assumed that nothing can be done over a period of ten years or more. . . ." I want to ask you some questions about those schools. I think there were about 600 black-listed schools in 1925. Would you think that there are still 600 schools which you would regard as black-listed?—I do not think the same 600 would necessarily be there now. I think some of them may have been closed in the nature of events or some of them may have had some improvements made to them, but I would say quite definitely that there are many more than 600 schools at the present time which would be black-listed on any set of regulations of the Minister.

399. Would you agree, for instance, with this comment, that the recording of the black list was stopped when war broke out and that numbers of those schools were on the black list not because of any particular defect in the building but because the building was unsatisfactory for the number of children who used it?—In 1925 that black list was a genuine black list, and those particular 600 schools were condemned as unfit for use by children and should be abolished, because they were incapable of being brought up to the necessary standards for use as schools in the opinion of the then Minister. (Mr. *Hirst.*) I will give you an actual example. We had a school on the black list in 1925. In 1949 it was still accommodating 800 children. The conditions were quite deplorable. As far as teaching staff were concerned it was a constant headache because staff would not stay. In 1949 we had more subsidence, and we condemned the school. That is to say we had to say "We will not have any children in this school," and as a result we did get a modification of our building programme to help us to meet the difficulty. The point is this: unless

my committee had said "We are not going to use this school any longer" there is nothing in the building programme provisions which would have enabled us to replace that school. (Dr. *Alexander.*) In a word the authority had to force the issue by saying this school cannot be used. (Mr. *Hirst.*) The school forced its own issue, put it that way.

400. You would say those schools originally placed on the black list were schools which were unfit to be used according to standards then, but whilst some of them may have been put in better order since then and could be removed from the list, on the whole you would consider there are many more?—(Dr. *Alexander.*) There are many more.

401. Have you any idea of the number? —Nobody has that information ,as far as I know. I do not think the Ministry have. The situation we want to stress here is that at the end of the war something like one million school places had been destroyed or damaged. Also many other schools had been regarded as unsatisfactory for substantial periods of time before that. We put it as an assumption made. In fairness we are bound to say, and we try to say, that the issue was probably forced on the Ministry in terms of available money and manpower. I am not suggesting the Ministry said, "These are fine; these schools are all excellent and adequate." I would not suggest that; but it has the effect of saying that "these schools, many of them very bad, very many of them quite below the regulations of the Minister, must continue to be used, and nothing can be done to improve them because all the money we have got available must be used for other purposes for at least ten years."

402. That is what I am leading up to because the first assumption, which you say is an assumption of the Ministry with which you disagree, is that these old schools which are unsatisfactory are still to be used, and then it is said that nothing can be done for a period of ten years or more to bring that accommodation up to standards which more nearly approximate to the regulations of the Minister. Is it not true that some millions of pounds have been spent on these schools?—On a few of what are called minor projects. It is true that it is competent for an authority to undertake minor projects in improving all these schools, but they are barred by the facts, the facts being that the minor projects have to be used for providing additional accommodation because of the demands. In other words, the actual money devoted to the improvement of existing buildings is almost negligible, because it has to be used for providing additional class rooms.

403. Would it be more economic if more money was spent on these old schools, do you think, in present circumstances?—It is very difficult to say. You would have to examine particular cases. A great many buildings will, in my view, eventually have to be scrapped altogether, and to spend money on buildings you propose to scrap is not wise; obviously it can be wasteful. In other cases, by improving buildings they could in fact continue to be used for a substantial period of time. Now the issue is that, because of the very severe limitations, the present money available has really got to be limited to two purposes, and those are quite specifically stated by the Minister—the birth rate and new housing estates. There is nothing for any other purpose. Therefore you just have not got the means to improve. There have been minor works. Some dry lavatories have been taken out and decent lavatories put in, and so on. Minor projects of that kind have been going on. (Mr. *Hirst.*) If your electric wiring is condemned you have got to replace it. (Dr. *Alexander.*) That kind of thing must be done, but the total money devoted to bringing schools existing at the end of the war up to regulation standards must be quite small.

404. You say, "The second assumption relates to the relationship between the provision of new school places and the number of children who will require to be accommodated in them." You give figures, and you say it has "resulted, we believe, in the establishment of the fact that new school places were required for 1,150,000 children by the end of 1953". You also say this: "Administrative realism . . ."—perhaps you will explain to us what that means—"demands that for such a number of children the number of school places must be at least 100,000 more". Why?—It is a very simple proposition. The figure of 1,150,000 is the official figure accepted by the Minister as being the number of additional children for whom there are no school places and who must be provided with school places.

405. By the end of 1953?—That figure has been accepted, and that was the reason why I quoted it. Now these places have to be provided in 146 authorities, some of them widespread geographically. The only way you could fit 1,150,000 children into them is if in fact you could build a school for 357 children here, a school for 469 children there and so on, which you cannot do. Schools must be built in groups of forty. A class is forty. That is the basis of building. You must build a school for, for example, 240 children or 320 children. In fact there are going to be in a school of 320 inevitably certain classes where the number is not forty. It may be a bit more or it may be a bit less. The administrative experience is that you never are closer

than 90 per cent. of your official accommodation. In other words, the number of children in your schools can never exceed 90 per cent. of your official accommodation figure by reason of the territorial spread, unless they are born in nice groups of forty in each place. It assumes that these schools are going to be overcrowded from the day they are built. That is what it assumes. In other words, you get your average by accepting that in many cases your new schools are going to start by being overcrowded.

406. The Ministry assume that?—That is the assumption that the Ministry make, that many of these new schools are going to be overcrowded from the start.

407. Would they agree that?—They do.

408. They agree they do make that assumption?—Yes.

409. That the new schools are going to be overcrowded?—In many cases they will be above regulations in size of classes from the word "go", and they cannot provide the necessary places to comply with the regulations. The defence is that as other schools are overcrowded these might as well be overcrowded too.

Mr. *James Johnson.*

410. What we are being told is that the Ministry merely make a mathematical calculation. They have got a school population of 6,250,121 youngsters in 1954. At the moment they have got 6,100,000. The extra is the difference between the two totals. That is the global total over the whole country?—And as a result the Minister has repeatedly said that, while she claims the number of places matches the number of children. It may not obtain in any particular area, it cannot obtain, and that means an acceptance that in certain areas there will not be school places for the children requiring them. That is accepted.

Mr. *Norman Cole.*

411. I have taken 1,150,000 children as representing something like 2,000 schools. That is on the basis of 500 per school. That means that your 2,000 schools are providing extra places for 100,000 more children, which means 50 more children per school. Is that the burden of your argument?—It would not be done that way.

412. That is the sort of figure?—That is the sort of order of the thing.

413. In other words, something between 40 and 70 extra places per school built on the programme?—That is the effect of it, but what it would mean in fact would be additional schools having to be built.

414. The other way round?—That would be the effect of it.

Mr. *James Johnson.*

415. Was not this always the case, even before the war?—Never.

416. You built a school for 320 children, and you found that you had to put 367 children in it within a year or eighteen months perhaps. This is nothing new?—That would not be true of a well planned area. I rebuilt schools entirely in an area I administered from 1935 to 1939. Quite literally every school in the area was rebuilt, either scrapped and a new school built or it was so substantially altered as to be virtually a new school. The basis there was that they would meet the need for at least ten years ahead. That was the basis of the plan because obviously it takes you a long time to build schools, and therefore you budget ahead. That means that a school for 480 was occupied in the first instance by about 360 children, but it became full in the course of the next few years. That is the obvious way to plan. At the moment what we are doing, through, if you like, shortages of materials, manpower and money—I accept the reasons—is to say "We cannot provide enough school places to make the Minister's regulations operative; it cannot be done; and therefore let us accept that we are going to have large classes and build schools accordingly." That seems to us to be a defeatist policy. It is an admission that there is no prospect of operating the regulations, never mind this talk about reducing the size of classes. The present regulation of the Minister is that a class should not exceed forty. They build schools for 240—six such classes in fact—and accept the fact that there will be 280 children there from the start, that it will get bigger, and that when it bulges out the whole place will have to be altered or perhaps another school will arrive to meet the situation. We say that the present claim of the Minister that this programme is adequate to meet the immediate needs is not true. It is inadequate to meet the immediate urgent needs of the birth rate and the housing estates.

Chairman.] I think we can pursue that question a little later because you then mention it in more detail.

Brigadier *Peto.*] I should have thought you were verging more on a question of policy rather than finance. If that is the Minister's view it is not for us to say anything about it. That is not our function.

Miss *Ward.*] I suppose the argument possibly would be that, if you spent a little more now, you would not possibly have to make up with another new school to meet a particular situation later on.

Brigadier *Peto.*

417. You cannot say that?—I would not argue the case in terms of economies. I do not think there is an argument. I would accept that it is fundamentally a policy point.

Chairman.

418. The question of not being able to send children to school is one matter; the question of being overcrowded in school is another?—It is stated quite baldly in the North Riding that within a year they will have to operate a shift system for infants. They will have to use schools twice. There will be so many children for whom they have not the necessary places that they will have to have one lot in the morning and another lot in the afternoon. That is the only way they can accommodate them.

419. They would have to double the teaching staff?—No. They would have to put the children on half time. That is the only way they could meet the situation.

Mr. *James Johnson.*] Without labouring the obvious this was stated by the Chief Education Officer of the London County Council only a few hours ago.

Chairman.

420. To proceed with your memorandum, you mention this in the second paragraph on page two. "There is the fact that the housing programme has been substantially expanded during the last year without any increase in the school building programme". Can you give us any details about that?—The facts are these. The school building programme was determined in relation to a housing programme estimated at 200,000 houses in a year. If therefore that was a correct calculation that enabled the necessary number of schools to be built for those houses. The fact is that 230,000 houses have been built so that there are 30,000 houses for which no school provision has been made. The average will be probably one school child per house at least in the kind of houses we are discussing, so that there are 30,000 school children for whom there are no schools.

421. Are there areas where you have houses already built and where there are no schools?—Oh, yes.

422. And with the children not attending school?—They are having to be transported very long distances, or they are accommodated in hired halls, church rooms or whatever improvisation can be affected pending the building of schools.

Mr. *Norman Cole.*

423. May I point out to Dr. Alexander that he is assuming the whole of those extra 30,000 houses are in areas divorced from present areas covered by schools?—In London, for example, houses are being built where schools are already in existence They may be overcrowded, but the schools are there?—I accept that. There is a figure, but it would not necessarily be 30,000.

Mr. *James Johnson.*

424. If the Minister has based her increase in school building on the increase in the birth rate that is one matter, but in regard to how many houses that are built it will make no difference to the number of youngsters who have to be admitted. The only point within the wider context is that if you have got your new housing estate . . . ?—With respect, you cannot make that assumption. Let me give you an example. Sheffield are building quite extensively in Derbyshire, right out on the periphery of the city, on the border of the city where they sought an extension of the boundary and did not get it. It is in fact impracticable to move certainly infants from the houses which will be there built to schools which could accommodate them, in other words to bring them back into the centre of Sheffield. It is not practical politics. Therefore a school has got to be built for them on the estate, creating redundant places in the centre of Sheffield where no people are living, so that you get a loss of school places because nobody can use them. I administered Sheffield for six years, and I know it fairly well. I reckoned there would be 40 schools which within 10 years would become totally redundant, having been built in the centre of the city where no residential population now exists at all. The children would be at least five miles away.

425. Without anticipating the next memorandum, could they be used for technical colleges?—Some of them have been so used, but I would add that an infants' school is not very suitable for a technical college.

Mr. *Norman Cole.*

426. What Dr. Alexander says is that we ought to assume that in 10, 15 or 20 years' time many of our urban schools, built to-day, will be quite useless?—(Mr. *Hirst.*) Fortunately many of them will be old ones.

Chairman.

427. We understand that there is a very satisfactory liaison between the Ministry and local education authorities and housing authorities so that in fact, when new houses are going up, there should be adequate provision. I should like to know if in fact you have got any glaring example where it is necessary to pay out a lot of money to transport children to school. Can you tell us whether there is a very serious

problem there?—(Dr. *Alexander.*) I can give you two examples to show the nature of the problem. South of Sheffield Mr. Long built a school in five and a half months. It was built of timber, with the consent of the Ministry. One school had to be there within six months; in fact it was completed in five and a half months, and it will be opened on the 20th February. It is the fastest building of a school of which I have ever heard, because otherwise there was a situation in which children were living on a new housing estate with no provision at all.

428. Was that an economic proposition, do you think?—I think it was quite an economic provision in terms of the cost of building a school, but whether it will be there in 60 years' time—that is the average life we normally expect in a school—only the future can determine. It is a timber school. It will probably be quite attractive, but I know the climate of Sheffield sufficiently well to doubt whether a timber building will in fact continue to be satisfactory.

429. That is not the point of my argument. You are telling me that in fact that is where they have satisfactorily met the situation?—No, it is one school where perhaps 10 are needed. Nine more schools are needed on that estate. They have to be built. The point is that the children are away ahead of the tempo of the building programme.

430. Have you got any idea what it does cost to transport the children?—I could not give a figure.

430A. This is the Sheffield authority?—It would affect both. The schools will actually have to be built by Derbyshire because the estate is in that county, but the children are being moved from the city of Sheffield.

Mr. *Norman Cole.*

431. I understand the Chairman's point to be what is happening to the children now, how far are they transported and what is the cost?—Distances up to five miles. That would be my estimate. I do not know the facts. In Hertfordshire, with the overspill from London, there must be a very heavy transport problem. (Mr. *Hirst.*) I think it is reasonable to assume that in all these new housing estates the schools lag behind the housing.

Chairman.

432. Do you find that is general?—I find that is general. (Dr. *Alexander.*) I think that is a fair statement.

Chairman.] I used to be a member of the Birmingham Education Authority, and we always seemed to be a bit behind.

Mr. *Norman Cole.*

433. That costs money in transport?—(Mr. *Hirst.*) It costs money in transport; it costs money in the hire of premises; and you have the difficulty of unsatisfactory conditions.

434. You cannot have both. If you hire premises you have not got to transport the children?—(Dr. *Alexander.*) The transport cost is quite high.

Chairman.

435. Have you any figures at all?—I could obtain figures for you. The present transport bill is of the order of £4 million in the country, but much of that would probably be required in any case. I am not suggesting that is all due to this.

436. What I am trying to find out is whether the present method is expensive. It is our job to inquire into that?—I would have to make special inquiries in the areas where I know it is happening. It is the additional cost of transport caused by the failure of the school building programme.

437. Could you let us have a memorandum* on that from the information you are able to collect?—Yes. I could obtain that information for you.

Mr. *Norman Cole.*

438. It is not the failure of the school building programme. That is limited by the availability of materials, manpower and money. There is also the speed with which it is carried out. There are two points?—It is the relationship between the housing programme tempo and the school building programme tempo. If you would agree that I took a sampling that would be quicker. I could take half a dozen areas where I know this problem exists. I could give you the size of the area and a sampling figure of the cost which is incurred in those cases.

Mr. *James Johnson.*] Is this the place to ask what type of school, in view of the speed of building, they would advise to be built?

Chairman.

439. I think we are coming later to that question. Dr. Alexander, I think we have dealt with a very important question now. Thirdly you say there is no provision to enable reorganisation to be carried to completion. It seems to me we are now stepping into policy here?—It is policy in a way, except that it is agreed policy. The nation is agreed on what is to be done here. This is in relation to the provision of secondary education for all. The sole controlling factor is the building programme. There is no dispute that it should be done. As I say the sole controlling

* Annex 6.

factor is that there is no provision in the building programme to enable it to be done. If I were to go to the Minister to-day and say, "Look, I have here six all-age schools. They should be reorganised. I have to build a secondary school to provide for children at age eleven", the answer would be "That is not able to be entertained. It simply is not a proposition within the limitations of the building programme. You cannot do it". The effect of that is really serious. There was an article in one of the Yorkshire papers only last week stating quite bluntly that the rural areas had to accept the position that they were financing secondary education for other people and they were not going to get it themselves for an indefinite period. That has been the effect. The rural areas are very dissatisfied. They feel they are being dealt with unjustly. What they have been promised is not being given. In other areas, for example, on a housing estate, in an urban community, you have to build new schools, and therefore you can do your reorganisation because naturally you would build both primary and secondary schools. In rural areas they get nothing. We have had very strong representations, and we have endeavoured to obtain information as to what would be necessary. A relatively small sum provided annually would enable this problem to be resolved in a very limited space of time, within a few years. We feel that would be amply justified.

Mr. *James Johnson.*] While we accept the thesis that perhaps 900,000 all-age schools are still operating and while we sympathise with Dr. Alexander on this aspect, it is a matter of policy really and I do not think we can usefully enquire into economies in that field.

Chairman.

440. The Ministry are making provision for secondary school education for all in accordance with the Act?—No, Sir. Let us be quite clear about that.

441. I should like to ask you this question. We understand that it is largely a question of tempo whether a school is built in three months or a year, but the actual programme is to build in accordance with the policy laid down?—The present policy in regard to the building programme is that there are only two conditions in which schools may be built—if it provides for children five years old or if it provides for children on a new housing estate. No other justification exists. Therefore it is true to say that at the present time there are many children who are not being given a secondary education at all. That is a statement of fact.

442. As Mr. Johnson says I think we are on to policy here. You go on to say in the memorandum that the school building is at present inadequate to the needs of the situation. That is the point you are making, I think?—That really is the whole burden of this argument.

443. You recognise that the total calls on the building resources exceed the capacity of the industry, and therefore in fact you could not carry out your building programme because the building industry has not the capacity in any case?—Our building programme is entirely dependent on the proportion of the total output of the building industry which is allocated to that purpose, and therefore it is not a matter in which we can do other than make a claim. The percentage of the total output of the building industry which is allocated to the school building programme is a matter obviously for determination by the Government. In the Cleary Committee our hope was that we would get six* per cent. In other words, that would enable the programme to be carried out. At the moment I do not know what the percentage is.

Mr. *James Johnson.*

444. In the second complete paragraph on page two of the memorandum this is said: "Secondly, there is complete failure to make provision for bringing wholly unsatisfactory existing accommodation up to required standards". In the elementary schools, particularly Catholic schools at the moment, the parents in actual fact are making great efforts indeed. They are building huts. The men are wiring them up, and the women are even carrying pails of cement to help in the building. Is there any scope, in your view, for parents giving their voluntary labour and helping in these—I will not call them black listed schools—unsatisfactory school buildings? Is that being done on any scale? Do you think there is any sense or any use in encouraging that sort of thing?—Not the slightest. You are really on a very different issue there, with respect. The general body of your parents expect the schools to be provided out of the rates and taxes. The particular community to which you have referred, for reasons which are very clear to-day, desire to provide their own schools, so-called, and they are prepared to make very great efforts to that end. Therefore you have quite a different situation, one in which you have a body of parents who know that the only way they can get the school they want is if they provide it. No one else provides it.

445. Your view is that it would be unsatisfactory, to say no more, to attempt to encourage this sort of thing, that parents should help with voluntary activities in making these bad buildings better?—Your

* *Note by Witness*:—The figure of six per cent. was calculated on the assumption that the total output of the building industry was about £1200 million, whereas it proved to be £700 million.

first problem is that if they are going to make them better they need building materials, and those you cannot give them. If you could give them to the parents, give them to us and we would do the job. If the building materials are not there, what are they to do without materials? I agree there are cases—I believe it has happened —where some help has been given to a school by the voluntary efforts of parents, but mostly I should have thought in improving the equipment and things of that kind. (Mr. *Hirst.*) Where it is I think it is a very limited provision, like temporary huts or things like that.

Brigadier *Peto.*

446. Dr. Alexander obviously is gravely dissatisfied with the building programme in so far as schools are concerned. He asks that a higher proportion of the total available resources should be allocated to the building of schools. Dr. Alexander said he was hoping to get six* per cent. of the total resources—I think that was the figure you gave?—(Dr. *Alexander.*) I believe that was the figure.

447. I think it would be most helpful if you could now state, although you said you could not, what is the proportion that you are getting. We cannot argue unless we know?—I do not know. I do not know the total output of the building industry today.

448. I think you should know, if I may say so. If you quote one instance of six* per cent. I think you should know what you get now?—I am quoting that from the Cleary Committee where both figures were quoted. At that time we did manage to get the information from Government sources, but I do not know today the total output of the building industry.

449. It may be more?—I should hope it would be, but one of the great disappointments, when we were on the Cleary Committee, was to find that whereas the output before the war was of the order of 500 million with a million men, although prices had more than doubled the increase had only gone to 700 million with the same number, the output per man having dropped accordingly*.

Mr. *Norman Cole.*

450. When was that?—1946. In the present situation I think it is true to say, of the school building programme, that the output per man is higher than obtains generally, which is a very strong argument for encouraging those who appear to be making a decent effort.

Chairman.

451. Now we have got a very, very important question to deal with, and that is the question of pre-fabricated building. Before we pass to that paragraph perhaps Members may have some comments on the previous one. I gather you are quite satisfied with this new department created by the Ministry; you have been quite satisfied with the co-operation?—It has made a very major contribution, in our judgment.

452. You say you do not accept the claims sometimes put forward that present practices have positive educational advantages. I do not know whether this is policy or whether this relates to buildings which are at present being erected?—It relates to building. It is a minor point, but of some importance for future policy. The purpose of this department was properly to find ways of getting school places built at the minimum possible local cost with the maximum effectiveness. To do that they encouraged, introduced and spread knowledge where something was being done which was successful—the reduction of circulation space, a different way of planning to get the maximum of teaching space in the minimum of total space and so on. In order to do that and perhaps to encourage people to do it, it was argued that it had positive educational advantage, that the new form of planning was better for educational purposes than what had been done before. In some cases that is a proposition which we reject. For example, to reduce circulation space you get class rooms closer together, and to avoid movement you get lavatories put alongside them. Frankly we do not regard that as good planning. Where you can hear the lavatory being flushed every time a child goes we would say that is not very desirable educationally, although we agree it saves circulation space. You have established a central hall so that all movement has to be through the hall to go from one part of the building to another. That again we do not regard as good educational planning. That is a principle we rejected many years ago. I agree it has been done much more cleverly than it was done fifty years ago. The central hall, as it is, is virtually a corridor, and so anything going on in the hall must be constantly disturbed while that movement takes place. Even so we accept that in the present circumstances these things are justified in order to get the maximum number of school places at the minimum of cost. I think it is fair to say that the Ministry and the local authorities acting together have made very major improvements in the planning of schools and in the effectiveness with which they are built. I think that is true.

453. I think that is a good introduction to the next paragraph where you say this: "It is our experience that prefabricated methods of construction for school buildings do not involve any major economy in price". Yet you say you recognise that such methods do involve economy in the use of skilled labour and economy in time.

* See note on previous page.

If that is so, then surely there must be economy in price?—You would think so, but so far there is no evidence to that effect. I think there is one additional point which in fairness should be made here. If a school built by the orthodox methods of construction takes, say two and a half years, to build, if you are in a situation of rising prices and if a prefabricated school can be built in, say, fifteen months, half the time, then I should have assumed that you must save money on a prefabricated construction because your increase in prices during the time of building must be less than during the two and a half years. In other words, if your initial prices were the same, with the provision which always has to be carried for wage additions and so on, then you would get out in fifteen months with a total price cheaper than getting out in two and a half years. That seems inevitable, and therefore I think—here I am expressing a purely personal opinion—evidence will be forthcoming in the course of a few years that there probably is an economy in price in prefabricated construction as against orthodox construction. As you know, final costs of school building are established some time after the event, and therefore as regards the major part of the work of prefabrication all the facts are not yet available. We have only a limited amount of evidence at the moment. On that quite limited amount of evidence there does not appear to be any significant difference in price, but there is a significant difference in time. I should say the speed of building would be little more than half, say something over two years reduced to fourteen or fifteen months. The average time to build a school today is about eighteen months; it was of the order of two and a half years. They are being built more quickly. The advantage of that is very real. In fairness again part of the justification for the changes which have been made in the building programme is this: it has enabled the amount of work in progress to be reduced. The situation which was developing in the building programme was a very sharp increase in the amount of work in progress but not finished. That was going up very rapidly while the amount of work completed was not going up rapidly. That is a situation which must be corrected, otherwise you get to the stage where you have so much work in progress that you cannot handle the situation. By stepping up the tempo in which a school is built you reduce the amount of work in progress quite substantially, and therefore you are in a better position to deal with new work, if new work is to make steady progress.

Mr. *James Johnson.*

454. Is it not a fact that the school we saw in Coventry was cheaper, and even cheaper in the final analysis than the tender which had been given in the first instance? The one we have seen has encouraged us to think they will be cheaper, as you say. I think the important thing is the tempo, is it not? You get more schools built in a shorter time. That is the point you make in this memorandum, is it not?—There again, that only is true up to a point. The actual length of time it takes to build a school, if it is properly scheduled, merely affects your initial two years; that is all. Once you have established your first two and a half years, then the work comes off at the same rate. Whether it takes two and a half years or eighteen months it is only your initial schedule which is affected.

455. It depends whether you build a more or less percentage of aluminium schools. If you build fifty-fifty that would be so, but if you build more or less it is simply a matter of arithmetic?—The point is not affected by that. Let us assume that you were building all your schools in fifteen months at a time. The other assumption is that all your schools take two and a half years to build. Those are the two programmes. Let us assume that you have in fact allowed, as you have here, for a period in which you have established the rate, the first two and a half years, then the tempo at which the schools are completed is the same. The only difference is that you get a quicker start with prefabrication, but you do not keep up quicker output. The output comes off in fifteen months, and in the other case the output comes off in two and a half years. The proof of this is that the North Riding has completed by orthodox construction more school places within a stated period of time than the people on prefabrication because of the time lag in getting prefabricated building organised. (Mr. *Hirst.*) In comparing prices of prefabrication with permanent construction it is very important to compare them with the latest methods of design, because undoubtedly the revised methods of construction in our experience are no dearer than prefabrication although they used to be.

Chairman.

456. Would you say that the school which is being built at Wokingham, of which I have no doubt you have full particulars because it is issued in the bulletin, could be built as economically on traditional lines?—(Dr. *Alexander.*) To-day, yes, I would. The best example I can give you is again to quote the North Riding and compare it with Hertfordshire. It is a rather good example because the North Riding has used orthodox construction all the time; it has not used prefabrication at all. Hertfordshire has probably used prefabrication more exclusively than any authority. It had a very heavy building programme with the overspill from London. The present chief architect

at the Ministry was the architect for Hertfordshire, and he was in fact instrumental in starting this use of prefabrication in the area. I would say quite definitely that over the total of building to this date the cost of school building in the North Riding is cheaper than in Hertfordshire, per place. It may very well be fair to say that the early part of building in Hertfordshire involved a good deal of experimental work so as to get the right method of prefabrication and so on and so forth. That did in fact cause inflated costs, although benefits will derive in future years. That awaits the event, but in the other case it is true, strictly true, that cheaper schools in the country were built by orthodox construction in the North Riding. In Hertfordshire it was costing as much as £480 per place, and in the North Riding £120 and £240 respectively for primary and secondary schools.

Mr. *James Johnson.*

457. Listening to this evidence can we assume that the chief virtue of the aluminium school as opposed to the old-fashioned type of school lies in the speed of erection, and therefore is it fair to assume that you would advise their erection—I will not say only, but mainly—on new housing estates?—Do you mean on our present evidence?

458. Yes?—I would say we would only advise prefabrication where speed of building was an important element and also where the absence of certain materials made it necessary.

459. And to help building labour in that locality?—Quite. It is a method of building which enables you to build satisfactorily in certain conditions, where you could not use orthodox methods of construction. A factor at the present time, and a very important one, is that we could not carry the school building programme on orthodox construction; there are not enough bricks. (Mr. *Hirst.*) We have built quite a bit with aluminium, some of the first in the country. The buildings went up very quickly, but unfortunately, owing to the heating arrangements which went with them, the great shortage of heating pipes and so on meant that by the time the buildings were complete they took just as long. There were two contractors, one contractor putting up the aluminium units themselves and so forth and a separate contractor doing the bases for them and all the supplementary services. I think nowadays one contractor will take on the whole job. If you have got shortages of things like boilers, heat pipes——

460. In the memorandum you are going to let us have could we ask you to let us know the cost of transporting the youngsters from the Sheffield areas of new housing estates into schools in Sheffield? Is it possible to make a calculation of what the saving would be if an aluminium school were erected in twelve months' time as opposed to waiting for the older and more strong type of school which would take a longer time to build? Is it possible to make a computation on those lines?—(Dr. *Alexander.*) A computation could be made. You obviously save transport costs, but frankly I think it would not be a very profitable line to pursue because I think it would be true to say that on any new housing estate prefabrication is almost standard practice. I do not think there are many authorities trying to meet the needs of new housing estates by the orthodox methods of construction.

Chairman.

461. What I would like would be details of the North Riding Schools to which you have referred, schools which you claim have been put up more economically?—There would be no difficulty about that.

Mr. *Norman Cole.*

462. I want to make it quite clear that I have got no brief for prefabrication and I confess I have the same thoughts as you on the question of maintenance, but frankly with what you have just said I find it impossible to agree at all. With respect I say that. You yourself have quoted the epitome of prefabrication in your timber school on the Sheffield estate, a school which went up in six months. As a business man, to say that if a school is built in half the time it cannot be any cheaper, well, I am afraid that offends my common sense?—I can tell you the answer quite simply. This was done by working overtime, week-ends and evenings. I have no doubt a dearer school has not been built at the present time, because it was done by overtime. The contractor agreed to make it a blitz operation, so to speak, and he got his men to agree to work overtime and week-ends, and so it was done. The price was worth it because of the savings in other ways. (Mr. *Hirst.*) Your timber may be a dearer raw material than bricks.

463. I rather feel you have been introducing factors which are not equal. Mr. Hirst mentioned one where he had two contractors who did not quite co-operate on the question of building. Otherwise I would take a lot of convincing that what you say is correct. Other things being equal, efficiency of administration, clearance of site, levelling of site, availability of railway, termini and things of that sort, I cannot believe, much as I dislike prefabrication, that place for place you would not get a cheaper school by prefabrication than by the orthodox methods of construction?—I accept the logic of your argument. I

merely say we cannot produce evidence in support of that logic.

Chairman.

464. Could we pursue this question of the timber school? If you can put up a timber school in six months, from your point of view that would be economic—but if you have got to replace it much quicker than you would the traditional school then it might be more costly?—And if your maintenance costs were doubled.

465. That is another point I wanted to raise in this connection. You have got to look at the question of what is the life of a school. What is the life of what you call the traditional school, and do you think that has a longer life than the prefabricated school or the aluminium school?—We have not experience of them to advise. We have experience of the orthodox construction, and we know they last a very long while, about 60 years and longer than that. We have not experience of prefabricated construction, although we realise that in this field the present methods of prefabrication are perhaps substantially better than those which have been used.

466. The schools which are being put up now are supposed to be built to last 60 to 80 years?—That is as at present advised, as I understand it, on the best research evidence, and that is what the Minister has claimed. We can only await the event.

467. We have the experience that the traditional types of schools have lasted many years longer than they were ever intended to last?—I think we cannot say how long they will last.

468. I want to get this clear. It seems that you do agree with the necessity for economy in present circumstances, and that you do not really oppose the experiments which have been and/or are being made because you think they may be necessary?—On the contrary, we are extremely anxious that there should be continuing experiment.

469. You are also anxious, as I understand it, to convey to us the opinion that, whilst you are thinking that at the moment, that does not conform to what you regard as good educational practice?—Let me be clear on this. Is this referring to prefabricated or orthodox building?

470. The design?—That is solely related to space planning which would apply in either case, either orthodox or prefabricated.

471. There is no doubt that in the prefabricated schools which are going up at the moment these points are very clearly brought out. You speak of lavatories being designed near the classrooms and so on. Because you are able to do that you are able to build with economy?—It is entirely the same in orthodox construction. It can be done in orthodox construction in precisely the same way, and it is being done. That is a change in regulations relating to the space planning of schools. I probably have rather unfortunately brought two different things into this paragraph.

472. We understand the aim of the Ministry of Education is to build 50 per cent. of the new primary and secondary schools during the next two or three years by using methods which require the minimum of site labour?—Yes.

473. Would you agree with that?—We would agree that is absolutely necessary. The school building programme could not be built on any other basis.

474. Does that not mean then that 50 per cent. of the schools which are to be built are going to be built on similar prefabricated lines?—Yes, necessarily. Our present advice is that we could not carry more than half the school building programme by orthodox construction in terms of available labour and materials, and therefore we accept that as a fact. It may be that in the event the methods of prefabrication will prove so successful over the years that it will justifiably be made a permanent feature of school building; I do not know. At the moment we merely express certain doubts, particularly on maintenance costs, though again not based on evidence. Sufficient time has not passed to enable evidence to be produced.

475. If in fact the building programme were increased——?—Then the proportion of prefabrication must increase. If we had a bigger school building programme it could only be carried out by a greater proportion of prefabrication.

Miss *Ward.*

476. Would you agree it is not right to put across that prefabrication is being proceeded with because it is cheaper than traditional building but because we cannot get our schools by any other means as quickly?—That is true.

Mr. *Norman Cole.*

477. To sum up, this is the antithesis in my mind. You say you must have prefabrication to carry out the present building programme, let alone increase it; and yet you do not agree that it saves any money because it has a quicker speed?—We try to be factual. We say that at present we have no evidence that it involves economy. I really must say this because I think the

Ministry would not disagree with this. They believe that the evidence will be forthcoming.

478. That it will be cheaper—what do you believe?—I await the event. I am a Scotsman ; I am cautious.

Mr. *James Johnson.*

479. Would you say, in the light of the urgency of the situation with all these extra school places to be found, it would warrant paying for or building more prefabricated schools, even 100 per cent., not only for the new housing estates but anywhere?—I do not think that would necessarily be helpful. If in fact you are in a situation in which you can build by orthodox construction, and you have the labour available and the resources, I say use them. If you have not, then do the other thing. In other words, use the building resources, and in particular, in any particular area, use the method which will be most effective in that area and on that job. I was really saddened to see a rather beautiful brick building I had put up at Margate being extended by adding two prefabricated class rooms when in fact there were the necessary bricks on the opposite side of the road which could have been used to do that. It took nearly eighteen months to erect the two portions, when it could have been done in six months by using the bricks across the road. That was just a misuse of prefabrication. As I am sure the Ministry will agree our great need is to get local authorities to use the methods of building which are appropriate to a particular job in a particular area. That I think is what the authorities are trying to do as best they can.

Chairman.

480. Would you tell us, Dr. Alexander, why you are worried about the maintenance costs of prefabricated schools?—We have on our executive several members who have very wide experience in the building trade in their private capacity, and they have stressed this very heavily. We have limited experience of perhaps less effective methods of prefabrication used in earlier years—I say less effective because I think it is only fair to say that compared with what we are having now—where maintenance costs proved to be fairly high. I am not suggesting that will be the case here. I imagine it is quite obvious that the methods being used to-day are very much better.

Mr. *Norman Cole.*

481. Some of them?—Those used on the building programme. We do not want to be unfair by saying we are satisfied they will be higher in maintenance. We merely say they might be ; we have certain doubts. We may prove to be wrong, and we will be very happy if we are proved to be wrong. We can put it no higher than that.

Chairman.

482. You have got no specific details in that respect?—We have not. Most of these schools are just shortly up, and therefore the question of maintenance really has not arisen yet. The issue will come in the next ten, fifteen or twenty years.

Mr. *James Johnson.*

483. Your colleagues are not basing their evidence of maintenance costs on those for steel houses, for example?—No, I do not think they would be influenced by that at all.

484. Because we were told in this particular context that there is little painting to be done on the outside of this school in Coventry. We asked that question, and they did not think maintenance costs would be so high ; we will have to wait and see? —I think that really is the issue, but in the factual situation in which we are quite clearly not only have we to use prefabrication because we have got to but also we should use it as effectively as possible. That is the common sense of it. To that extent I think it is true to say that all authorities are collaborating very closely with the Ministry to get the best possible advice on its use.

Chairman.

485. You did submit to us a memorandum on technical education?—Before we pass from the first paper may I just mention this? You referred to the cost per place. We are really quite gravely concerned about this. We have managed during the last three years to build schools within these ceiling price limits wholly because of the very much improved planning, space saving and so on which has been able to be done. There was plenty of scope for it. Let us be quite honest. The regulations in 1946 were rather expansive, and architects increasingly got better at this work to which they had come new. We believe we have just about got to the point where there is not much more we can do there, and therefore any further increases in building costs will in fact have to be reflected in an increased cost per place. We do not know when that point will come, but it seems to us probably within the next year.

486. The Ministry will have to pay more?—The Ministry will have to pay more. There are two solutions when you get to that point. One is to cut the provision still further in order to get inside the price, and the other is to raise your price. We would most strongly advise against cutting the provision further, because in due

course it would mean much heavier expenditure. It would mean the building had to be extended; it would prove to be inadequate in the event; and in the course of ten or twenty years it would mean additions having to be made to the building to meet the needs. That would be much less satisfactory than keeping your essential requirements from the beginning, we should have thought.

Mr. *James Johnson.*

487. There is a third way. You could have an increased output by your building workers?—If we could get that, yes.

488. More efficiency on the site?—We would not wish to press the point here, but it has been a matter of very great concern to us that in the analysis of the increased costs of school building so high a proportion of it appears to be attributable to reduced output per man. That is obviously not a problem which we can ourselves solve.

Chairman.

489. If there are no other questions on the first memorandum I just wanted briefly to refer to the memorandum which you have submitted on technical education. We are not going into this in detail to-day, but maybe we might ask you to see us again about it?—We shall be happy to come. We have phrased this in very general terms because we were advised that at this stage that might perhaps be as useful to you as anything.

490. In the third paragraph you say, "In terms of necessary building for this work it was estimated in 1949 that the investment required was of the order of £50 million in order to provide the minimum facilities for technical education. So far, less than half that sum has in fact been made available. . . ." That is for building, is it not? Could you tell us what are the very serious disadvantages of this and what are the losses to us in having to cut down on buildings for technical education?—We are simply unable to provide the technical education required, and we do not have the technical colleges in which to house students to give them the courses which they are seeking and which are necessary. We are trying to do technological work in improvised buildings with unsatisfactory equipment and so on, and therefore their training is less adequate than it should be. We believe that this is of prime importance to the country as a whole. We believe technical education is one of the most important aspects of our work. There are two points to make on that. One is that we believe there is a waste of money in the present way we are tackling this job. The Ministry, facing the issue of a limited amount of money for this purpose, is tending to spread it too thinly on the ground. They say "You can build a bit of college here, a bit there" and so on, and then perhaps later build another bit. That is an expensive way of building a technical college. It would be much better, in our opinion, to put the money more heavily on certain places, and say, "Do the job, and finish it", but the solution we suggest is that we should tackle it over the next three years by making the remaining £25 million available at the rate of £8 to £10 million a year.

491. You are going on now to what appears on the last page of your memorandum?—Actually I think it is in the third paragraph of the first page.

492. You consider it is uneconomic to build part of a college and then add to it?—Yes. You know the nature of the proposition. It is a major building operation. You bring a contractor and a whole body of people on to the site to do the job, and then you have to bring them back again at a later date. Inevitably you have got to seal off, because it may be a year or two before you can proceed and then you have to open up again. (Mr. *Hirst.*) It is bad planning in that your building has got to be designed and got to be built piece by piece. You have got to use this piece for the purpose for which you intend ultimately to use it, but at your next stage, when adding another bit, you have got to revise the whole arrangement.

493. Have you got any place in view at the moment?—(Dr. *Alexander.*) We have, Sheffield, where a college was proposed fifteen years ago, and at the moment I think they are building a bit costing £20,000 to £30,000. When the whole college is completed it will probably involve £250,000. The bit which is being planned is going to be used for all kinds of purposes, then altered, and another bit added. It will be thoroughly uneconomic in its building. It will cost far more by the time it is finished.

Mr. *James Johnson.*

494. Can I ask where you think the emphasis should be at the moment?—Technical colleges.

495. Building technical secondary schools or expanding technical colleges?—Technical colleges, definitely.

496. That is my view, but I am glad it is confirmed?—Definitely.

497. Technical secondary schools for ages eleven to sixteen will have to come when?—They must follow as part of the reorganisation. (Mr. *Hirst.*) They will come in the ordinary school building programme.

498. Your view is that we should expand the technical colleges wherever they are—Sheffield, Middlesbrough, Birmingham—and get more and more of the technicians, so to

speak the N.C.Os., out of the factory and get them better equipped?—I think the Sub-Committee should remember that there has been a very big increase in the numbers taking technical education. The number of full-time students has increased by three times what it was in 1939, and the number of part-time by five times. The total is something well over double the pre-war position. A lot of the teaching is having to be done in very unsatisfactory premises. (Dr. *Alexander.*) The use of unsatisfactory premises there is much more important than in ordinary schools. You simply have not got the right equipment. You cannot carry the right equipment in them and give the students the training they should get.

Chairman.

499. In the present situation in which the country is placed it could be a very serious disadvantage for technical education?—We think so.

500. What is the position of other countries in this connection?—We think this country has lagged and is lagging seriously behind in technical education. In 1939—I speak from memory as to the date—we were so conscious of that that the then Government made a special contribution of £12 million (which was a considerable sum of money pre-war) as a special allocation, which of course we were unable to use as war broke out. We were prevented from using that sum. The need after the war was even greater than any estimate which could be made in 1939. Therefore the need, starting after the war, was estimated at £50 million for building work to make essential provision. Present plans, as we understand them, are to scale that from now to 1960. That is the present intention. We say that is a great mistake. It would be very much better to speed that up, and try to tackle it in, say, three years, so that we could give proper training to these very much increased numbers, particularly in a situation in which industrial interests generally are more than willing to co-operate. The pre-war situation was one in which many of us tried very hard to get apprentices freed for further training, but the response was not always encouraging. The present situation is one in which employers are coming to us and saying, "Look, we are not only willing but we are anxious to release our people so that they can get proper training. Can you do it?" In some cases the answer is, "We will do our best, but frankly we have not the means to give them proper training. We will have to improvise as best we can". (Mr. *Hirst.*) Then there is another aspect of it: I would say generally that the amount of advanced work has increased very much indeed since the war. (Dr. *Alexander.*) I believe that is true. Just to illustrate Mr. Hirst's point there are more students taking University Degrees as such in technical education in technical colleges than in all the Universities put together. Those are actual Degrees. I am leaving aside all the National Certificates and so on. Quite frankly, they are doing it against all the odds. They are not getting the chance of proper equipment and proper premises.

Mr. *James Johnson.*

501. You feel quite happy that we have finally decided to have an Imperial College of Science?—That in no way affects this problem. We are perfectly happy that you have done that, but you must not be misled—if I may say this although it is perhaps policy—into thinking that by doing that this problem is solved. It is not touched at all. There is a need now to develop the technical colleges, to give them proper provision and proper recognition so as to cater for the vast number (vastly in excess of anything we could do at any of the United Kingdom Universities) of people who are not seeking full time study and could not possibly be admitted to a three or four year course but who may be seeking a sandwich or part time course. They are seeking to get a high standard of technology.

Chairman.

502. It is much easier to measure the financial loss to the nation there than in some of the other branches of education?—It must be very real. In these days I should imagine that this properly done would show a very handsome dividend to the country.

503. You say at the bottom of page two, "The Committee will be aware that one of the effects of Circular 242 has been to increase fees in further education, more particularly for classes of a recreative or social nature". You do not regard that as unreasonable, but you go on to say, ". . . there has been a substantial reduction in the total number of people taking part in further education activities"?—That is true.

504. Can that be measured in the amount of fees which are paid?—The effect simply has been that a great many students have simply ceased to come. They are not prepared to pay the said fee.

505. Does that amount to this, that the teaching is more uneconomic because the classes are smaller?—No, I would not stress that. Certain classes would be just discontinued altogether. If there is not sufficient demand to justify their continuance, then they are just dropped. In some areas the fall was as heavy as 50 per cent.

Mr. *James Johnson.*

506. This is on a par with your Education Department in a way. What has

happened to all these teaching assistants? —They are all part time, and it has simply ceased.

507. What have those teaching assistants done?—They are full time teachers during the day, in the normal hours so to speak, and this part time evening teaching is regarded as overtime. You simply cease to employ them part time. It is one of those things which fluctuates every year. There is no manpower lost. The only point we are making here is that it may well be—and indeed I think it is true—a great many youngsters make their first contact with further education at a social or recreative centre, but from that they are brought into a properly organised course of technical education. If you do not get this first contact with them you have then got to pick them up later, so to speak, to get them into serious work. Even so we are not disputing that it was not unreasonable to say that those people wanting recreative activities should make a reasonable contribution for them.

Chairman.

508. We would like to thank you very much indeed for the patience you have exercised in listening to our various questions, and for the helpful way in which you have given your evidence this morning. Thank you very much?—We are very pleased to have done so.

The witnesses withdrew.

Adjourned till Wednesday next at Eleven o'clock.

WEDNESDAY, 18TH FEBRUARY, 1953.

Members present:

MR. YATES in the Chair.

Mr. James Johnson.	Brigadier Peto.
Mr. T. W. Jones.	Miss Ward.

Mr. E. BRITTON, Chairman of the Education Committee, Mr. W. GRIFFITH, Secretary of the Education Committee, and Mr. R. G. K. HICKMAN, Assistant Secretary of the Education Committee, National Union of Teachers, called in and examined.

Chairman.

509. Mr. Britton, you are the Chairman of the Education Committee?—(*Mr. Britton.*) I am the Chairman of the Union's Education Committee.

510. Would you be good enough to tell the Sub-Committee for the purposes of our record exactly what your positions and functions are within the Union?—The National Union of Teachers does represent rather over 200,000 teachers in all types of schools, including lecturers, training colleges, universities and so on. Within the organisation I am Chairman of the Education Committee, Mr. Griffith is Secretary of the Education Committee, and Mr. Hickman is Assistant Secretary of the Education Committee.

511. We are obliged to you for coming to answer some questions we would like to put. As you know, we are considering the Estimates of Expenditure on education, and particularly buildings. We should like to ask some questions, and, of course, certainly we should like you to express your views to us and say whatever you like in regard to matters which may be uneconomical. We are concerned mainly with finance; we are not so much concerned with policy. We should like to ask some questions and have your views about various matters. In the first place, we understand, as you will be aware, there is a programme of school building at present in operation, and there are various types of buildings being constructed, prefabricated buildings and so on. We should like to know your views about buildings; for example, if you know anything about the experiments that are being made in building, whether those buildings are satisfactory from the teaching point of view, whether they are economical or uneconomical; we wonder if you have some views about that? —I think the position is in this wise. When teachers move into a new building, whether it is a new building that is in permanent construction or whether it is a prefabricated one, their first reaction is: "This is

lovely", because they tend to compare it with the type of building that might have been built in the last century. There are so many of us who were teaching under the very bad conditions of old buildings, that the first reaction, whatever the new school is, is that it is rather a fine school. But I think it is not quite fair to judge it on the first reactions. You cannot really tell what a building is like as, as it were, a machine in which to teach, until you have been in it for some time. I think, judging from what I have heard from the people I get round and talk to, there is a feeling that the prefabricated buildings tend to suffer because of high upkeep. You feel that there is always something that is not working properly in them, and that the job could have been very much better done. To some extent the same applies to the permanent buildings that are being put up at the present moment. In the teacher's life the small things tend to bulk very large. If you are short of cupboard space, that is a very serious thing in your teaching life; you have not got anywhere to put your stuff; it tends to get put on windowsills, in odd corners, and the whole tempo of the teaching drops. It is just those sort of things that people at the present moment are feeling are being dropped out. Their reactions are first, "This is a lovely place"; they compare it with what they have been used to. After a couple of years they say: "Why on earth did not they put that little bit extra?" I think that sums it up.

512. You mentioned cupboard space. Is it not correct that in the new aluminium school and so on there is adequate space for storage?—I do not know the aluminium school, but I do know that the tendency, when you have got to keep costs down below a certain level, is to cut out just those things. I know, for instance, in my own authority, Surrey, we have built the new schools mainly of permanent structure, and in order to keep the cost down a cupboard that you could walk into between two classrooms was seriously reduced, and a sink was taken out of that cupboard. From the point of view of the teachers in the school that was a very serious loss indeed. The point I am trying to make is that these sort of things, from the point of view of the practical teacher, do bulk very large in our existence.

Miss *Ward.*

513. My recollection was, in going over the new pre-fabricated schools, that much more attention had been paid to giving storage space in each classroom and the introduction of individual sinks in each classroom, which to my mind, which is not a trained mind from the teacher's point of view, indicated there was far more of those kind of things made available in the new designs than appeared in the later schools that were built before the war that I have seen?—(Mr. *Hickman.*) That is quite true up to a recent date. It was true that there was an increased development of cupboard space, sinks and things of that kind, but the need to cut down to a lower figure of cost of building at the same time as costs were still rising has meant these things are now beginning to disappear again.

514. Have you any schools that you can mention, except the one that was mentioned in regard to the Surrey County Council?—Not definitely by name. They could be obtained. Of course, the problem of cupboard space and things of that kind is doubly important when you come to the interesting experiments connected with the dual use of space. Wherever you have dual use of space, obviously it follows that you must have the opportunity to put away what is being used by the one user before that space is used by the other user. It is of paramount importance to have not merely the large cupboard provision that was becoming made in many parts, but even more than that, and yet we do find the tendency is that owing to the very narrow limits you have got to work under this is the sort of thing that is tending to decline.

Mr. *James Johnson.*

515. Talking about skimping of cupboard space, could we have your views on other economies: (*a*) this matter of circulation space, particularly corridors, and (*b*) what we are having in the aluminium schools, where the corridors have gone; we are now having the hall in the centre, and the youngsters going from one class to another have to pass to the second teaching space via the centre hall. Do you think that would disturb other teachers, and how would it affect the efficiency of the teacher inside the school?—(Mr. *Britton.*) I would say it would tend to interfere with the efficiency of the teacher inside the school. I think, in order to save circulation space, there have been two tendencies: one is the one you mention, and the other is to tend to build the buildings in separate blocks so that your circulation space in effect is out of doors, which is all very well when the weather is fine but has very serious objections in bad weather. I think the saving in circulation space you mention does tend to interfere with the efficiency of the teachers. If you get the hall in the middle it is also a circulation space. If there is an activity inside that hall, then any children moving about in the building tend to interfere with the activity in the hall.

516. When you talk of building separate blocks, do you mean that inside, say, a secondary school there is a separate block hiving off the junior primary school?—No. I am talking now about building new

secondary modern schools in separate blocks. You tend to have an administration block, which includes staff rooms, hall, gymnasium and so on; you tend to have a practical block and a classroom block; that type of set-up, in which you have got a certain saving of circulation space because you do not have any covered way between the various blocks. That is the sort of thing which is quite satisfactory if the weather is fine, but you do find serious troubles when it is wet.

Brigadier *Peto.*] Have you visited a school such as you describe?—I have not.

Mr. *James Johnson.*] I think it is fair to say we have not seen this type of building. We have seen the Coventry aluminium type, which was in one big block, and we have seen Wokingham which is in a coherent connected whole.

Brigadier *Peto.*

517. And Slough?—Part of the difficulty is this: that the schools that are now completed were built to specifications produced two to three years ago. The schools which are at the moment being planned and are beginning to be constructed have been built to restricted regulations.

Mr. *James Johnson.*

518. They will not come off the line, so to speak, until at least another 18 months or two years?—Yes. I am speaking with a certain amount of knowledge over this in so far as I am at the moment in an old school, and there is a starting date this month for a new school building for me. I have gone into the plans of that particular one.

Chairman.

519. Are the teachers in any way brought into consultation with the education authorities in regard to the types of school?—It varies very considerably. Some local authorities have a panel of teachers and maintain close contact with the County Architect, and who do discuss with the County Architect in some detail the plans. Other authorities do not consult the teachers in any way whatever. But I think the difficulty quite frequently is that the consultation on one school does not affect that school; it affects the next one, because usually at the stage at which the consultation can take place the plans have gone too far for the non-expert in building, namely, the teacher, to have a great deal of effect; but the consultations would tend to alter the next school.

520. Have the National Union of Teachers at any time submitted views to the Ministry of Education about buildings?—(Mr. *Griffith.*) When Building Bulletin No. 1 was issued there was a statement, and for the first time the Ministry of Education suggested that those who use the schools should consult with those who plan them. We sent out to our branches—we have got 650 branches all over the country—we sent out to each of them and asked them to form a committee locally to study that Building Bulletin No. 1 and the Regulations and make contact with the L.E.A. in order to discuss how consultations should take place. We also asked them for their observations on the Regulations and Bulletin. A very good proportion of them did this, went through the Bulletin, and sent their observations up to us, and I did send to Mr. Marshall, who is the Chief Architect, some views of teachers on the Bulletin. I would say that there is more consultation now than there has ever been. I remember a headmaster suggesting to an architect how he should build a corridor or steps from one storey to another; it was where I live in South Wales, where the valleys are very steep. The architect came there, and the headmaster spoke to him, and the architect said: "You look after your job; I do not interfere with your teaching; you must not interfere with my planning." That is not untypical of the old days.

Brigadier *Peto.*

521. You would say it is a great advantage that there should be consultation?—(Mr. *Britton.*) I am sure we say that unanimously. I think it is true to say the position is much better than it used to be. More authorities do it than used to, but by no means all of them. (Mr. *Griffith.*) We asked Mr. Marshall to come to our Conference and lecture at our National Conference. I have got here a copy of the address he gave. It is well that the teachers should know what the Ministry are trying to do. We can give you copies of that if you want it.

Mr. *James Johnson.*

522. Could you tell us this offhand. You say there are 650 local N.U.T. branches. How many of those do co-operate with the L.E.A. and the Director of Education?—The 650 are County and local branch organisations. There are 146 associations in contact with the L.E.A. Sometimes the teachers' representative is elected to the Site and Buildings or some Sub-Committee and things of that kind. It is not always co-operation between the staff of a school and the school that is going to be built. I would say the co-operation is more general than particular, for a particular school, that is. It covers the whole building programme.

Mr. *T. W. Jones.*

523. To what extent are teachers co-opted on education authorities?—There are only three or four of the 146 that do not co-opt them.

524. My own county is one of them?—Is that the West Riding?

525. No, Denbighshire?—We have had some difficulty in Denbighshire; they have co-opted one now; when he retired from school they co-opted him.

526. That is a different story, but they do refuse to allow the N.U.T. to have a representative on the education authority?—Yes. The L.C.C. do not co-opt a teacher, but they have many teachers on the L.C.C.

Chairman.

527. What I am anxious to find out is how far consultation takes place and whether in fact buildings are going up without any views or ideas from the teachers?—In the circular we sent out we pointed out that the Ministry for the first time had said, and we told our people, there should not be any reluctance on their part to ask for co-operation if it did not exist.

528. In some of the buildings that are being put up would you agree that it is a good thing to have lavatories built inside the school and children ought not to have to go outside?—(Mr. *Britton.*) Yes, definitely.

529. Do you think it could be uneconomical to have lavatories inside the class itself? Have you any views about that?—(Mr. *Griffith.*) We have never discussed that.

530. In some of the buildings lavatories are built at the side of the class?—Yes.

531. There can be a corridor at the side or a screen, or they could actually be within sight of the class for smaller children?—(Mr. *Hickman.*) The difficulty about that is that children are not always in a class or under the control of a teacher. There are many occasions during the day when children need to use the lavatory when they are outside the classroom altogether, at break and at dinner-time and so forth. If you have only lavatories in a classroom or connected with the classroom unit, you are raising rather serious disciplinary and control problems which can be a very big nuisance in a school. That is the trouble there if you have only those. You have something that may have to be locked or kept shut for various reasons so that children cannot run in and out at certain times because there is not sufficient control and so on. At dinner-time you cannot have everybody under control.

Miss *Ward.*

532. If the decision was taken to take this line in school planning, did the Ministry ever ask for the teachers' views on the departure from the previous ideas which had been incorporated?—No.

533. That to me seems to be the kind of thing on which consultation could very properly and helpfully take place?—Yes, and in the Building Bulletin (No. 2, I think it was), which had some very interesting and fruitful ideas in it, one of the things teachers were very concerned about was this suggestion that cloakrooms should be carved out of corridors, which obviously is a saving, but which to the teacher is a source of danger and damage to personal belongings and a source of very severe indiscipline.

Chairman.

534. Why?—When you have young children in a school, they are not people who, however well-behaved the school may be, just walk about with their hands behind their backs. You get clothes hanging on pegs in corridors or even in recesses off corridors, and you have some swept off and trampled underfoot and damaged, and all sorts of resulting trouble with parents and work which takes part of the teaching time.

535. I do not understand when you say carved out of corridors?—It was suggested to save cloakroom space experiments should be made with hanging the clothes in the corridors. You have this idea of saving circulation space. One way of getting your circulation space fairly adequate is to cut down your cloakroom space and use your circulation space as partial cloakroom space, not as lavatories and washbasins, those were put in recesses off, which has very grave danger elements when you get them too near the circulation space. The idea was to have the cloaks hung in the corridors. That causes danger and damage and rather a lot of disciplinary trouble. (Mr. *Griffith.*) And health troubles. You get smell and things like that, of course. Their coats are not always dry; they are wet; and anybody who knows a school cloakroom knows it has got a familiar smell. A school cloakroom is as big as a classroom, bigger as a matter of fact, and if you can save a classroom, so to speak, or put the clothes somewhere else, you have got a cloakroom you can use as a classroom.

Brigadier *Peto.*

536. Would you say that is a false economy?—Yes, I would say so. (Mr. *Hickman.*) I think it was an economy that was ill-conceived in that the teachers were not consulted.

Chairman.

537. What about the method of coat-racks that could stand in the classroom itself?—Clothes in the classroom are very unhygienic.

Miss *Ward.*

538. I think in some of those we saw the racks were wheeled into a storeroom space inside and the door shut?—(Mr.

Britton.) I have not known that system in operation, but I would say this: from the point of view of the smaller children, the younger children, I have come across a number of teachers who, since they have seen the separate cloakrooms off corridors, have welcomed them, but I am quite certain that it would not be welcomed by teachers of children who were rather older. Infant teachers have at least welcomed the fact that you have got the coats under the teacher's direct supervision, but I am sure they would not welcome lavatories equally close. One of the major problems in all infant schools undoubtedly is the problem of lavatories; there is not a scrap of doubt about that; the terrific journey very small children have to take, often in bad weather, to the lavatories is, I think, probably the main reason why some children do not like going to school; and I do not think that is an exaggeration in any way. At the same time the organisation of a school has altered very materially because of school dinners. The problem that Mr. Hickman outlined with regard to the children not always being in the classroom and wanting to go to the lavatory from other places than the classroom would apply very largely in infant schools if the lavatories were, as it were, centred on the classroom rather than in the building in a definite place to which there was access from all parts of the building.

Mr. *James Johnson.*

539. We have had this question of what we think of false economies, circulation space and the like. Are there any other points in this connection where we have been spending money over the last two years or so on things which you think are harmful to the teacher as an education technician, or not so much harmful as a handicap to his maximum teaching efficiency?—(Mr. *Griffith.*) I think there was a reduction to £140 per place in 1951. That was a reduction of about 12½ per cent. While I think we have got to say the Ministry do something by trying to co-ordinate the efforts of architects and issuing Building Bulletins and things of that kind, certain local authorities, especially small ones—because you must remember to a small local authority the building of a school is an event, and that experience may not be wanted again for a long time—I think the Ministry in doing that kind of thing and advising L.E.A.'s did something worth while. But I would say it is a little bit early. The school is built: everybody is pleased with it; but we have been given schools, and we know schools are expected to last about three-quarters of a century, or even a century. We have got to ask what this will be like in three, four, five, six or seven years' time, because a school is not only used as a school; it is used continuously nearly every night up to 8, 9 and 10 o'clock; and we do not know what the wear and tear on this will be like. I believe myself that the repair bills and the maintenance bills of these new schools will be very much higher than the others, because they have saved on the doors and that kind of thing. I think we are going to have very big repair bills on them.

Chairman.

540. Could you give us anything more specific? Mr. Britton did mention the fear about maintenance. Have you any actual evidence?—(Mr. *Britton.*) The difficulty is that there has not been time for the evidence to accumulate.

Brigadier *Peto.*] I think also the difficulty is that the types of schools that are now being put up are not uniform. You have not got uniform material. We saw one, for example, using prefabricated blocks about 3 inches thick and a couple of yards wide which require no upkeep, so the architect told us.

Chairman.

541. Mr. Britton mentioned at the outset that they feared there would have to be an addition of this and of that, but he did not mention what he was meaning?—I think one's attitude is affected by what has happened over the HORSA huts. The HORSA huts were put up in large numbers some five or six years ago. I believe when teachers first moved into them, having been used to the rather restricted condition that many had known in old and out of date buildings, they thought these HORSA huts were pretty good. But steadily one is getting less satisfied with them. There is invariably something that wants repairing. The repair bill quite factually is high on these, and I think that any local authority would substantiate that fact. As a teacher, you feel that the place never looks, no matter how much effort you put into it, a graceful place, which is important in the lives of children, I believe.

542. They were specially for the raising of the school leaving age?—Yes. What we do feel is this. We have also got this in very many cases: temporary buildings that were put up immediately after the first war are there still being used in overcrowded circumstances. These HORSA's were put up for ten years, and it is already becoming quite obvious they are not going to be anything like a temporary expedient.

543. On the whole, may we take it that whilst you would recognise the necessity for prefabricated buildings in present circumstances——?—Yes.

544. —because of the question of time and because of the shortage of labour and materials, on the whole would we take it it is your view that all things being equal

you prefer the traditional types?—Yes. (Mr. *Griffith.*) Could we put it like this. We recognise that extraordinary measures are required to build the schools because children grow up quickly. But we would want to return, not just return but go forward, to more substantial and even better buildings.

Brigadier *Peto.*

545. I was going to clear up one point if I could. I was informed that the traditional type of building was probably the cheapest type to put up, as bricks are probably cheaper than anything else in the way of building material, but that the traditional type did require more upkeep and maintenance than the prefabricated building?—We have some experience of that. Before the war there were many what we call light buildings put up, lightweight buildings. The maintenance cost of those, repairs and maintenance and that kind of thing, we can prove was higher. I listened to the Architect for Middlesex giving a lecture some years ago, and he pointed out that although the initial cost was less, when you take the cost of repairs it was more expensive; those were the words he used. There was quite a number of those schools put up in pre-war days.

546. Non-traditional?—Yes, some wooden ones.

547. I was surprised by the architect who told me this, that the traditional building is in fact a cheaper building to put up in material, cubic space for cubic space, than a prefabricated building, which has the more expensive original cost in material than the brick building?—(Mr. *Britton.*) That is completely contrary to the views of the architect with whom I am most familiar. The Surrey authority's architect takes a completely opposite point of view, and I have discussed this with him in some detail, namely, that the traditional building is not cheaper in original cost, but is much cheaper in the long run. (Mr. *Griffith.*) The traditional way of building was in force in very many areas before this reduction to £140 per place, and it is by doing away with a lot of that and putting some prefabrication in that they were able to come down to £140 per place.

Mr. *T. W. Jones.*

548. What are your views on the central hall system in the construction of a school? On the face of it, it would appear that would be the cheapest building that could be put up. In any case, is not this question of noise over-exaggerated?—In 1907 there was a central hall type of school with windows in the hall, where the headmaster could sit in the central hall at a big desk and see what was going on. I have had experience of that kind of school, and a central hall of that kind is no use at all. It is only a corridor. You want a central hall where the school meets as a community, and it cannot meet as a community if any of the classrooms are in use. It is really a wide corridor, and a recurrence of the old days, where the headmaster used to sit at a big desk.

Miss *Ward.*

549. Now you are talking about a central hall where the classrooms were off the central hall and there were glass panels in the doors, but that is not the present arrangement?—I thought that was what you were asking.

Mr. *T. W. Jones.*

550. I was asking whether you could go back to that type or whether they condemned it?—You have got to have a stage and platform and everything now.

Chairman.

551. Where you have a central hall through which children have to go to their various classes and come from the classes through the central hall, how far does that affect teaching efficiency by work having to be interrupted?—(Mr. *Britton.*) I think it does affect it very considerably. (Mr. *Hickman.*) It is a sort of dilemma really. If you are using that space efficiently, then it affects it. If you are not using it efficiently you are paying very dearly for circulation space. (Mr. *Britton.*) I think that sums it up.

552. We are not getting value for the money we spend in education if in fact it is not being done efficiently?—(Mr. *Hickman.*) If you are using that big space efficiently you cannot circulate through it, because you would upset the efficiency of the use. If you are not using it efficiently you are paying very dearly for circulating space. I believe, as regards the suggestion of dual use of halls, they were some of the most interesting and quite fruitful suggestions and quite proper ones, because if you have big spaces you should use them as much as possible. (Mr. *Griffith.*) I actually taught for some years before the first war in one of these halls, and there was constant friction. I had a class there because it was the only space. The South Wales valleys were expanding in population. I used to say: "Nobody is to come through here because I am talking for the next ten minutes or so." The other teachers would say they want that boy and that boy and there were constant interruptions.

Miss *Ward.*

553. That is a very very old type. You cannot compare that type of school with the new modern school with the big central hall?—I am not against the central hall, but if it is used for the purpose of circulation it is valueless really.

554. With regard to heating, I wanted to know whether there was any experience and if you have any views on some of the new heating arrangements?—(Mr. *Britton.*) What particular heating arrangements?

555. The new radiation systems, where the heat is blown into the hall, so to speak. Have you seen any of those?—I have seen them, but I could not say at first hand I have had any experience with people who have worked in such buildings. I am quite certain that very many teachers have welcomed the fact that there is far less danger from children hitting themselves on radiators than there used to be. That is a marked advantage.

Mr. *James Johnson.*

556. We have mainly put questions about false economies. Can I ask the N.U.T. delegation now, since it is a common complaint, or a common shout, so to speak, that since the war we have been lavish with our school buildings, are there any parts of a school that have been built, or any ornamental parts, that need not have been put in, on which we have spent too much money?—I deny that any money spent has been wasteful. I have seen a good few new buildings, and I have not yet seen one where I felt money had been spent unnecessarily.

Brigadier *Peto.*

557. What about Slough?—(Mr. *Griffith.*) Just the opposite; they have not spent enough.

558. The second point I wanted to ask about was this. Have you any view on the desirability of having only one floor, the advantages or disadvantages of one- and two-storey buildings?—(Mr. *Britton.*) I think it depends on the age of the children very largely. With young children I think it is undesirable that there should be two storeys, but I do not think that there is any serious disadvantage in having a school for older children of more than one storey. (Mr. *Griffith.*) We did discuss this problem when the Building Regulations came out, and we have got to have regard to space. It is no good saying you can have a one-floor big school, because you have to have regard, especially in towns, to space. But we are definitely against three-storeyed buildings, and two-storeyed ones in the case of very young children.

559. Are you speaking from the point of view of the efficiency of the teaching?—Yes, because if you are going up and downstairs you waste a lot of time moving about from one part of the school to another and one class to another.

560. Not so much as you do if it is on one floor?—It depends how it is shaped. (Mr. *Hickman.*) There are very serious danger elements in some places, though not for older children. There are advantages in some schools in having some parts upstairs, for instance, libraries and sixth form rooms, to get away from the noise.

Miss *Ward.*

561. Do you, in the positions that you hold in the National Union of Teachers, when there are any fairly considerable departures in building, go round and see them from county to county, or local authority to local authority? Do you see them for yourselves or do you really judge from the Bulletins?—(Mr. *Britton.*) We do go round and see them. As an elected member of the Executive and officials, we go round the country quite a lot, and we do see a fair bit of new building.

562. A fair sample?—Yes. But we also do have a procedure by which all our associations send in views on all sorts of subjects to headquarters, so that we have the advantage of the information that comes from the localities, from the teachers who are working in those localities.—(Mr. *Griffith.*) Could we explain that Mr. Britton is actually the head of a school? Mr. Hickman and I are not now in schools. We came out a few years ago; but we are always going to address teachers at meetings, very often held in schools, and we take advantage of seeing anything new, and in fact anything old, that is about.

Chairman.

563. We have had a good talk about new schools. Can we now go to the old schools? You know that there were 600 schools black listed in 1925. Would you say that a number of those schools are no longer on the black list, or at least some of them have been improved, and that figure today is less than 600?—It is very difficult to say whether it is less or what the actual position is. Some of them were removed from the black list; some were removed every year because the L.E.A. was able to do sufficient, just sufficient, to bring them off the black list; but in many of those schools the defects which put them on the black list are still there. The Ministry have information as to how many were removed from year to year, although when I tried to find out the other day about one I had no information as to the reason why they were removed except that something had been done to take them off. Very many are still there.

564. Have the Ministry got information? Have they collected information about the number?—You have the power to press for the information.

565. You say that the Ministry of Education has that information?—I think so.

566. If so, do you ask for that information?—Yes, we have asked for information.

567. Did they decline to give it?—No. I think there is one point where one cannot get information about numbers; it is really because they have not actually got it.

Mr. *James Johnson.*

568. Is it not a fact there has been no official inspection, so to speak, of the schools in this field since 1925?—That is so, but I was in touch with them about a school in Essex, and they could tell me on what date it was removed from the black list.

Chairman.

569. What I am trying to find out is this. If you say you have experience of schools throughout the country, you ought to be able to give us a view as to whether there are more bad schools or less. What is the extent? What are the teachers' views?—(Mr. *Britton.*) My own authority had no school on the black list in 1925. If my authority had no school on the black list, I know what schools my authority has got, and goodness knows what those schools on the black list must have been like; because very many of the schools of my own authority, which is not a bad one, are so bad that I think they very seriously prevent even average good teaching in those schools.

570. Would you say in your opinion there are more unsatisfactory schools today than there were when the black list was made?—I am sorry. I was still a boy at school in 1925, and it is very difficult for me to say whether now the bad schools are worse than the schools were in 1925.

571. What do you describe as an unsatisfactory or bad school? You were speaking about your area, where you had examples of a good many?—I would say a school is bad if there is no hall in which the children can assemble properly; if the lavatory accommodation is still earth when there is water sanitation; if there is no electric light, when there is electric light running down the street outside; if the buildings are dark; if the cloakroom accommodation is too small; if the water comes in through the roof; if the schools are so overcrowded because of the increased birth rate that children can hardly move around. You can find these things at the present moment.

Mr. *James Johnson.*

572. Would you care to add heating in open fires?—Yes. You would find those conditions in schools not on the black list in 1925.

Chairman.

573. Those schools are still being run today, and you would say they are very uneconomical?—Very uneconomical in terms of human talent and human ability. In terms of pounds, shillings and pence it is very difficult to say whether they are uneconomical.

574. Do you think that money could profitably be spent on them?—That, again, is extraordinarily difficult. Ideally they ought to be pulled down and properly rebuilt, but I am quite certain, with existing schools as they are, you could profitably spend money on them by bringing the lavatories up to more reasonable standards, which would not be a very expensive job, seeing that they have got adequate lighting, and seeing that you have got adequate paved playground space. That is very expensive, but it is an absolute essential. I think in view of the present national situation, where you are not likely to get these buildings swept away and decent buildings put in their place, it is quite false economy to adopt the point of view: "We are looking to the day when we are going to pull them down, therefore we will not do anything to improve them now." (Mr. *Griffith.*) Here is a Survey which we made in 1936, which the Ministry did not believe, of bad schools. I think it is true to say we were able to substantiate everything said in this.

575. Could you let the Sub-Committee have copies of it?—Yes.

576. Would you say the situation has improved over that or whether the same conditions exist today?—I would say this: you have got to remember this; there were only 600 out of 30,000. Whether it is 700 or 600 does not matter very much. The point is there are very many bad schools, judged by any reasonable standards today, very many more than 600, having regard to the position in 1925.

577. The only other question I wanted to ask was this. Have you any evidence of teachers, for example, refusing to work in bad, unsatisfactory schools?—Perhaps they refuse to go into them, and look for another job somewhere else. They choose their area. Undoubtedly some teachers look at a school and say: "No, I am not applying for this." That is true, I think. It is true generally; even the Ministry admit that one of the difficulties with regard to recruitment of women teachers is the unsatisfactory conditions of very many of our infant schools. They imply that in a pamphlet.

578. Does that mean, for instance, there are very often considerable changes of staff in these schools that are unsatisfactory, because people do not stay?—(Mr. *Britton.*) Is it not really one factor in a much larger situation, because people change jobs not only because it is a bad building? Possibly they put up with that building if there

is a congenial staff, or they like the headmaster or things of that sort. But it is one of those things which do bulk large in a teacher's mind when he or she decides whether to apply. (Mr. *Griffith.*) The L.C.C. find greater difficulty in getting teachers to go to the East End than to the West End.

Mr. *James Johnson.*] We have spoken of schools for the average child. Can we have your views on the building of special schools, because so many of our subnormal and handicapped youngsters have to go to special schools?

Brigadier *Peto.*] Before we do that, might we clear up one or two points on the bad schools?

Chairman.] Are there any other general questions?

Mr. *T. W. Jones.*

579. I was going to ask this. Of these 600 schools in 1925, due to a changed system of education in the country, would not you find that a large number of them that were condemned due to overcrowding in particular in 1925 would be today perhaps regarded as more satisfactory, having introduced electricity, for instance, if it was non-existent in 1925, and a change in the lavatory accommodation and so on? I have one school in mind that had 300 pupils in 1925, and there are only 80 children there now. Many of the rooms are permanently vacant and can be used for any purpose; in 1925 they were definitely overcrowded; nowadays they lose themselves in the school. Would that account for the reduction as far as the Ministry is concerned in the number actually condemned?—I do not think the school was condemned because of the number of children attending it.

580. I know, but it applies to this extent: that here is an old building——?—Where?

581. At Rhosllanerchrugog in North Wales, built in 1849, which certainly should have been demolished years ago, but due to the fact that it has been converted to a junior school with less pupils, although the building is dilapidated, still they can put up with it now, as they could not then?—The L.E.A., instead of condemning that school, built a new school for the seniors and say the old school is good enough for the juniors. They have had the opportunity to do it but they did not do it; they were so anxious to save rates. (Mr. *Hickman.*) You cannot compare 1925 with 1953. I am absolutely confident there is no doubt whatever that the sanitary conditions of our schools in relation to the sanitary conditions of our houses and what the people are used to nowadays is much worse, but you have got to take the improvement in social conditions into account, the housing and the general attitude of the pupils, and I am quite certain comparatively in sanitation alone things are worse.

Chairman.

582. That is the schools that are unsatisfactory?—Yes.

583. What we cannot find out is to what extent that is so?—(Mr. *Griffith.*) We can say this: that as far as a fair proportion of the children are concerned, when they go to school they go to a place where the standards of sanitation are lower than in their own homes.

584. Is that the majority?—Not the majority, but a very large number. (Mr. *Hickman.*) My own children do, for instance, in part of Middlesex; it is shocking.

585. (Mr. *Britton.*) If I may just put in a point, once upon a time children need not use the lavatory at school because they went home to dinner. Now they have to because 50 per cent. of them do not go home to dinner. That is a very serious change. (Mr. *Hickman.*) I think your evidence is in the complaints of local education authorities, which are increasingly numerous, that there is not sufficient provision for the small scale expenditure outside the big new grant, the expenditure for small projects; I forget the technical term—minor projects. I think you will find there are increasing numbers of local education authorities complaining that the allocation of money for minor projects is grossly insufficient, and the schools they could keep in a tolerable state for some time they are not being able to because of the lack of allocation.

Miss *Ward.*

586. You would suggest it would be worth while having a really serious examination of all schools below a certain standard to see how far they could be improved with a reasonable expenditure of money, and that if that was done they might possibly last for a considerably longer period: is that a fair summing up?—I believe in the circumstances some balance of that kind has to be struck, and it is wise book-keeping and economy to look into it.

587. It does seem what you have said, if I may say so, is slightly on the lines of a generalisation. You have not inside your organisation got a list of schools that fit in with the kind of examples you have been giving. It is a general impression that you have got, but you have not really called in your own organisation for information?—(Mr. *Griffith.*) We asked the Ministry of

Education the other day, and I am sure you cannot expect us to do what the Ministry with all its facilities cannot do.

588. I do not know. I think if you want to prove something to the Ministry it is useful to get the facts yourself and confound them?—We do get reports from people in the schools, and *this* document is compiled from reports.

589. That is 1936?—Yes.

590. I was wondering whether you have an up to date one?—There has not been much done since 1936 as far as these old buildings are concerned.

Brigadier Peto.

591. I was wanting to follow up what Mr. Jones said. He quoted a school where there are plenty of rooms and few students. My point is this. Are there not cases where village schools, that type of school, could be or should be condemned because they have physically too many pupils. You said in your remark just now you did not think the number of pupils was taken into account when condemning schools?—I am certain it was not.

592. I should have thought that was the first thing to be considered?—I should say the main things are structure, ventilation, lighting, and things like that. There are plenty of new schools, if that was the criterion, that you could condemn because they are overcrowded before they are open, almost. (Mr. *Hickman.*) The grammar school I worked in had 650 pupils in a school built for 300 within five years. (Mr. *Griffith.*) I have had a complaint even now from one of our New Towns in a very good L.E.A. area, Hertfordshire, Hemel Hempstead, where the schools and the houses are being planned to meet at a certain point, but before they reach that point where the accommodation will be suitable for the children there will be a time when there will be 600 children without school accommodation.

Chairman.] I think that is another question. On the question of overcrowding and unsatisfactory schools, are there any other questions?

Mr. *James Johnson.*] I would like to move on to special schools.

Chairman.] Very well, we will take it now.

Mr. *James Johnson.*

593. Yes, because it is very important indeed. In big cities particularly we are spending thousands on subnormal, abnormal and physically handicapped children we cannot obviously contain inside our so-called normal or average schools. I would like the views of the delegation on that, about buildings and accommodation and facilities for teaching?—We would say there is not sufficient money being spent in getting accommodation for children in special schools, because we find that there are at least 20,00 children who ought to be in special schools who have been found to be in need of it, and that has an important repercussion, because as there is no accommodation for them the local authority and the doctors and everybody seems to say: "What is the good of ascertaining these people; there is no accommodation for them; you only raise people's hopes". There has been quite a substantial number of new special schools built. (Mr. *Britton.*) Not built—opened—old mansions and things of that kind, but it does not meet the demand at all.

Brigadier Peto.

594. You cannot give us anything more definite than that on the numbers?—20,000 is the figure. If you look in the Ministry's last Report, I think you will find over 20,000 who ought to be there and who cannot find places.

Mr. *James Johnson.*

595. Is it correct to say that the number would be swollen enormously to perhaps 30,000 or 40,000 if we had the accommodation in special school buildings?—Yes. (Mr. *Hickman.*) It is a reasonable deduction.

Chairman.

596. Is that figure of 20,000 a figure which would be agreed by the Ministry of Education?—(Mr. *Griffith.*) This figure is 20,128 in December, 1950. It is in the Ministry's Report. We can check that up for you.

597. Where are those children now—in ordinary schools?—(Mr. *Britton.*) Mainly in ordinary schools.

598. Do you think it would be beneficial to provide special classes in schools for those children?—(Mr. *Griffith.*) There are experiments going on now in some areas.

Mr. *James Johnson.*

599. Your feeling is, Mr. Griffith, that we could build some of these schools or have a place for them inside the school building programme at the moment, and that would be a definite help to school teaching and the actual life of education inside our big cities particularly, Manchester, Liverpool, Birmingham and so on?—Yes. Everybody is going out for that, but it had been neglected in certain parts, in Wales particularly.

Chairman.

600. I think we have to bear in mind whether it is likely to be more costly to us in the end by keeping 20,000 children

out of special schools?—Let us put it in this way. Many of these children in special schools can be brought up, trained and educated in such a way that they will be much less of a burden on society when they grow up than if they are left in ordinary schools. (Mr. *Britton.*) I should have felt in a large town where you are providing additional places, if you provide a certain number of additional special school places you are really saving in so far as you have taken those children who ought to have special education out of the normal class and enable the normal class to work more efficiently because they have not got the drag of these children.

Miss *Ward.*

601. I have been impressed on occasions with the fact that some local authorities provide accommodation and teaching in these special classes, whereas others do not. Do you think that it ever would be possible in any area to collect all the children from the variety of local authorities, children who require special accommodation and special teaching, and make it a sort of special thing, rather than trying to provide all this additional accommodation local authority by local authority?—(Mr. *Griffith.*) That is what is actually happening, and in Wales, where they have set up the W.J.E.C.—Welsh Joint Educational Committee—they tend to put all the responsibility for all of them on the one authority for the very reason you have stated. Small counties cannot provide enough for one kind of special school, and we want not just special schools but the different types of special schools.

602. You think it would be, looking at it from the economy point of view, wise to examine the whole problem from that angle as well as from the individual angle, so to speak?—Yes; and in practice it is being done. In other areas it is the voluntary school that may cater for a number of authorities, like the Doncaster Deaf School caters for Yorkshire and even some parts of East Anglia. (Mr. *Britton.*) I think one must say the whole idea argues such schools would have to be residential. If you are going to collect children from a number of authorities they would have to be residential.

603. It is awfully depressing for local authorities who have no special accommodation, or shall I say it is very depressing for parents, to hear that one local authority has made provision, whereas the local authority under which their children come has made no provision. I think it is psychological as well as being a problem of organisation?—(Mr. *Griffith.*) Might we ask about the building programme for the future, because I think it is an important aspect. I do not know whether it comes within your jurisdiction. If we are only going to spend about the same amount of money in the next few years on the buildings, the position is going to be even worse than it is now, for this reason, that the cost of secondary accommodation being £240 per place and the cost of primary accommodation being £140 per place, as the children grow up for every twelve primary places you are able to build with the money you will only be able to build seven secondary places. If there is to be proper secondary accommodation it looks as if there ought to be very much more money spent. At the present time there is this switchover or emphasis from the building of primary schools to the building of secondary schools to meet the needs of the children as they grow older.

Chairman.

604. We can quite appreciate that you have in your minds what you think is desirable. That, of course, involves policy, and it is difficult for us to say what is desirable. I was going to raise the general question of the school population; perhaps that will lead on to this. We understand that the school places required by the end of 1953, as the agreed figure with the Ministry of Education, is 1,150,000. Do you know that?—(Mr. *Hickman.*) Yes, we agree that.

605. Do you consider first of all that figure is scientific or a satisfactory figure? Would that meet the situation so far as primary places are concerned?—(Mr. *Griffith.*) I would say it is a very rough figure in this sense: that the children are not evenly spread, and they are continually moving from old places to new places. I am of the opinion myself that to meet the needs of 1,150,000 you want more than 1,150,000 places. You cannot have exactly 30 children or 40 children to each classroom.

606. That brings in Mr. Hickman's point that he raised earlier. I think you were rather saying that the schools were overcrowded from the beginning?—(Mr. *Hickman.*) Yes.

607. Is that the experience now?—The schools are grossly overcrowded almost everywhere. The infant schools at the moment are distressingly overcrowded almost throughout England and Wales.

608. Even the new schools?—Yes, right from the beginning. (Mr. *Britton.*) It is quite a usual experience to open a new school and have one or two classes in the hall within three or four months. (Mr. *Hickman.*) The lag of schools is so far behind that they are filled to capacity almost as soon as they open.

609. The lag in schools behind the housing development?—Yes.

Mr. *James Johnson.*

610. Was this the case before the war? If we built a new school in 1936, for example, for, say, 320 pupils, was it quite full at the beginning?—(Mr. *Griffith.*) No.

611. Has this always been the tendency in school building?—No. (Mr. *Britton.*) Not to anything like the extent it is at the moment. It is very much more so now than before the war.

Brigadier *Peto.*

612. Is it the fact that more children are now being made to go to school than in 1936; does that have any effect?—I would not say so.

613. In 1936 and before there were a great many children who never went to school, children in the country?—(Mr. *Hickman.*) Very few, I should think. (Mr. *Griffith.*) It reminds me of the Russians when they came here, and they asked me: "How do they make the children go to school?" My answer was: "They go." I do not think there were many who did not go. There is a good tradition of school attendance here.

Chairman.

614. I am just trying to find out to what extent you believe this problem has increased. Do you think we are likely to have a very considerable number of children without any places at all? Is it developing in the country in a way that you could say that any serious development is showing itself in that there are no schools for children to go to?—When we say there are no schools for children to go to, we tend to take them in rather than exclude them. As Mr. Britton said, a new school which is built has a hall and there are two classes in that hall, which can never be used for anything else.

615. But if you cannot take them in what do you do—transport them to the nearest available school?—(Mr. *Hickman.*) Yes, or delay the entry. The school age is five, but it is not five in many parts of the country; I understand in certain parts it is 5¾.

616. Where is that?—(Mr. *Britton.*) There are parts of Surrey, for instance, where children cannot get in at the end of the term in which they are 5. It is a problem that varies very much from locality to locality. In my own particular area for the first time there will be next Easter children who normally would go to school at Easter not being able to be admitted till the summer. The practice has been for children to be admitted at the beginning of the term during which they are 5, but for the first time in my own particular area that is not going to be possible this Easter, and the situation will become more acute the following terms. That is fairly general.

617. Does that arise because the number of places planned has not been sufficient, because this figure of 1,150,000, for instance, is short?—It arises, I think, from the fact that there have been either insufficient places planned or there has been a time lag between the planning and the actual provision. It is very difficult for a teacher to see whether the authority did not foresee it or did foresee it and have not got the buildings put up. (Mr. *Griffith.*) They cannot spend the money.

Miss *Ward.*

618. I suppose it is sometimes difficult for the education authority to know what the housing authority is proposing. You get all sorts of problems of negotiating for buying building land. There are very wide problems which arise, and it must be difficult always to get co-ordination between the housing authority and the local education authority?—What is happening is this. I agree with you, especially so in a big county, but in a county borough they ought to be able to do it, because they do both. May I point out, in January last year there were 35,873 classes, over-large classes, in this country.

619. January this year?—January, 1952. It is worse this year.

Chairman.

620. What do you mean by overcrowded?—(Mr. *Hickman.*) In excess of the Ministry's regulation. (Mr. *Griffith.*) Of the maximum permitted. Forty is the maximum, and there are 35,000 classes—and I am certain that the figure for January, 1953, will be bigger—in other words, 45 per cent. of the children in this country in primary schools are being taught in over-sized classes. These figures can be seen in the last Report of the Ministry. The figures I get from teachers in certain places indicate that this year they are bigger still.

621. Could you tell us any area of the country where you think a large amount of money is being spent on transporting children because there is no school?—(Mr. *Hickman.*) The New Town in Essex is an outstanding example; it is going to be if it has not reached its peak. It will be tremendous, the amount of money spent.

622. That is because you have not got the schools in the town?—Yes.

623. You have got the houses; they have gone up?—Yes. (Mr. *Britton.*) The schools just have not been built. (Mr. *Hickman.*) I think it is the outstanding example.

Miss *Ward.*

624. Is that, in your opinion, due to bad planning on the part of the New Town Corporation, or is it because the Ministry of Education was unable to authorise the building of the schools, or how do you suppose that Essex should be in a worse position vis-a-vis its New Town than other counties where New Towns are being built?—(Mr. *Griffith.*) I will answer it from the point of view of a teacher in the area, not at Harlow, but another similar one. He says: "In the New Town the rate of building schools is lagging far behind the rate of building houses, and in consequence it is estimated approximately 800 children of primary school age will be without school facilities by December, 1953. The L.E.A., we understand, is doing all in its power to build the schools allowed under its allocation."

Brigadier *Peto.*

625. What is that place?—Hemel Hempstead.

Miss *Ward.*

626. Does one draw the conclusion——?—They can only build what the Ministry permits.

627. Would you read the sentence again, "The L.E.A. is doing everything . . ."?—"The L.E.A., we understand, is doing all in its power to build the schools allowed under its allocation."

628. It is doing all in its power to build the schools?—No, the allocation is the important word.

629. I interpret that sentence to mean that they have not built the schools that have been permitted; they are doing everything in their power to build the schools allocated?—Yes.

630. Does not that rather indicate a failure in the planning?—They asked me to get on to the Ministry of Education to get more allocation.

Chairman.

631. That is the situation that is likely to develop by the end of 1953, but in Hemel Hempstead or any other New Town do you get a considerable number of children living there now in new houses with no school, and if so what is happening to the children? Are they being transported to schools outside the area?—Yes, there is no doubt about that. (Mr. *Hickman.*) They are being transported in large numbers up and down the country.

632. In the New Towns?—Yes, very large numbers at considerable cost.

633. Which could have been avoided if it had been possible to have these schools erected as quickly as the houses?—Yes; it seems reasonable it should be done.

Mr. *James Johnson.*] Do not you think it is merely a matter of time lag, because the policy is that housing estates will have their due allocation of new schools?—The new housing estate is one place where we do feel happy at the moment, or happier than most, that they will get their schools.

Miss *Ward.*

634. That is exactly my point, because, if I understood it, the Minister's decision was that the new building programme would run entirely where there is new development. What I am really wondering is this. Is it the fault of the planning Corporations? It cannot be the fault of the Ministry, because that is the policy?—(Mr. *Griffith.*) Hertfordshire has always been cited by the Ministry as one of the best in getting on with school building and the rest of it, and the teachers approached me and said: "We have got to have all kinds of temporary arrangements, temporary classrooms and things like that". I think the schools are going up. (Mr. *Hickman.*) The starting date has been too late.

635. That absolutely confirms my point?—(Mr. *Griffith.*) But the Ministry give starting dates, not the L.E.A.

Mr. *James Johnson.*

636. Do you think that you could furnish us with evidence, and obviously numbers are very important, in these areas like Hemel Hempstead and elsewhere, that you think are glowing examples of the building of schools lagging behind the housing programme? That would help us enormously. You have mentioned one. Are there any others you could lay hands on or get from the local associations?—(Mr. *Britton.*) We can try.

Miss *Ward.*] I think that would be most helpful.

Chairman.

637. You did, I think, mention the question of secondary school places. If we are going to be short of school places for primary schools, did I understand you to say on the present basis it is going to be worse for secondary schools?—(Mr. *Griffith.*) I would say at least as difficult in the secondary schools, because even the Minister suggested that more of the children should be kept back in the primary schools.

Mr. *James Johnson.*

638. Is it not the case that to build teaching space for, shall we say, half a million secondary youngsters costs almost twice as much as it does to build the teaching space for half a million youngsters under 11?—I worked it out last night. For the same money you are only going to provide 58 per cent. of the places. If

you have only got a certain amount of money to spend on school building it will only provide 58 per cent. of secondary school places as compared with primary.

639. Which means the bulge passes up above the 11 stage and you have to spend *x* more million pounds to give the accommodation needed?—Yes

Chairman.

640. There are three other questions which are more or less general. First of all, there are 146 local education authorities in the country, and they must vary in their programmes. Do you find from experience some are very much worse than others or that they cannot get on with the building that really they could have the permission to do? Is there very much distinction in the country?—I think some are better than others, naturally. We always say there is variety, and variety means not only difference of the same quality but difference in the quality itself. There are some L.E.A.s, for instance, Hertfordshire, who have got the reputation of going on with this job quickly of building schools

641. There are not any cases where you think they could do the job but are not doing it?—(Mr. *Britton.*) I think we should have difficulty in producing definite evidence.

642. Would you say that in the rural areas as compared with the town areas there is any difference? Is the rural population being catered for in the same way equally with the towns?—(Mr. *Griffith.*) I would say I think this is the test of this: how many all-range schools are there in the country? All-range schools means all-standard, where you have got children up to the age of 15 mixing with the younger ones; in other words, areas where there are no secondary schools. This is the actual position: there are 350,000 children of secondary school age—that is above 11 years of age—who are still in primary schools; that is, all-standard schools. That means that there is not secondary school accommodation there, and according to the Ministry's priorities there is not priority of any kind for reorganisation in these schools to provide secondary education for them.

643. Is that more a difficulty in the rural areas?—Yes. (Mr *Britton.*) The amount of new building in purely rural areas I think is very small indeed.

Miss *Ward.*

644. That is because of the housing development?—Such new building as there has been has tended to be either for areas where there was so much bomb damage you have got to provide new schools, or the new housing estates. They have had a smack at the new building and the other people have not.

Chairman.

645. Would you say that the slowing up of the building programme is in any way connected with the shortage of teachers?—(Mr. *Griffith.*) The Minister was more concerned about the shortage of teachers than the shortage of buildings. The local authorities say it is the shortage of buildings, not so much the shortage of teachers. We would say quite definitely there is a shortage of teachers and buildings; there is no doubt about that.

Brigadier *Peto.*

646. It does not quite answer the question?—(Mr. *Britton.*) I do not think there is a connection between them except in so far as bad teaching conditions inevitably react unfavourably on the recruitment to the profession. (Mr. *Griffith.*) And there is the tendency on the part of authorities not to appoint teachers because they have not got classrooms for them. They tend to say it does not matter how many children you have got in the class; we only want one teacher there.

Mr. *James Johnson.*

647. Do the witnesses feel we can get down the cost per place below the £140 or £240? If it is got down, would that again affect teaching efficiency and the teaching conditions inside the schools?—(Mr. *Hickman.*) I would say that was rock bottom a year or so ago, and rising costs are almost making the reconsideration of that necessary. That varies from area to area; the costs in one place are not quite the same as in another. But that was rock bottom when it was done, and now costs are beginning to go up again it is getting now that building to that cost in some areas must mean sacrificing efficiency.

648. Any architect would be optimistic if he thought he could get it down below £140 or £240?—(Mr. *Britton.*) I would say it is impossible without seriously lowering the provision.

Chairman.

649. We should like to thank you very much for your patience and the co-operative way you have answered our questions?—We should like to thank you for the opportunity of coming.

The witnesses withdrew.

Adjourned till Wednesday next at Eleven o'clock.

WEDNESDAY, 25TH FEBRUARY, 1953

Members present:

Mr. YATES in the Chair.

Mr. Norman Cole.
Mr. James Johnson.
Mr. T. W. Jones.
Mr. Malcolm MacPherson.
Brigadier Peto.
Miss Ward.

Dr. J. L. MARTIN, Deputy Architect to the Council, Mr. F. G. WEST, Assistant Architect, Schools Department, Mr. W. F. HOUGHTON, Deputy Education Officer to the Council, and Mr. JOHN SHOVE, Assistant Clerk to the Council, London County Council, called in and examined.

Chairman.

650. Dr. Martin, perhaps you would be good enough to explain to the Sub-Committee what your respective positions are and what your functions are in the London County Council?—(Dr. *Martin.*) Yes. I am at the moment the Deputy Architect of the Council, but I am also now the Architect Designate; that is to say, I become the Chief Architect of the Council in two months' time. Mr. Houghton is the Deputy Education Officer of the Council. Mr. Shove is a representative of the Clerk to the Council who is particularly interested in education and deals with the Education Committees. Mr. West is my colleague, and he is the Assistant Schools Architect. So that I can speak on any matters relating to building, supported by Mr. West; and Mr. Houghton would speak on any matters relating to education. Would you like me to make a general statement?

651. I think it would be rather good if you could tell the Sub-Committee something about the situation, the building programme in the London County Council, and your special problems?—Yes. I would like to bring out in the first instance one or two points which we think are important. First of all, we have come before the Sub-Committee at rather short notice, and we may not be able to answer all your questions without further study of the very large number of facts we have at our disposal. The second thing is that we would like the Sub-Committee to bear in mind the particular problems of building schools in London. The first point is that London schools are designed to conform to the London Building Act, which makes a slight difference between schools in London and other parts of the country; there is, for instance, the question of certain added fire resistance in two-storeyed schools which has to be taken into consideration in London building. The next thing is that this particular factor, together with the fact that we have to build schools on sites which are not only restricted but usually the sites of old buildings, and therefore we are building them over old foundations, has some effect on the cost of the school. There is the third factor that there are differences between rates of wages in London and elsewhere in the country. We estimate, therefore, that because of these factors the cost of schools in London is perhaps anything up to 10 per cent. more than the cost of schools elsewhere. The question of site does bring me to the third point, and that is, because the sites are restricted we are forced to adopt in some cases special kinds of building, for instance, in secondary schools probably higher building than we would adopt elsewhere if we had an open site. I think it would be most helpful to you if I described the programme of building we have carried out since the war, so that you can see the types of construction we have adopted. I will give you some information about costs and areas. We began in 1947-48 to build some new primary schools and to do a great deal of war damage repair to old buildings, buildings which had been bombed during the war. The total volume of the programme was £1,061,300; that is for 1947 and 1948. The Council's Architect—and this is the only matter on which I can speak—was responsible for the new primary schools, and the cost of our programme was about £638,000. I would like to say something about those schools. First of all, it was a period when we anticipated a shortage of bricks. We also knew there would be difficulties in the delivery of materials. We therefore chose a steel frame building and provided the steel in advance, and then we tried to eliminate brickwork by building walls in woodwool slabs and rendering over them. We built 11 primary schools. They were built as transitional schools. The whole idea was that they would have a limited life of 25 years. They took a certain amount of time to build because of the fact that the materials position changed during building. Our quickest school, for instance, was completed in 21 months; our slowest school took about 30 months. In fact, of course, there were partial occupations of the schools before then. The area

we got down to was about 58.3 superficial feet per pupil, but I think you should bear in mind that these are transitional schools and do not include a dining hall, so that that is a low figure compared to some you will see in a moment. The cost per place in those days was £138; that was 1947; if you brought that up to date it would be in the region of £187; that is net cost not gross cost. That is our position in 1947-48. In 1949 we had a general building programme of £1,686,900. The Council's Architect spent £1,068,100, and we again had a programme of primary schools. At this date, bearing in mind the fact that these other schools had been transitional schools, we tried to build what we would now call traditional schools; that is to say, we re-introduced brickwork into building; we had a steel frame with brick in-filling or something of that kind. You will find the area per place goes up in those schools, so that we go up to an average of 74.1 superficial feet per pupil, and we come to a cost of £215 per place; that is for tradtional building in 1949.

Brigadier *Peto*.

652. Is that net cost?—That is net cost. The present day cost we think would be about £258. We very rapidly found that we were having difficulties of material supply, and we attempted to use other methods of construction. We attempted to use, for instance, reinforced concrete frames and steel frames, but we did not consider the whole thing as a programme with all the buildings using the same system of construction. You will see the effect of the programme when you come to the 1950 programme of building. In 1950 we built 12 schools and had to get them right on the ground quickly. We decided to deal with the programme as a whole and to select for a major element of the building, that is to say, the structural frame, a prefabricated system of construction, and to use a unit cladding; that is to say, a cladding made in the factory and brought to the site and then clamped on to the frame. There is no doubt that we got great advantages in the drawing office from adopting that system. We had a standard series of working drawings which applied to every building. We then merely prepared scale drawings for each individual building. So that we saved a considerable amount of time in the drawing office. That means we also got the building on to the site more quickly, and we started building much earlier in the year than we could normally have done. That is always an important factor in the programme, how soon you get on to the site. When we got on to the site our contractors knew certain elements of the building were going to be there when they required them, and I think we had rather good organisation on the site itself. In this case in a programme of £2,824,600 the Council's Architect actually built £1,831,000. When I say the Council's Architect built that amount, you will understand that private architects were doing the rest of the work; it was not that it was not done; it was built, but private architects carried out the rest of the work. In this case we reduced the areas to 62.1 square feet per pupil, and got down to a net cost of £180 per pupil. Our quickest time now became 16 months.

653. What is the equivalent of the £180 today?—We think about £214. Our quickest time was 16 months for full completion. That is in the 1950 programme. We were halfway through that programme when we had the effects of Circular 215 limiting the cost per place to £140, and we made a struggle with later schemes to get down to that figure, and in four of the 12 schemes the cost per place came down nearer to £140, and the area was reduced to 51.5 square feet per pupil. In 1951-52 we built a total of £1,610,700, the moratorium restricting starting dates and pushing buildings back into the following year, the Council Architect spending £693,600. The interesting thing is that the square footage—we were using the same system of construction—is now reduced to 43.9 square feet and the cost per place is £140 net. The quickest time we achieved here was 15 months to full occupation. In the 1952-53 programme I want to emphasise that we had a changed situation, because in this programme we are not in fact building a programme of primary schools; we are only building three primary schools and the rest are secondary schools. So that there is quite a change in the whole situation there. In the case of the primary schools there is perhaps one point that will interest you. We have designed a school with an area per pupil of 42.9 square feet and a net cost of £135 per place. That is not in prefabricated construction; it is in what we would describe as an economic form of brick and reinforced concrete construction. Coming to the secondary school problem, perhaps I might give you the figures first of all for the total work. The total volume of work we are building is £4,626,500. The Council's Architect is now coping with £3,388,400. If I might just describe the problems of the secondary school from our point of view, they are these: first, that there is a severe restriction on the site area available; sometimes we only have 75 per cent. of the statutory figure; and that does mean that we have to erect in some cases tall buildings, though not always. The tall building means that forms of construction probably have to change; that is to say, that the prefabricated form we had used on primary schools was not available for tall building when we were

beginning to develop these secondary schools. That brings a special constructional problem. We have nevertheless tried to keep height down and have built four-storeyed schools. We have also used a prefabricated steel frame in one of these schools. What you have in front of you in considering secondary schools is a sort of specialisation of construction for each particular school. If you are interested in the figures, we are building seven schools. We are getting down to somewhere round about 66 square feet per pupil, and we are getting down to the £240 per place cost. We have just had a tender for one of our schools which is actually £240 per place. That, Sir, is the general statement of what we have done. I do not know whether I could draw any conclusions from these facts, but if I did I think I would emphasise that in the primary and secondary schools in London there is no single constructional solution of the whole programme. There are cases where it is desirable to use prefabrication; there are other cases where you can get advantages from other methods. The number of systems of prefabrication that are available is limited, and it is also important to remember that any system of prefabrication takes a very long time to develop before you can take full advantage of it. There is no doubt it has given us great advantages on the primary school programme. Those are generally single-storey or two-storey buildings. The special advantages, I think, are the time-saving in the office and time-saving on the site and the certainty that the materials will be delivered. In the later building, the secondary schools, it is important to bear in mind that when you have a very large building, as these buildings are, it is possible to secure economies by other methods; for instance, by arranging your design so that there can be repetition in the use of form work in reinforced concrete. That in itself will secure an economy, although everything is produced on the site. There is the opportunity on the larger school for economies by site organisation. In every case, whether you use methods on the site or whether you use prefabrication methods, it seems to us there are great advantages in being able to order as many materials as possible in advance so that you are certain of the delivery to the site by the time the contractor requires them, and we are taking that precaution in a number of instances. There is one final point. During this period I have been speaking about there has been a continual rise in prices and there has been a continual reduction in areas. We have tried to offset the rise in prices by a reduction in areas and not necessarily by the standards of construction.

654. Could you say a word on the comparative cost between prefabricated and brick construction?—For a similar kind of building?

655. Yes?—I think the answer is if you take one of our prefabricated schemes which I have given to you, a typical one in last year's programme, 43.9 square feet, £140 per place, you can compare that with a brick wall and reinforced concrete roof, 42.9 square feet, £135 per place. There is a reduction in square footage there which means some reduction in cost. I think the conclusion one could draw is that there is not really any advantage in cost, as such, in the cost of the building, by using prefabricated systems. I think that is our experience.

656. They are much about the same?—We would think so. I do not think you should ignore the other advantages, the timesaving in the office and the fact that all the materials are certain to be delivered at the site.

657. What about the maintenance thereafter?—We have simply no experience of any of these schools after a number of years, so that I cannot make a statement on that. I can say that I do not see any major elements in the construction that are likely to give rise to serious maintenance problems, because we have tried to achieve the cost level by reducing areas rather than standards of construction.

Chairman.

658. Would you think the traditional method of building, assuming all things being equal, assuming you have the materials available, is more satisfactory building?—By the traditional method do you mean the sort of things we were building before the war, for instance, with pitched roofs and brick walls?

659. Not necessarily, but you quoted the example of brick and reinforced concrete as against another form of prefabrication?—All I can say is that with brickwork and reinforced concrete roof we do in fact know there is very little to go wrong.

660. Actually there is really no real advantage on cost, but there is the advantage on time?—Yes, that is our experience.

Mr. *Norman Cole.*

661. Could Dr. Martin tell us this? We have been told in this Sub-Committee, as Dr. Martin told us this morning, that in fact prefabrication does not work out cheaper in the end, but if there is a saving of time on the site of nine months—you quoted 13 months as against 22 months—where is that saving in cost on time used up? Is it by materials, because it must be; otherwise it would be cheaper to have prefabrication? If there is a difference of 9 months, there must have been a saving in

cost on time?—I think the point is you pay more for your elements.

Chairman.

662. We will for a few moments consider this question of the building programme. There are other matters we would like to consider with you, such as the question of the unsatisfactory schools. But on this point I would like to ask one or two questions. First of all, are you able by your programme to meet the demands that the London area makes upon you so far as numbers are concerned? Are your schools going up in time to meet the demands from birth rate and so on? Have you no problem there?—That is not a question for me. I think that is for Mr. Houghton. (Mr. *Houghton.*) I think the broad answer is that up to the moment we have kept, or will keep, pace with the primary school problem.

663. So that your schools are not lagging behind the housing in time?—Not very seriously. There are odd cases where they have lagged behind. You cannot get them exactly to match, but by and large, no. In some cases we have had the schools before the housing estate is finished; in others there has been a rather short time lag. But by and large we are keeping pace with the primary school problem. With the secondary school problem one cannot say categorically, but we hope we will be able to keep pace there.

664. In fact you have not got a big problem of transport?—Not because of difficulties of accommodation. The problem, such as it is, is due to the need to transport children to grammar schools, central schools, and, of course, denominational schools, but not substantially because of difficulties on the housing estates.

665. In regard to the question of the types of school you have been building, you have reduced the cost, I suppose, in accordance with the Minister's requirements, and in doing so have you lowered in any way the educational standards, especially in regard to space or area of schools?—It is rather difficult to answer. Up to the moment, in primary schools certainly, I should have said not. The main onus of cutting down cost and saving space has, of course, fallen on the architect to save on circulation space, and it is there where the big saving has been made. With regard to the secondary schools, we have not had any experience of our new schools, of what the effect will be of these reductions in cost, but there again the onus has fallen largely on the architect. I think I am right in saying, Dr. Martin, using this very generally, that before the problem was studied in detail, and before we had the experience we now have, the balance was roughly 60 per cent. circulation and 40 per cent. teaching space. It has now switched, so that it is 60 per cent. teaching and 40 per cent. circulation. Those are rough figures. I should think they would not be far out. (Mr. *West.*) Circulation figures should include things like cloakrooms and lavatories; that is non-teaching. The proportion has been roughly reversed from 60/40 to 40/60.

Mr. *Malcolm MacPherson.*

666. What about cupboards and storage?—They are included in the teaching accommodation. (Mr. *Houghton.*) There are four points on secondary schools that one looks at with some interest. One is that the tendency now in cutting down circulation is to make use, for example, of the hall as a passageway. Whether that is going to cause difficulties I would not care to say, but it is a point to be considered seriously. I am not absolutely certain there will be sufficient space for practical accommodation. I am not absolutely certain; one cannot be in default of experience.

Mr. *James Johnson.*

667. When you say "practical accommodation," do you mean woodworking shops?—Science laboratories, workshops, housecraft rooms and so on. The third point is the use of the circulation space, foyers, corridors and so on, and school halls in secondary schools, for dining accommodation. Fourthly, in certain of the new London secondary schools it has been necessary to reduce the size of the hall so that they can seat at one time three-fifths of the school roll rather than the total school roll, but by rather skilful planning in some cases—and we are hoping it will be possible to do it in most cases—by the use of auxiliary halls it may be possible to seat rather more than would be apparent at first glance at the plan. In other words, they can throw an auxiliary hall into the main hall by skilful planning, and that, of course, is a matter of good architecture. (Dr. *Martin.*) I should have said we have examples of plans of any of the types if you would like to see them.

Chairman.

668. I was trying to be quite clear on the fact that you have reduced the cost of these schools so considerably over the years and have been able to do so by sheer methods of economy without in any way impairing the educational efficiency. We want to find out whether what you are doing is really safeguarding the standards?—(Mr. *Houghton.*) I would like to make it clear that those matters I was speaking of are matters of opinion which will have to be tested against experience, and they are not matters of fact; they must be tested.

Miss *Ward.*

669. I was going to ask Dr. Martin, after his very interesting survey of the achievements that appear to have been made, would it be unfair to say that perhaps necessity to economise has stimulated everybody to economise?—(Dr. *Martin.*) I think necessity is a great stimulant, but also there is a new approach to building problems which does involve a real study of what goes on inside a building, I think architects have been following that approach for a number of years now, and that is resulting in some general economy.

670. It is good organisation taking advantage of a new system, really?—Yes.

Mr. *James Johnson.*

671. Although you have abolished a second gymnasium in many schools, I take it all schools have a gymnasium still?—(Mr. *Houghton.*) Yes, secondary schools.

672. And all schools still have a hall?—Yes.

673. Despite this auxiliary hall and so on; it is a hall auxiliary to the other?—Yes.

674. I was interested to hear Dr. Martin say they had not in their new building designs got less standards but had economised on space?—(Dr. *Martin.*) I beg your pardon. I meant standards of construction.

675. Can I take it in your new schools you have not got cloakrooms in the corridors? We have met, for example, cloakrooms in corridors, where the youngsters may bump into them and damage themselves going to and fro?—(Mr. *West.*) In the last section of the prefabricated primary schools, after the incidence of Circular 215, cloaks have been placed in corridors in primary schools. Great care has been taken in the planning. We have specially designed fittings in the corridors. It is not a question of coats hanging on pegs along the wall. The corridor is widened to take that space for the fitting into consideration. I think Mr. Houghton will probably say the inclusion of that method of dealing with cloaks has not led to undue difficulties. (Mr. *Houghton.*) We have no evidence that it has.

676. Dr. Martin spoke about seven new secondary schools going up at £240 a place, and he spoke about the height. We know, because of your sites, you must go up. How high are you going? You spoke about four storeys?—(Dr. *Martin.*) We have gone up in one case to the maximum height, which is 100 feet. Perhaps Mr. West could go through the schools one by one and tell you precisely?—(Mr. *West.*) We have one school which is six storeys, which is the earliest one. We have one the maximum height, which is 100 feet; that is nine storeys. We then are restricted entirely on the rest of our schools to four storeys. Only two schools in the current building programme are over four storeys; one is six storeys and one is nine.

Chairman.

677. How many children are there in the nine-storey building?—2,000 children. It is a 13-form entry comprehensive.

Mr. *James Johnson.*

678. I think Dr. Martin said it was less economical to build upwards when you get beyond three or four storeys. You said it was less economical and yet you are keeping down the cost; you have got a tender for £240 per place?—(Dr. *Martin.*) That is not for the high school; we shall be a little higher than that on the high school. I think it is true that high building does tend to increase the cost of the structure, and what one has to do there—after all, there is a limit—is to find ways and means of saving cost in other ways. For instance, if it is possible to face the whole of the building with a simplified glazing system there is the possibility of cost reduction. There is also a possibility if you can get the right constructional method of keeping the cost down as low as possible by the repetition of certain forms.

Miss *Ward.*] May I ask one question on the repairs that have been done to the war-damaged schools, because those, of course, must have been done, generally speaking, to old schools? I would very much like to know whether, putting war damage aside, you think it is possible by skilful repair and perhaps some alteration to make what we might term rather old and out-of-date schools reasonably good for keeping up to the educational standards now laid down?

Chairman.] I was wondering whether we might leave that for the further discussion on the old schools.

Mr. *T. W. Jones.*

679. I am interested to know whether they have got lifts in these nine-storey schools?—Yes.

680. What about the playground? That is on the ground?—Yes. The whole point about the tall building is to conserve as much free space around the building as possible on the limited site. (Mr. *West.*) Playground areas are statutory sizes. The site in the case of the maximum height building is very restricted, under 7 acres, and it was only by adopting a method of planning resulting in this high structure that we were able to get sufficient free space to comfortably accommodate the

number of children it was required to accommodate but all the play areas are on the ground. It is the teaching area which goes up.

681. What about the lavatory accommodation; is that on every floor?—The position is in this high school that the main concentration of lavatories is on the ground floor, but there are emergency provisions on various floors throughout the building. So that the children coming into the school and using the playgrounds will have the main sanitary accommodation available on the ground floor, but for emergency use there will be emergency provision throughout the building.

Brigadier *Peto.*

682. On the same subject, what is the most economical height from an architect's point of view when building a school?—(Dr. *Martin.*) I do not think there is any doubt that it is three to four storeys.

683. That is much more economical in your opinion than single-storey?—I should think so.

684. Do you think, to go back to the maintenance of the prefabricated schools, that the maintenance in the future will present a big problem and an expense?—That is a very difficult question to answer. We have absolutely no experience. The exposed metal parts are galvanised. The roof finishes are similar to the roof finishes that we are using in the other form of construction, and I cannot see any single element that will give rise to serious trouble.

685. Do you think that the figure of £140 is too low a figure at present costs for efficiency?—Again, that is partly a question for the Education Officer, but we think that we have economised as much space as we possibly can. We cannot reduce beyond these levels.

Chairman.

686. Is there a danger that still further increasing prices may make it difficult to keep within that figure?—Yes. (Mr. *Houghton.*) Any further reduction will be at the expense of teaching space, which I think would be quite serious from the educational point of view.

687. How have you managed to keep within the Ministry's ceiling figure and at the same time pay 10 per cent. higher wages? I understood you to say that wages costs were 10 per cent. higher in London?—(Dr. *Martin.*) Yes; wages and other things are included in the 10 per cent. as I stated previously.* It really means we have just had to economise on such things as space, perhaps, a little more than others have done, certain finishings inside the building, although there again we have tried not to produce headaches for ourselves in the future, because, after all, we maintain these buildings.

Mr. *Malcolm MacPherson.*

688. Do you think that a general figure like £140 per place set for the whole country is a fair figure for London, taking it as a fair figure for the rest of the country?—We have always claimed we should have a figure slightly higher than the rest of the country, and in fact I think before the war that was accepted by the Ministry.

689. What is the total population of the area that you people are responsible for?—(Mr. *Shove.*) About 3½ million at the moment. The area is 117 square miles.

690. Has the Defence programme had any impact on your building programme? Has it raised any difficulties that did not exist before?—(Dr. *Martin.*) That is a difficult question to answer. I suppose in the primary schools through the shortage of steel, perhaps.

691. That is the only impact that it has had on you, so far as you can tell?—It is the only one we can see.

692. There has been no effect of shortage of labour, for instance?—I do not think we have felt it in that way.

693. What is the Education Officer's attitude towards the nine-storey and six-storey schools? Is there any educational disadvantage in having schools of that height?—(Mr. *Houghton.*) Not so far as I am aware. We shall have to await the results of experience, but in theory, no.

Chairman.

694. Is this nine-storey school in the nature of an experiment?—It is the architect's solution of a problem on a given site, to get a building which will accommodate a given number of children on a given site. That is his solution of the problem, and educationally I do not think we can raise any objection.

Mr. *Malcolm MacPherson.*

695. Have you any educational comments to make on the number of children included in one school? Is 2,000 children a good number to have in one school?—I do not think I should answer that as an officer of the Council. That is a question of Council policy, and I think I prefer not to answer it as an officer.

696. What discussions do you have with the teachers or their representatives about plans for buildings?—We have the advantage of our Inspectorate's advice, but you cannot, of course, discuss the plans of a new school with teachers, because the

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teachers who will occupy the school are not there.

697. No, but the inspectors are not there either. There is nobody in the new school. Surely the teachers have an interest in the fact that those are the buildings they will be working in?—Yes. There have been discussions, and in particular when you are extending a school the School Governors or Managers, together with the school staffs, are consulted.

698. Does that mean discussions with teachers have been restricted to the teachers connected with one individual school or that the discussions have been with the profession generally?—Not actual detailed discussions of detailed plans, no.

699. I was thinking of something more general than sets of plans. Do you get, for instance, the profession's direct statement of opinion about what cupboard space they need, or do you get that from some other source?—There have been discussions. I would like to send you an answer to that point, since it is an important point. I should not like to answer offhand, if I may send the answer.

Chairman.

700. The point is you do have consultations with teachers?—Yes, but I took it you were asking do we have consultation about specific plans, and I think the answer is no. There is a very extensive arrangement for consultation. They do have opportunities of expressing opinions on a whole range of educational matters, but as regards discussion of detailed sets of plans, so far as I am aware, no.

Mr. *Malcolm MacPherson.*

701. It was not the detailed set of plans that was in my mind, but the general lines along which the policy would go. For example, the number of teachers concerned with special schools must be fairly small, and the number of special schools you build in London must be fairly considerable. If you are building schools for physically handicapped children, would you not discuss that with the people who teach those children?—Yes, I think undoubtedly in a case of that kind we would.

702. But not in the case of ordinary primary or secondary schools?—Yes, I think we have had the advantage of getting the opinions of teachers in general terms through the machinery for consultation which exists, a very extensive machinery of consultation. I am distinguishing between general opinion and detailed comment on a set of plans.

703. What has been your experience of working with the Ministry of Education's Development Group?—My own experience has been a very happy one. I find them extremely helpful and co-operative. I do not know what Dr. Martin thinks. (Dr. *Martin.*) I think on the architectural side there is no question but that they have been extremely helpful.

Mr. *Norman Cole.*

704. I have three questions. The first is more or less a statement that Mr. Houghton might confirm. It is true a lot of the potential trouble of London has gone out into the Home Counties around London, Essex, Kent and Surrey, who are coping with the children of the parents who have gone in the last two or three years. What we are considering in London are those children who to a very large extent are coming from the new estates or who remained in their own homes. In other words, is the London child population becoming largely somebody else's responsibility now?—(Mr. *Houghton.*) There has certainly been an outflow from London. (Dr. *Martin.*) There has also been an inflow into London.

705. The second point is this. On all these programmes, dating back to 1949, there has been a considerable proportion, 30 or 40 per cent., of the work carried out by private architects. Can Dr. Martin tell us whether he has reason to believe the private architects are adopting the same systems of pre-cladding and things of that sort that are used in the Council Architect's Department?—In some cases they are, but there is a difference. They are considering each building as an individual job only.

Mr. *Malcolm MacPherson.*

706. To what extent do the architects working on school building tend to be architects who are specialists in school architecture?—I should say this: all architects who are qualified feel they can cope with most kinds of building. But we have within the London County Council a divisional system, and we have a division which specialises in schools. Mr. West is the representative of that division.

Mr. *Norman Cole.*

707. Going back to the main question, could Dr. Martin tell us this. If the flow of materials in a year or two's time becomes satisfactory for all purposes would he give it as a personal opinion that, bearing in mind what he said earlier on about prefabrication, we should still have to consider going back to traditional types with modern developments? In other words, is there a future for prefabrication as regards expense and functional use and so on?—The answer is that the building industry is changing its methods, and its methods are changing in the direction of certain component parts being produced in the factory. In so far as that is happening I think one ought to work in line with that.

The weakness of adopting prefabrication too early in the day is simply that it becomes a system which may only be developed in one or two instances as a complete system. But there is the development in the building industry as a whole towards prefabrication of the units of the building.

Mr. *Norman Cole.*] In other words, traditional building, but using as much prefabrication of traditional units as possible. I think we should bear in mind that we have found the answer to a question which puzzled us at previous meetings, namely, why, when it was so much quicker to build prefabricated buildings, it was no cheaper. The answer is that prefabricated materials as against traditional materials are dearer.

Chairman.

708. That is an opinion?—Yes, it is.

Miss *Ward.*

709. I wanted to ask two questions, one dependent on the other. Have you used in any of your new schools the system of the putting of the lavatories, so to speak, in or adjacent to the classrooms?—(Mr. *Houghton.*) No.

710. I was going to ask whether you had got any educational reaction from teachers to that, but you have not used that?—No, we have not. (Mr. *West.*) We do decentralise lavatories about the school to bring them in close relationship to the teaching space they are to serve, but in no cases are they incorporated in the classroom layout or directly opening off the classroom.

Chairman.

711. You would not think that satisfactory?—(Mr. *Houghton.*) It depends whether they are young children. (Mr. *West.*) We have not had that, to my knowledge. I think another factor is that probably complete decentralisation of sanitary accommodation would be likely to prove more expensive. The plumbing charges are very high in relation to the rest of the building.

Miss *Ward.*

712. If you decentralised, but not in that way, would it reduce your plumbing charges?—No, I think not, but it is essential in a fairly large school to decentralise to points at which children are going to concentrate, which entails some decentralisation of sanitary accommodation, but there is a limit beyond which it is really not economical to go unless the educational advantages are overriding or completely dominant. If the Education Officer was to say that educationally it was not bad to have sanitary accommodation opening out of classrooms in certain cases, we should endeavour to provide it within the cost.

713. Would you say that really the possible saving in space is outweighed by the increase in plumbing cost?—I think it would certainly need thorough investigation to prove it was a saving in space in any case.

Mr. *Malcolm MacPherson.*

714. May I ask Dr. Martin whether he incorporates in the building any form of thermostatic control in heating?—(Dr. *Martin.*) No, we do not as a general policy.

715. Why not? What I had in mind was that we have had evidence from elsewhere about the use of thermostatic control, which seems to have been introduced for good reasons. You have taken a different decision, presumably also for good reasons, and it is the reasons I would like to know? —(Mr. *West.*) I think the systems that have been adopted have been adopted for two reasons: (1) the fundamental one of economy; the services of a building are one of the most difficult elements to attack to make economy. Obviously, maintenance would be very heavy if standards were reduced very much on the services. To maintain our general specification and get an efficient system, after a very great deal of consideration it was decided to retain the standard low pressure hot water system, which is an ordinary low pressure boiler with hot water circulating through radiators. That has been the general policy throughout the school building programme on the ground of economy. It was felt to be one of the cheapest methods of doing it, at the same time maintaining the maintenance standards which the Council has had in the past. In the smaller schools the method of firing is merely to have hand-fired coke boilers, and the school keepers are responsible for the boilers. In the case of the larger schools we are going in for automatic oil fired boilers with automatic temperature control. We have, after due consideration, adopted the ordinary standard low pressure hot water radiator system of heating.

Mr. *James Johnson.*

716. With regard to these large comprehensive schools, which are completely new, did you say that you had seven of these new 2,000 population schools going up?—(Dr. *Martin.*) Yes; seven new comprehensive schools of which four are for 2,000 pupils.

717. Mr. Houghton said there had been no consultation with the teachers regarding the detailed plans. Would you tell us what consultation you have had? In other towns—for example, Coventry—the teachers have been called in and have been very helpful, because they are the people going to work in the future building. How far does consultation go in this matter with teachers on the kind of building?—(Mr. *Houghton.*) I would like to send that to you in writing. It is an important point, and I should not care to mislead the Committee.

Chairman.

718. To conclude this, may I ask this general question? It has been suggested to the Sub-Committee that in some areas in the country as soon as the new schools are put up they become overcrowded from the beginning. As you have stated there was no lag in your building behind housing generally, may we take it that that does not apply in the London area, and that in fact you are able to keep within the regulations laid down by the Ministry so far as numbers are concerned?—I think that is a fair statement, yes, generally speaking.

719. What would be the average of your classes in the London area?—In primary schools, about 40 on the average. Again, I can let you have these figures in writing.

720. Thank you. Miss Ward has raised a question which I think the Committee regard as very important. It relates to the dilapidated schools. Perhaps you can tell us first of all how many schools in your area that were placed on the black list in 1925 are still in operation or still being used? Secondly, have you been able to survey the school buildings in the London area to distinguish them in categories of very good and satisfactory and unsatisfactory according to modern standards?—We have certainly surveyed the buildings, yes. With regard to the details of the black-listed schools, again I did not realise until late yesterday that it was possible you might wish this kind of information. I have it here, to be quite frank with you, but I should prefer to check it and let you have it in writing, since you want facts, and it is particularly important you should have accurate ones.

721. Could you give us the information, and that can be corrected in our evidence later?—Yes. The information I have here, given to me this morning, is that there were roughly 24 schools regarded in 1925 as black list schools, and six, I understand, are still in use. They are all voluntary schools. The others have been reconditioned or demolished or discontinued. (Dr. *Martin.*) It is perhaps important to remember the amount spent on war damage repair alone. London suffered heavily with war damage, and we did spend in 1947-48 quite a large amount. (Mr. *Houghton.*) The information here is that 218 schools were either totally destroyed or extensively damaged, and over 1,000 suffered some damage, though less extensive. Fifty schools have undergone major reinstatement. That is not merely a question of repairing the actual damage, but also bringing them up as far as possible to modern standards as part of the reinstatement.

Miss *Ward.*

722. Has that been found to be an economic proposition, or was it merely a necessity because you had to get on and get the schools into operation?—The schools had to be repaired, and the opportunity was taken to bring them as far as possible up to modern standards.

723. You think it was an economical proposition, bringing them up to modern standards and not abandoning them?—In these particular cases, yes.

Chairman.

724. You have still six schools that were then on the black list. Do you know why they were placed on the black list? Was it because the buildings were totally unsatisfactory or because they were too small for the numbers?—Five of them fall under the heading of premises which ought not to be continued to be recognised, in their present condition at all events, for their present numbers, but might possibly be made suitable for the same or reduced numbers by incurring heavy expenditure. That applies to five of them, and one comes under the heading of schools which ought not to be continued at all.

725. My information from another education authority was that the black list of 1925 was under three categories?—Yes, A, B and C are the categories. The B category is the one under which the five schools come, and the A category the one under which the one school comes. Then there was a C category of schools whose premises were recognised as unsuitable for present numbers but may not be unsuitable for much lower numbers.

726. Since the war, when did you last manage to survey all your school buildings throughout the whole area? Are you able to tell us whether you have many schools that are bad or unsatisfactory schools?—I should say there are no other schools that would fall into the A, B or C categories other than the ones I have mentioned. Certain schools may be overcrowded for the time being.

727. Have not you got a good many old schools in the London area?—Yes, a good many old schools, but the mere fact that it is old does not mean it is unsuitable.

728. Usually they get more dilapidated as they go on, and unless you are spending large sums of money there comes a time when you have to close the school?—(Dr. *Martin.*) I can only say that we have an annual maintenance programme, of course. There are many of these schools that are structurally very sound.

Chairman.] I quite appreciate you have many schools in the London area which are

structurally sound, but what I want to know is how many schools are not so sound.

Mr. *James Johnson.*] This is an interesting point, because if Mr. Houghton tells us that in the last 30 years the list has had no additions, so to speak, in the next 30 years, with the time going on, will there be no additions? How long does it take before an old school becomes so dilapidated so that it is on the black list?

Brigadier *Peto.*] It may not necessarily become dilapidated through age. Look at these public schools that date back to Henry VII.

Chairman.] This is very important. Surely, if you have got a large area like this, do you not survey the area to say: "We shall need to replace so many schools in five or ten years"? Are we to understand everything is perfectly all right in the London area? You have not thought out what are the schools likely to be falling out soon and needing to be replaced?

Miss *Ward.*] What about the House of Commons? It is over a hundred years old, and it is still surviving.

Chairman.

729. That has been rebuilt?—(Mr. *Houghton.*) The answer is that surveys are constantly being undertaken by the Architect's staff in order to carry out a proper programme of maintenance which is programmed each year. (Dr. *Martin.*) It follows from that that if the Architect's staff saw that a school was becoming absolutely uneconomical and impossible of being maintained, the fact would be reported some years ahead of the actual occurrence.

Mr. *Norman Cole.*

730. That has happened since the war, irrespective of whether that school was or was not on the black list in 1925? There have been occasions when a school has been no longer used because a new school came into the area which could cope with the children?—Yes. (Mr. *Houghton.*) And, of course, a very extensive survey was carried out when the London School Plan was prepared in 1943, 1944 and 1945. But if you ask me whether we can say exactly when a school is going to be discontinued because it is uneconomical, I do not think I can answer that in detail. Certainly, for as far as we can see, for the next ten years, all the existing accommodation that can be preserved without extravagant cost will be necessary to contain the school population. It is because we are banking on that that we hope to keep pace with the secondary school requirements as we have with the primary school.

Mr. *James Johnson.*

731. Would Dr. Martin care to comment on this factor of the age of the school being placed on the black list? Is a more important factor, perhaps, the matter of how much money you have got to spend on new buildings instead of the old ones which are not so good?—(Dr. *Martin.*) It is a very difficult question to answer. I could make a written answer to that.

Chairman.

732. It may be, of course, that these large sums which have been spent on bomb damaged schools have brought a number of them up to a better standard?—(Mr. *Houghton.*) Yes, undoubtedly: 50 schools.

Miss *Ward.*] That was my point.

Chairman.

733. In 1925 there were 600 schools on the black list. They were very unsatisfactory schools. We are informed that that number is high. I am anxious to find out what the position is in London, whether these figures you now give are confirmed or whether, having surveyed the buildings, you find there are a number in the London area that need money spent on them in the next few years to save them getting very much out of date?—I think we should answer that in writing, if you will allow us.

Miss *Ward.*

734. I wanted to ask whether you felt, because in 1925 the words "black list", which conveys, quite rightly, something absolutely horrible, has gone on being overemphasised in the B and C categories, that really maintenance is a very worthwhile expenditure which may result in schools which were on the black list in 1925 being put into satisfactory use for the appropriate number of children?—It may be a necessity to do so. There may be schools which you would wish to get rid of which can be maintained for the time being by reasonable expenditure, because you need to spend the larger sums of money on your new schools to contain the school population.

Chairman.

735. Are you actually rationed in the amounts you can spend on repairs? I think you said you had a maintenance allowance?—(Dr. *Martin.*) There is a continuous maintenance programme. We could supply quite readily the amounts of money spent annually on the maintenance of schools.

736. Do the Ministry of Education fix any particular sum of money for that?—(Mr. *Houghton.*) Not for repairs. There is no specific rationing other than the rationing

which might be applied by the authorisation of starting dates. The rationing is on alterations and improvements. The line is fixed at £6,500 as the maximum for a minor building programme, and above £6,500 is a major building programme in which, of course, fall all the new schools. The major building programme in London is almost wholly required for the building of new schools. Therefore, to a large extent, any improvements and alterations which have to be carried out, and which are indeed being carried out very considerably throughout the schools, must be within the limit of £6,500. The Council at the moment have a minor building programme of some size for improvement of secondary schools, provision of laboratories, mainly practical accommodation, workships and so on; improvement of sanitary accommodation; wherever possible some improvement of play space where that is limited. (Dr. *Martin.*) I think that is an important point, which caused you to ask the question. I think if you could have a statement* to show the programme of improvements and the maintenance of the London schools, that would help you.

Miss *Ward.*

737. Do you think it would be an economy to expand the sum of money that could be spent on the minor building programme? If you put in modern lavatories and make further provision for laboratories and the like in the schools which already are built, would that be a saving, rather than expanding your major building programme? Do you think the amount of money allocated to the minor building programme is sufficient?—(Mr. *Houghton.*) We never think it is sufficient, of course. I cannot say we have been ungenerously treated by the Ministry this year. We could always do with more. I am quite convinced that our major building programme is required for new schools quite definitely, and I should be very hesitant to say that the major programme and the provision of new schools should be slowed down.

738. No, I was not meaning that at all. I was merely wondering whether it would help to go forward more quickly if there was more money available for the minor building programme?—Yes, it would undoubtedly help, to modernise more schools.

739. And might in the long run produce a saving of the total sum expended?—I would not care to say that.

Chairman.

740. Take the painting of schools, for example. That must be a very big item in the London area. Are you carrying out the painting of the schools according to the programme which you think is satisfactory, or, if not, would it not mean greater expense to the authority at a later time?—(Dr. *Martin.*) We are maintaining the schedule of painting which we have always held to be necessary for the maintenance of the schools.

741. You have not cut down on that?—I do not think we have cut down on the actual painting.

742. I think what Miss Ward is anxious to find out is whether in fact it would be economical for you to spend more in the direction of improving these older schools, not necessarily at the expense of the building programme; whether neglect might not involve your authority in higher expenditure later on?—(Mr. *Houghton.*) I am not quite clear on the question—more economical than what?

Miss *Ward.*

743. I did not put it quite clearly. If you are going, in a survey, to put additional schools on the black list because they have not got modern lavatories or modern playing fields, or something which might be termed a minor improvement, would it not be more economical to spend some more money on modernising the lavatories and the playing field facilities, and thus build up your whole building programme for the future?—I think that would almost entirely depend on the individual case as it came along. There would be some schools you could not modernise because of small sites or because the layout of the building made it tantamount to complete rebuilding.

744. Is there sufficient money available for the minor building programme to put the schools which you think can be put into a more or less modern condition?—No. Jobs of that size which I think you are contemplating would not fall within the minor building programme. It would be beyond the £6,500. After all, the amount of work you can get for £6,500 is quite restricted.

Mr. *Norman Cole.*

745. That is just the point. Supposing it were altered to £15,000 or £20,000, would it be possible to extend the life of these schools for another five, ten or fifteen years into the future, and thereby spread the new building programme over a longer period, by spending the £20,000 and helping in that way; in other words, would there be a long-term saving?—(Dr. *Martin.*) I think we are quite clear on the point that is being asked now, and we ought to give you a written answer to it.

* Annex 9.

Chairman.

746. It is rather an important question. For instance, one would get the impression from Mr. Houghton that you have got all that you require in that way, that the Ministry of Education do not restrict you. We do know you have got a programme for the figure you require for maintenance?—(Mr. *Houghton.*) May I correct any impression I gave? I hope I did not give the impression we are getting everything we want. We want considerably more on the minor building programme; we want considerably more on the major building programme. I said, in the circumstances of the country as a whole we could not regard the Ministry as having treated us ungenerously, but we want a lot more for both programmes.

747. You said you could always do with more, but what I am anxious to find out is, for instance, whether you say: "We need to spend £*x* on improving our schools", but the Ministry of Education say: "We are sorry, but you cannot have that". They restrict you to £6,500?—For each job. The allocation for the minor building programme is according to a formula based on the number on the rolls in the area, and in point of fact the allocation to London is much higher than would be applicable by the application of the strict formula, but it still is not sufficient.

Chairman.] I want to find out exactly what is the basis on which you are restricted, or permitted if necessary, to have more than another area. It is important we should know exactly what that basis is.

Mr. *Norman Cole.*] If you get an oldish school which cannot be done away with because it is in a highly populated area, since each job is restricted to £6,500, it might be that a job might have to be done at separate times rather than all at once at a cost of £20,000 or £30,000. One would not have the cynicism to put up four jobs in one year and hope to get away with it. It would be spread over a few years.

Chairman.

748. From the Ministry's angle the concentration must be on the demands to meet the birth rate and the movement of population and so on. It means, to meet the situation, old schools have to be used?—Yes.

Chairman.] And therefore the question is how far can those schools be made more economical in the long run, perhaps by additions or alterations.

Miss *Ward.*] Is £6,500 a suitable figure for a limit?

Mr. *James Johnson.*

749. Is it fair to assume that because of this limit of £6,500, in a number of years' time you would have more expense to patch up a thing which had worsened in the meantime?—(Dr. *Martin.*) I think the whole question is a little complicated, and we ought to cover it in a written answer.

Miss *Ward.*

750. I do not want just maintenance, but the question of modernising as well?—Yes.

Chairman.

751. Would it be true to say it is as difficult to get teachers to go into the East End as it is to go into the West End?—(Mr. *Houghton.*) It is more difficult, I think it would be fair to say.

752. Is that because the schools in the East End are not considered satisfactory from a teacher's point of view?

Mr. *Norman Cole.*

753. And the surroundings?—I think it is probably a combination of factors. There is the difficulty of travel. A good many live out of the East End and have to travel there, which adds to the expense.

Mr. *Malcolm MacPherson.*

754. May I ask Dr. Martin one general question about his building programme? The building programme depends to a certain extent on changes of Government policy. Have you found at any time that your staffing was affected by the difference in policy? Have you found that you have had too many or too few because of a policy change?—(Dr. *Martin.*) I think you will see the Council never adopts a policy of staffing for a peak load. We staff for the average, and the private architects take the difference between the average and the peak.

Chairman.

755. You did not say anything at all about technical schools. Have you got a programme of technical schools?—(Mr. *Houghton.*) The comprehensive schools comprise technical facilities.

Mr. *James Johnson.*

756. Does that mean quite definitely you are building no technical secondary schools?—As such, no.

757. None at all?—No, they are within the comprehensive schools.

Chairman.

758. You have got no college of technology under construction?—Not a new one. There have been extensions and developments. I have not got the details here.

Mr. *James Johnson.*

759. You are building a big one of 2,000, but not building any technical secondary. Are you building any modern; that would be 1,250 or 1,500?—No. They are all comprehensive schools. They all embody the whole range of facilities which are now comprised separately in technical, grammar and modern.

760. Do you envisage within 10, 20 or 40 years having all L.C.C. youngsters in comprehensive schools?—No, because some of them are County complements; that is complementary to aided grammar schools. There will still be a proportion of aided grammar schools with a County complement working in association with the grammar school, and the complement will have facilities for technical work.

761. They will be mainly technical and modern, auxiliary to the selective scholarship types of the older endowed school?—By that time we shall not be talking in terms of modern, technical and grammar. That assumes a rigid tripartite grouping which is not correct.

Mr. *Malcolm MacPherson.*

762. You said you did not want to comment on the 2,000 pupil school because you said that was a matter of Council policy?—Yes.

763. With respect, if we want to know about matters of Council policy, is it not to one of the Council's senior officers we should address ourselves?—(Mr. *Shove.*) The answer is in the County of London Plan, in which the whole policy of comprehensive schools is in fact discussed.

764. What is the policy about numbers?—It runs to about four pages.

Chairman.

765. In any case, we cannot really discuss questions of policy. It is not what is desirable or undesirable. We are concerned with what is economical or uneconomical?—(Mr. *Houghton.*) The question was what was my opinion, and I answered that it was not a question of my opinion but a question of Council policy.

Mr. *James Johnson.*

766. Is it fair to assume you will have new comprehensive school building for decades ahead? You will have to improvise the use of buildings for 500 and others for 1,000?—No. There are considerable numbers of County complements in addition going on now, which will be in the 1953-54 programme and the 1954-55 programme and the subsequent programmes. In the interim period we shall have to use existing secondary school buildings. Having regard to the fact that in one and the same area you will have at the same time a comprehensive school or County complement side by side with the existing secondary school buildings, the existing secondary schools, the Committee is very anxiously considering a revised pattern of education within the various areas and the best and most distinctive contribution each particular school can make to that revised pattern.

767. Does that mean because you have scattered areas or have buildings on separate sites inside the one organism you will have to have buses to take the youngsters from place to place?—Not necessarily, no; not more than at the moment.

Chairman.

768. Have you got any figures about transport?—The number of children transported daily?

769. Yes, or the cost of transport, for instance, this year or last year, compared with the year before?—I have not got the figures here.

770. Have you any idea whether it has increased very much?—I would like to give you the details in writing.*

Mr. *Norman Cole.*

771. Would it be fair to say that this comprehensive school system, whether it be in a single building or a group of buildings, will in time lead to higher transport costs?—It should lead to less, because they will each serve a neighbourhood area within reasonable reach of the children's homes.

Mr. *James Johnson.*

772. Will the cost per place of the 2,000 pupil comprehensive school be more than the technical or modern or academic type? Will it tend to be more expensive?—(Dr. *Martin.*) We have no evidence, but if you look at the figures it looks as though it would not be more in the case of four-storeyed buildings. We have no evidence.

773. I would have said it would be more, because you are going to give more children more access to metal work and things of that kind. You are giving the secondary modern types a larger access to a wider and, I would assume, a better curriculum?—Broadly the area of teaching space is not increased, but if this is necessary a special allowance is made by the Ministry.

Mr. *Malcolm MacPherson.*

774. We have been talking about primary and secondary and technical schools. In

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a big area like yours you must have a considerable number of special schools?—Yes.

775. Is there any need for a programme for maintaining special school buildings?—Yes, there is a programme.

776. Can you give us some indication what are the types involved and how you plan it?—I could let you have that in detail in writing*, the different types of handicap and what we are doing for each type, both day school and boarding school. I think those details can be better given in writing.

Chairman.] I think we have kept you rather a long time, and I am sure the Sub-Committee would like to thank you for your great patience and long-suffering. You will have an opportunity of seeing a copy of this evidence, and you will be able to read it through, and if you get in touch with the Clerk of the Committee on any point I am sure we can put all the evidence in order. It is sometimes decided to side-line matters which you feel ought not to be mentioned. We do appreciate your coming and giving evidence this morning.

The witnesses withdrew.

Adjourned till Wednesday next at Eleven o'clock.

WEDNESDAY, 11TH MARCH, 1953.

Members present:

MR. YATES in the Chair.

Mr. Norman Cole.	Mr. Malcolm MacPherson.
Mr. James Johnson.	Brigadier Peto.
Mr. T. W. Jones.	Miss Ward.

Mr. E. L. RUSSELL, Chief Education Officer, Mr. R. M. MARSH, Deputy Education Officer, and Mr. J. R. SHERIDAN-SHEDDEN, Architect to the Education Committee, Birmingham Corporation; and Mr. N. A. Y. YORKE-LODGE, County Education Officer, and Mr. G. R. BARNSLEY, County Architect, Warwickshire County Council, called in and examined.

Chairman.

777. Gentlemen, we are much obliged to you for coming to answer our questions. As you know, we are a Sub-Committee of a Select Committee of the House of Commons inquiring into the expediture on education, with a view to recommending to Parliament what economies, if any, can be made which are consistent with the policy implied in the Estimates. We do not discuss policy as such, but we are concerned about what is economic or uneconomic. Mr. Russell, there is a number of questions the Sub-Committee would no doubt like to ask you, and I will proceed first of all. There is the question of old schools and the question of new schools. We would like first of all to discuss old schools. You did give some information to me regarding the number of schools in Birmingham which were placed on the black list in 1925. I understand that that black list was divided into three categories?—(Mr. *Russell.*) That is correct, Mr. Chairman.

778. The first category, Category A, was schools which appeared to the Board of Education to be unsuitable for continued recognition and incapable of improvement?—That is so, Sir.

779. The total under that heading was 15 schools?—Yes.

780. And there are 4 remaining to-day?—There are.

781. Could you tell us how many schools you think there are to-day in Birmingham that would come within that category?—You will appreciate it is entirely a matter of opinion. I should say there would be at least 13 schools, if you were to draw up a fresh black list to-day, that I fear would be regarded as so bad as to be really quite incapable of mere adaptation.

782. That is in addition to the 4?—Yes. I ought to say about the 4 that they are different from what they were in 1925. In fairness to the Authority, I ought to say that. In 1925 they were, of course, for children of all ages. Now we have been able to remove all the children from 11 to 15. Whilst the 4 are still unsatisfactory, they are not so grossly unsatisfactory as they were in 1925.

783. At any rate, you think there are 13 schools in addition to the 4 that are

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really incapable of improvement?—The number would be of that order.

Miss *Ward.*

784. Is that structurally or because they are overcrowded?—No, it is really structurally.

Chairman.

785. The next category, Category B, I understand, were schools which the Board of Education considered ought not to be continued to be recognised in their present condition but which might possibly be made suitable either for the same or reduced numbers, but only by means of large expenditure. I understand that there were 10 such schools, and 7 are remaining to-day?—Yes.

786. Have you any idea how many schools in Birmingham might now be brought under that category, which could be improved by large expenditure?—I do not think I could really attempt to give a number there. The feature of that category is that they might be made suitable for reduced numbers. The trouble is almost every Birmingham school is overcrowded to-day. The average size of primary classes is of the order of 43 to 45. The average size of class for infants or juniors is of the order of 43 to 45, which gives you some measure of the overcrowding in the City schools at the moment.

Mr. *Malcolm MacPherson.*

787. Is the reason shortage of buildings or shortage of teachers?—It is more shortage of buildings, but the basic reason is the quite amazing growth of the school population in Birmingham. Very shortly after the war the school population was 130,000 children in primary and secondary schools. To-day it is 175,000 children, an increase in only 7 years of 45,000 upon 130,000.

Chairman.

788. Is that primary?—No, primary and secondary. Only 10,000 of that increase is due to the raising of the school leaving age. The other 35,000 is due to the increased number of children.

Brigadier *Peto.*

789. Is it not to some extent due to the increased population of Birmingham?—That is perfectly correct, but our problem in Birmingham is that we have got the bulge arising from the birth rate superimposed on a rising population. I think I am right in saying that is not so in Liverpool or Manchester. To-day we are more than 50 per cent. larger than Manchester.

Mr. *James Johnson.*

790. If one assumes these old schools are in the middle of the City, if you had the money have you got the site to expand, to add a new wing to accommodate these extra numbers?—If I may say so, with respect, I am very glad that question has been asked, because in addition to the about 15 schools which to-day would be considered so bad they could not be reconstructed at all, there are some more schools, probably about 40, which are on such restricted sites that though the building is not so bad as the 15, nevertheless they are very unsatisfactory as schools,. That is one of our great difficulties. There are many cases where we shall be compelled to ask the Minister to waive the regulations about sites because of the overcrowding in parts of the City.

Chairman.

791. In the third category, Category C, there were only two schools in Birmingham, according to your information, which were unsuitable for much lower numbers?—Yes.

792. And those two are remaining?—They are, yes.

793. I think, arising out of this question of the old schools, the Sub-Committee would like to know whether there are many schools in Birmingham you consider could be improved if expenditure were made upon them and which would be economic?—Not unless we could also appreciably improve the sites. I do not think you can consider a school just as consisting of a building. The school consists of building and site. It is in these crowded areas that the children are more in need of adequate playgrounds than in the housing estates, which are at any rate somewhat more spacious.

794. Could you tell us what is the general condition of playgrounds? Are they very bad?—The playgrounds are one of the respects in which we suffer from the limits of improvements and so on that the Ministry has been compelled to set in view of the financial position. We would like to be spending more money on playgrounds than we are.

795. What are the disadvantages of leaving the playgrounds as they are? Do you get many accidents?—No, we do not get very many accidents, but sometimes they are in such a state that one has to restrict the activities.

796. Could you explain to us on what formula you are permitted to expend money on old premises?—Yes. As well as the Ministry's major building programme, there is what is known as the minor building programme, and for that there is a formula. That is based on the idea of 9s. per child plus, I think it is, £25 per school department. That would give Birmingham something of the order of

£80,000. We find that quite inadequate. We always appeal to the Ministry for a larger share. The Ministry are always most sympathetic to us in so far as it lies in their power to be, and they are generally able to give us something of the order of £140,000. Our particular problem is this: that the Ministry, most understandably, say that the first charge, even on this minor building programme, must be additional accommodation. If you are building a new school that comes into the major building programme, but if you are merely adding a couple of classrooms to an overcrowded school that comes into the minor building programme. Our trouble is that owing to the great increase in the child population to which I have referred we have to use up something like 60 to 66 per cent. of our minor building programme on these small projects for increased accommodation.

Miss *Ward.*

797. In other words, you must use it for extending the classroom space, perhaps, rather than up-to-date heating?—Exactly. Therefore, the amount we are left with for much needed improvements is very small; it is probably something like 40 per cent. of the £140,000. Never before in the history of Birmingham education has there been such a need for much needed improvements, because you will remember that one of the chief devices of the Education Act, 1944, was the device of a voluntary school being given controlled status under which the Authority becomes responsible for the upkeep of the school. Therefore, in the last few years, we have had these Church of England schools coming over to us as controlled schools, and most of them are urgently in need, for example, of improved sanitary accommodation, and we could very well and most reasonably use up an entire year's allocation of £140,000 on improved sanitary accommodation and nothing else at all.

Mr. *James Johnson.*

798. I wonder if we could invite Mr. Yorke-Lodge to give his views on this, because I think in the village schools the difficulties are even greater than in a County Borough like we have been discussing. Perhaps we could have his views on this question of ameliorating the condition of the village schools on these lines?—(Mr. *Yorke-Lodge.*) Warwickshire is in the same position as Birmingham. We could spend a very great deal more on bringing sanitary accommodation up to date, but many of the schools that have obtained controlled status are very small, and we have spread our expenditure rather thinly and managed to do some work in a large number. 75 County schools have obtained controlled status. Sixty have already had work done to them. The remaining 15 will have work done; they have only recently become controlled. The only regret that Warwickshire have is that they cannot do the job more thoroughly with the resources at their disposal. They have to cover only the most urgent requirements, particularly the sanitation.

Miss *Ward.*

799. You do think it is an absolutely economic proposition to make these improvements, having regard to the length of time the school will last structurally?—May I expand my answer? I would not suggest for a moment it would be an economic proposition to spend a lot of money on an old building to try and turn it into a secondary modern school, because secondary modern schools need special facilities. Probably what is a good idea is to build new secondary modern schools and use the vacant places in the all-age schools for primary school children during the surge in the birth rate.

Chairman.

800. I think it is probably better if we keep each Authority separate, because we might get mixed. It is true to say, Mr. Russell, in your opinion, you could use the available allocation for old buildings on improving the sanitary accommodation alone?—(Mr. *Russell.*) For a year, and we should really have caught up the arrears. If we could have, say, £125,000 to spend on sanitary accommodation, we really could remove what are practically scandalous conditions in a number of schools.

Miss *Ward.*

801. You think that would be really an economic proposition?—Yes, because some of these schools are in fact good structures. I am thinking about schools to remain in the Development Plan as primary schools, not all-age schools. In fact, we have been able to do it in a few cases, but only a few, because such a large part of our minor building programme has to be used for additional accommodation.

Chairman.

802. You cannot really spend more money because you are limited by this formula?—Because the Ministry are limited? We have no quarrel with the Ministry. We have every reason to think they have done their best with the resources at their disposal to be as generous as they can to Birmingham because of its particular increase in the birth rate.

Miss *Ward.*

803. Have they issued guidance on the spending of the allocation for the minor building programme?—Yes, they have

issued guidance and they have made it quite clear the first claim on the minor building programme must be schemes for the provision of additional school places, without which children might be out of school altogether.

Mr. *James Johnson.*

804. Have you any all-age schools left in Birmingham?—Very few, very few indeed. We have got a few, but certainly not more than 5 per cent. of the children of secondary school age attend such schools. They would be almost entirely in voluntary schools.

Chairman.

805. Have you any idea how many schools there are where the sanitary accommodation is unsatisfactory?—I should have thought there may be at least 50 schools. I do now know what Mr. Marsh thinks. (Mr. *Marsh.*) I think I would say practically every pre-war school is deficient in sanitary accommodation, particularly bearing in mind two points: one, that we are having to crowd schools beyond capacity, and the second thing is that so many children now stay at school for their midday dinner, and it is, therefore, even more important that there should be adequate facilities within the building for washing, to start with, for part of the social training. It is not good social training if they go in with filthy hands.

806. Within the plan of future building and so on you do envisage these old schools being there for a long time yet?—(Mr. *Russell.*) Yes. What is particularly ironical in this matter is that attention is continually being called to that by H.M. Inspectors when they come to inspect.

Mr. *Malcolm MacPherson.*

807. What proportion of children are without proper sanitation facilities?—A very considerable proportion.

808. The number of schools means nothing to us, because they may be of varying sizes?—Most Birmingham schools are large schools. We have very few small schools indeed.

Chairman.

809. Have you had to restrict expenditure in painting schools, for example?—Not seriously.

810. Have you a plan for that?—Yes. One of the things we have done rather well since the war is the decorating of schools.

Mr. *James Johnson.*

811. Have you any schools where you have teachers teaching in the same hall, where you have no partition between separate classes, and two teachers almost competing against one another?—We have a number like that, because one of our ways of providing additional accommodation is to make use of a very large number of annexes in church halls and chapel halls and so on. They vary from extremely good to third rate.

Chairman.

812. There has been published recently a Trades Union Congress Education Committee Report?—Yes.

813. The Sub-Committee have not got this information, but I have a copy of this Report before me, and Birmingham is specifically mentioned. I would like to ask you about this. It says: "The number of children at present accommodated in makeshift classrooms must be considerable, since Birmingham alone reports 4,800"?—Yes. I was consulted about that, and, with great respect, the authors of the Report have misunderstood me. It is 4,800 children who are in such makeshift classrooms, not 4,800 makeshift classrooms; it means something of the order of probably a little over 100 makeshift classrooms.

814. Thank you. I am glad I asked that question, because publicity had been given to that. I wondered if you could explain to the Sub-Committee what problem this is in Birmingham, having to have temporary rooms?—It is a very considerable problem, because these temporary rooms vary from being close to the school, where they are convenient, to possibly half a mile away, where obviously very considerable problems of supervision arise. Even if the children are not suffering, the parents often sincerely believe the child is suffering, and are, therefore, very often perturbed about this.

815. Is it very costly to have to hire the temporary premises?—I do not think it is very costly, because, of course, the rents are fixed by the District Valuer. There is no question of paying exorbitant rents or anything like that.

816. There is also mention in this Report of overcrowding. I wanted to ask you this in view of an earlier statement you made about the number in the classes. It says in Birmingham the average number in primary school classes is 47.5?—Yes.

817. Is that correct?—I am glad to say I think that is a slight exaggeration. If that is incorrect I am responsible and not the authors, as they did have a meeting with me. I have recently got out fresh figures, and one has, of course, to be a little careful here. There is a difference between the average class and the median size of class. I think the average is about 43, but at least half our classes are at least 45 or more. The reason why the average

is less is that we have got a few very small classes. We have a very few classes less than 20. We do not balance that with a few classes of some 75 or 80. I think the average is about 43 and the median is about 45.

818. It would be true to say you are very much above the regulations?—Yes. Those are the averages in primary schools.

819. In all cases are you in excess of the regulations?—The averages are very much above the regulations. The secondary modern school average is about 37, whereas you know the regulations are primary schools 40 and secondary schools 30.

820. Perhaps we ought to ask you about the new schools now. Could you explain to the Sub-Committee what kind of schools you are now building in Birmingham? What are the respective advantages or disadvantages as between the traditional school and the prefabricated school?—As the increase in the birth rate began in Birmingham about two years earlier than for the country as a whole, we have largely dealt with the building of primary schools. We still, of course, have to produce primary schools for new housing estates, but otherwise we have broken the back of the primary school building programme. We have now got the gigantic task in the next two or three or four years of breaking the back of the secondary school building programme. That is the chief problem before Birmingham from now onwards for the next few years. We are experimenting a great deal with non-traditional methods. We cannot find any evidence that the non-traditional methods are cheaper than the traditional ones. In fact, there is some evidence that they are more expensive. But I do not think there is any doubt they are going to prove speedier to erect. Of course, such is the shortage of labour in the West Midlands that if, as is true in some instances, some of the work on prefabrication is done outside the West Midlands, that is probably a sensible arrangement. We have, of course, no knowledge yet of how these prefabricated schools are going to stand up to wear and tear, atmospheric conditions and so on. We are obviously rather nervous about that. We do not know what the next ten or fifteen years will show. (Mr. *Sheridan-Shedden.*) Our programme is mainly secondary, and we have split it up in the last couple of years into some non-traditional and some traditional. The traditional schools we are building are just steel and brick, the normal type of school. Our non-traditional include most forms of construction which the Ministry recommend, the various different types of construction, from the completely prefabricated school to the school which is prefabricated in structure only. By that I mean pre-cast concrete structure with brick cladding.

821. And aluminium too?—We are using aluminium, but we are just starting two aluminium primary schools; we have not started building them yet; we should start in a couple of months. We have no actual experience of building them.

822. In the experiments you are now making with the traditional schools as compared with the non-traditional, how are the costs working out?—The costs of a traditional school, from our experience, are cheaper than the non-traditional school, the prefabricated school.

Mr. *Malcolm MacPherson.*

823. Can you give any comparison of figures?—It is difficult to give comparative figures. The best figure we can take is cost per square foot, which we consider is the best comparative cost, rather than cost per place. Our comparative figures show that we can build a traditional school for about £140 a place and we can build non-traditional for about £140 a place, but it seems to us we have got to be far more careful with our planning of non-traditional than traditional because the cost per square foot is higher for the non-traditional. In some cases some prefabricated structures are cheaper than others, some are higher.

Chairman.

824. Can you tell us why the cost is higher of the prefabricated? What is the cause of that?—It is a difficult problem.

825. Is it due to materials?—(Mr. *Russell.*) I think I am right in saying that you have not got quite the same adaptability with the prefabricated school. You may have to build a storeroom larger than you require because it has to be a certain size as a unit. Secondly, there is very little competition. You get some particular contractors offering a particular type of school, and it is largely a question of taking it or leaving it. You do not really get much advantage from the point of view of competitive tender.

Mr. *James Johnson.*

826. Would you say, Mr. Sheridan-Shedden, that your difficulties are the same as Coventry's in this matter, the time factor and the labour factor and so forth?—(Mr. *Sheridan-Shedden.*) Yes.

827. We discovered their new aluminium school at Tile Hill was slightly cheaper than the tender they had been given eighteen months before?—We are doing two schools in aluminium similar to Coventry, but we have not got the tenders

yet, and therefore we do not know whether the aluminium school will be cheaper.

828. Would you say, based on their experience, you would be justified in building or experimenting in Birmingham with secondary schools in aluminium?—I would say yes, if the tender proves they are cheaper. We have got no experience in aluminium.

Miss *Ward.*

829. Mr. Russell said he had slight apprehensions about the maintenance and the wearing qualities of the non-traditional. Could you express any opinion on that?—There, again, we have finished one small job in non-traditional form of construction, but it has not been finished for long, and we really do not know. We can only assume. What I personally think is that the maintenance costs will definitely be higher than the traditional building. It is only my opinion; I have got no facts. How much higher I cannot say.

Chairman.] Would it be true to say if it was not for the time factor—that is to say, it is more speedy to put up a prefabricated building——

Brigadier *Peto.*] And the labour force.

Chairman.

830. —if it were not for those factors, should we take it you would recommend the traditional every time?—Yes, if the cost continues as it would seem to be now. If we are right, and non-traditional building costs more, I would say traditional every time.

Mr. *Norman Cole.*

831. Could I ask Mr. Sheridan-Shedden this: have you experimented with trying to get the best of both worlds, having traditional building with prefabricated units?—Yes, we have.

832. How have you found that?—We are doing one or two buildings now. We have taken a steel building and put a prefabricated form of cladding. We have tried to put prefabricated partitions because of the shortage of plasterers. In one case we are putting a glazing screen as the walls, to cut out labour.

833. Already manufactured?—Yes.

834. Do you find it (*a*) quicker and (*b*) cheaper?—There, again, we have just started and we have got no experience. I am convinced in some cases they will be quicker.

835. Has the Birmingham Council had any experience with the Education Ministry's Planning Section as regards their plans; in other words, using one of their blue prints, or are they entirely manufactured from your own sketches?—You mean our sketch plans?

836. We have seen one school they have initiated?—Yes. We liaise very much with them. They give us a great deal of help. We have not adopted any plan straight from them and used it.

837. You know about them, of course?—Yes. I have been to see them, too.

Mr. *Malcolm MacPherson.*

838. When you say you have no experience, there are a large number of education authorities in England, and you have been faced with this problem since the war?—Yes.

839. What are the methods for pooling experience? To what extent can you draw on the experience of other authorities as you draw on your liaison with the Ministry, or are you left to your own resources?—Only by contact with my counterparts.

Mr. *Malcolm MacPherson.*] You have no systematic method of pooling experience?

Brigadier *Peto.*

840. You do not go and visit Coventry, for example?—(Mr. *Russell.*) Yes, we do. Even this week Mr. Sheridan-Shedden has been to Derbyshire. (Mr. *Sheridan-Shedden.*) Yes, to see a form of construction. When we wanted to use an aluminium school I went to Coventry and looked at theirs, and they were very helpful, and we went into the whole thing. I also went to see the Ministry schools. Whenever I can I go round to look at the new forms of construction. We are going up to Derby to have a word with them about subsidence because of mining. Whenever we can and have the time we try to do that.

841. You have no sort of common arrangements with other authorities for analysing costs of individual types of building?—(Mr. *Russell.*) The Ministry is really doing that, and placing the results of their analysis at the disposal of every authority.

Mr. *James Johnson.*

842. Do not teams of architects come up to London and discuss this with the Ministry from time to time?—Yes.

Chairman.

843. Do you employ all your own architects or some outside architects?—We employ a considerable proportion of outside architects as well as our own.

844. The Ministry had a programme of building which was a bigger programme,

as far as we can see. The whole machinery of the country was geared up to that programme. Then there was some change, and it was necessary to reduce the numbers. Have you had that in Birmingham; have you had to dispense with architects?—No, we have not had to dispense with architects at all. I am glad to say that every year since the war we have managed to increase the actual amount of work we have got done. We have been more and more geared up all the time.

Mr. *Malcolm MacPherson.*

845. To what extent do you rely on the services of specialist school architects?—That is a most interesting question. We have been very pleased to employ outside architects for two reasons; firstly, as much needed reinforcement of our own staff, and secondly because it is very important in a place the size of Birmingham to introduce some variety; we do not want every school the same. But the fact does remain that outside architects of considerable distinction may still require a great deal of advice from Mr. Sheridan-Shedden and his staff, because they may not have the experience of school work. When you employ the outside architect, although one of the authority's motives is to relieve pressure on its own staff, nevertheless a great deal of work still falls on the authority's own staff.

Chairman.

846. There are still one or two important questions I would like to address to Birmingham. I think we should like to know whether the school building lags behind the housing development in Birmingham, and if so do you have to spend much money in the transporting of children? If so, how much, and what are the problems there?—I regret to inform you that school building does lag behind the housing. Housing has been going forward very well in the Birmingham authority, and school building lags seriously behind.

Mr. *Malcolm MacPherson.*

847. You said earlier on you had broken the back of the programme of primary schools?—Yes, but I added that we still had to build some on the housing estates. I think I said our main problem was secondary schools apart from new primary schools on new housing estates. But in the housing estates we have, I am afraid, lagged seriously behind. The result is that, quite apart from the expenditure which we would have anyhow on children travelling to secondary schools, we are spending no less than £17,000 a year simply on transporting children away from housing estates with a quite inadequate number of schools to other schools, sometimes several miles away. This is very unsatisfactory, and in many cases we are transporting very young children. One's attitude to transporting very young children is different from one's attitude to transporting children of 11. Secondly, it is sometimes very ironical, when the parents have at last got to a new housing estate, that the child has to be transported back to a school in the area from which the parents have removed.

Brigadier *Peto.*

848. Under the present rate of progress, by what approximate date would that problem be solved?—I hope most of that, so far as primarly education is concerned, will be solved in the next five years.

Chairman.

849. Why is it that a school cannot be put up to meet the demands of the population of a new estate, so that when the houses are there the schools are there also? What is the cause of that?—It is largely a technical point, but I do not think generally, unless you are merely building purely temporary schools, you can build schools as fast as houses.

Mr. *Norman Cole.*

850. Surely you can build one school as fast as you can build 200 houses. 200 houses would mean about 400 children. Surely one school could be built as quickly as 200 houses? I am not making a debating point. I just do not understand it?—I do not know what my colleague's opinion is. (Mr. *Sheridan-Shedden.*) A primary school, if it was prefabricated, which would seem to be quicker, should be built in eighteen months at a maximum, and if you started at the same time as you started the housing scheme I would think you would get your school completed by the time you went into your first houses.

Chairman.

851. Is it because there is a lack of co-operation between the local department for housing and the local education authority?—(Mr. *Russell.*) No, I do not think there is any lack of co-operation. It is partly, I think—I am out of my depth here—I do not know whether the Ministry of Education's allocation has really been adequate. We are building as many schools as we can obtain approval for from the Ministry. Every year we have a major building programme, and every year we want to embark on a programme of about £2 million capital investment. I want to be perfectly fair on this. These programmes are hardly adequate for Birmingham. On the other hand, we had the greatest difficulty in obtaining labour for programmes of that size.

I very much doubt whether, if in fact the Ministry had felt able to allocate us a larger programme, we should have managed to get much more school work done.

Miss *Ward.*

852. Naturally, the demand and requirements of other areas have got to be taken into consideration by the Ministry. For instance, probably, coming from my area, I should want to know why Birmingham was getting more?—I would say it is harder to build a school in Birmingham than in Bournemouth. There are more rival claims on the labour, the claims of the Defence programme, for example.

Chairman.

853. You said as a result of this lagging behind it was necessary for you to spend £17,000 on transport?—That is about the annual rate.

854. Could you tell us how that compares with previous years?—That was £17,000 additional expenditure. We do not normally have to transport whole groups of children. Normally we merely pay the travelling expenses of odd children who happen to live more than 1 mile away in the case of an infant school and so on. Now for the first time we are having to provide buses. May I give a case in point? On a particular estate in Birmingham there are 3,000 houses to be erected, and 2,500 are occupied. At the moment we have just over 600 children attending schools on the estate, and we are transporting 1,500 children in bulk. That will not go on very long, because we have in fact four more schools building on the estate, in fact six more schools, including secondary schools.

Mr. *James Johnson.*

855. Would you say it is inevitable there is bound to be a time lag between house building and school building?—No, I do not think so, if there could be a greater allocation to school building.

856. Is it not a matter of the climate inside the Council: that the Housing Committee has more influence because of the urgency of their problem?—With great respect, it is nothing to do with the City Council, who have been unanimous on Birmingham's education building programme. They are approving the largest programme for which we can obtain approval.

Chairman.

857. It is true to say that the Ministry of Education building programme throughout the country was made to conform to the plan of building a certain number of houses throughout the country?—I should have thought if school building is to keep pace a bigger national investment is required.

Mr. *Norman Cole.*

858. Specifically as regards Birmingham, you did say you had your own local troubles about labour?—Our own local troubles about labour, but I would like to assure you no local troubles in the City Council.

Mr. *James Johnson.*

859. Would it not be that emphasis on housing is a more urgent matter?—It has not arisen. If we could hve gone to the not arisen. If we could have gone to the have no reason to think they would not agree. There is no debate as to whether the schools are needed.

Mr. *Norman Cole.*

860. You have reason to doubt whether you could complete that £2½ million?—Yes.

Chairman.

861. Your experience will be that as soon as a new school is built it is overcrowded from the beginning?—Yes, very often. We have some new schools with temporary annexes. That is not necessarily wrong, because some of them are in the areas where there is at the moment a larger school population than we think there will be in the future.

Mr. *James Johnson.*

862. Have you any difficulty at the moment in sending up the 12-year-olds to the secondary schools, or will you have to keep them back?—We are not having difficulty at the moment, but unless we can successfully complete a very large secondary building programme from now on we shall have great difficulty.

863. Whether you like it or not, you will be forced back again to some type of all-age school unless you complete your new secondary buildings?—If some new building restriction were to occur now secondary education would break down.

Mr. *Malcolm MacPherson.*

864. With your secondary programme do you envisage just now a programme which will be mainly prefabrication or mainly traditional, or what is the balance between the two, or have you made up your minds?—We have not completely made up our minds, because there is very little experience yet about secondary schools. We are at present experimenting with some non-traditional, and a lot will depend on the success of those experiments.

Brigadier *Peto.*

865. To clear up this problem of the lag behind of schools over housing: it appears

that you have not got the labour even if you had the money. Is it not, therefore, a case of re-allocation of labour between the house building and school building?—Very possibly, yes. (Mr. *Marsh.*) I think one additional problem on these housing estates with regard to labour is that, with the housing going on all round, the bricklayers find it more attractive and probably get more money on the housing, and any good craftsmen are naturally drawn away from our school building. That slows it up.

Mr. *James Johnson.*

866. In theory they should get the same wages. You are suggesting they get a little under the elbow, that builders pay better?—Probably there is some payment being made in accordance with results, on piecework.

Mr. *Malcolm MacPherson.*] Is there any reason why that could not be done on the school building?

Miss *Ward.*

867. Could I, for information, ask one question? When a new housing estate is decided upon, is it not within the competence of the local authority to decide whether they shall start with a school building or hostel for old people, to be followed by houses, because you do find a variation as one goes round local authorities as to which building goes up first?—(Mr. *Russell.*) I should have thought such was the shortage of houses that if the local authorities were to say: "We will not begin any houses for six months but will start a school", while it might be sensible, it would be almost untenable in view of the grave overcrowding.

868. Local authorities might be planning to develop a variety of housing needs. I went last week to the opening of an old people's hostel set down particularly from the community point of view on a new housing estate. That hostel had been put up, incidentally, before the new school, but that was done for specific reasons to show what the development of the housing estate was going to be. It is within the competence of the local authority to decide how the various units for the housing estate should be established?—Yes; but, with great respect, I do not think we have been building any unnecessary schools. A year ago we ought to have built a few more so as to be more ahead in relation to the housing. That would have meant a larger programme a year ago.

869. It is within the competence of the local authority to plan its whole programme of housing and schools and so forth?—Yes, subject always to its getting the various Ministerial consents.

Mr. *Norman Cole.*

870. Is it not true that you might have to decide upon the nature and size of your school depending on the families that go into the estate when the houses are finished? Would you know before the houses are occupied what size school you want?—I think we have an advantage in Birmingham, being so closely knit a population indeed. There is not very much variation from the statistics. We do not in fact get very far wrong in our forecasts.

871. You do have to guess a little?—Yes; you can only work on averages, but they work out well.

Mr. *Malcolm MacPherson.*

872. The impression I have got from your answers is that you are in a position in a city like Birmingham to foresee and plan to meet your building needs in the way of houses, hostels, schools and so on. But you cannot actually plan as you wish because there are certain supervision regulations of the various Ministries. Could you eliminate certain delays and certain costs resulting from delays if you were more masters of your own house? I am not suggesting the change should be made, but I would like to know what you think?—There is always this point. We have probably employed nearly all the labour we can get for school building; I cannot say quite all but nearly all. Therefore, while we undoubtedly need larger major building programmes and must, I think, try and attempt somewhat larger ones, it is very doubtful how much larger we could in fact actually carry out.

Chairman.

873. I wanted to clear up the question of transport costs. I gather the £17,000 is additional expenditure?—Yes.

874. What I would like to know is what sort of figure has it been since the war?—It has been slowly rising to £17,000. After the war there was none of this, but it has slowly risen to £17,000. It has more or less risen from £0 to £17,000. I think the graph would be a straight line graph.

Miss *Ward.*] Could we have the figures sent in of each year from 1945?

Chairman.

875. Could you let us have that?—I will most certainly see if I can provide that*.

876. Would it be difficult?—I will do my very best.

Mr. *James Johnson.*

877. Do you have any difficulties with parents upon new housing estates whose youngsters do not quite qualify within the

* Annex 11.

2-mile limit or the 3-mile limit to get transport and the youngsters have to walk?—We do not have very much bother, because the Ministry have agreed to slightly lower distances for Birmingham because the whole is practically a built up area.

878. Does it apply to other big cities, like Leeds and Manchester?—I do not know. We in fact had to have a friendly tussle with the Ministry, but they saw our point of view.

Chairman.

879. You spoke about site difficulty in Birmingham. Does that mean you are building two- or three-storey buildings?—(Mr. *Sheridan-Shedden.*) Yes, we are. In secondary schools we are building as many as four storeys as a maximum.

Mr. *Malcolm MacPherson.*

880. What is your experience from the point of view of costs about building in the centre of the City and building on new housing estates: is it cheaper or dearer to build in the middle of the City?—I have not got any figures. I am sorry.

Chairman.] The site value in the centre of the City would be very much higher.

Mr. *Norman Cole.*

881. It is the District Valuer's valuation?—Yes.

Mr. *James Johnson.*

882. Are you building many new schools in the centre of the City?—No, not in the centre.

Miss *Ward.*

883. Has not the population been moved from the centre of the City?—(Mr. *Russell.*) Considerably.

Chairman.

884. It is suggested in some parts of the country that it is not possible to get all the children into the schools; there are not the schools and places available. What is the experience in Birmingham? Are you able to bring in all the children immediately after the age of 5?—So far we have just managed. In fact we have even brought in most children from the beginning of the term in which the child will reach five, but only by very considerable crowding. I do not think we are going quite to maintain that, but so far we have just managed.

Brigadier *Peto.*

885. Would it make a great difference to the overcrowding if you left them out till 5½?—You see, Birmingham, like most authorities, moves its children up once a year, and therefore it is only really in the summer term that the infant schools and junior schools get very crowded as they slowly fill up during the year. I think we shall have great difficulty this summer. Next autumn we shall be all right again, and probably run into great difficulties again in the second half of the next school year.

886. To what extent would it alter the situation if you left them out till they were 5½?—It would alter the situation in the summer. It would be almost unnecessary to do that in the autumn.

Chairman.

887. I think we must go on to Warwickshire. I am very much obliged to you, Mr. Russell and Mr. Sheridan-Shedden and Mr. Marsh, for giving us so much of your time and experience. The Sub-Committee would like to thank you for the very patient way you have listened to our questions and your co-operation in this rather important matter?—Thank you, Sir.

Mr. Russell, Mr. Marsh and Mr. Sheridan-Shedden withdrew.

Chairman.

888. Now, Mr. Yorke-Lodge, you have had the opportunity of hearing all that has gone before, so your minds are carefully prepared. Perhaps it might be as well to ask you if you could make a statement or tell us your views about some of these matters?—(Mr. *Yorke-Lodge.*) I should prefer to answer specific questions.

889. How do the problems of Warwickshire differ from that of a borough in regard to, for instance, the school buildings, the old school buildings? Have you got a problem of old buildings, and what would be the number of schools you would regard as being unsuitable or unsatisfactory or could be improved upon by a reasonable amount of expenditure?—Warwickshire, I think, for your purpose is a very good county, because it really contains two worlds, North Warwickshire, which is industrial and contains several large communities, Rugby, Nuneaton, Sutton Coldfield; and South Warwickshire which is almost entirely rural. Because of the geographical spread of the community, it is necessary to spread over a much wider area than Birmingham's our new schools. I take it that in Mr. Russell's area one new school may improve the conditions in the whole of Birmingham or a large area of Birmingham. In Warwickshire, of course, a new school in Sutton Coldfield is not the

slightest use to Rugby, because they are many miles apart. In general, the schools in the urban areas are not at all unsatisfactory. Many of them are of the immediate pre-war period, and almost all our new building has been concentrated in the urban areas, so that there are many post-war schools as well. In the rural areas, on the other hand, by the Ministry's regulations, we have not been able to provide the improved conditions. As you know, owing to the birth rate increase, the Minister—and I do not mean one particuiar Minister, but all Ministers since the war—has had to prescribe that you could only build to provide new places in schools. So that the rural areas have had very little from the post-war building programme. They have had almost nothing. There are some parts of Warwickshire where new schools are urgently needed. To answer the last part of your question, there were 13 Warwickshire schools black listed at the time of the last black list. Of those, 3 have been closed, 2 have passed into the Coventry area through the Coventry boundary revisions, 7 have had work done on them, and the thirteenth has been reorganised and there is not the same pressure on the space. All those 13 schools would probably now, if there were a further review, be removed from the black list, but there is roughly a corresponding number of other schools, where work has not been done owing to the building restrictions, which are now " by merit raised to that bad eminence ", as Milton said of Satan, and they form a kind of unofficial black list in my mind. As soon as something can be done it will be done. I mentioned in an earlier statement that the granting of controlled status has been a great help to us. We have a great many Church schools on which we could not spend money before the passing of the Education Act, 1944. 75 have been given controlled status; 60 have had work done on them; the remaining 15 will have work done on them the moment the 1st April comes. They have only just been given controlled status.

890. Do you work on the same formula that Birmingham mentioned, 9s. per pupil?—Yes, that formula is laid down by the Minister, but the Ministry have been very generous with Warwickshire. I was amused to hear Mr. Russell's statement that Birmingham's problems were perhaps unique, because we feel exactly the same in Warwickshire. In fact, I had the utmost difficulty in holding my tongue.

Miss *Ward.*

891. Do you feel the money that has been expended on the schools that were originally on the black list has, so to speak, done the trick?—It has done the trick.

Chairman.

892. Are the conditions of the schools in the rural parts of the County very much worse?—They were in the immediate post-war period before the controlled status.

893. What about the question of sanitary accommodation in those schools?—It was very poor immediately after the war, but the worst cases have now nearly all been dealt with. We in Warwickshire give top priority of all to sanitation.

Mr. *James Johnson.*

894. Would you say your biggest headache was this matter of minor improvements? You just cannot spend the money because you have not got it in the kitty; this business of having a partition between two teachers, for example?—It has caused much concern to Warwickshire, but the Ministry have quite obviously done their best for us, as they have for Birmingham. On the formula our allocation this year would have been £38,000. Warwickshire put in their application for a special addition and have been granted £19,000.

Miss *Ward.*

895. The formula is flexible, is it? I was going to ask you whether you considered it was fair to have a static formula for the type of authority like Birmingham and a County authority; but really it is flexible, or is it just by arguing you have made it flexible?—I think, as with most formulæ, it is just a rough guide in dividing up what resources are available. I do not think the Ministry cling rigidly to any of the general rules they are forced to lay down in their dealings with 140 authorities.

896. Have you had to make application for more money under this heading?—Yes.

897. The figure originally allocated was not satisfactory?—Not satisfactory in the sense that we in Warwickshire feel that we are faced with unusually urgent problems. Though we could in a way have managed with the original £38,000, it would have meant in effect the problems, instead of being met or diminished, would have been accumulating for the following year.

Mr. *James Johnson.*

898. Is it correct that perhaps we in Warwickshire have got more all-age schools than any other county?—I should not expect that to be so, but, of course, I should need to refer to the published statistics before giving you a considered answer. We have in Warwickshire these large rural areas, and as with most rural areas throughout the country there are a fair number of unreorganised schools. Warwickshire have made more than one application to the Minister to put up secondary modern schools in South Warwickshire to solve this problem

of eliminating all-age schools. The Minister of Education—and I do not mean the present one but her predecessor and his predecessor too—regrettably, has had to reply that, owing to the need for increased school accommodation, at present no new secondary schools could be provided merely to enable reorganisation to be carried out in a rural area.

899. If we agree there is little chance at the moment of having selective secondary or even secondary moderns built in the south of the County, would you say as the bulge moves up and the 10-year-olds become 12 and 13 we shall have a disproportionate number of older pupils in what is junior accommodation; there will be difficulty abouts desks and furniture and amenities as a whole?—Well, this is a matter that is at present before the Minister herself. She is considering the 1954-55 building programme, and she has been asked for two secondary modern schools in South Warwickshire. The authority put up a case based in this particular instance on increased numbers in the rural areas. It may well be that the Minister will be convinced by this case. If so, the circumstances that Mr. Johnson foresees will most happily be avoided.

Mr. *Malcolm MacPherson.*

900. You want to build secondary modern schools for reorganisation. Is there any big problem of new school building in order to meet the needs of increased school population as distinct from reorganisation?—Yes. It has rather intrigued us, but there are signs that the population in South Warwickshire is beginning to rise rapidly. The increase in the Warwickshire school population between 1st January, 1952, and 1st January, 1953, was 3,883. Of that increase 353 additional children were in South Warwickshire, a bigger increase than in North Warwickshire. We did not expect it. That is one of the reasons why we hope we shall get these secondary modern schools in South Warwickshire.

Chairman.

901. That is rather a question of policy. With regard to the new building programme, are you able to meet the demand for new building for the number of children that require to be accommodated, or does your programme lag behind?—You know that there was a change in the building year imposed by the Minister two or three years ago. There was a moratorium. We come very largely within the Coventry building zone, and owing to the rebuilding of Coventry we find it very difficult to get early starting dates. There has been, unfortunately, a delay in our programme. Mr. Barnsley will dilate on what I say, but I am afraid we are several months further back than we had hoped to be two or three years ago. (Mr. *Barnsley.*) Yes, I think that is true. We did, of course, get a bad setback at the time of the moratorium, and, of course, our starting date problem is quite a serious one.

Mr. *Malcolm MacPherson.*

902. What is your experience of the difference in cost between traditional and non-traditional school buildings?—Our experience is much the same as Birmingham's. As far as aluminium is concerned, there is definitely, I think, a saving in time but no saving in cost. We have now put up three aluminium schools. The last one, which is within two months of completion, is at Leamington for 320 children, and it has gone up in about fourteen months. I would say that was three or four months quicker, perhaps more, than traditional construction, at any rate at the present time.

903. Does not that saving in time reflect itself in a saving in cost?—No. We have really reluctantly accepted the policy that we must put up these aluminium schools because of the very severe labour shortage, particularly in the Coventry area. We have accepted that as inevitable, but we have done so reluctantly, because we shared the feelings of Birmingham. We do not know what the future holds. You cannot bring ordinary labour in to repair the aluminium school. It means specialised labour, which no doubt will be expensive. We know what we are doing with traditional building, and we are perfectly satisfied that if we had the labour available, and while it might take longer it would be definitely cheaper and the maintenance less. In the long run it would be economic.

Chairman.

904. When you say you are behind with your building programme, does that mean you have children in the County who ought to be at school and are not? What are the sizes of your classes?—(Mr. *Yorke-Lodge.*) It does not mean there are children excluded from school, but that some of the relief of large classes we had hoped to achieve has had to be delayed. I do not think if I gave you the average figure for the size of class it would be very helpful, because Warwickshire falls into two contrasting halves. In Nuneaton, where there are the biggest classes in primary schools, the average figure is 39. In South Warwickshire the average is 23.

905. That is not overcrowded according to the standards?—In South Warwickshire there are many small rooms and there are many uneconomic units being used as schools. If you have 50 children covering an age range of 10 years you cannot divide them into fewer than three classes, if the

children are to get anything like an education, and that is why the classes are small. There is not a lack of school accommodation in South Warwickshire but a lack of suitable accommodation for children of secondary school age.

Mr. *James Johnson.*

906. It is the old question of buildings and teachers. Does Mr. Yorke-Lodge think our difficulties are at the moment in the matter of schools buildings in this question of getting down the size of classes? If we had the buildings could we have the teachers?—Yes.

Mr. *Malcolm MacPherson.*

907. Does that apply to secondary as well as primary?—Yes, in Warwickshire.

Mr. *Norman Cole.*

908. I am trying to resolve this, and I am sorry to press it. Would the contrast in cost between prefabrication and traditional schools be summed up thus: if the prefabricated school did not take less time to build it would be inordinately more in cost? I am trying to put it the other way round. In other words, if it was the same time, it would be out of all proportion to the cost of the building?—(Mr. *Barnsley.*) I am not sure what you mean.

909. If they both took the same time to erect there would be no further consideration of prefabrication on the ground of cost?—Not on the ground of cost, but it is not really the cost; it is labour.

910. Have you in Warwickshire, either in the north or south, gone in for this partial prefabrication of traditional schools?—Yes. As a matter of fact, that is what we feel is the solution, at any rate in the areas outside the red area of Coventry. We do do that. We prefabricate to some extent the classroom block; that is a special unit; and for the administration block we use traditional construction, and the two work together quite well. Actually the secondary school at Warwick would have been very successful, not only on the question of cost (it came out below the figure set down by the Ministry) but also on the question of speed, had it not been for steel. We were delayed for months on steel; that threw the whole thing out of gear. Had the steel been available I am sure that would have been very successful. The steel position seems to be improving.

911. That is the secondary school in Warwick City?—Yes.

912. Was that partially prefabricated?—Part fabrication and part traditional.

Mr. *Malcolm MacPherson.*

913. In your campaign to reduce expenditure on building, in which particular directions have you made economies, in design, circulation space, or what?—Of course, the latest schools have been designed down to the standards set down by the Ministry. That has meant a good deal of ingenuity. The children dine now in entrance halls and classrooms. It is largely a matter of planning.

914. Do you find what has happened is that the ways in which your economies can be made are in fact suggested to you, or even dictated, by the practice and experience of other areas and of the Ministry?—I would say suggested, not dictated. (Mr. *Yorke-Lodge.*) The Minister issues at frequent intervals Building Bulletins, which are guidance to local education authorities on the planning and construction of schools.

915. You find in fact the problem of finding ways to reduce costs is really centrally settled. It is not a problem in which you have to try to explore the possibilities, or would that be putting it too high?—(Mr. *Barnsley.*) I would say it is a combination of the two.

Mr. *James Johnson.*

916. What are your views about this boxlike method, which you have a school hall and then the classrooms on either side, and the youngsters leaving classes or going to them have to pass through the hall? Are you building schools of that type, and what are your views about them?—We have one planned at the moment which is partly that. The one you are thinking of is the one at Coventry, and I think it is generally understood that could not be repeated to-day.

917. You yourself would not build that type unless you were forced into it by reasons of function or economy?—I think it is probably for Mr. Yorke-Lodge to comment on the working of the school. As far as we are concerned, we have no quarrel with it. Obviously it has some advantages. (Mr. *Yorke-Lodge.*) It seems to me a perfectly satisfactory way of organising the interior of a school, though it is not the only way. It is always a matter of balancing the advantages of any particular arrangement against the disadvantages. Nobody has yet discovered the perfect way of planning the interior of schools.

Mr. *Norman Cole.*

918. Except at enormous cost?—Even at enormous cost.

Miss *Ward.*] Do you think they ever will?

Mr. *James Johnson.*

919. Would you say there were certain accepted views about circulation space and how you should move about inside the building?—I think my short answer to that would be that the teaching profession would probably say no. There are so many different opinions.

Chairman.

920. If you use the school hall, if there is no means of getting to classes except by going through the hall, is not that regarded as as educational disadvantage?—It depends on the nature of the school, and I have known schools where it was not in fact a disadvantage but a convenience in the running of the place administratively. There are other schools of a rather echoey and noisy kind where it is a great inconvenience.

Mr. *Malcolm MacPherson.*

921. Looking over your experience in recent years in building schools, would you say there have been any significant losses of educational advantages? Are there any purely educational factors that have been sacrificed?—I would say no educational factors have been sacrificed; aesthetic advantages, I would say, yes.

922. Would not you say they were educational factors?—Indirectly perhaps, but they are not of direct importance, I think.

Mr. *T. W. Jones.*

923. You made a very interesting observation that you made a speciality of sanitation and concentrated on that. I think that is the first time we have had that observation here. Can we have a word or two about that to see exactly what is meant by this speciality?—In South Warwickshire there has been a shortage of water in the past, and there have not been water schemes and drainage schemes in some of the rural areas. Water is now being put in, and the authority has taken the opportunity to install water closets in the controlled schools wherever possible.

924. That would be one way of converting what was formerly a black listed school into a decent school?—Yes.

Mr. *James Johnson.*

925. Have you many schools with earth closets?—Quite a number, but in general they are in areas where there are no water schemes.

Miss *Ward.*

926. They are unavoidable?—Yes.

Chairman.

927. On the transport question, could you tell us whether your transport costs have increased, whether you have to transport children because schools are not available?—(Mr. *Yorke-Lodge.*) Our transport costs have increased partly owing to the increased price of transport, with the higher cost of petrol and wages. I do not think in a County the experience of Birmingham would apply. In Birmingham when you build a new school, if I understand Mr. Russell aright, you build it in a housing estate and you save on transport. In a County area you build a new secondary modern school, and that exercises a gravitational pull and draws in children from quite a wide country area, so the effect of building a new secondary modern school is to increase your transport costs in the County, which is the converse of what happens in the Borough.

928. Does that mean you are not building many primary schools at all?—No.

929. You have housing estates in parts of the County?—Yes. I am sorry; I was dealing with the question of transport. Our transport costs have gone up because of increased costs. They have gone up in the last few years from about £35,000 to nearly £50,000. To return to your question, the authority immediately after the war built primary schools because the big age groups were then at the primary school age. Now they are going up towards the secondary school era in their lives, so the authority are concentrating on secondary schools, but there are still some areas where new housing estates are going up where we are building new primary schools.

930. Is it true to say your costs of transporting children who happen to be outside the statutory limit have not increased?—It would not be true to say that, but it has not contributed significantly.

Chairman.] Are you having to transport children outside the statutory limit to new estates anywhere in the County, to schools on new estates?

Mr. *Norman Cole.*

931. From places outside the estate?—The answer to that is yes. There are some country areas lying beyond the housing estates that are contributing children to the new schools, at places like Newbold.

Miss *Ward.*

932. From the point of view of County organisation it is inevitable that you should have transport charges. It is quite a different problem from the normal County Borough. You have always had to have that. You obviously cannot provide a secondary school close to all the villages, etc?—Or even a primary school.

Chairman.

933. In fact, the cost of transporting children to primary schools on the new estates by virtue of the fact that the children are removed is really insignificant?—It is not a major factor. It is the increased cost of the much higher school population. Our school population has risen from 53,000 to 71,000 since 1946-47.

Mr. *James Johnson.*

934. It is fair to say you have got off somewhat lightly because in the south of the County we have not yet reorganised into our secondary school stage. That is fair comment?—That was the point I was making. The effect of new school building in the County area is to send up transport costs.

Mr. *Norman Cole.*

935. The more Warwickshire carry out the provisions of the 1944 Act, the higher will go their transport costs in the future, up to a limit?—There will be come offsetting, of course. Obviously, some of these new primary schools will be better sited than the old ones for the new centres of population, and that will offset to some extent the rising costs of transporting the secondary modern school children.

Mr. *James Johnson.*

936. If you build these new schools at places like Southam and Wellesbourne, you are going to have youngsters coming 8 to 10 miles or more, and your costs will go up?—Inevitably, yes.

Mr. *Malcolm MacPherson.*

937. To what extent does your general school building programme depend on the services of specialised school architects?—(Mr. *Barnsley.*) You mean private architects?

938. Yes?—We have put quite a number of schools out to private architects. There are one or two still pending.

939. You have no specialised school architects?—We have a section which deals entirely with education.

Mr. *Norman Cole.*

940. Have you found that you have had to diminish your staff at all in the last five years?—No. We could not possibly deal with the problem as it was two or three years ago, and therefore we employ private architects. We have never reduced the staff.

941. Did you have to increase your own staff at that time?—To some exent, yes.

942. And you have kept them?—Yes.

Mr. *Malcolm MacPherson.*

943. With regard to heating installations, in your new schools or old schools, have you made any change from the old methods of heating?—We are using the new type of warm air heating which Hertfordshire use; the same type, but not exactly the same system.

944. Do you save money on it?—Not a great deal, but it does save in other ways. You improve the appearance; you do not have so many pipes about.

945. Have you installed thermostatic control?—Yes, always.

946. Do you find that saves cost?—Yes.

Miss *Ward.*

947. Do you like the new hot air system?—I think it has a lot to commend it.

Chairman.

948. I did read something about Warwickshire closing nursery schools. Is that correct? I was wondering what happened to those buildings?—(Mr. *Yorke-Lodge.*) No. I think you have been misinformed. What I think perhaps you may be thinking of is the closing of day nurseries. They are run by the health authorities.

949. I think we have rather exhausted the questions this morning, and unless there is anything you particularly would like to say to us . . . ?—No. We are both indebted to you for making it so pleasant an experience.

Chairman.] We should like to thank you very much, first of all for waiting whilst we questioned the other witnesses, and also for your help in giving us the information you have done. We hope you will read our Report when we issue it with some interest.

The witnesses withdrew.

Mr. R. E. PRESSWOOD, Director of Education, and Mr. E. C. ROBERTS, City Surveyor, Cardiff Corporation, called in and examined.

Chairman.

950. Mr. Presswood, you are the Director of Education for Cardiff?—Yes.

951. We should be glad if you could give us some information about Cardiff. What is the school population of Cardiff?—38,700 at the moment.

Mr. *Malcolm MacPherson.*

952. What is the total population?—243,000.

Chairman.

953. Has that figure of school population increased very much in the last two or three years?—Yes. I can illustrate it by figures ranging from 1947, when there was a very high birth rate of 5,306, with 228 children dying immediately after birth. From that date to 1957 the child population will have increased by 11,000, taking into account the increased birth rate in the post-war years. It is going down now, but the eventual increase up to 1957 will be about 11,000 children.

954. Does that mean that you have much overcrowding in the schools in Cardiff?—No, largely because new building, which has been very extensive in Cardiff, has scattered the population to the new housing estates, and we have really kept pace with the increase by the provision of new school places. Where we shall be after 1957 depends on the continuance of school building.

955. What would be the average of your classes? Are you keeping within the regulations?—Well within, on average. I can give you some figures. Taking a summary, we have 40 classes with under 21 children, 259 classes with between 21 and 30, 371 classes with between 31 and 40, 251 classes with between 41 and 50, and 12 classes with between 51 and 60.

Mr. *Norman Cole.*

956. Could we have it split into primary and secondary?—These figures will relate only to secondary modern and primary. The grammar schools will have about 30 pupils per class, but the teacher-class ratio will be very much less, about 22. In the secondary modern schools we have 10 classes under 21, 104 with 21 to 30, 68 with 31 to 40, and 4 between 41 and 50; so that the secondary modern population except for those 4 are pretty well within the regulations. The others are mostly junior schools, some all-age schools and infant schools. They include Roman Catholic and Church of Wales schools.

Chairman.

957. Did I understand you to say that in the primary schools you have a number of classes with more than 50?—Yes, 12 classes with more than 50.

958. And some with more than 60?—No, 51 to 60. They are mostly just over the 50 line.

959. You have a very large number with over 40?—247 classes in primary schools are over the 40 level.

960. That is overcrowded in accordance with the regulations?—Yes.

961. I only wondered, because you said you had been keeping within the regulations?—I had in mind we were keeping within the 50, which is the top level for primary, and 40 the top level for secondary schools.

Mr. *Norman Cole.*

962. But not the desirable level?—I agree.

Chairman.

963. Can you tell us how many schools in Cardiff you had on the black list in 1925?—I do not know that I can tell you the exact number, but I should think probably 3 or 4 were really bad old buildings.

964. Have you got many schools in Cardiff now that would come within the category of a black list or unsatisfactory schools?—Yes, the same number.

965. We understand that there were three categories in that black list. The first category were those that were totally incapable of improvement, and then there were those that could be capable of improvement if money were spent upon them?—Yes.

966. Have you got many old schools in Cardiff that would benefit by money being spent on them—more money?—Yes, the majority of the existing schools. It would be economical, and the Development Plan does foreshadow that they be completely re-adapted to present day purposes; but there are certain schools, mostly Church in Wales schools, which we have come to agree must be replaced by new schools.

967. Apart from those that are to be replaced, I am trying to find out what number you think would be an economic proposition if you could spend more money on improving them?—Of all types—and most of them are fairly old, built in the early part of this century—I should say about 50 to 60 buildings will continue.

968. Which are in need of repair?—In need of repair and radical replanning, most of them.

969. Have you got the same allowance as other authorities in England for the minor capital works?—Yes, 9s. per number of children on the rolls, plus £25. It

comes to about £20,000 per year so far as we are concerned, for all purposes, which covers further education, training college and all primary and secondary schools. It very rapidly disappears because we have urgent need in certain schools of extending and replacing unsatisfactory W.C. and lavatory accommodation. £20,000 is quite inadequate in relation to the needs of existing schools.

Miss *Ward.*

970. Are you able to spend a fairly large proportion of that on replacing your old lavatory arrangements?—Yes, most of it has been spent on that kind of expenditure.

971. I understood that most minor projects expenditure had also to go on the extension of the accommodation. Presumably you got special permission to do it that way, or is it something peculiar to your part of the world?—Not that I am aware of. We put forward these extensions of lavatory facilities. It may be linked with what was the very late reorganisation of schools in Cardiff. The full range of secondary modern schools was only established in 1950 with a redistribution of the population of the existing schools, many of which were unsatisfactory. The establishing of secondary modern schools in the old all-age schools did necessitate in certain cases an urgent need for extending lavatory accommodation. A school that had formerly been a boys' school may have become a girls' school, or something of that kind. That is why we have had to spend a lot of minor works money on extending and improving of lavatory accommodation. Some was so bad it was unthinkable it should be continued.

Chairman.

972. There is still a need for a lot of that kind of work to be done?—Yes.

Miss *Ward.*

973. Which would be economic if it was done?—Yes. It comes as a very great help indeed to the general life and amenities of the school.

Chairman.

974. If you cannot spend more on these schools will you be faced with very great difficulties in a few years? How big will the problem be if you are not able to improve these schools which according to plan should continue for several years yet? —I am thinking of three schools in Cardiff. They are all improvised secondary modern schools. They are all without a hall of their own; they certainly have not a gymnasium, and they have not the proper laboratory and craft work facilities they should have. Their function is extremely limited by comparison with that which is available in a new secondary modern school. This is now in occupation, and has brought a new opportunity to the children. If we cannot do that with our existing secondary modern schools, so much is their function and effectiveness going to be limited.

Mr. *Norman Cole.*

975. Mr. Presswood made one remark which I am ruminating about. He said the increase in child population of 11,000 was now levelling off?—Yes.

976. Could he just tell us where that problem is going to arise, for primary or secondary schools? Secondly, if that is levelled off now, when the effect of the increase of that bulge comes is that going to embarrass the size of classes you gave us at the beginning, which was not too bad?—I think that position will be met if we go on building as many schools as we have been able to build in the last few years. Next year is going to be a lean year so far as our building allocation is concerned. We have two primary schools, quite small ones; they are both ready to start immediately the programme year begins. Previously we have had as much as £600,000 in a year, and £400,000 or £300,000 in others. If we can keep to an average of about £400,000 per year in the next ten years we can keep pace with the problem of the size of classes. But if we go on having lean years, such as next year, there will be great difficulties.

977. The 11,000 you mentioned was new births, not accumulation?—We have felt the effect in the infant schools, and it is now about ready to move into the junior schools.

Mr. *Malcolm MacPherson.*

978. How many schools have you built since the end of the war?—Can I give you a figure of schools which are either built and occupied or in building? There are 17 of all kinds. That includes one small special school, which is an adapted house, but I have missed out things like kitchens and dining rooms and things of that kind. There are 17 building projects, 2 of which are in next year's programme and will start in April.

979. It represents a huge capital expenditure for a city of a quarter of a million?—Yes.

980. Do you think it is more or less proportionate for the average city of a quarter of a million since the end of the war, or have you been treated more generously?—The proportion was high because of the need for new schools. The reorganisation did not take place in the

1930's; it took place in 1950. Cardiff built very few schools between 1926 and 1939, and this is the aftermath of it. The need is very great.

981. Can you tell me how many of these schools were of traditional type of construction and how many not, or what proportion?—(Mr. *Roberts.*) 2 were of non-traditional construction.

982. Were they constructed recently?—Yes, in 1949-50. One was the Orlit type of school, pre-cast concrete; the other was aluminium.

983. What has been your experience between traditional and non-traditional building (*a*) from the point of view of cost, and (*b*) from the point of view of satisfactoriness?—On the ground of cost, the non-traditional did not effect any saving in cost; in fact they were somewhat higher than that of traditional type. So far as time is concerned, they did not effect any material saving in time, particularly the aluminium school. It was not only costly, but the main object of adopting the aluminium type was in the saving of time (the need was very urgent) and at that time the saving of time was not nearly so great as was anticipated.

Mr. *Norman Cole.*

984. How long did it take?—It took approximately 18 months. (Mr. *Presswood.*) The starting date was 23rd December, 1949, and the termination of contract was June, 1951, and that particular school was not opened until April, 1952. I think Mr. Roberts would agree with me we ran into special difficulties with the contractor for the non-prefabricated part. It was not the prefabrication that was responsible for delay. It rested in other directions. (Mr. *Roberts.*) The time, I think, could have been reduced so far as prefabrication was concerned had the manufacturers of the aluminium components worked to your standard of 3 ft. 4 ins. at that time, but that was more or less in the embryo stage, and I did have considerable difficulty in adapting the aluminium parts of the construction to the parts which were traditional.

Miss *Ward.*

985. Was it built on the new design to save circulation space?—Yes, more or less.

Chairman.

986. You would do that in co-operation with the Ministry?—It was 1949. It was really before we had their more recent directions on that matter.

Miss *Ward.*

987. It was not really what is now being built as the modern type?—No.

(" Division.")

Chairman.

988. I was wondering about those schools. Would it be that the materials are more expensive than the materials for the traditional schools? That would help to put the cost up?—The only advantage, in my opinion, of the prefabricated school is that it diminishes the use of skilled labour on the site, but it is entirely confined to the shell of the building; it does not affect the finishing, the internal work; that remains the same whether it is non-traditional or traditional construction. The saving in material itself, in my opinion, is not relevant. In the case of aluminium it is more expensive than bricks and mortar. In the case of pre-cast concrete construction, like the Orlit, I should say the cost of material is probably the same as that on traditional construction. Recently many non-traditional types have involved the use of steel, which has been in short supply, and that has militated against the use of non-traditional types. The same applies to cement. There has been a shortage of cement because we do export it, and for that reason many types of non-traditional construction are ruled out because of the difficulty of obtaining cement.

Miss *Ward.*

989. Did I understand Mr. Presswood to say that the schools had kept pace with the housing development?—(Mr. *Presswood.*) The provision of school accommodation has kept pace. We have had these new schools, and there has been a scattering of the child population. Whilst we have some element of overcrowding, it has not become of serious proportions. We have on the new housing estates the policy that, quite rightly, priority is given to families with young children, and therefore we have an inordinate number of younger children. On one housing estate the highest age group was 200, and then the next one was half that, and the next age group was less than half. On any housing estate our experience is, and I think it is typical, that we get an inflated number of children. We have to improvise ways of providing for them by the use of church halls and other means. We can see the child population will drop to normal proportions in a few years' time.

990. You were able to build your schools on your new housing estates so that you had the school accommodation; you were not faced with large housing estates with no new schools and a lot of transport?—I can give you the exact transport figure. We are spending for children coming from housing estates £150 out of £8,000 a year on general transport costs. That is quite recent and is very temporary pending the building of a new school on a particular housing estate.

991. When the local authority had decided where the new housing estates were to develop, did you straight away build your school?—No, we did not get the school started as soon as the houses. There is always a lag. It takes longer to plan a school, but in most cases there have been other schools somewhere near that have been able to take the temporary overflow. In one case we cannot do that, and the authority are at the moment building some temporary wooden classrooms to look after the temporary overflow. In the main we have been able to use older schools round about or church halls or transport a few children, and we have kept pace.

Chairman.

992. It is true that the building of the schools lags behind the houses?—Except on one estate, and there the primary school has pretty well kept level with the houses. It is only the beginning of a large estate, and I do not think we can guarantee to continue that.

993. On the point Miss Ward raised about transport, probably this explains the reason for your low transport figures. I have before me the Institute of Municipal Chartered Accountants Education Statistics for the year ended 31st March, 1952. I notice that Cardiff has £22 per 1,000 of the population, which is a lower figure than all the other large towns in England and Wales, even including Swansea, which is £75, and Merthyr Tydfil £78?—Yes.

994. How do you manage to keep your transport costs lower than all the others? —The transport we provide is for children going to the special schools, the educationally sub-normal children, the All Welsh School, of which we have got one, handicraft centres, where they are separate from the secondary modern schools, to swimming baths, and also to a camp school, and those costs amount to £7,750 per year. In addition to that, we have recently had to transport some children away from a housing estate where the houses are in advance of the school, and that costs £150. I do not know quite how we have done it. I am very glad to know we are less than some in this respect.

995. The £150, has that steadily risen to that, or is it a figure going up each year? —It will not go up. It is a recent figure, and I very much hope it is a very temporary figure. Certainly so far as the housing estate is concerned the school will be ready in about six months, and the cost of that will disappear.

996. In the main it is due to the situation of your schools in Cardiff?—Yes, I think most of our schools are home-based and there is not the need for transport.

Mr. *Norman Cole.*

997. Out of the 38,000 child population almost one-third are of primary school age or less, 11,000 since the war?—Yes.

998. Therefore, that means in the main at the present moment you are building the schools where the children are?—Yes.

999. Your problem may come later, when they have to go to secondary schools and where you have not got a secondary school on the estate?—Yes. (Mr. *Roberts.*) In 1949 I carried out an investigation on one of our earlier housing estates regarding the child population up to 11 years of age, and I found that owing to the proportion of people on the estate having large families, which was necessary, of course, having regard to the coding system of housing, the child population on that particular estate was exceptionally heavy. I plotted a graph which showed that in approximately eight to ten years the child population on that estate, that is up to the junior age, up to 11, would approach the normal. At the time the survey was made the child population up to 11, I think, came to 1.1 child per household, and in eight or ten years, applying the same norm of birth and death rates, it would decline to approximately 0.8; so that the child population is very much higher in our earlier housing estates. As the housing need is satisfied that, of course, would be gradually levelled out. (Mr. *Presswood.*) I agree with Mr. Cole that so far our primary schools have been on the housing estates, and therefore near the homes. In view of the fact that our secondary modern schools are improvised, we shall hope the new secondary modern schools will be on the perimeter of the city and therefore near the homes too.

Chairman.

1000. Could we go back to the question of prefabricated schools? Mr. Roberts, have you got any figures you can give to us to show the costs of your prefabricated schools as compared with the traditional types?—(Mr. *Roberts.*) I have not the figures readily available. I can furnish those. The cost of the aluminium school, which is a primary school for 320 juniors and 200 infants, was £108,742. Comparing that with a traditional school which was built by direct labour at the same time (the two schools were started at approximately the same time) that was the same number, 320 juniors and 200 infants), that was £76,810. Those figures have been exceeded by approximately £10,000 in each case, but the relative proportions are the same as the original figures indicate. The aluminium school was £108,000 and the traditional school £76,000. Comparing that with another non-traditional type, the precast concrete type, that was a primary

school of the same size, juniors and infants, that was £108,988. It was approximately the same as the aluminium type. At Rumney, which was a traditional school for 520 juniors, the cost was £101,227.

Mr. *Norman Cole.*

1001. How was that built, by direct labour?—No. The only one which used direct labour was the first one I mentioned, which was £76,810.

Miss *Ward.*

1002. Could you give us the figures per place?—I have not worked that out. It is a case of dividing one into the other.

Chairman.

1003. Perhaps you could let us have a further paper on that, to give us those particulars?—Yes, I shall be very pleased to do that. Of course, I shall have the final costs now of these schools.

Mr. *Norman Cole.*

1004. There is one important point here. The purpose of our questions on this will be evident to Mr. Presswood and Mr. Roberts. It would be true to say that you could not do prefabricated schools by direct labour?—Quite.

1005. Therefore that comparison is a little bit weighted on one side?—I might say this so far as primary schools are concerned; there is one advantage of the non-traditional type, and it is this; it is not generally appreciated. In the primary schools which are put out to tender the smaller builder usually tenders. For the larger secondary school the tenders are usually confined to the larger building firms, but that does not apply to the smaller primary schools. The result is that the time of completion of the primary schools is very much longer in proportion than the larger school. As a rule the smaller builder submits a lower tender. In the case of the non-traditional schools it is confined to a few select large firms who have the organisation and are able to complete the work.

1006. Over and above that, there is the special aspect of direct labour and its relevant cost?—Yes. In my opinion, and I have a fairly big direct labour organisation, a direct labour organisation is not adapted for the erection of non-traditional buildings. It could be done, but it would be difficult to apply the bonus system (the incentive system) without altering the whole basis of the organisation.

Miss *Ward.*

1007. Mr. Presswood mentioned, when discussing adaptations, that in some cases there was central provision for handicrafts and domestic science and those sort of things. Do you think that is a possible way of achieving economies, by having central accommodation for crafts to which all the schools would send their pupils, or do you think it is a greater economy to have special provision in every school?—(Mr. *Presswood.*) From a purely economic point of view, I think it is better to have the provision in each school, provided the school is big enough to use their practical facilities to the full extent. Our policy of building the three form entry secondary schools certainly will make full use of all the practical provision in any one school. Educationally, of course, there is no limit to the advantage. Once you can get the provision as an integral part it becomes identified with the life of the school, whereas a separate centre always creates the problem: "We are something apart from you, and we will not ally ourselves with the work and functions of the school." Economically and educationally I would strongly plead that every school has its craft facilities in the same way as everything else.

Mr. *Norman Cole.*

1008. Transport would come into it?—Transport could come into it a great deal and mount up those costs considerably.

Mr. *James Johnson.*

1009. Are all your schools three form entry, or have you bigger ones?—We have none bigger than three form entry. Under present conditions we have several secondary schools less than three form entry.

1010. You have no schools with more than 500 or 600?—No.

1011. Nothing on the lines of the comprehensive schools?—No, nothing at all.

Chairman.

1012. I should like to consider further the question of prefabricated schools, because we do understand some of the schools being put up in the country are much cheaper. You have given an example where prefabrication is very much dearer. Can you tell us whether in those particular schools you have referred to you have done away with circulation space, which the new design of the Ministry of Education recognises?—The schools in question were the old type of school and were not designed on the new circulatory basis. (Mr. *Presswood.*) It did not arise at that time. They were rather elongated. (Mr. *Roberts.*) All of them are single storey schools. I think I should qualify it in this respect: the two cases I have quoted are exceptional cases. The schools at Gabalf was done exceptionally cheaply by direct labour; it was one where I applied the incentive system,

and as a result of that the costs were exceptionally low. In the case of the aluminium school they were exceptionally high owing to the special circumstances attaching to that particular school. I do not think perhaps those two would constitute a fair comparison.

Brigadier *Peto.*

1013. When you are giving us the comparative costs in the paper you are going to submit are you going to give us the cost per place or the cost per cubic foot?—I can let you have both.

1014. Which is the best?—Usually in school work it is based upon cost per place or super foot. I do not think in school work the cost per cubic foot gives a fair comparison; the schools vary so largely. I think the cost per place and per super foot is the better yardstick.

Mr. *T. W. Jones.*

1015. You said that there was no saving in cost and no saving in time by putting up prefabricated buildings?—Yes.

1016. Would not this be true: if the Ministry said to you, "It must be a traditional building", then it would not be put up at all?—I agree. I think one of the main virtues of the non-traditional construction is that it augments traditional construction. By using both we should get more schools erected, because it does save skilled labour; it saves site labour. (Mr. *Presswood.*) We as an authority have never been told "You will get more schools in your programme if you build by prefabricated methods". The programme has been determined by the amount of the capital expenditure, and we have been fairly fortunate.

Miss *Ward.*

1017. You have no labour problem in Cardiff?—(Mr. *Roberts.*) Yes, we have.

1018. Compared with the Midlands?—Yes, I think we have. The building and civil engineering labour in Cardiff has been limited because of the industrial development taking place in South Wales. South Wales is a Development Area. A material amount of labour has been transferred from Cardiff to outlying areas. I am not in a position to say whether we have been affected more or less than the Midlands, but there has been a shortage of labour, and particularly, of course, skilled labour. One advantage of pre-fabrication is that it makes the maximum use of unskilled and semi-skilled labour, particularly bricklayers.

Chairman.

1019. According to the Ministry, the programme for the country is being based upon 50 per cent. of the schools being of a pre-fabricated type and 50 per cent. traditional. Would you agree that that percentage is a satisfactory one in present circumstances?—I should say yes. I would like further time to think about that, but it seems to me to be a reasonable proportion. The important thing at the present time, in my opinion, is to reduce the proportion of certain types of skilled labour, particularly the trowel trades, bricklayers and plasterers. The main advantage of the non-traditional type is that more of the work is done in the dry than the traditional building. At the same time I think the principle could be effected to a greater extent than it is in the case of traditional building. I think with the use of hardboard and plaster board and the pre-fabrication of standard partitions and many things of that sort in the internal fittings of schools, to a large extent the same object could be achieved. But by and large the non-traditional methods lend themselves more readily from that point of view than the traditional.

Mr. *Norman Cole.*

1020. In other words, you think we could get the best of both worlds by going in the future for a policy of traditional construction with a large measure of pre-fabrication in the construction?—That is my opinion.

1021. The second point is this: can you tell us what is your experience of the maintenance of pre-fabricated schools since 1949, I think you said, which is four years?—Yes.

1022. Is it good or bad?—I am sorry; I cannot answer that, because I have not had sufficient time to form an opinion. In my opinion, the maintenance on the aluminium school will be rather higher, but that is an opinion; it is not based upon experience. In regard to the concrete non-traditional, the Orlit, I do not anticipate there will be any difference between that and the traditional. But I cannot speak of any other forms of non-traditional schools.

Chairman.

1023. Have you any problem in regard to the supply of teachers? Does that affect you in Cardiff?—(Mr. *Presswood.*) No.

1024. Your building programme is in no way delayed by supply of teachers?—No, in no way.

Mr. *James Johnson.*

1025. At the moment the cost per place is £240 secondary and £140 junior. Do you think, Mr. Roberts, that figure will go up in the next few years, or is there a chance of getting it down by further economies?—(Mr. *Roberts.*) No. My opinion is that the only way of bringing it down is to increase the productivity of building labour.

I should couple that with the fact also that I think the cost of building materials is too high, not only labour but particularly building materials. I think if it were possible to embark on non-traditional construction on a large scale and produce your pre-fabricated material in your own factories and do away with the builders' distributors, it would be possible to bring it down; but it is dependent on higher productivity and lower costs of building materials, in my opinion.

1026. If, as I take it, you are mainly building secondary schools for the next few years, is there any chance of getting it down?—No, I do not think so. I think your secondary schools will probably be done quicker and probably more efficiently because the larger building firms will carry out the work. But the tenders of the larger building firms are not lower than those of the smaller; rather the contrary. The smaller builder usually tenders lower than the larger firms, but he takes longer, and generally speaking his work is not so efficiently done.

1027. Would not you expect the larger firms to tender lower?—From an economic point of view one would naturally expect that, but I think many of the larger firms have larger overheads because of their better organisation; perhaps in some respects they are over-organised. The overheads, in my view, of many of the larger firms are very high. I am thinking of firms like Wimpeys, for example; they have an elaborate bonus system, very elaborate staffs, quantity surveyors and so forth; they are high in proportion to the smaller builder and for that reason their costs are higher. Also I think they expect larger profits.

1028. You do think £240 for secondary schools is a basement figure, but it might go up?—It is purely a personal opinion. In my view, building costs are about to become stabilised; I think we have reached the peak of the curve. But I think any reduction will be very slow and gradual, and it is dependent, in my view, on higher productivity of labour plus reduced prices for building materials. (Mr. *Presswood.*) Could we illustrate that in this way: we draw up a specification and advertise it, and we are finding that in almost every case the lowest tender exceeds the permitted amount. We have to go through the specification in consultation with the lowest tenderer and say "We will reduce the layers of paint and reduce the finishings". We have not found we have vitally spoiled a school by these reductions, but if prices went up much more that scaling down of the lowest tender would become a matter of difficulty, and we should have to start a simplification of certain features, for example the halls. The assembly halls and gymnasia are somewhat elaborate, even now, and I think we should have to think in terms of hall-cum-gymnasium if costs go up much more. So far we have managed to bring the cost down to the permitted figure without detriment.

Chairman.

1029. You do not anticipate coming down further?—It is going to be increasingly difficult.

Mr. *James Johnson.*

1030. The bill for school places will go up inevitably in the next few years, because we will get fewer pupils in the secondary schools we are building? School places will become dearer?—If you change from primary to secondary building, per child the bill will go up.

1031. The national bill is bound to go up?—Yes. I should say it is.

Brigadier *Peto.*

1032. Have you had any tenders less than the maximum permitted?—No, not one. The 1949 programme was not based on permitted amounts. Ever since there has been a ceiling figure the lowest tender has been somewhat above, and we have negotiated it down to the permitted figure.

1033. That is not because the builders know the figures?—I think they do know, but I do not think it is because of that.

Miss *Ward.*

1034. Do you think it is a good thing in the interests of economy to have a figure of that kind imposed, or do you think it would lead to greater economy if it was left to see the lowest you could get?—(Mr. *Roberts.*) My opinion is that is serves a useful purpose to have a ceiling price. I think without that the prices tend to rise. The contractors do know the figures. When they price their tenders they have that in their minds, and it inevitably results, in the case of Cardiff, in bargaining afterwards between the contractor and the Council Committee in order to bring it down within the ceiling. Personally I think the fixing of ceilings tends to limit building costs, not only in schools but in housing.

Chairman.

1035. Do you have much co-operation from the teachers of Cardiff? Are they represented on your authority?—(Mr. *Presswood.*) We have one teachers' representative on the Sites and Buildings Committee. Where we are building a school in replacement of another, we enter into full consultation with the headmaster or head mistress in the planning, and particularly in the furnishing and equipping.

1036. Generally speaking, the teachers would consider that the schools you are now building do not lower educational standards in any way?—I am sure they are of the opinion they raise standards very considerably in relation to what they are generally used to.

Mr. *James Johnson.*

1037. Would you say the teachers think at this moment, 1953 or 1954, the schools now being built are as good as schools built in 1948 to 1950?—I should say equally good, probably a little better.

1038. Cutting down circulation space is a good thing for educational technicians, apart from saving money?—Yes.

Chairman.

1039. I rather gathered earlier you had not cut down the circulation space?—Compared with the 1949 programme, our present schools are much more compact, and in my view much more efficient.

1040. Have you been able to cut out the passages?—(Mr. *Roberts.*) To a very large extent, yes.

1041. Have you got a school where there are no passages at all and in order to get to the classes you have to go through the hall?—No. I think the nearest to that is Moorland Road. (Mr. *Presswood.*) That is a small infants school, and the access is from the centre to the classes. We also have double-storey schools with vertical access to classrooms.

Mr. *James Johnson.*

1042. You have had no complaints from teachers' organisations about skimping of cupboard space due to the economies you must exercise in new buildings?—No, we have had none yet. It may be too early to say that. I doubt whether we will have, because the new school does offer an improvement.

Chairman.

1043. Have you made full provision for mentally defective and physically defective children?—We have adapted a house to provide for the younger educationally subnormal children, and that has really completed our picture. So far as physically handicapped children are concerned, we have an arrangement through the Welsh Joint Education Committee, and it is hoped a school will be built in Glamorgan soon. There are difficulties about the site, but that is in hand. At the moment there is quite a number of spastic children particularly whose parents are terribly anxious for them to have accommodation. I saw a representative of those parents recently, and they have asked that as an improvisation we should allocate a classroom with a specially qualified teacher, so that the children can go for some semblance of education. Whether the Ministry will agree that that is a practical proposition I am not quite sure, but it is a rather urgent problem in South Wales generally to have a school for physically handicapped children.

1044. You have special schools?—Yes, we have two.

1045. You do not have special classes in primary schools?—We have at the moment, but they are in process of being disbanded; they are called Delta classes; there are four is different parts of the city. We feel these children would be better dealt with either in the special schools or in the appropriate classes in the primary and secondary schools.

1046. Are you able to take into school all children at the beginning of the term in which they reach the age of five?—No. In view of pressure on accommodation, we have had to say they can start at the beginning of the term after their fifth birthday. That is to say, they begin on the legal date of entry into school, except in very few cases.

1047. What would be the average age at which they start?—Five years and two months—just over five.

Mr. *Norman Cole.*

1048. It could not be more than five years three months?—No.

Mr. *James Johnson.*

1049. Do you feel happy about getting all your secondary school places for the big bulge that is coming?—We have a large proportion of secondary grammar places in Cardiff. At present it is nearly 30 per cent. entry for both boys and girls. Even with the child population on the increase, there will still be an adequate proportion of secondary grammar accommodation. The secondary modern accommodation will increase by the provision of new schools in the next few years' programmes.

1050. Are you building any new technical schools?—We have started one; it is moving into an empty school. We shall hope in the programme to get a new building before long.

Mr. *T. W. Jones*

1051. Is the all-Welsh school a new building?—No. When we built and occupied a new secondary modern school as one of the 17 I referred to, part of that population was in a small school in the suburbs of Cardiff. The all-Welsh school had been occupying three class rooms in a school near Ninian Park. We were able to make the small suburban school into an all-Welsh school. It is much nearer to the homes of

the parents who want the school, and it made a very happy home for this school, which in the past three years has increased from less than 30 children to just on 90. I think the total number will be in the region of 100 to 120; I do not think it will rise above that.

Chairman.

1052. Mr. Presswood and Mr. Roberts, the Sub-Committee would like to thank you very much for coming to give evidence to us and for listening so patiently to our questions?—We have enjoyed coming and talking to you.

The witnesses withdrew.

Adjourned till Wednesday next, at Eleven o'clock.

WEDNESDAY, 18TH MARCH, 1953.

Members present:

MR. YATES in the Chair.

Mr. Norman Cole.	Mr. Malcolm MacPherson.
Mr. James Johnson.	Brigadier Peto.
Mr. T. W. Jones.	Miss Ward.

Mr. J. E. S. NISBET, Chairman of the Education Committee of the Association, Mr. J. MCBOYLE, County Clerk, Midlothian, and Mr. J. CRAWFORD, Director of Education, Renfrew, The Association of County Councils in Scotland; Councillor ROBERT MCLAUGHLIN, Convenor of the General Purposes Sub-Committee of the Education Committee, Edinburgh, Mr. J. B. FRIZELL, Director of Education, Edinburgh, Councillor ALLAN C. YOUNG, Convenor, Properties Sub-Committee of the Education Committee, Glasgow, and Mr. BAIN, Deputy Director of Education, Glasgow, The Scottish Counties of Cities Association, called in and examined.

Chairman.

1053. Gentlemen, we are very glad that you are able to come to give evidence on the question of educational expenditure in Scotland. Mr. Nisbet, you are the Chairman of the Education Committee?—(Mr. *Nisbet.*) Of the County Councils Association.

1054. Would you be good enough to introduce the members of your delegation, and would you tell us for the purposes of our records exactly what your functions are as an Association of County Councils in Scotland?—Each County sends one or two members according to the size of the County as members of the County Councils Association on education. We look after all educational matters so far as the Association is concerned. We do not deal with cities. The Association is purely advisory, having no executive functions at all.

1055. And, Mr. McBoyle, you are County Clerk of Midlothian, and Mr. Crawford Director of Education. Then we have the Scottish Counties of Cities Association. Councillor McLaughlin, you are the Convenor of the General Purposes Sub-Committee of the Education Committee of Edinburgh?—(Councillor *McLaughlin.*) Yes.

1056. With regard to the Scottish Counties of Cities Association, would you tell us exactly what the function is?—(Mr. *Frizell.*) I think the nearest parallel would be a federation of the four cities, Glasgow, Edinburgh, Dundee and Aberdeen which deals with all matters affecting the common interests of the cities of Scotland. To-day we have two cities, Glasgow and Edinburgh represented here. The other two have substantially expressed themselves in agreement with the main points to be put forward.

1057. You are an advisory body?—And a sort of consultative co-ordinating body.

1058. We have had a memorandum* submitted by the Association of County Councils in Scotland. Mr. Nisbet, perhaps you could answer a few questions on this memorandum. With regard to the school building programme, you say firstly: "In extensive new housing areas it is false economy to build schools with only minimum provision for day school education without having regard to the needs for community centres." Could you explain to us exactly what you mean by false economy

* Annex 7.

there?—(Mr. *Crawford.*) The point which the Association is putting forward is the fact that restrictions have been imposed, and as a result economies have been effected in facilities that should be provided in the schools. For example, take a very large new housing area, say, of 10,000 units. Schooling unfortunately is lagging very much behind the housing. We arrive at the position that when the schools are built there is no provision for social activities whatsoever. Where one hall has to do as a dining hall, gymnasium and general purpose central hall for the school it curtails social activities. If the school is to be used as we think it should be used for a certain period of time at least, as a community centre, then assume the school has been built without, these provisions and the community centre is not built until ten to fifteen years later, or alternatively that these additional provisions have to be built upon the school, we feel it is false economy following the building of the school to be faced with the very high cost of building to provide a community centre.

1059. Does this mean in the new estates going up now in Scotland you may not, because of this instruction about economy, provide adequate facilities for the community?—I would not put it so strongly as that. I rather put it this way. The restriction of materials is such and the demands for housing needs over schools are such that any request for a community centre at the present moment must be delayed for a considerable number of years.

1060. I want to pass on to a few questions on the whole of this memorandum. Then the Members of the Sub-Committee would like to ask questions. In paragraph 3 you say in the last sentence: "It is increasingly desirable that modern ideas on decreasing the relatively high costs of corridor and circulation space should be made widely known." Is not that widely known?—(Mr. *McBoyle.*) The point is that we feel that meantime each education authority and its staff is responsible for designing its own particular project. Our feeling is that there is scope here for co-ordinated action in some centralised machinery whereby you could get down to the possibilities of so designing schools that there is as little circulation space and corridor space as possible. This problem, particularly in the Counties, is being approached by individual architects working for their own authorities, either private or in the employment of the authorities, whereas we feel substantial economies could be effected if there was consideration of this question on the national level and some advice given.

1061. It is a very important question that you raise, because as far as we can gather in England and Wales there is this centralised guidance and direction through the Ministry of Education. Do we understand that does not operate in Scotland?—(Mr. *Crawford.*) I think the point we are putting before you is this. While it is true in England, where you are building a great many more schools than we are in Scotland, there is guidance given by a central Department as to corridor space, etc. Plans are produced in Scotland, a great deal of the knowledge of planning economically in the use of corridor space, etc., is not within the knowledge of the architects. That means when these plans come to the central Department there is delay, and the plans in many cases have to be re-cast. What we are suggesting is that sooner or later, and preferably before the plan is started at all, there should be excellent examples available on exhibition of how corridor space has been curtailed, and an architect could see that without wasting time going ahead with his plans. (Mr. *Frizell.*) With regard to the last paragraph in our Association's memorandum,* I think many of these points coming up about possible economy will stem from that idea of a centre in the Scottish Education Department where the experience would be gathered, where before you begin to put pencil to paper at all the architects would go and see the latest advances and also the bad examples of school planning, to know what to avoid, and only then start to put their first rough plan into shape.

1062. In the last paragraph of your memorandum* you do make the suggestion that "There is need for a centre in Scotland, probably at St. Andrew's House, where ideas and experience could be collated," etc. Surely that does exist in England and Wales through the Ministry of Education. There is central direction and guidance. Does this not apply in Scotland?—Yes, there is the guidance, but it comes too late. It comes after the sketch plans. First you have thought out the general framework of your school and prepared the sketch plans, and they lie on the desks of the School Building Section, and then only does the latest information and guidance come. It is not only with regard to circulation space but any aspect.

1063. Do not you get the Building Bulletins?—Yes, they are circulated.

1064. The same in Scotland as in England?—They are available through the Stationery Office. But much of it is not relevant to Scottish conditions. (Mr. *McBoyle.*) The real point is that there is

* Annex 8.

no comparable document issued in Scotland.

1065. Comparable to what—the Building Bulletins?—We have no Building Bulletins for Scotland.

1066. In paragraph 6* you say, with regard to the Scottish Education Department: "Some Education Authorities have experienced difficulty in preparing plans of new schools during a period when the standards for accommodation and costs operated by the Scottish Education Department are constantly changing with resulting delays in the progress of projects and the incurring of additional expenditure in architects' and surveyors' fees through the abandonment of plans." Can you explain that in more detail?—(Mr. *Crawford.*) There have been different minima or maxima—I do not know which—approved of by the Scottish Education Department. Let me give one particular instance in my own County. We had two schools being built. Before the urgent need for economy was so apparent the length of those classes was designed at 29 feet. The plans were prepared accordingly. Later instructions were received that the size of the classes should be reduced to 27½ or 26½, as the case may be. That meant a complete alteration in the whole set-out of the plan. Our point is the delay in settlement of a plan and approval of a plan and the alteration in the minimum standard approved by the Scottish Education Department, forced upon the Department by the urgent need for economy in effect, raised the cost of our schools. (Mr. *Frizell.*) I think an illustration of the raising of the cost is that the school is not put up, and therefore you have to provide some alternative, hire halls, erect huts, or more generally increase the cost of transport, which costs Glasgow over £100,000 a year; it costs Edinburgh £10,000 a year; that is because of the delay. It is not only a question of redrawing the plans, but also the other costs because the school is not there.

1067. What I wanted to find out was, could you give us any example where additional expenditure in architects' fees and surveyors' fees has been incurred through the abandonment of plans?—(Mr. *McBoyle.*) I have two examples in my own County. A particular secondary school would be sufficient to indicate the point being discussed. The position was that in 1949 the Scottish Education Department issued Circular 173 giving details of standards for primary schools and a certain amount of guidance for secondary schools. For example, classrooms were to be 27 ft. 6 ins. by 22 ft., and practical rooms 40 ft. long. In 1950 we had circular 190 which indicated the cost per pupil place in primary schools was to be £140, but that circular gave no guidance with regard to the cost per pupil place in secondary schools. In January, 1951, those were the instructions at that moment. My people determined the accommodation for stages 1 and 2, and submitted to the Scottish Education Department that for stage 1 only, the intention being that as this school was being provided for incoming miners from the West of Scotland over a period of years, it would be economic and better to do it in two stages. The accommodation agreed with the Scottish Education Department was 11 classrooms 27 ft. 6 ins. by 22 ft., practical rooms 40 ft. by 22 ft., and gymnasium 70 ft. by 40 ft. In March, 1951, the accommodation was approved by the Scottish Education Department and we proceeded with the preparation of the necessary plans, etc. Then in December we received observations from the Scottish Education Department on the sketch plans, in which they suggested that the classrooms be reduced from 27 ft. 6 ins. by 22 ft. to 25 ft. by 20 ft., and also that the number be reduced by 1 or 2. We were also called upon to reduce the size of practical rooms. Following thereon we had a meeting with the Scottish Education Department in January, 1952, and we agreed the following standards: 8 classrooms 25 ft. by 20 ft., technical rooms to come down to 36 ft. by 22 ft., and gymnasium to 60 ft. by 30 ft. The amended plans based on that were submitted to the Scottish Education Department in January, 1952, and approved later that month. We then took tenders. The tenders when received revealed that the cost per pupil place would be £351. The Scottish Education Department advised us that they could not, in view of the economy being practised, approve the scheme (stage 1), which was going to cost £351 a pupil place. Therefore it went back into the melting pot again, with an indication from them for the first time that the price per place for secondary school accommodation must not exceed £250. As a result we have had to have the whole school redesigned. We have had three sets of plans for this project, and I have had the unpleasant duty of negotiating a settlement with the architects for the work set aside, and with the quantity surveyors, because in this case the schedules had been prepared. I have had to negotiate a settlement with the architects and the surveyors, which, of course, has cost money. If we had had an indication from the Scottish Education Department in the beginning that the price for secondary schools was not to exceed a certain figure, then it would have been incumbent upon our architects to have seen that what they put

* Annex 7.

forward kept within that. But they had no such knowledge and the Scottish Education Department approved the plans of accommodation. (Mr. *Crawford.*) In defence of the Scottish Education Department, it has got to be appreciated that when the plans are submitted at the first stage it is exceptionally difficult to say what the cost of that per pupil place will be. It is only at a later stage that the schedules come out and the actual figure is revealed. They are in a dilemma. It looks as if the plans will meet the needs of the Department.

Miss *Ward.*

1068. You do not work to a figure already laid down?—The Scottish Education Department in their circulars have stated that it shall not exceed £140 for primary and so much for secondary. When the private architect sees that he says: "Yes, it will comply with that." But the very close approximation which they envisage in actual practice is not realised.

Chairman.

1069. I was under the impression that there had been no limitation of cost imposed in Scotland?—There are limitations of cost.

1070. Surely there is no limitation mentioned in any circular?—Yes, there is.

1071. Which circular?—The cost of primary places has been mentioned as £140. (Mr. *McBoyle.*) The Scottish Education Department are now indicating this quite clearly. They have indicated that for this particular project they are prepared to go to £250 but not anywhere near that figure in the future.

1072. When did they say that?—Within the last month or two.

1073. So far as England and Wales are concerned, circulars have been issued very much earlier limiting the cost. My impression was that whilst they were asking for economy in Scotland there was no absolute limit. Now you say that you have examples where you have had to prepare plans three times?—Yes.

1074. So that they were exercising some pressure in regard to the cost that you could incur?—Yes. I think it is correct to say that, along the line primarily of reducing the size of the provision. (Mr. *Frizell.*) I think it is true to say £140 was not laid down as a limit but as a broad indication. No mention was made of secondary schools. That emerges in the course of negotiations and discussion on a given set of plans.

Mr. *Norman Cole.*

1075. I have two questions burning me up. This is a most important matter about the question of interlocking between the private architects and the Scottish Education Department. May I ask, is it not possible, Building Bulletins or no Building Bulletins, for a private architect who is asked to prepare a set of plans for a primary or secondary school to consult the Scottish Education Department as to what would be approved? Surely that is the common sense thing to do?—I think there is a far more important stage before that. That is what we call the educational standards, what is to be allowed in a primary school of a given size. I think that is probably the source of most of the delay and most of the waste, the cases where it is ascertained on the working drawings, which come at a very late stage.

1076. I mean, could he not consult them on the general framework of what sort of school is likely to be approved by the Scottish Education Department? Surely the architect would go and say: "I have been asked to build this school. Can you show me prototype plans?"—(Mr. *Crawford.*) There is a code of procedure for building schools, and the code of procedure lays down that an architect will consult the Scottish Education Department at an early date to meet the very point you are raising. Often the private architect is running ahead of the Scottish Education Department and the plan has been produced before that early contact. In two cases in my own County that was what caused the trouble. (Mr. *McBoyle.*) There is no doubt about it, in the early days the private architect was more or less told we wanted a school for *x* pupils. He perhaps went on and prepared plans, and then we found the accommodation provided was not acceptable to the Scottish Education Department. Our technique now in my own County is to get the accommodation tied up with the Scottish Education Department; what are they prepared to allow—how many classrooms, how many practical rooms, and all that sort of thing. We get that fixed up, and that is Mr. Frizell's point. After that, if my Council have agreed to employ private architects, I arrange a meeting with them, and we sit down and discuss the general ideas and what my Director of Education has in mind.

1077. Is the Scottish Education Department represented there?—No. Then I immediately say to the architects: "You should now see the architect of the Scottish Education Department and discuss with him exactly what you have in mind."

1078. One more question on the second stage of the plans, when you have found your classrooms have to be lessened in

size. With all respect, would it not be possible to ascertain from the Scottish Education Department before the plans were laid whether the circular, which is possibly eighteen months old, has been altered?—They were altered in the course of the plans being prepared.

1079. Would not it have been possible to find out, by means of a telephone call to the Scottish Education Department, the latest size that they were likely to approve? There seems to be a time lag between their latest pronouncements?—(Mr. *Frizell.*) The real point is this. The Scottish Education Department, pressed no doubt by the Treasury to effect economies in education in capital expenditure, look for ways and means and say: "One way we can do it is to reduce classrooms." They intimate that to us.

1080. It would not have been possible to find out before you made the plans?—We could not find out before they made up their minds.

Mr. *Malcolm MacPherson.*

1081. Both from the memorandum* and the answers you have given, it would appear there is a very considerable lack of confidence or lack of working closely together between the authorities on the one hand and the Department on the other?—I think there is a feeling of uncertainty in regard to the educational standards during the programme of a school from the original idea until it is put up. I think during two to three years there have been four changes in what the Department have been prepared to accept under pressure of economy. Take a school in a city area. We were permitted about three years ago to have 21 classrooms and three halls, three assembly points. Subsequent to that we were permitted to have only 17 rooms and one omnibus hall. Then we were asked to reduce the size of the classrooms and cut down circulation space. Now there is just coming through the information that we must have 16 rooms. That can happen within a period of time from the germ of the idea of the school until it is realised. You can see the uncertainly that is caused among the educational administrators and the architects, who have got to advise as to what we want. The architect has got to take his drawing board and get on with his job. He cannot be telephoning every week and saying: "Have you changed the permitted size?" I think what we want is to get things more on paper as to what they are prepared to sanction and under what conditions, and a little bit of stability over a given period. Once they have given the O.K. on a set of plans, unless there is a national emergency let us complete the school on that.

* Annex 8.

1082. We cannot concern ourselves in this Sub-Committee with policy. It may be that a number of the uncertainties would come from changes of policy, but do I gather that the main burden of what you are suggesting is that a great deal of the uncertainty and delay can be avoided, apart from changes of policy, by changes of organisation as between you and the Department?—I think you could avoid it by two things; being quite clear as to what a primary school shall contain and to know that for a period that will be accepted.

1083. When you say for a period, you are going into policy?—The operation of policy in certain instances will have to be delayed. I think in the interests of economy it is right that it should be. It has an effect upon the Scottish Education Department and upon what they allow us and an effect upon us in drawing plans. To add the whole thing up, are you getting economy? They should be able to say: "We have approved of that school and it can go on. On your next school you are not going to get that. On your next school a different set of educational standards will have to apply."

1084. Can I refer to the last paragraph in your memorandum where you are talking about the centre for collation of views. Have you in mind some physical geographical centre, a building, rather than an organisation?—No, a section of the Scottish Education Department. I would not want something divorced from the day to day administration of our central Department. It should be something which has executive power as well. We have been dreaming of this for ten to fifteen years, but because of many difficulties it has not come into being. We do think a great deal of economy could be achieved by having a place to which you could go for all the necessary information, instead of as at present hearing about a new school going up in Inverness-shire, and everybody going up and seeing an elaborate building, and then going back and probably copying the mistakes. A great deal of that has gone on. You could go to Edinburgh and get the latest ideas, not only about the shell of the building but also the heating system, circulation and everything, before you sketch the first rough drawing. I think if you spent a few weeks on that, looking at plans which the experts in the Department (and there are some very fine fellows there) have agreed about, in the long run you will get savings.

Miss *Ward.*

1085. Do not you have any conferences with your Directors of Education on these matters?—We have conferences. I do not think conferences would achieve what I am thinking of.

1086. You have discussions about what is cooking, so to speak?—I think you have got to have a concrete problem—so many children to house, giving them a school in which they will be happy and work will go on efficiently—and then get what has been the latest school building ideas about all these things. It must be a place where they have sufficient staff and authority to amass all that. I think the conference idea is very good for the day to day practice.

1087. I think you misunderstand what I mean. Have you never had anybody coming from the Scottish Education Department and talking about all the new ideas and projects, etc.?—I would hope that would be an offshoot of a centre such as we envisage.

1088. Have you never had a meeting where you have had all this put before you?—No. (Councillor *Young.*) May I say a year ago, on the 27th February, 1952, the Scottish Education Department intimated in their circular No. 232 that there would be intimations sent from time to time to the various education authorities of the latest types and of what is cooking, as Miss Ward says. I am sorry to say that we are still awaiting what is cooking from the Scottish Education Department. (Mr. *McBoyle.*) I think what we had in mind was something like a museum. (Mr. *Frizell.*) No, something living. (Mr. *McBoyle.*) Well! A central library. We want to see the bad features to be avoided as well as the good features.

Chairman.

1089. I think we have got that point fairly well?—(Mr. *Crawford.*) We may be giving the impression—and we do not want to—that we get no help from the Scottish Education Department. That is wrong. I want to quote an actual case we have at the moment with regard to a trade school. The architect plans with the Department and discusses the ideas. The machinery is there for close liaison and help. It is just the delays, with economy waves one after the other, creating the difficulty. (Mr. *Bain.*) We have had in Glasgow Mr. Marshall from the Ministry of Education addressing the architects. That was arranged by the architects themselves. He has been up talking to them. (Mr. *Frizell.*) That is a complementary sort of thing to what we have in mind. We want a day to day centre.

Mr. *Malcolm MacPherson.*

1090. The experience you have been quoting has been mainly on primary schools?—Yes.

1091. In the next few years there will be much more secondary school building. In addition, if Scotland is going to repair the lag in technical schools, you will have to concentrate on those. Would this be a favourable moment for the Department to consider some sort of reorganisation on the lines you have suggested?—It would mean more staff. The Department have been overworked and have suffered from lack of staff. They must have more technical people on their staff. We say it would be a wise national investment.

1092. There was an indication that the building of schools in new housing areas lagged behind the houses quite considerably. In Scotland we have the advantage that the same Minister is responsible for both; in other words, you have the Scottish Education Department and Department of Health under the same general control. Would you suggest there should be some greater liaison between the various arms of the one body in this respect? One would think there would be a greater possibility of co-ordination in Scotland than in England?—(Mr. *Crawford.*) It is a very difficult question to answer yes or no. Let me quote an actual housing scheme. 4,000 or 5,000 houses are being erected. As you are aware, in Scotland the education authority is responsible for the Roman Catholic children as well as the Protestant children. The first thing to be determined is what provision must be made for the Catholic children and what provision must be made for the Protestant children. The second question is what unit of children per house must be taken for that housing scheme. There are no static figures. They vary from housing scheme to housing scheme. Therefore, in my opinion it is essential, or really it is inevitable, that there should be a certain lag of schooling behind housing if planning is to have any relationship with reality. It is not a question of relationship between the Secretary of State's various Departments, but the difficulty of obtaining the factors on which the official can go to his committee and say: "These are the requirements for that particular area."

1093. You say a certain amount of time lag is inevitable?—Yes, in my opinion. Mr. McBoyle is in a completely different position in a New Town. (Mr. *McBoyle.*) I have a point I want to make later about the New Towns.

Chairman.] Is there anything else on this memorandum?

Miss *Ward.*

1094. I did not really hear the opening comments. Do I understand that in some parts of Scotland the community centre built in connection with the housing estates is used partly by the education authorities; is that really the sense of your first paragraph here?—(Mr. *Frizell.*) No, the reverse,

although we are driven to use bits of any sort of building we can get for temporary school accommodation. What we feel is that a great deal of the social provision could economically be provided by allowing not just one hall in a primary school but at least two, and ideally three, because in Edinburgh at present we have 20,000 separate lets for social purposes in the year. There is obviously a great amount of social provision which could be met economically by existing buildings used during the day, with the same heating and administration and so on. It does not mean that all the community provision can be met in that way. Probably in each district you would require a little hall for that purpose to do things we could not permit in a school, such as drinking of strong liquor, etc. You will have to have some nucleus of social provision apart from the school, but a great deal can be put in a school building. You can have the advantage of using the accommodation in the daytime and at the same time during the evenings.

1095. You really think it is extravagant to have two developments of community provision side by side, so to speak?—Could we put it more positively? It is an economy to have two halls in a primary school instead of one if you are keeping in mind not only the school but also a certain measure of social provision.

1096. Is that a view held entirely by the Education section? Have you any views from the Town and Country Planning section: would they feel the same way?—(Mr. *Bain.*) I can say it is the duty of the education authority under the Education (Scotland) Act to provide facilities for social and recreational training in the form of a community centre.

1097. That is what I want to get at?—It is the duty of the authority, but under various circulars from the Scottish Education Department we are forbidden to proceed with the building of community centres. We make the plea that some provision should be made for community activities in the schools going up in the new estates. One sentence of a circular says that must be borne in mind, and the next says we must economise. (Councillor *McLaughlin.*) From the housing side, we have on the drawing board in the City of Edinburgh our first civic centre in a housing area, but that is still on the drawing board, and I cannot visualise any provision being made under any heading except education in the next ten to fifteen years. We have to provide it at the moment under education.

1098. It is a statutory obligation to provide it?—It is a statutory obligation, but it may be under Town and Country Planning it could be done by another Department. We are only at the drawing board stage just now. (Mr. *McBoyle.*) I have a particular case you should learn of. In my County, Midlothian, we have a big influx of incoming miners, a big concentration in the Dalkeith area. We conceived the idea that it would be economical and the best arrangement if we could arrange with the Miners' Welfare Committee that they would build their welfare and community facilities in conjunction with the necessary extension of Dalkeith School. Instead of the Miners' Welfare providing themselves with separate accommodation, if they built their special provision along with our school, then the gymnasium and common room, etc., could be available to both and form a community. The Scottish Education Department say: "We are sorry. We like the plan and approve of it in principle, but we cannot give you authority to make provision of what is not required for education purposes." That being the position, I am scared the miners will go and build their provision themselves, which in our view would be disastrous. It is a big community, and frankly a large proportion of the population are miners, and it would be in everybody's interest for community facilities to be provided in our extension to Dalkeith School.

Chairman.

1099. When you say it would be disastrous, what do you mean?—If I understand the miners' approach to life to-day, they do not want to be regarded as a segregated population. They want to be regarded as part and parcel of the community, accepting the obligations of the ordinary citizen and enjoying the ordinary rights. Our idea is to put them together. We have in this area communities with 1 miner per 3.5 of the population. We are trying to balance the population by bringing other people in. The miner is an ordinary citizen and not something apart. He ought to have community facilities in conjunction with his fellow citizens.

Miss *Ward.*

1100. Has there been any consultation? That would come from the Welfare Fund of the National Coal Board. Has there been any sort of discussion in your area about this proposition?—Yes, definitely. We have met representatives of the National Coal Board and Miners' Welfare Committee, and they are agreed on the principle of this. But we are at the stage where we must say to them: "We are sorry; we cannot go on; the Scottish Education Department will not allow us." They themselves have the money in their funds. I am afraid that they will go on their own. They do not want to wait five or ten years for community facilities.

Mr. *Malcolm MacPherson.*

1101. Is this an isolated case, or is the same thing happening in other areas?—Fife would be a comparable area with my own.

1102. Is there any similar problem there? —I do not know, because I do not know the policy of the Fifeshire Education Committee. I know the policy of my own Committee. I am quite sure we could get that information.

Miss Ward.

1103. On another aspect, you do refer particularly to the fact that you have not all the information that you would have liked about the cutting down of circulation space. Is it your opinion that the cutting down of circulation space is a good thing from the educational point of view as well as the saving of money?—(Mr. *Frizell.*) If there is going to be cutting down of space at all that is where it would be least disadvantageous to the educational efficiency of the school. We have got to admit there is a certain wastefulness about corridors principally. You have got to get from one point to another. and therefore you must have some means of doing that, but if you can devise some other means of getting from point to point, particularly in primary schools, if you got some way of cutting down these enormous corridors which are idle for all the time the classes are inside the rooms, I think we would save a tremendous amount of money and would be able to keep the classes at the size we want. We would rather sacrifice the space in corridors than in cutting down the size of classrooms.

1104. Am I to understand in fact none of the new designs for Scottish schools really embody the cutting down of circulation space?—We have in primary schools at present the idea of a staircase joining two rooms together. In a secondary school I do not think that could be the solution.

1105. You have not in fact started on that?—Yes, plans have started.

1106. I mean with regard to the corridors; I do not mean the one staircase? —We have certainly narrowed our corridors. In primary schools that is not really a very good thing, because if there is any emergency you must have space for two classes to pass.

1107. You have cut down in width?—Yes.

1108. You have not eliminated the corridors?—We have got new plans coming forward with this two classroom staircase system.

Chairman.

1109. We have a much longer memorandum* to look at. I do want to get this rather clear about costs. I have before me Circular 190 dated 18th August, 1950. In this circular it is said: ". . . primary schools should not exceed 55 square feet per pupil place, a figure determined to ensure that costs, save in the areas where building is unusually expensive, would not exceed £170 per pupil place. The Secretary of State is anxious that costs should be further reduced—he has the figure of £140 in mind—but he is reluctant to ask for any lowering of essential standards." As I understood it, the Scottish Education Department have never really insisted upon a definite limitation of costs, but from what I gather this morning may I say that the general position is this: you have not been certain actually about what was required, and that uncertainty has caused difficulties?—Uncertainty in the way that I gave in my illustration, of what constitutes a school in regard to school halls, etc. That is probably the first definite statement we have had for a considerable time.

1110. I am speaking about information I have received that there has been no suggestion that if you go above £170 they will not approve it?—(Mr. *Crawford.*) I have had half a dozen cases where the plans submitted to the Department at a particular stage were costing over £170, and they examined those plans and stated they could not approve of them, I think rightly. (Mr. *Frizell.*) It is common practice. We are being pushed down towards the £140 level.

1111. There is one other point I wanted to raise on this memorandum†. In paragraph 2 you state: "Modern school planning shows a tendency for the building to spread over a wide area, e.g., the aeroplane or butterfly type." Is not there one that goes up?—I think we are unanimous that, unless in the case of nursery schools and probably schools for handicapped children, which are a long way off, I am sorry to say, we have got to get up into the air rather than spread ourselves on the ground. The traditional school in Scotland was three-storey. (Councillor *Young.*) There is this reservation in regard to Glasgow, that there will be no reduction in the site area of the school. It is a recommendation from the Scottish Education Department that there shall be so many acres for a primary school and so many acres for a secondary school. We agree with what the Chairman has said, that single-storey is taking up too much land, but even if two or more storeys are put up we do not want to lose

* Annex 8.
† Annex 7.

the adjacent area for the playing spaces necessary in a city like Glasgow, where we have very little ground for playing spaces. (Mr. *McBoyle.*) It will be appreciated in mining areas it is sometimes impossible to build more than single-storey because of the subsidence question.

1112. We go on to this further memorandum* submitted by the Association of Directors of Education in Scotland. I think perhaps the Sub-Committee might like, before we go into this, to have a little information about some other questions. Firstly, with regard to the size of classes: can you tell us what the general tendency is? According to this book on the Education in Scotland in 1951, there were 1,986 out of 24,074 ordinary classes outside the code of what is laid down. Can you tell us whether that position is now better or worse, or whether the present restrictions are adding to the difficulties?—(Mr. *Crawford.*) I think I should preface it by saying that Scotland is a country with large schools and small schools. The number of pupils in a class in a small rural school bears no relationship whatever to the position as we find it in the urban areas. In the West of Scotland and the industrial parts of Scotland there are a great many classes in excess of the code. For example, I think in my own County we have 53,000 children and about 1 in 12 of the classes, unfortunately, is in excess of the 45. It is slightly higher, I think, in Dumbartonshire, and about as high in Glasgow.

1113. That is in excess of 45?—In excess of the maximum number in the code.

1114. Would it be very much in excess?—That is difficult to answer. It is between 46 and 48; very few are above 50; they are mostly between 45 and 50. Secondly, the position of the supply of teachers is such that the position will become worsened. I personally cannot look forward with any degree of equanimity to a reduction in the size of classes, because the teachers will not be there.

Mr. *Malcolm MacPherson.*

1115. You think the supply of teachers is the key factor in the size of classes rather than the supply of buildings?—It is both.

1116. I know they work together, but which is the ultimate determining factor?—We are at a period in the industrial areas where we are transferring our school population from certain parts to others. During that period it is most heavy upon staffing. 45 pupils may be found in a new housing area, but in the school which they have left the roll has gone down to 40 or 37, which still requires a teacher, so there may be 1½ teachers required where previously there was only one. In addition to that, there is an overall shortage of teachers. My view is it is not getting any better. (Councillor *Young.*) Can I say that our Director of Education, Dr. McIntosh of Glasgow, told us quite recently there is a shortage of something like 500 teachers in Glasgow. In supplementation of what Mr. Crawford says there are some classes in Glasgow with 60 on the roll. In the old areas, although the total rolls may be small, the classes can be large in numbers because they are being telescoped. In addition to what was earlier stated by Mr. Frizell we are spending just now, because of the lack of schools in our housing areas, £2,700 per week in taking the children back from these housing areas to schools in the central areas from which they came. For a 40-week session that is something like £108,000, the equivalent almost to the building of a primary school. As Mr. Frizell said, that is false economy to withhold the money for the schools, because in a year we could get an extra school out of the transport costs.

Miss *Ward.*

1117. Surely you could not, by building one school, get enough accommodation to accommodate all the children that have got to be transported?—No, we are not suggesting that, but we are saying that if the various economies had not been suggested from time to time—in 1949 Glasgow's school building programme was cut from £9 million to £6¾ million—we could have put up, not one school to accommodate the children transported, but at least four secondary schools.

Chairman.

1118. Let us discuss that question of transport now. Is not that due to the fact that your schools are not going up as quickly as your houses? Why is that so? Why cannot you have your plans whereby the school goes up as quickly as the houses?—I think it is admitted that the schools are not going up as quickly as the houses. I think you will admit that there is a certain housing target aimed at, 300,000 per annum. If we could, probably through the good offices of this Sub-Committee, or any other, get a similar target for schools, then we might get it. When it comes to the building of schools, the workers have not the same incentives, such as bonuses, overtime, canteens and so on. Therefore, it seems to us the building industry is more or less concentrated on the housing target to the exclusion of the schools. A school building target is really a housing target for children, because they are in these places for 7 to 8 hours a day.

1119. Would you say that figure in Glasgow of £2,700 per week is on the increase?—Yes, it is.

* Annex 8.

1120. It is not likely to remain stable or go down?—It is going up, because it is mostly for secondary pupils. When the contracts were made several years ago, no provision was made for an increase in the transport costs. We are just in the midst of negotiating new contracts.

Brigadier *Peto.*

1121. To what extent is the labour problem a factor? With the number of men you have got employed on houses, could you not by local authority action employ a percentage, something more than you are now doing, on the building of schools?—Unfortunately, it is not all, shall we say, labour owned by the Corporation. It is private labour and the contractors set their own standards. We are helping in this respect, that we are giving a guaranteed week and other conditions.

1122. My point is that it is really a local problem; it is your problem rather than the Department's, this problem as to at what speed you build your schools?—Probably it is, yes.

Chairman.

1123. Could you tell us something about your old schools? What allocation are you permitted for bringing old schools into a decent state of repair?—(Mr. *Frizell.*) In our Directors' Memorandum we say the modernisation of many of our old schools is being postponed because of the need to concentrate on schools in new housing areas.

1124. The Minister of Education in England has just issued a new circular, and it mentions a figure of £6,500 limit for minor projects. Have you a similar figure for Scotland? We are wondering whether if more money were spent on some of the old schools in bringing them up to date it would be an economy in the long run?—We have got some classes in the central parts of Edinburgh, from an educational point of view, down to the 30 or 34 level. In order to conserve your teaching strength you have got to telescope say 7 schools into 6, change your districts and gain a building. That makes it very uncertain as to which of your older schools you are going to modernise as day schools, because there will be a certain amount of rebuilding in the central part of Edinburgh. The only money we are spending at present on modernising old buildings is not for that purpose. It is in order to provide a temporary technical college because we cannot get money for a new one, or provide a temporary secondary school which is sufficiently near the housing area to feed inwards. I do not know of any major improvements on old schools in the built up part being permitted unless they are solving the present problem of secondary or technical education.

Miss *Ward.*

1125. You cannot use the minor project grant for building technical colleges, can you?—Yes. With a small sum you can provide a technical college, in miniature. We have got to put up with taking a primary school out of six or seven and closing it and gain the staff by that means and use the building for a technical college.

Chairman.

1126. What is the limit imposed in Scotland?—There is no limit.

1127. Is there no allocation per pupil, as in England, for the expenditure allocated for repairs?—(Councillor *Young.*) What happens is this. Sometimes we put in a project for the renovation of old lavatory accommodation, and we put that up to the Scottish Education Department, and we say probably there will be something like 70 or 80 schools that require this work. They say: "We will grant you 26 for a period of a year or two", but there is no fixed amount per pupil.

1128. Would you say you are getting adequate funds for the repair and maintenance of the schools?—Your question is very difficult. I speak for Glasgow. Sixty-four of those schools in Glasgow are now approaching 80 years of age; 65 schools are approaching 70 years of age; 101 schools are between 15 and 55 years of age. Your question would be applicable to the schools in the last group I have mentioned; that is roughly about a third of the schools in Glasgow; they would be worth considering modernising. (Mr. *Bain.*) The limitation is not money but technical staff. If we have only a limited staff at our disposal, even bringing in all the private architects we can get, they have to be concentrated on the building of new schools.

Mr. *Malcolm MacPherson.*

1129. Can you give us some information about the extent to which you rely on specialist school architects and the extent to which you rely on architects of more general practice?—Of the outside architects we employ, none of them, I would say, are specialists in school planning, and they require a considerable amount of close supervision in the preparation of their plans if they are to get down to the figures which they are expected to produce.

1130. On this matter of minor capital expenditure would I be right in thinking that a great many of the day release schools are built by way of adaptation and improvement?—Yes.

1131. Are they satisfactory?—(Mr. *Frizell.*) I think our only hope for technical

accommodation in Scotland is to take in the built-up areas some of our primary schools and turn them into miniature technical schools. They are not big enough. You can put the building trade in one and another trade in another. It is amazing what you can get out of one of these good solid Scottish primary schools with good solid floors and walls. They are all right for this purpose of putting heavy machinery down.

Mr. *James Johnson*

1132. With regard to the specialist school architect department; Coventry, for example, work in close liaison with the Ministry here and put specialist people on this specialist job. Have you any authority in Scotland doing that with the Ministry?—No. (Mr. *Bain.*) In Glasgow the position is that we have a fairly large staff of our own. We also have a large number of private architects who are not in any way specialists.

Chairman.

1133. Your memorandum*, I think, is an extremely interesting one and very much to the point. I see in the first paragraph it is stated: "The cost of alternative provision particularly in urban areas by way of erection of temporary buildings, hire of halls and transport is considerable". Have you any details about the cost of this temporary building you are obliged to put up. Can you tell us what you think about the H.O.R.S.A. Scheme?—(Mr. *Frizell.*) Probably the order of the alternatives is wrong. The most costly is undoubtedly transport and after that temporary buildings and after that hire of halls. The hire of halls is not a big thing in money except for adaptations; you have to make provision of lavatories and so on. There are two examples of temporary buildings costing £30,000 between them in one place. We have in Edinburgh had to provide temporary units on about six sites, aluminium temporary units.

Brigadier *Peto.*

1134. What was the cost of that?—There were 80 class rooms of aluminium, so it is a considerable cost. (Mr. *Crawford.*) More expensive I understand than the ordinary permanent building. (Mr. *Frizell.*) 80 rooms, which is four primary schools, less the halls. (Councillor *Young.*) Might I say one thing. Mr. Frizell mentioned that the cost of halls and rooms was not too bad in Edinburgh. Unfortunately it is not the case with us in Glasgow. We are spending something like £35,000 per year on halls and rooms for drill purposes, classrooms and dining rooms and so on.

Chairman.

1135. That in your opinion is rather a waste of money?—We consider if the plans made provision for dining and accommodation in schools or drill halls in schools we would not require to pay that £35,000 a year. It is not in the new schools.

Miss *Ward.*

1136. Could I put a question on Section A, causes of delay? The point is made about the change in development of new housing areas involving alterations in school planning. Do you mean to say they decide an area for housing development and plans are prepared for the school and then there is an alteration of the site of the new housing development?—(Mr. *Frizell.*) Yes. We had a case in a housing estate where we had our sites provisionally fixed in 1946 and we are just beginning some of the schools. There is another case to the west of Edinburgh where we had two secondary schools which were to be housed comfortably in the general plan. We are now pushed right out of the housing area to the boundary of the City, and we are having a fight with a property owner and may have to use compulsory powers. The site difficulty goes on all the time.

Mr. *Malcolm MacPherson.*

1137. What about the building regulations. If you are using, for instance, prefabricated parts, and that kind of thing do you find they come up against the regulations laid down?—Not seriously in Edinburgh. (Mr. *Bain.*) There are delays, I think, due to the severity of the building bye-laws in Scotland. The Scottish Education Department suggested a 9 ft. ceiling in one of our schools and the local bye-laws in Glasgow would not permit such a low ceiling.

Miss *Ward.*

1138. When you have got your schools pushed out to the boundaries because of the alteration of the siting, do you go on with the building of the schools or do you abandon them?—(Councillor *McLaughlin.*) We then have a fight with the planning people who say there must be a green belt on the outskirts and the school cannot go into the green belt. (Mr. *Frizell.*) The agricultural people say you cannot have your school and we start the battle again. (Mr. *Crawford.*) I think it would be unfortunate if the impression was gained that the experience of my colleague was uniform throughout Scotland. I am from a county, and when an area is given for a school that area has to be kept for the school.

Chairman.

1139. I gather the Association of Education Directors are agreed on this memorandum?—(Mr. *Frizell.*) It is a statement with regard to the country as a whole but six-sevenths of the country is rural.

* Annex 8.

1140. It does seem the regulations that exist are having an adverse effect upon the speedy erection of schools in Scotland?—I think the general picture is that not so much under town and country procedure as the way it is working out in practice, generally speaking it works out that the schools are really being left to the last in regard to sites, and in some cases may be pushed aside because of the needs of the planning of the area. I think the Secretary of State for Scotland before this blessed day of planning had a sort of omnibus authority and could say "We want schools and various other things."

1141. That touches upon policy and we cannot go into that. What we can find out is what is the effect of regulations. I was trying to gather a consensus of opinion. You are faced with difficulties in Scotland about adjustments between various changes which make it difficult for you to speed up your building?—Particularly in the cities and most particularly in Glasgow, I should think. (Mr. *Bain.*) Under the old regulations the Secretary of State called for the submission of complete layout plans of the housing estates. In circular 46 of the Department of Health for Scotland he left to the local authorities the adjustment of sites for schools and houses, but he did retain the power to call for information should that be necessary. In Glasgow we have been reasonably happy only recently in the adjustment of sites between housing and schools. Of course we have had to take our share of fairly poor sites and in some cases the Secretary of State's power could have been exercised to our benefit.

Mr. *Malcolm MacPherson.*

1142. To a large extent it is a problem in the hands of the local authority itself?—Yes. (Mr. *McBoyle.*) With regard to school building in housing areas, what I have found in my county with the incoming population and the population moving out into the bigger housing schemes is, they seem to have a higher percentage of school children who require to be educated. I would suggest as a vital economy that the recommendation is made that education authorities should provide as the nucleus of their school provision the minimum of school provision on a permanent basis that they think would be adequate for the population on a more stable level, and that in addition to that temporary buildings should be provided at the initial stages to take the bulge that exists; that would save transport and make for economies.

1143. I think Mr. Nisbet you come from Roxburghshire?—(Mr. *Nisbet.*) Yes.

1144. Can you tell us a little about how things are working in the rural centres because we have heard a good deal about the heavily built-up areas so far. The problem is more one of extending and improving existing schools, we are told. Does that mean in a thinly populated county like yours you get a fairly generous or more generous allowance for improvements and so on?—No, I think neither of those adjectives is applicable. We took up to the Scottish Education Department recently plans for a school to be built and were very disappointed indeed that the school we thought was required, which consisted of 12 rooms, hall, dining hall and gymnasium, had to be reduced by one room and that only one hall was permitted. That is not only not economy, because the other halls will have to be built later, but aesthetically it will not give such a pleasant looking building. That one hall will be used for assembly, then for gymnasium, and then when the room is full of dust the tables will be set for dinner. Then in the evening it is going to be the community centre. That, I think, is false economy.

1145. This problem is really a problem of long-term planning. In other words, the tendency is for the smaller country places to be deserted for places like Hawick. That is likely to be a feature for the next few years?—I am afraid it is. We have had to close down many country schools largely because of the shortage of staff, but also because the number of children has fallen to a point where it is no longer economical.

1146. Has it been possible to find any suitable use for the school when it is closed down?—I cannot think of any schools used for any other purpose. We are, of course, able to let the houses, but not the school buildings. I must say that in regard to any extension of a school that we have applied for I think we get more gentle treatment than we get if we ask permission to build a new school. They will not let us build a new school where there is a school existing. They may give us an aluminium classroom or two.

1147. As Chairman of your organisation, you will know about the situation in the Highland counties as well as the Border counties. Would you say what you have said about Roxburghshire is true of the Border counties and the Highland counties as a whole?—I think so, yes.

Chairman.

1148. On the second page you sum up broadly: "What is wanted more than anything else is as great a sense of urgency in regard to school provision as is shown in regard to housing"?—Yes.

1149. We must go on now to non-traditional buildings. Your experience has been

rather disappointing as regards non-traditional building. You mention higher maintenance charges which will be involved; you do not say which may be involved, but will be involved?—(Mr. *Frizell.*) Take our timber schools, for example. We have put up three timber schools in Edinburgh. I am perfectly certain the maintenance costs will be very high. We have to keep them painted. They are subject to our Scottish weather; normally we have pretty wet, damp weather, and the maintenance cost of a timber building will be admittedly much higher than a traditional brick building. In cost they were not much below.

1150. We understand the average net cost per place of the six schools built in timber since 1950, or are now being built, is almost exactly £150?—Yes.

1151. Which shows that method of construction works out slightly cheaper, but the maintenance charges will be higher?—Yes. (Mr. *Bain.*) Is there any indication whether those six schools have halls or dining rooms? (Mr. *Frizell.*) These are the complete schools. (Councillor *McLaughlin.*) The hall is traditional building, not part of the non-traditional school.

Mr. *Norman Cole.*

1152. Can you tell us whether you have any experience of aluminium schools, and could you develop this point, which surprises me a little, that there has been little economy as regards speed of erection of non-traditional schools?—(Mr. *Frizell.*) I think the crux of this is that you may get all your prefabricated units on to the site, but certain things must be in traditional construction. You must have your fitments, sanitation, etc.; these are all traditional. It is some small thing which may hold up completion, the heating system and so on. Your non-traditional school which contains certain elements of traditional material is not quicker in the end.

1153. You have found non-traditional materials dearer than traditional?—The school when it is finished is slightly more economic.

1154. The actual non-traditional units——?—are cheaper. The aluminium school has been our one success.

1155. You have found that the non-traditional elements in a non-traditional school, the materials, are not necessarily dearer than traditional school elements as regards the shell of the building and so on?—I think that is our experience, particularly with timber.

1156. You said you have had experience of aluminium schools?—Yes. I think the aluminium type is a non-traditional permanent school. I do not look upon that structurally as temporary. They are non-traditional, but they have not that temporary element of timber schools. Our experience of the one we have is very happy. It went up very quickly. It did not go up more cheaply—perhaps on a par with traditional. But our worry about it is that it is the one-storey type, which is in a city very wasteful.

1157. Did you find the aluminium school quicker to put up?—Yes.

1158. Appreciably?—Yes. (Mr. *Nisbet.*) That was exactly our experience. We built a 6-room aluminium school, and it went up very quickly indeed. (Mr. *Bain.*) We in Glasgow have built a large number of small aluminium schools, 4- and 6-class-rooms; they have gone up very quickly. We have completed one 17-room school in aluminium. The classrooms went up very quickly, but the traditional sections, the assembly hall and so on, and especially the heating, delayed the occupation of the school.

Mr. *Malcolm MacPherson.*

1159. Apart from the timber school, would you say there was anything in the difference between the Scottish and English climate which would make desirable a different policy with regard to the type of building?—(Mr. *Frizell.*) I think if we were given the choice we would have the traditional building, stone if we could, but certainly brick.

Mr. *James Johnson.*

1160. Is there anything in favour of the aluminium other than the speed of erection?—(*Mr. Crawford.*) Yes, the brightness and airiness. The classrooms seem to be more commodious. (Mr. *Frizell.*) The teachers find it very comfortable and practicable.

1161. One the whole, you are in favour of aluminium?—(Councillor *McLaughlin.*) On the aluminium unit as designed they have a very large glass area. It is not beyond our power to design a traditional school with the same glass area. Our experience on the aluminium school is that they have been very lavish of corridor space, and they raise a great many heating problems because of the large variations in temperature.

1162. But what about the aluminium building *per se*?—Coming from Edinburgh, I would prefer that all our buildings should be traditional. (Mr. *Frizell.*) You are thinking of the aesthetic sense?

1163. Yes?—I think the reaction is against them from that point of view. With the one we put up in Edinburgh, we left

the trees round about, and I think the trees redeemed it. But I should have hated to see the school on a hill in the suburbs of Edinburgh.

Mr. Malcolm MacPherson.

1164. What have you found the most economical method of heating?—(Councillor *McLaughlin.*) Low pressure hot water.

1165. And thermostatic control?—Yes. (Mr. *Bain.*) We have found in Glasgow forced air convectors rather than radiators have been an economy.

Chairman.

1166. In the paragraph on economies in building, I think you are rather bringing in questions of policy, whether money spent on education is in the end finally an economy or not?—(Mr. *Frizell.*) There is one point here. We are not denying the need for economy. We are trying to make the point that you can get economy in the £ s. d. sense and it is not incompatible with a good school, but in order to get that you must not look upon it as an architect's problem but a problem for co-ordination between the administrator and the architect.

1167. You make recommendations here with regard to economies that you think might be carried out. Do you think you could, if these economies were effected, bring down this figure that is allocated for building, or are you not faced with rising costs which might operate against that?—(Mr. *Crawford.*) We are faced with rising costs all the time. (Councillor *Young.*) I think it would be fair to remember, with regard to the memorandum from the Directors of Education, that Glasgow is not necessarily in favour of all the suggestions that Mr. Frizell has made. (Mr. *Frizell.*) They are merely exploratory and things which can be looked at to see whether we can agree.

1168. In paragraph (i) on page 3 you do state that: "Building costs in Scotland seem excessive when compared with England." Is that in general or in regard to school buildings?—It is in regard to building generally.

1169. You say: "This would seem to merit a special inquiry"?—There are many reasons we could guess at, but I think it would be merely guesswork.

Mr. *Malcolm MacPherson.*

1170. Would you put down transport as one of the big factors?—Transport of certain materials, certainly bricks.

1171. What about prefabricated parts: where do you get them from?—Mostly from far away.

Mr. *James Johnson.*

1172. Can you give us any false economies which militate against the efficiency of the school?—The cutting out of certain rooms, educationally speaking, is probably the worst feature.

Brigadier *Peto.*

1173. The best example of that, surely, was the one given by Mr. Nisbet—one hall for all purposes?—Yes. (Mr. *Crawford.*) The cutting down of classrooms to the 25 ft. means that the space between the front desk and the blackboard has been curtailed considerably, and therefore the teacher is more or less pressing upon the pupils. When it comes to the question of group teaching, etc., there is not the space to allow modern educational practice to be operated and that is a decided disadvantage.

Chairman.

1174. There was a question I asked earlier on, and I did not get an answer; that was the question of the H.O.R.S.A. huts, which seem to be very expensive? Does this mean you will not be able to get more permanent buildings because of those huts?—(Mr. *Frizell.*) The H.O.R.S.A. huts were the schools' lifebelt. Nobody liked them and they were not cheap, and they looked cheap in the other sense; but they gave us a roof at the time when the age was raised.

1175. There are a lot of them in use now?—Yes.

1176. How long are they expected to last? —They were expected to last ten years, but they will last more than that.

1177. What do you visualise in your plans for replacing them?—In the case of Edinburgh, with the new housing development, our secondary school provision is going to be on the outskirts mainly. What we are hoping is to see probably 25 per cent. of the population in the central part moved out to the outskirts, and we should have our secondary schools there and take these huts down. I think by that time their life will be over.

Mr. *Malcolm MacPherson.*

1178. Was it this type of hut you were suggesting, Mr. McBoyle, for the temporary bulge?—(Mr. *McBoyle.*) No. We rather prefer the timber. We do not like the H.O.R.S.A.

Chairman.

1179. You mentioned earlier on the question of teachers. I suppose if you could develop in the way you want to develop these buildings, you could not get the teachers, could you?—(Mr. *Nisbet.*) No.

1180. If that is so, why is that?—(Mr. *Frizell.*) I happen to be a member of the Supply of Teachers Committee. It is a fact-finding committee to estimate the shortage which is going to exist if something does not happen. The Secretary of State is holding a conference, I think next week, to ask all bodies concerned how they think we are going to overcome this shortage.

1181. We understand you have more than adequate facilities for the training of teachers; that is to say, the buildings, the training colleges?—May I say, putting aside the fear that we have reached the stage in this country where we have not got the number of people for all professions, putting that aside, if there are the people available, there are two things necessary; you have got to make the job more attractive: there are the salaries and the conditions of service. There is also the question of social prestige which to a certain extent has to be earned by the profession, but society could give a certain measure of recognition more than it has done. This is all to be debated at this conference. I think, generally speaking, we are not relatively as badly off as England. Your problem is greater because you have a fairly big number of uncertificated teachers in England compared to Scotland. I think in quality we have the best. I think we have 50 per cent. graduates in our schools.

Mr. *T. W. Jones.*

1182. When you say England, you are excluding Wales?—Yes. I once heard someone say that the Welsh case is the Scottish case, and that is all he said.

Mr. *T. W. Jones.*] May I say this: I think the observations made by the Association of County Councils in Scotland on the school building programme is one of the most practical things we have had. There is something very worthwhile in it, since we are concerned with economy.

Chairman.

1183. Is there anything else you feel we ought to know?—(Mr. *Bain.*) I feel that I ought to comment briefly on item (k) on page 3, regarding the method of placing contracts. A rather minor point is where you get a general contractor for all trades. I am told prices of the sub-contractors are higher because they have not the same confidence in the main contractor as they would have if they were drawing the money straight from the authority as separate contractors. As a major point I wonder if it is not possible to do something which was done during the war, where a contractor was put on a job and told to get on with it and no tenders were taken. You may sacrifice something in cost, but I think you could gain much in speed.

1184. You mean to say you would cut out competition?—Yes. (Mr. *Frizell.*) I think the Directors are saying, could we examine the traditional method of contracting in Scotland, which is the very worthy one of preserving the different crafts. If you take in your tenders and place separate contracts, there is no man to get the thing moving except the clerk of works, and one person falling down can delay the whole building. We wonder if there is not something in the more popular method in England of one contractor.

1185. Could you let us have a Memorandum about what you think about this? Information should be available on the most efficient and economical methods. That is very important; we are interested in that. If you could give us a little more information as to what is in your mind about that, we would be pleased?—Yes, we will gladly do that.

1186. I am sure the Sub-Committee would like to thank you very much indeed for your co-operation in answering all our questions, especially after a night of travelling?—(Mr. *Nisbet.*) May I, on behalf of all of us, thank you very much for the courteous and interested way in which you have received us to-day. It has been a great pleasure to appear before you.

The witnesses withdrew.

Dr. A. R. MURISON, President, Mr. WILLIAM REID, Member of the Executive, and Mr. WILLIAM CAMPBELL, General Secretary, Educational Institute of Scotland, called in and examined.

Chairman.

1187. Dr. Murison, you are the President of the Educational Institute of Scotland?—(Dr. *Murison.*) Yes.

1188. I take it that your organisation is something equivalent to the teachers' organisation in England?—Yes, we are roughly similar. We represent some 28,000 teachers of all grades in Scotland, primary, secondary, further education and so on.

Brigadier *Peto.*

1189. Is it all religious beliefs as well?—Yes.

Chairman.

1190. Have you separate teachers' organisations or headmasters' organisations, or do they all come within the same organisation?—The comprehensive one is our own, but in addition we have the Senior Secondary Headmasters' Association, membership of which is quite compatible with membership of the Educational Institute; in fact most of the senior secondary headmasters are members of the Educational Institute.

Mr. *James Johnson.*

1191. Have you any splinter unions like the National Association of Schoolmasters?—We have a small splinter organisation at the moment. It commenced as the Secondary Teachers' Defence Association about six years ago, and then they decided to form themselves into a semi-permanent body called Scottish Secondary Teachers' Association. That is, of course, very much smaller than the Educational Institute of Scotland, and in fact represents only a minority of the secondary teachers.

Chairman.

1192. You know we are a Select Committee of the House of Commons inquiring into expenditure on education. We are rather concentrating on building, and it is for us to make recommendations where we think economies can be effected. We do not deal with policy as such. Could you tell us what you think are any special difficulties or problems with which teachers are faced?—We are faced with a great many difficulties at the present moment, but I think I might call on Mr. Reid to answer this; he knows much more about school buildings and building needs than I do, and was a member of the Scottish Committee on School Building which reported to the Secretary of State, Mr. Thomas Johnston, in 1945.

1193. Have you anything specially to tell us in relation to buildings, Mr. Reid?—(Mr. *Reid.*) We included in this Report a special section dealing with delays which were anticipated post-war. This is Post-war Building Studies No. 21. School Buildings for Scotland, 1945, which may seem out of date today, but there is incorporated in Section VII the special problems of the post-war years, in which we try to anticipate for all school buildings the problems we will have to face. While this Report deals mainly with primary and nursery schools, the general principles enunciated there govern the present-day situation. I would like to run through what I have done here first, and then deal with delays causing increased costs. I would like to point out first that the school is essentially a functional building. It must be judged by its functional suitability, not its architectural pleasantness. The school must contain the units necessary for carrying on the particular form of education, and those units must be so grouped that the system is carried on efficiently. Let me first of all deal with the position of the siting of schools. We mention in this Report one of the problems that faced us in 1945, and that is this: too often for school building a residual site has been left after the Town Planning Committee has dealt with the area. Uneven or unlevel sites are costly from the point of view of excavation. A school frontage may be as long as say, 300 ft., but take 200 ft., single-storey building, which seems to be the vogue for primary schools today, and quite a number of post-primary schools: consider the frontage being levelled on an uneven site and compare it with a housing scheme in the same area where the longest frontage, possibly, is 60 ft. I submit that the Education Committees building these schools are faced with considerable cost in levelling up or excavating or under-building. The second point is this: the site plan as such must have consideration in all its departments for easy circulation of pupils. I am talking mostly about post-primary schools where the pupils change possibly on a period basis. A sprawling school spreadeagled round a central corridor means waste of time travelling from room to room. I can quote one school where they travel 80 yards from one section to another. The planning is badly chosen.

1194. When was that put up?—That is being built now.

Mr. *Malcolm MacPherson.*

1195. What school is that?—Inzievar School, Oakley, Fife, where I submit the contours in the siting plan have not been used to the best advantage. The excavation is considerable. The length of travel from the rear of the school to the front extends to about 230 ft. From a department of the school sited to the north of the site to the front portion, which is the gymnasium, the plan is on a rising contour of 35 ft. from the gymnasium site to the practical room at the back.

Miss *Ward.*

1196. Is that put to you as a sort of modern example of economy?—I cannot say it is an example of economy. It is a school that has been accepted and approved in Scotland for the purpose of building.

Mr. *Malcolm MacPherson.*

1197. Can you give any indication of the difference between the cost per place in that school and the cost per place on a better site?—I cannot at present. How many pupils it will have to contain I cannot tell you. The cost per place cannot be assessed until the school is occupied.

Mr. *Norman Cole.*

1198. Surely the school is laid down for a certain number?—It is a growing area. They have cut off already the infant department. That is taken away from the original site. Under those conditions I cannot say how many pupils there will be.

1199. Are the teachers brought into consultation by the authorities?—As a body, no, not even the teachers concerned in the running of that school. The headmaster has seen the plans, and is at present making certain recommendations for the improvement of the school. But the plan has been passed, the site has been chosen, and the siting is such that alterations would be serious in cost.

Mr. *Malcolm MacPherson.*

1200. Is the Institute consulted by the Department?—The only consultation I am aware of is that we were allowed to have representation on the Schools Advisory Buildings Committee, but because we were awaiting the Report of the Advisory Council on the Scottish Secondary School that Committee fell into abeyance, and I feel our recommendations contained here, if applied to post-primary school accommodation, would have a salutary effect.

1201. If you were kept in continual consultation with the Department would you be able to give valuable information?—Both of a general nature and also a particular nature, once we see the site plan.

Chairman.

1202. When you talk about levelling of sites, are you suggesting there should be a different plan?—I think the siting plan could show a re-grouping of all the various departments in the school in such a way that it would offer the minimum amount of excavation, the minimum amount of underbuilding, and the minimum amount of travelling inside the school. The more compact the school, the simpler it is to control and the easier to regulate.

Mr. *Norman Cole.*

1203. What you would prefer would be a better site altogether?—Yes, not a residual site at all. I feel we want to come in earlier, at least simultaneously with any Planning Committee.

1204. Is this a residual site?—I can call it residual to this extent: I think I am correct in saying it was the one left by the Planning Committee to the school.

Mr. *James Johnson.*

1205. Is there teacher co-option on your Local Education Committees?—(Dr. *Murison.*) None at all. We feel things would be very much better both as regards the choosing of sites and planning if the people who had to use the schools were consulted earlier on both a national and local level. The practice in Scotland is that no consultation of any kind takes place.

Mr. *Malcolm MacPherson.*

1206. Have you made any representations to the Department on the question of the types of buildings, the design of buildings?—This document is the first step. At local level various requests have been made by the teachers that they should be consulted earlier and all the way through, but these requests have not been granted in many cases.

1207. Is there any consultation with the teachers in the case of special schools for physically or mentally handicapped pupils, on which there is a comparatively small body of information, and the teachers must be a fairly sizeable proportion of it?—That I cannot say.

Chairman.

1208. As far as you can tell us, you have no recollection of any teachers who sit as co-opted members on Local Education Authorities?—None at all. (Mr. *Campbell.*) The nearest approach to that is the establishment of Local Joint Committees. Those are purely advisory for discussion of difficulties inside the school, mainly, techniques of teaching, and that sort of thing. In some areas those are working with a number of representatives of the Local Education Authorities and representatives of the Institute, the teachers. Whatever recommendations they make may be brought up in the Education Committee, but there is no guarantee of that, and that is the extent of consultation. I do not know whether a matter of this kind would have come within the scope of discussion. (Dr. *Murison.*) They were set up for a totally different purpose.

1209. This Report you are quoting from: did that go to the Secretary of State?—(Mr. *Reid.*) Yes; it is signed by the Secretary of State.

1210. Could you tell us what part of the recommendations you have made have been accepted?—The whole of this was accepted.

1211. But not put into operation?—No, unfortunately.

Chairman.] I am really trying to find out what was acted upon.

Miss *Ward.*

1212. Was it a unanimous Report?—Yes, unanimous from the Committee concerned, representative of Directors of Education, teachers, Local Education Com-

mittees and Town Council Committees, as well as contractors.

Chairman.

1213. You explained about the siting, and then you were going on to say something else?—Yes. Section II deals with siting. sites for primary and nursery and secondary schools.

1214. That has not been accepted?—From what I have seen of the siting, and I have travelled fairly considerably over Scotland, the contours are not put to the best advantage in building schools, and, of course, that is due to the fact that the education authorities have possibly no option in the matter; they are left with the site, and haggle as they might to get it changed, it is there and it has been passed and approved by the Planning Committee, and they have to make the most of it.

1215. You were going to pass to something else?—Yes. There is delay in actually attacking the problem of building schools. It seems the multiplicity of committees and the rubber stamping to be done means that each committee must be honoured and have its little privilege. All the time that is going on, remember the costs of material and labour have been increasing, and if there could be some means of speeding up the acceptance of and the putting into operation of the building—that means getting the permit and starting date from the Department—there might be a considerable saving against the rising market in labour and materials. That delay is causing worry because the need is urgent for schools.

1216. Do you know anything about the procedure in England?—No.

Chairman.] I was wondering how it compared, whether the delay in getting through these various committees is more in Scotland than in England.

Brigadier *Peto.*

1217. Could you enumerate the committees?—The origination of any school comes from the Education Committee. The Education Committee remit the problem possibly to a sub-committee and also to the Planning Committee of the area. The Planning Committee will draw up a suggested plan for the site suggested, the number of pupils for the school, the type of school, primary or post-primary. Then it goes back to the Education Committee for discussion and acceptance. It may be remitted to the Finance Committee for costs. If it is finally approved by the County Council as the type of school to be accepted in regard to site and cost, it must be discussed from the point of view of the various District Committees and County Committees. Then it goes before the Scottish Education Department for approval. It waits there. Many problems arise.

1218. Do the Scottish Education Department ever refer it back?—I am afraid they do, according to the cost and size and nature of building. Then remember that it comes before the local committees, the District Committee, simply to be rubber stamped. It is in the time element where the economy can be; costs are rising against that time factor.

Mr. *Norman Cole.*

1219. Surely the design of the school would not go to the Planning Committee?—There are in certain towns a Planning Committee attached to the Education Committee only. In the County you have two committees, the Planning Committee responsible for the whole area, and then a Housing Committee responsible for erecting houses in that area. At that stage there seems to be a lack of prevision, a lack of consultation, between the various committees. For example, in a great many housing areas the type of house, three-roomed or four-roomed, is not clearly defined to the Education Committee, who have to face the problem of numbers. The date at which so many houses may be completed is not clearly defined. In our Report we more or less specified a unit per house for primary school population and suggested a unit per house for post-primary consideration. Taking those factors and remembering the nature of the area—an industrial area will mean a higher unit than a non-industrial area—you may get an elderly population transferring in and not requiring any units at all for school purposes. On the other hand, it may be younger married people who require a larger provision. On the plan I think the figures can be taken slightly higher for the industrial areas. If that information were available, the Education Committee would be in a better position to anticipate things, and therefore build accordingly. The early part of the school could be ready for the school population at an early stage, and the later part finished as the numbers increase. That prevision is very necessary. Sometimes I feel the consultation does take place in the correct spirit of co-operation. I would like to emphasise the position of the headmaster of this type of school. If the headmaster has already been appointed and is on the spot and knows the details of growth of the area, he can anticipate his gross numbers and advise accordingly. My point now is the position of the headmaster in such a school. Sometimes we are dealing with the headmaster who is already appointed. He knows the nature of his courses and can anticipate the numbers from the numbers of housing given, and he

can guide any school planner on the nature of the school provision, say, for classroom purposes or practical purposes, for gymnasia, etc.

1220. How would a new headmaster know anything about the detail?—The new headmaster would not, and that is the point I want to raise. We have in each County area a body called the Educational Institute of Scotland, where there is a great wealth of experience. I feel a reference there might be helpful. I will not say it will eliminate all unnecessary costs, but it would be helpful in trying to anticipate the type of building wanted, because the experience of other members of that body in similar schools can be pooled and passed on. In the actual planning of the school I feel that is very necessary. Experience is wanted. You do not want a young architect who has scored brilliantly and is attracted by new ideas or types of material, etc.; you want the type of architect who knows first of all what is needed from the functional aspect of the school building, who knows his materials, and is prepared from his own experience to offer the best possible type of plan. That type of architect must have experience in practical work. Too often the architect who is chosen is the one who is able to draw an attractive drawing board design which attracts the interest and receives the approval of the committees concerned, without appreciating to the full the detailed internal arrangements necessary before such a plan can be put into operation.

Chairman.

1221. Surely in judging that you judge by the results?—Yes, but it is too late.

1222. Can you give us examples of schools which are a reflection on the architect?—(Dr. *Murison.*) I can give you my own, which is probably one of the most costly in Scotland.

1223. What is that?—Marr College. My Governors paid an architect for six months to go round Scotland and England and take the best that he saw in each school. When I went there, too late to do anything about it, I found that in order to have the stage of the main hall and the two gymnasia on the same floor for the purpose of having an occasional dance my two gymnasia had been placed over classrooms, with the domestic science department in one and the technical in another, when it would have been so easy to have had the gymnasia on the ground floor, with the lavatories and wash basins and showers projecting out, so that they could have been used for my very spacious playing fields.

1224. Is that a recent development?—I went there in 1930, too late to do anything. It was built in 1929. That is the type of thing that can happen. That was by a very experienced and distinguished Glasgow architect, who knew nothing about school planning.

1225. That is going back to an earlier time, but would not it be true to say that the architects you are now employing are showing a considerable improvement on that?—Not necessarily. I think what Mr. Reid is getting at is this, that before the future of our new school site is committed to anyone the authority should make sure that the man who is selecting the site and drawing the plan should have had considerable experience of similar school siting and school building. I think I have followed your point. (Mr. *Reid.*) That was my point.

1226. Have not you had difficulty in getting architects?—No. There is this point. Where the local Planning Committee finds itself overloaded it gives out its work to private architects, but in nearly all cases it prefers to do it itself in my particular area. The result is a private architect with experience is not going into the employment of a County Council but will remain in private practice, with the result that you will find younger architects in the County Council being left with the responsibility of planning a school for £250,000 with no experience at all of even working up to £10,000.

1227. With regard to these new types of buildings, what views have you got about the various types of buildings, the prefabricated as against the traditional?—In the first place, I would be very rash to pass any judgment on prefabrication, because they seem to have come in to supply the need of speedy erection. What they are going to be like in three, five or ten years' time is hard to say, but at present, because of the unit system on which they are built, and because they are proprietary articles, you take them from the firm; there again the site value must be considered, because nearly all these schools are not adaptable to the siting given to the school. The result is that you have costs in excavation and under-building. Quite a number of these schools will have to be re-designed in relation to the site rather than a school with a definite planned shape forced into the site.

Mr. *Norman Cole.*

1228. You used the expression "units". We are talking about the whole school?—That is based on the unit; the whole thing is built up unit by unit. It may have a gymnasium round which the prefabricated classes are built.

1229. Mr. Reid also mentioned they had one purpose, and that was speed of building. Is it your experience that there has been greater speed of building as a result

of using non-traditional methods?—I am afraid I cannot agree there has been. I cannot say there has been. There are three schools within my knowledge of prefabricated units going up now, and the delay is causing considerable worry to my Director of Education and the headmasters appointed.

1230. What is the delay caused by?—First of all, I would say, lack of suitable skill in the supervision of the job, and secondly lack of enthusiasm to get on with the job.

1231. What about the traditional parts of non-traditional schools?—The traditional parts?

1232. The traditional parts, those parts which must be in traditional structure?—These parts are serving a very definite useful purpose. I have no complaint at all of such parts.

1233. It may be I am on a point that has not come to your knowledge. It is the case that certain non-traditional schools have in many cases a traditional part which has perforce to be traditional; in other words, the whole structure is not non-traditional; some of it has to be of a permanent character?—It is all permanent.

1234. I mean a traditional character. I wonder, have you had any experience of that part holding up the speed of the non-traditional part?—No. But remember, in these particular schools they are a very small part of the school units.

Mr. *Malcolm MacPherson.*

1235. Has the Institute as a body any preference between non-traditional and traditional?—(Dr. *Murison.*) We have certainly got to accept the quick method just now, but we prefer the traditional type.

1236. On what grounds do you prefer it? Are there any educational advantages which are lost, for instance, in the non-traditional?—I think as a general rule they are much more comfortable. After all, in the traditional type of school there is always greater amenity, and that has a very big effect on education. I can speak from my own experience there. All my classrooms, for example, are panelled, and have been in operation for 17 years, and there has never been the slightest damage done.

1237. But that would not be an essential part of traditional building?—Not an essential part, but I am trying to make out that it is very important from the standpoint of the child's education that the accommodation provided for him in school should be as good as possible and as charming as possible. If you are going to educate the child in semi-temporary huts, I do not think the child is going to have the same aesthetic appreciation for things later.

1238. But that is not quite the point, is it? Non-traditional building need not be semi-permanent nor of the hut type. If you have a non-traditional building which is of a permanent type, is there any loss of actual educational benefit or amenity in that as compared with traditional?—It depends how you define non-traditional. (Mr. *Reid.*) I can think of two cases, one in reference to three schools and one in reference to one school. In the case of the single school the siting of the staff rooms and lavatories and cloakrooms does not suit the convenience of the school from the point of view of circulation. In the case of the three schools, to approach the second storey classrooms you must go through each room.

1239. Is that inherent in the non-traditional building?—That is because of the particular design put into operation.

1240. There is nothing inherent in non-traditional structure which brings that out?—It depends on the material used. In aluminium schools, it is well known they are over-heated in summer, and you require extra heating in winter to keep them up to the necessary heat. The floors are mostly of concrete.

Chairman.

1241. The non-traditional building is built with a view to saving circulation space?—I do not think so. It is too sprawling a building. I think you can save on corridor space.

1242. When you talk about going through classrooms, is it not in order to save circulation space, corridor space?—Yes, but that is bad educationally. You are detracting from the educational efficiency of the school if you find two or three rooms are linked up by doors and partitions.

1243. You do not think that can be justified in any circumstances on the grounds of economy?—It cannot, because what is of paramount importance is the educational efficiency.

1244. What do you think about timber schools? We understand the ones built in Scotland have been constructed more cheaply?—And more quickly. They have adopted a more or less traditional plan, but we have got to consider also the fire risk. Provided the fire risk is not increased unduly, timber schools would be satisfactory, and provided the insulation is sufficient to guarantee warmth in winter and provided at the same time they will not be excessively warm in summer.

Mr. *Malcolm MacPherson.*

1245. Timber schools are very commonplace in Canada and the United States.

where you have very warm summers and cold winters?—There is a difference in the quality. The timber school put up in Scotland is simply of five-eighths or seven-eighths weatherboard. It is an entirely different matter.

Mr. *James Johnson.*

1246. Can you tell us whether economies in school building for the last three or four years has led to what you would term inefficiency, speaking as a teacher; and speaking of the internal economies inside the school itself?—Yes. Where classrooms lead off a central hall, it is definitely educationally inefficient. Where the grouping of departments is so scattered that the control is wellnigh impossible, that is educational inefficiency. Also from the point of view of economy in costs: take some of the practical rooms where public utility services have to be laid on, electric light, gas, etc.; look at the length of pipe necessary to connect the school building which is spread-eagled as against the compact building which is easily controlled, and also centralised from the point of view of laying on the services.

1247. What about internal cupboard spaces?—There are very few of the prefabricated schools where I have heard teachers satisfied with the suitability of the storage space. It may be so placed in the site that it is away from the classrooms as well as not sufficient.

Mr. *Norman Cole.*

1248. What would you suggest as the alternative to classrooms leading off the central hall?—The central hall is a necessary thing in a school if the school is to have a life. You can bypass that central hall and not use it for circulation space by putting cupboards and passageways round the sides of the hall.

1249. Does not that lead to a large waste of space?—No. You get a minimum of corridor space thereby connecting the various departments of the school, and at the same time reserving your central hall. Remember, your central hall is not merely a means of circulating pupils; it becomes a drill hall and possibly a dining hall. How can any headmaster timetable for classes in a central hall being continually interrupted by classes passing through?

1250. These corridors are within the shell of the school or outside?—Just simple lean-to's to the side of the main hall.

Chairman.

1251. Suppose you could put into operation your views about the ideal buildings and so on, and that you could build according to what you considered was necessary, you would not be able to do so because you would not have the teachers, would you?—That I do not think worries us. There is certainly a scarcity of teachers, but the main problem is to cater for the children. The better and more attractive a school is, provided there is such a thing as a school classroom for the purpose, and not improvisations and church halls elsewhere—which detracts from the supply of teachers, provided we have the classrooms in the school, I think you will find, even under the stringency of the present supply, the teachers would be attracted by the amenities.

1252. What do you think is the difficulty at the moment in not being able to attract teachers?—There are two aspects of the problem which cause the scarcity of teachers. Firstly, the remuneration is not satisfactory, and secondly conditions of service are bad. When I tell you that in my school we have a staff room 14 ft. by 8 ft. for 23 lady members, and one wash basin and one toilet, do you think those amenities would attract teachers?

Mr. *Malcolm MacPherson.*

1253. Has there been no consultation even on the staff rooms?—We are fortunate in Fife. We have a Director who is very keen on improving staff rooms, starting with rural schools, where there are no staff rooms at all sometimes.

Chairman.

1254. Is the school you are referring to now a very old school?—It was built in 1912.

1255. Is it correct to say that a number of prospective teachers would be deterred by the fact that buildings are very bad?—You get a number of teachers refusing to take up posts in certain schools because of the conditions.

1256. You have had that experience?—Yes.

Brigadier *Peto.*] They have had it in England, too.

Mr. *Norman Cole.*

1257. Surely if a teacher decides to take up the vocation he does not have a certain kaleidoscopic view of the conditions of service all over Scotland. The trouble comes later when it comes to taking up the post. Would not you think the overall shortage of teachers would be affected by the fact that school building in the next few years would be more modern in character?—It certainly would contribute to the supply if the amenities were improved; not only the amenities but the salary question as well, which we cannot discuss here.

Chairman.

1258. You have experience of teachers refusing to take up posts because the conditions in the schools are unsatisfactory?

—I know of cases of teachers who have been posted to a particular school and refused to take up the post.

1259. Is there any particular area in Scotland where that is most marked?—I cannot say for the whole of the country; I cannot distinguish between the urban or rural or industrial or otherwise. (Mr. *Campbell.*) I think it ought to be added that the recruits into the teaching profession are coming, as is not the case in other professions, from people who know what the schools are like. They are pupils who have come through, and they know what they are like; they have been through it. If the schools were more attractive, more might consider going in for teaching.

1260. When you talk about the bad conditions of your old schools, how far is that widespread in Scotland?—If I can give you my experience, I have taught for twelve years in a school which was opened by Mr. Mundella. That will give you an idea of the age of it. Our staff room, which was to accommodate about 12 or 14 men, was, I should think, about 10 ft. square, with a lavatory opening off it. The ceiling was certainly not more than 9 ft. high. That was our staff room.

1261. When was that built?—The school itself was built about 60 or 70 years ago. That was the only staff room the men had. The pupils in that school knew quite well the conditions under which the teachers were working.

Mr. *Norman Cole.*

1262. We seem to be getting on to the point of minor improvements on existing schools?—It is not a new school. (Mr. *Reid.*) Let me put it this way: would a factory inspector allow staff room conditions, canteen conditions, such as teachers have to put up with, at the present time?

Chairman.

1263. I am trying to find out?—I do not think so.

1264. You cite two examples of bad conditions. What we want to find out is how widespread they are. Have you many old dilapidated schools in Scotland?—(Dr. *Murison.*) The position is this: where schools have been expanded by the provision of huts, very often nothing is done to improve the amenity of the common room previously in existence. I have been in schools where, owing to the need for increased accommodation, huts have been provided, but you will find men and women, probably 30 to 40 of them, occupying the same common room, with one common lavatory, and the teachers who teach in those huts scattered over a fairly wide area, if they wish to go to the lavatory must go into the old building in order to get there. We feel something should be done to improve that amenity, and probably—I do not say it would, but it might—contribute to an increased supply of teachers.

1265. So that the temporary buildings, as apart from the old buildings, have added to the difficulties?—In some cases. I cannot put it stronger than that. No provision is made for the amenity and the comfort of the teacher, no fresh amenity.

1266. Of course, educational authorities are permitted to carry out improvements and repairs. Do you think in the case you have mentioned it would be a very big improvement to improve the sanitation of the schools?—It is rather difficult. If you design your huts round the older building, it is very difficult to provide common rooms for staff in each hut. They must travel somewhere. That is why the new type of building is rather unsatisfactory.

Mr. *Norman Cole.*

1267. With regard to the minor improvements, could I ask if the E.I.S. have any views about the extent to which permission to carry out minor improvements to schools, not only for the old schools but middle-aged schools, could result in better amenities and better educational efficiency; that is to say, for example, the expenditure of a few thousand pounds on a school 30 years old, or something like that?—We have advocated that for years, but we have not gone into details, because the conditions in different schools vary so much.

1268. Is it your experience that a certain amount of that minor improvement work as alternative to new building is being carried out?—(Mr. *Reid.*) Not as alternative but in addition to. (Dr. *Murison.*) What, of course, worries us just now is the vogue of economy in educational building because our Under-Secretary of State pointed out as recently as October—he was speaking in Fife—if things went on as they are they would be unable to provide sufficient classrooms for the next five years, and we are rather perturbed when we hear of possible economies in school building, because we feel that instead of economy we should think of expanding. As Mr. Reid has pointed out, the cost per place is constantly rising. I am told that in England you estimate £140 per school place for primary pupils and something in the neighbourhood of £240 for secondary pupils. Of course, the bulge at present is with the primary school pupils. But if you visualise what is going to happen in a few years' time, when the primary pupils become the secondary pupils, the cost is bound to go up, because for 12 primary places you will get something like six or seven secondary places. That is what is perturbing us, the

talk of economy at all, because having regard to what we know and having regard to what the Scottish Education Department has said, instead of talking of economy we should be looking to the future to provide additional places for the secondary pupils.

Brigadier *Peto.*

1269. Surely you would not say it is not possible to economise without necessarily cutting down the school places or cutting down something essential. The buildings going up now are not put up as economically as possible?—(Dr. *Murison.*) I would agree with you entirely, because if there is one person who hates to see money wasted it is myself. If we could find a way in which we could economise without impairing efficiency, let us do it. I still wish to stress the point that it will be necessary in the future to spend more on school building if we are going to maintain even our present standards, and most of us, of course, are very anxious and consider it very necessary to improve those standards.

Chairman.

1270. Are the children in Scotland admitted to school at the same age as in England?—At five years of age.

1271. Are they taking all the children in? Have they the accommodation to take them all in?—In some areas there is a delay, a time lag of six months.

1272. After the age of five?—After the age of five, because there is not sufficient accommodation.

1273. Could you give us any information about that?—(Mr. *Reid.*) In my own area there is a time lag; I think it is three months. The point arises in growing areas where the school cannot take them in unless they are five plus. The next entry date after the September one is February, which means they must enter at five years, six months. That is the delay, the two entry dates, because there is no accommodation. The fact that they must be five plus before they are taken in means they may be as much as five years, six months before they enter in February.

1274. Do you anticipate that position is going to get worse?—I cannot give numbers. That will vary according to the area. There are certain very quickly expanding areas where housing is going up quickly. I should imagine in those areas it will be seriously affected.

Mr. *Norman Cole.*

1275. Can you tell us anything about the size of classes of primary schools particularly?—If educational efficiency means anything at all, then the classes must be very much smaller. (Dr. *Murison.*) Our maximum is 45, as compared with 40 in England, for primary pupils, and for the first three years of a secondary pupil's life it is 40 as compared with 30 in England.

Chairman.

1276. Would not it be true to say that rooms in Scotland are bigger on the whole?—Not necessarily, no. (Mr. *Reid.*) I think you will find, because of the intense propaganda of the Ministry of Education in England, there are quite a number of Scottish architects—because this Report is 1945 and not up to date—accepting the model of English schools. The majority of our new schools are on the English standard.

Mr. *Malcolm MacPherson*

1277. Are there any Scottish firms producing prefabricated parts?—They may produce individual components, but it will be to the orders and construction of English firms.

1278. Do you know which firms?—I do not know which firms, but most of our prefabricated schools are of English origin.

Brigadier *Peto.*

1279. Would it serve any purpose to bring that book up to date and stamp it 1953?—I think our Committee fell into abeyance awaiting the Report of the Advisory Council. Where economies may be effected in certain projects would be in the post-primary school. We feel that since this Committee has given guidance of such a nature, even anticipating post-war delays in the erection of school buildings, it would be most helpful to have that Committee revived and pass its opinion on secondary schools.

Chairman.

1280. Could we get copies of that book?—Yes; I take it they are available. I will hand you my copy, which I may say is marked in the appropriate passages I thought might be useful to you.

1281. That is what you have already told us?—Some of it is, but there is a great deal more that you may find useful if you refer to it.

Mr. *Norman Cole.*

1282. Is there any general impression that any of you gentlemen can give us about your experience of transport costs as a result of the speed of building in Scotland; I am talking of the transport of children to existing schools from the housing estates?—I can quote an area where it was necessary to bypass a particular school with buses because the children could not be contained in the school for the area, and the school surplus population had to be spread over another two

schools in the area and transport supplied. Unnecessary delay in the erection of schools has compelled education authorities to face that problem. (Dr. *Murison.*) We have even had school strikes sponsored by the parents because it has been necessary to bypass certain schools and transfer them by bus a mile or two away to other schools. (Mr. *Campbell.*) I think, Mr. Chairman, very heavy expenditure has been incurred week by week by Glasgow. Probably they will be able to give you the details of it.

Chairman.] Yes, we have that information.

Mr. *Malcolm MacPherson.*

1283. Has the Institute, amongst its various committees, got a committee concentrating on school building?—(Dr. *Murison.*) Yes, we have Mr. Reid.

1284. Is he the only member of the Institute on that committee? In view of the fact that the whole profession spends all its working life inside school buildings, does it not seem you ought to have a very high-powered committee dealing constantly with the question?—(Mr. *Reid.*) Yes, but would it have executive powers? We are only advising at our best, and how far would our advice be taken?

1285. You are a professional organisation. It would be up to you to promote your interests in whatever way is suitable? —(Dr. *Murison.*) We do make recommendations occasionally. Recommendations are made locally, but the architect says: "I will leave you to do the teaching; you leave me to do the planning". I am afraid that is quite common. The authority take the view that when they employ a person whom they regard as a competent architect there is no need to call in anyone else.

1286. But surely since that situation exists the way to combat it is to produce a high-powered, well-informed body of knowledge within your own organisation?—Most of it is done locally. Most local branches of the Institute have people who look after that, but it is rather disheartening when they make recommendations and they are disregarded. We have no executive power. We can advise and we have advised, but our experience is that our advice is not taken.

Chairman.

1287. If you had a representative on the authority you would have a voice?—That is precisely what we have asked for. We have asked to be represented on the local authorities, if not as co-opted members, at any rate as advisors or assessors. That request, which we have made for several years, has not been granted.

1288. To whom did you make the request? —To the Scottish Education Department; in point of fact, not later than last Friday to the Under-Secretary of State.

1289. There is a Scottish firm, I understand, an aluminium firm, called Blackburn. Do you know that firm?—(Mr. *Reid.*) They erect aluminium houses, not aluminium schools. The aluminium schools I am referring to have come from Bristol.

1290. Could not this firm make them up there?—There is a great number of things that can be made in Scotland. Whether schools could be made by that firm I do not know, but at present they are geared for houses. It requires a considerable amount of change of jigs and machinery and so on before another unit can be produced. Whether they are prepared to do that I cannot say.

Miss *Ward.*] Have we got the views of these gentlemen on the cutting of circulation space?

Brigadier *Peto.*

1291. We had the views, but we did not have any recommendations?—Have a correct grouping of secondary school departments instead of spreadeagling it all over the sites, and in that way you are going to cut down circulation space considerably. With regard to the corridors leading to practical rooms, instead of being regulated at 7 ft., where the class is only 20 instead of 40, you can reduce the circulation to 5 ft., giving ease of circulation and every comfort with every safety for the pupils, depending on the headmaster's organisation of the school. If the headmaster were consulted, he could say: "These are practical rooms; there is my curriculum. I prefer the space of corridors to be saved". Money could be saved. It is the original planning for the site I want to get at.

Miss *Ward.*

1292. Have you seen any of the new schools where they have reduced circulation space considerably?—I have visited eight schools within the last three weeks, and I am sorry to say none of them would save space in circulation, from what I saw.

Chairman.

1293. Eight schools that have been built or are being built?—Have been built and are building, and I should say from my own little knowledge I could have saved circulation space at the planning stage.

Miss *Ward.*

1294. The point is in some of the new schools there has been almost a revolution in design. It is not a question of the headmaster or anyone else planning to save

circulation space. The design provides for that, and I wondered if you had seen any of the new plans. I agree with you it is on the planning stage. I wondered if you had happened to come across the new schools where the design in fact saved circulation space?—I do not think so.

1295. You could not mistake it?—Just by seeing it. You would see it right away.

Chairman.

1296. Have you seen any of the non-traditional types built in England?—No.

1297. Not having seen those schools, it is rather difficult to assess?—All I can go on is the Ministry of Education Bulletins, and whilst they are acceptable from the point of view of the suggestions they are not acceptable from the point of view of amenities in Scotland.

1298. I gather you feel that the suggestions for cutting down circulation space are bad from an educational point of view?—Not provided it does not interfere with classrooms.

1299. In fact, we have seen schools that obviously have cut down circulation space, and we are told that has not had a bad effect educationally?—I have not seen any.

1300. It is going up in Scotland ; you do not think they have really cut down?—I do not think there is any saving at all in circulation space. In quite a number of cases, traditional and non-traditional, they are really increasing circulation space.

Miss *Ward.*

1301. By giving more corridors or wider corridors?—By giving a long spinal corridor, unnecessarily long, to spread over a contour that is rising.

Mr. *Malcolm MacPherson.*

1302. Would not it be a good idea for an organisation representing 30,000 people to have some organisation to come and see schools where the circulation space has been cut down?—(Dr. *Murison.*) It is very desirable, but as I have tried to point out, we have at local level made representations, and our representations have not been too well received.

1303. But in this question you would be in a very much stronger position to make representations to the Department if you had a committee which armed itself, and made a deliberate point of arming itself, with up-to-date knowledge and saw examples of the newer types of buildings?—Our Education Committee, of course, deals with that. (Mr. *Reid.*) I am on the Education Committee, and where such problems do occur we advise local branches to the best of our ability. But even where the headmaster is in on this from the start his advice is rarely taken by the Planning Committee or the Planning Authority concerned.

Chairman.

1304. Are there any other points you think we ought to know? You did mention about single-storey building, but what about the buildings that go higher?—We quite recognise the difficulty of space in certain congested areas. The compelling factor, of course, is to make the best use of the space available, but as a general rule I think I am safe in saying for primary schools one storey and for post-primary schools not more than two.

Mr. *Norman Cole.*

1305. That is the functional teaching viewpoint?—The functional teaching viewpoint, and building for the best educational convenience.

Chairman.

1306. In these notes you handed in you do mention in the section on the special problems of the post-war years that demands on building materials and labour make it necessary for an authority to adopt some temporary solution. What do you mean by that?—I think further on in that Report this explanation is given: where a temporary school building has to be put up in hutments, the first consideration would be the laying on of the public utility services complete as for a new building intended on the site, and make the temporary hutments use that particular service as laid and then gradually, as the new building was built, remove the temporary buildings. As the classroom units are built, gradually remove the temporary hutments. To save cost, instead of putting in the double job of utility services, see that the services serve, on one operation, both types of building, and therefore save costs.

Mr. *Norman Cole.*

1307. These temporary buildings are not always on the site where there will be a permanent school later?—They are put up on sites that are reserved as temporary hutments to meet the school demand.

1308. That school population after a time may not be there?—By that time you may have removed the services in the hutments, and therefore you will not have built a new building.

1309. In which case your public utility services will to a certain extent have been wasteful?—No, because they serve both units.

Chairman.

1310. We should like to thank you very much for coming to answer so many questions. It is a very big subject, and we do appreciate your help?—(Dr. *Murison.*) Thank you very much for receiving us. Whether it has been an effective discussion or not, it has certainly been very interesting.

The witnesses withdrew.

Adjourned till To-morrow, at a Quarter past Four o'clock.

THURSDAY, 19TH MARCH, 1953.

Members present:

MR. YATES in the Chair.

Mr. Norman Cole.	Mr. Malcolm MacPherson.
Mr. James Johnson.	Brigadier Peto.
Mr. T. W. Jones.	Miss Ward.

Mr. J. H. NEWSOM, County Education Officer, and Mr. W. E. TATTON BROWN, Deputy County Architect, Hertfordshire County Council, called in and examined.

Chairman.

1311. Mr. Newsom, you are the County Education Officer of the Hertfordshire County Council?—Yes.

1312. And, Mr. Tatton Brown, you are the Deputy County Architect?—(Mr. *Tatton Brown.*) Yes.

1313. We are obliged to you for coming to give us some information about your authority. We understand that you have had a good deal of experience in the building of these new schools, both by the non-traditional and traditional methods. Could you tell the Sub-Committee what your experience has been in that connection and give us some information about the schools you are building and about costs per place, or any information which might be of help to us?—(Mr. *Newsom.*) We have not, oddly enough, had much experience in building in the traditional methods of ordinary brick construction, because we decided if we tried that in Hertfordshire, except in a very modest way, we should never get the schools up in time. We had what must have been a unique problem in England after the war. In addition to the normal increase of population, we had two L.C.C. housing estates being planned and three New Towns, all simultaneously. We knew that our child population was going to go up in the period from about 1950 to 1954 by the equivalent of the whole of Hastings or Cambridge every year, and we therefore had to provide a very large number of places. We estimated with geographical distribution we would have to build fifty new primary schools in five years, and because, I suppose, what is to some extent unique in the way we worked, we said we must think of this as a major operation, a complete £7 million programme, not individually fifty schools, and therefore we must think of a standard form of construction, a prefabricated form, for two reasons: firstly, because we could get the parts in bulk and get them more cheaply, and we should get people with experience in putting up our particular type of school, doing it in a rota: one might be doing the foundations, followed by one dealing with the steel framework, followed by somebody dealing with cladding; meanwhile the first lot moving on to the next school, and so on.

1314. I would like to divide this up and get the picture. You say that there are three New Towns. What are those New Towns?—Stevenage, Hemel Hempstead and Welwyn Garden City, Hatfield. Those are under the New Towns Act designed to increase the size of existing communities to 60,000 people. One of those is only 4,000 to start with.

1315. What did you start off with before New Towns?—Our total population at the end of the war was about 580,000.

1316. What was the school population? —Would you like me to give you the figure at the end of the war? This is where figures get very artificial, because the school leaving age went up, which did not mean more children but more children in school. At the end of the war we had 55,000

children in our schools, and we now estimate next year we shall have 83,000.

1317. You say by 1954 you have got to aim to build fifty new schools?—We have built them. We have built fifty-one new primary schools.

1318. That is in what period?—Since the war, which means for practical purposes since 1947.

1319. Those schools are in the main non-traditional?—They are.

1320. Are they all non-traditional?—It is difficult to give a specified nomenclature. The essential idea of prefabrication was to have standards designed to be effective for different sites, rather like, to use the ordinary language of the layman, a Meccano set, with which you have got a limited number of pieces to make all sorts of shapes. That was what we thought was the first essential, to have a limited number of pieces, but flexible for different sites. Then, because we were under great pressure of time, we decided the schools must be built the whole year round; in other words, must be built in factories in the winter, because ordinary building can come unstuck with bad weather. That is one of the reasons we have built so quickly, because our schools have been built in the Birmingham factories in winter and put up on the ground in the summer.

1321. Did you say they are built in Birmingham?—It is actually Hill's of West Bromwich. The primary programme has come off; we have built the schools we said we would in the time. For the last two years there has been the Minister's figure of £140 a place. We have always built since then within that figure, but even before that we were building in fact, we were told by the Ministry, at a figure a good deal less than the national average. Now, of course, our problem is secondary, and we have already built seven new secondary schools.

Mr. *Norman Cole.*] Before we move on to secondary schools, could we have one or two questions on what has been done on the primary schools?

Chairman.

1322. Yes. I think what we want to discuss first of all is the experience you have had in the building of these primary schools. You say Hill's of West Bromwich have been building the schools?—(Mr. *Tatton Brown.*) They have been manufacturing the steel frames and the components and arranging for the erection of it on the different sites.

1323. Have you in the planning of these schools worked in consultation with the Ministry of Education in regard to the plans?—Yes. (Mr. *Newsom.*) Indeed, the Deputy County Architect in Hertfordshire is now the Chief Architect to the Ministry of Education, Mr. Marshall.

1324. Apart from the steel, what other materials have been used?—(Mr. *Tatton Brown.*) The external cladding has been precast concrete, which we have had manufactured either at Slough or at Peterborough, outside the County, making use of labour outside the County in order not to draw on the very limited building resources we have within the County.

1325. Have you built by aluminium?—We have not built by aluminium at all. We have had aluminium prefabricated windows done at Bristol, but not for the structure. The whole idea has been to draw on the resources of the rest of the country for factory-produced materials, which can just be assembled on the job by a turn of the screw.

Mr. *Malcolm MacPherson.*

1326. Did you have any difficulties with your steel supply?—Yes. We are now building four timber schools with prefabricated timber frames made in Reading.

Mr. *Norman Cole.*

1327. I have got three questions. The first is this. What I do not understand is how you had an overall £7 million programme so that you could plan in that way over a number of years?—(Mr. *Newsom.*) Perhaps I used the word programme in too detailed a way. I do not for a moment suggest that the Ministry of Education or the Hertfordshire County Council thought of it in that way, but those of us reponsible for advising and executing the work thought of it in that way.

1328. It is true to say that despite what you managed to do you did not know what you would be permitted the next year or the following year?—No; we took some colossal gambles.

Miss *Ward.*

1329. Did you get special capital allocation for the New Towns? Was that something quite separate from the general expansion, or did you have to carry that as well?—No, we had to carry that. It has been one of the subjects on which we have had discussions at the Ministry. We have suggested the particular problem in the New Towns should be considered as a different problem, but it has not happened that way. I would like to say on that point that throughout, after one or two initial problems, the relationship between us as the executants and the Ministry of Education as the sort of co-ordinators and planners has been first rate. They could not have been more helpful. There has been no fussy interference or unnecessary red tape.

Mr. *Malcolm MacPherson.*

1330. Did all your gambles come off?—So far we have just managed to keep abreast of this enormous increase in the number of children. Our classes are too big, and the number of large classes is going up. But no child has been out of school, and at times, with this really phenomenal rise in population, it might have happened. We have been building quite a lot of our primary schools in just over a year, some under the year.

Mr. *James Johnson.*

1331. Can I assume you have had no disappointments in your Development Plan, if, as you say, you have got all your schools and you are fairly well satisfied? The Development Plan has been realised?—No, because the Development Plan was designed to see that all children were in decent buildings, but we have not started on that. All we have been building against is the new population. After all, when the Development Plan was made we did not even know about the New Towns; the New Towns Act had not been passed.

Chairman.

1332. In order to be clear on this, you have told us about the materials. In order to keep within the Ministry's figure of cost per place, and you say you have done that, have you had to restrict space in any way, or have you had to carry out any restriction that would be considered to be an interference with educational standards in any way?—No. Indeed, I think myself that the Ministry's putting a fixed figure on it was a first-rate thing to do, apart from the money side, because it was a challenge to both the architect and the educationalist to see what they could do within the new framework. Although the figure has been £140 for two years, with the rising cost of labour during that period there has been less to spend last year than the year before in real money. Therefore our architects were forced and we were forced to think with them about how we could get the maximum educational advantage out of this really much less than £140, and the result of it has been that the new primary schools we are building, because we have been able to cut down the communication space and non-teaching space to the bare minimum—I do not know what percentage it would be——(Mr. *Tatton Brown.*) 6 per cent. (Mr. *Newsom.*) We have actually got more teaching space. We have made in primary schools a complete unit, with classroom and space for handicrafts, cloakroom and lavatories for that classroom. The doors all open out of the same unit.

1333. Not all opening to the same room?—No. All that is a school unit, with built-in furniture sometimes, and sometimes partition walls. There is no corridor at all. It is designed in one space. It means, except when they go out of doors to the dining hall and so on, the children are in that space all day. In other words, you do not have to have elaborate corridors. We have got more square feet of teaching space in last year's primary schools than in the ones before, even though the cost in real money has gone down.

1334. Are they one-storey buildings?—All single-storey.

1335. You have not built any more than that?—Secondary. But I am dealing with the primary at the moment.

Mr. *James Johnson.*

1336. When you say the teaching space has been increased, do you mean you have actually got larger class-rooms or do you mean you have got more classrooms in the same area?—(Mr. *Tatton Brown.*) Larger classrooms. We used to have a classroom which was a square box. Outside that there was a corridor, and beyond that there were the cloakrooms and beyond that the lavatories. We have now put all that into one unit. The way through from one classroom to the second classroom is actually through the back part of the teaching space.

1337. Can you give me in square feet what the size of the old classroom was, perhaps four years ago, and what it is now?—Yes. The old classroom was 24 ft. by 24 ft., and the new one is about 40 ft. by 24 ft.

Mr. *Norman Cole.*

1338. Taking in everything?—Yes.

Chairman.

1339. When you spoke about the percentage of circulation space, did you say it was 12 per cent.?—It is down to 6 or 7 per cent. actually of the whole school.

1340. Is that not a very considerable improvement on anything in the London area?—(Mr. *Newsom.*) We do not know. We only take their children. (Mr. *Tatton Brown.*) It is likely to be if the London schools are bigger schools and have two or more storeys. On secondary schools, we need 13, 15 or even 20 per cent. circulation, because they are so big, and we have to go up several floors.

1341. It would be 94 per cent. teaching space and 6 per cent. circulation in the primary?—Yes, because we have such small schools of six or seven classrooms. We can get four off the assembly hall in pairs, like two little nodules, at the end of the assembly hall. Then we have the dining hall, and you can get another two off that, and a very short passage down to the

administration part, the headmaster's or headmistress's room.

Mr. *Norman Cole.*

1342. What is the average size of your schools?—(Mr. *Newsom.*) For primary schools they have ranged, apart from one or two smaller ones, between 240 and 360. We have built one for 600 and one for 560.*

Chairman.

1343. What are the costs?—I can give you figures for 1952 or 1951 or 1950, whichever you like. The latest one, 1952, the cost ranges between £131 per place and £139 on the Ministry's formula.

Mr. *Malcolm MacPherson.*

1344. What was the difference in cost between the smaller schools and the bigger schools?—The smaller school has always been more expensive. We built two parish schools. One was hit by a flying bomb and had to be rebuilt; that cost £224 per place in 1947. Another parish school cost £210 per place.

1345. Have you got the total cost of a school recently built?—(Mr. *Tatton Brown.*) It would be £40,000 to £50,000 according to numbers. It is all controlled by the Ministry's maximum of £140.

Mr. *James Johnson.*

1346. With regard to this increase in the teaching space, I am rather intrigued about the 40 ft. into 24 ft. Have you consulted teachers and asked them what they think of the economies—but this is not an economy; it is a luxury?—(Mr. *Newsom.*) One of the things we have tried to do from the beginning is to bring the teachers into the whole business. There is a standing panel of headmasters and headmistresses who are consulted on everything down to the way a door handle is put on. In the first term after a new school is opened there is a great post mortem to decide what is wrong, because there is always something, and we try to remember not to do that the next time. The teachers in the schools we have opened are very happy with it.

Chairman.

1347. Are the teachers represented in your authority?—Yes, very strongly.

1348. In what way?—On the County Education Committee, which has fifty people, there are ten practising teachers on the Committee for different reasons, some elected by the teaching body and others nominated because of their educational experience.

Mr. *Norman Cole.*

1349. Are those ten employed by the County?—Eight of them are.

Chairman.

1350. Would you say the co-operation between teachers and authority has helped to make a success of this?—I think it is absolutely vital that the practitioner who has got to live and work in the school should be consulted from the beginning about what is put up. I think it has been a help.

1351. Have you built infant schools?—Yes.

1352. What kind of newer developments have you added to the infant school?—Compared with pre-war building, it is partly in the equipment, the internal equipment, the sort of furniture they have. There are things that would have given people a shock had they seen them in 1939. I suppose the major thing is that they have all got paddling pools and sandpits.

1353. Could you tell us whether you have cloakrooms for the youngsters inside the classes?—Yes, and we have always tried as a general theory to break down the lavatories into smaller groups to try to avoid that huge school lavatory, which is a place not seemly in many ways, and to make it a more personal business of little groups of lavatories together. It is very interesting to notice the way in which the children's behaviour has improved in the lavatories because they have been made decent places, because they have nice tiles and lights and so on.

1354. They are outside the classrooms?—All separate from the classrooms.

1355. And cannot be seen from the classrooms?—No.

1356. You would not consider that desirable?—No, it would be shocking. All these schools are mixed schools. You must have separate lavatories for the boys and girls.

Mr. *Norman Cole.*

1357. With regard to the question of the design of teaching space, would you say that the designs you have used in these fifty-one schools which are non-traditional could easily be incorporated into the traditional building as and when you come to build it?—(Mr. *Tatton Brown.*) No, they could not. The light steel frames which support these buildings give one very much more flexibility. One is able to build with one space leading into another because the

* *Note by witness:* The 600 unit is two schools, a two form-entry Junior Mixed for 300 places and a two form-entry Infants' School for 240 places. These schools are on the same sites and are attached physically but there are two Head Teachers. The 560 unit school is on the same basis except that since 1951 the Ministry of Education allows only eight classrooms for the two form-entry Junior School instead of nine under the earlier Building Regulations.

walls are not supporting the roofs; they are merely panels filling in where you do not wish to see through from one place to another. One of the characteristics is that the rooms appear very much larger than they are because you seldom sit in a room without being able to see into another room or space beyond.

Chairman.

1358. What about the halls and gymnasia? Surely they have to walk through the hall to get to the classes?—We have done that now to keep the cost down to £140.

Mr. *Malcolm MacPherson.*

1359. Did you say access to one classroom is through another classroom?—Yes. We have had the greatest assistance from our own education authority and the Ministry over this problem. When we have come up against the financial limit we have said the only way we can do it is to eliminate this bit of corridor and go through from A to B. We never go through to C. It is never more than two.

Chairman.

1360. What do the teachers think about having to go through classrooms?—(Mr. *Newsom.*) The teachers would rather not, but when we discuss it with them and say: "We are living in a certain world in which there is a figure. Would you sooner lose teaching space and have the same corridors or have more teaching space, or at least the same teaching space, and fewer corridors?" they plump for the teaching space, because that is what the school is for. If you have not got enough space for everything you must have the inconvenience of going through one class to another.

Mr. *Norman Cole.*

1361. The inconvenience is only at the end of the period?—(Mr. *Tatton Brown.*) And even then they do not go through the classroom proper but through the space at the back, and so they do not disturb the class to a great extent.

Chairman.

1362. Would the children going to the lavatory disturb another class?—No; their own little lavatory block is at the back, and very carefully planned. They are top lighted and top ventilated. (Mr. *Newsom.*) If you imagine that wall behind you as the back of the classroom, you go behind that, and the lavatories are behind it.

Mr. *Norman Cole.*

1363. For each classroom?—For each classroom.

Miss *Ward.*

1364. There is always a dividing panel or something?—(Mr. *Tatton Brown.*) Yes. The lavatory wall going right up to the ceiling.

1365. Apart from the lavatory, this back part which you go through from one class to another?—There is a storage unit which is about 4 ft. high which takes the place of the old 8 ft. by 8 ft. storeroom built in bricks and mortar. That unit forms a little separation. When the children are sitting down they cannot see the cloaks.

1366. It is really only halfway up?—Yes.

Mr. *James Johnson.*

1367. It is behind this sort of open corridor that they pass to the other teaching space?—Yes.

Mr. Malcolm MacPherson.

1368. The success of your programme, I take it, depends to a large extent on this idea of regarding it as a whole?—(Mr. *Newsom.*) Yes, that is one thing. It is also having architects who do not groan and moan if they are told the amounts have come down, but get on with it and do something and generally keep a move on.

Chairman.

1369. How long does it take to build these schools?—They vary. Our all-time record was nine months. The first one took about two years. We know now, unless it is some awful site, steep, or clay, or whatever it might be, if we get on the site twelve months before we want the school we are home.

Mr. Malcolm MacPherson.

1370. Have you had good sites or bad?—Some have been shocking. We have had great co-operation from the New Towns, the Development Corporations; they have been most helpful about school sites. I have never known such provision. They think: "Where ought the school to be in relation to the people?" whereas everybody else says: "Where can we put the school?" when you have done everything else.

Mr. *James Johnson.*

1371. These fifty-one primary schools are all new ones since 1945?—Yes.

1372. Can I ask how many old ones you have got left which were black listed?—There is a technical black list. It was made in 1925. There were seven schools on that. The black list had two designations, A and B. We had seven in the A category.

Mr. *Norman Cole.*

1373. All primary?—In those days they were all-age range schools. Of the seven we had on list A, which were supposed to be quite hopeless, we have shut four, two have been amalgamated into one building with fewer children in it. The remaining school, which was an all-age school, is now for infants only; in other words, only two age groups in a building which had children

from five to fourteen. One of the troubles of the black list was that people said: "This is a building which is big enough for this number of children of these ages ranging from five to fourteen." We have had almost complete reorganisation. By next year all but 300 children over the age of eleven will be in secondary schools. That has meant these old bad schools, whether they were on the black list or not, have had their numbers greatly reduced. That has made them potentially not as bad as they might have been. We have spent a large amount of money putting in lavatories and sanitation, water and light and that sort of thing. I do believe myself one of the ways of providing for the people who are not getting anything at the moment, of providing the most dramatic change of the educational environment, is to spend relatively small sums of money on taking old buildings and imaginatively making them better places. When I knew I was coming here, I asked people to advise me, and they said there is no parish school in Hertfordshire, and it is parish schools which are the worst, which for £5,000 could not be made perfectly adequate for the next fifty years; one said the foreseeable future and the other said fifty years.

Mr. *James Johnson.*

1374. How many of the old schools have still got outdoor lavatories and things of that kind?—I think we have almost abolished earth closets. We have tried where we can to link the lavatory to the main building, but in some cases we have not been able to do it.

Chairman.

1375. Do I gather you do not think it is a good policy to make these schools good?—I think in the immediate period after the war everybody in the educational world was a bit slap-happy about what could be done, and when Development Plans were made people said: "Away with this; it is hopeless; we must build a new school." I think we have got a little more realistic about it now, and without depriving the children of anything they have got plenty of space. I am only talking about parish schools with something between forty and eighty children in them. If we could spend about £5,000 on any of them we would make them really good places. There is one church school in the County which was on the list to be abolished. People said nothing could be done about it. The school consisted of one large classroom and a little tiny room attached to it, and the infants were crammed into this little room about 12 ft. by 6 ft. The other was quite a big room. There was no cloakroom or internal lavatories. For £3,500 we built an extra classroom, put in new internal lavatories, cloakrooms and washing facilities, and installed central heating and electricity, and it is now a jolly good little place.*

1376. You think that is good policy?—Excellent policy, because it seems a waste to destroy the foundation and good walls and that sort of thing. Anyway, the parish school is very often on exactly the right site. If you went to try and find another site you get shouts about agricultural land, and your site may be on the periphery, not in the middle of the village.

Mr. *James Johnson.*

1377. Are you at the moment getting sufficient money to put in central heating instead of the old coal fires?—No. It is very difficult at present. Until about two years ago we were able to have a fairly steady programme of improvements, but for the last two years the Ministry have cut us down progressively to figures which have made it impossible to make improvements of this sort. All of the minor capital works grant has to go on building new classes for overcrowded urban areas.

Mr. *Norman Cole.*

1378. Would you say if you were allowed a little more money for the minor works you could save money in the end on the overall programme?—(Mr. *Tatton Brown.*) If you were allowed more money.

1379. It would be a long-term economy, instead of building new schools?—(Mr. *Newsom.*) It is so difficult to generalise about that. In Hertfordshire our new schools have been built, and we have been allowed to build them because of the tremendously swollen population in these areas. If we had not built the new schools, the old schools had not room to expand, or did not exist at all in the New Towns. I do not think you would save money on your new school building now, but when you get to the stage when you are beginning to say: "We can now spend money on building new schools to make conditions better", not just to provide education, which is the main thing at present, when you get to the stage where you are going to make educational buildings better, I think it would be more economical in many cases to spend money on improving old buildings instead of building new ones.

Mr. *James Johnson.*

1380. The cost was the most encouraging fact with regard to a certain school on which you spent £3,500?—Yes.

1381. Can you tell us how many schools at the moment you are tackling in a similar

* *Note by witness:* The Managers together with the Ministry, and not the County Council, paid for the reconstruction of the school since it is an aided school.

fashion?—Practically none. It has stopped completely now. The money for minor works has come down. This year we wanted about £120,000 and we have got £64,450.

1382. The point I wanted to make about that is this: do you think if you had more money for this particular kind of work you would be much better off, instead of building some new schools in certain areas? —No, we could not, because our primary schools are all being built in New Towns and on L.C.C. housing estates. Our secondary schools are being built in those areas, and also to meet the rising birth rate in the old towns. We have not old secondary schools which we could expand.

Chairman.

1383. Would you say if you had the power to carry out more of these minor improvements it would give a very much longer lease of life to the school and ultimately save the authorities money?—Yes, I think that is so. (Mr. *Tatton Brown.*) And there is also the question of equity. We have all the people living in the older part of the county having to put up with these old schools which only need £5,000 or £10,000 spending on them, seeing in the next parish a new school possibly going up for £120,000. (Mr. *Newsom.*) And inhabited by people who only recently lived in the L.C.C. area.

Mr. *Norman Cole.*

1384. When you say £120,000, you mean a new secondary school?—(Mr. *Tatton Brown.*) Yes, or £50,000 or £60,000 for the new primary.

Chairman.

1385. You would say there should be in all schools a reasonable level of sanitation?—Yes.

1386. And that ought to be brought up to standard?—(Mr. *Newsom.*) There ought in every school to be water sanitation, hot and cold water available, and facilities for children to wash themselves. It is no good talking to children about the benefits of cleanliness and putting them in an environment in which they cannot practise it.

1387. On these old schools, have you any idea how many schools you have in the area which are within this category of needing the kind of improvements such as you have referred to?—I am afraid I would not like to make a quoted statement on that; probably forty to fifty.

Miss *Ward.*

1388. It would be true to say, would it not, that the swelling of your population has helped enormously towards your ability to get permission to build? You have had a bit of good fortune?—Yes, that is perfectly true. We have not always thought of it in those terms. Nearly 30 per cent. of the children in Hertfordshire are now in post-war schools—the primary children.

1389. You make some very favourable references to the fact that your architects buckled down to reducing costs. Of course, in a way they knew there was quite a big programme ahead. It was not an isolated one. So that it was worth their while to cut down expenses. It did help them, because they could still see work ahead?—(Mr. *Tatton Brown.*) I think you have hit the nail on the head. The whole Architectural Department was established in 1945 to 1947. We have been able to recruit from the schools of architecture the pick of young architects coming up. Similarly, with manufacturers, we are always talking of programmes of ten, twenty or fifty schools, and that is the carrot we hold out in front of them.

Mr. *Norman Cole.*

1390. You can still do that now?—Yes. (Mr. *Newsom.*) With the rate our population is growing, we have got a school building programme running at the rate of £2 million a year for the next ten years.

1391. Is that primary again?—Mostly secondary, but some primary. (Mr. *Tatton Brown.*) Manufacturers are willing to listen to us. If we want the designs changed they will do it for us, but they might not do it otherwise.

1392. You have got a lot of levers in your hands?—(Mr. *Newsom.*) The County Development Plan is based on the assumption that the population of Hertfordshire will increase by 274,000 within twenty years. That was five years back. That is an increase of 50 per cent. The overall population has gone up during the last three years, according to the Registrar-General's figure, about 15,000 a year.

Mr. *James Johnson.*

1393. What difficulty have you had with building labour, if any?—(Mr. *Tatton Brown.*) We have had tremendous difficulty. It is not uncommon to go on a site and not see anybody working there at all, and at the end find one little room with three electricians wiring away on a ceiling. Perhaps afterwards you find two other labourers having tea. If it were not for prefabrication the jobs would not go on at all.

Mr. *Malcolm MacPherson.*

1394. Supposing you had needed only five new schools, and someone had said: "There are ten other counties in much the same situation. Can you combine with them to make a programme of fifty schools over the next four or five years?" do you think that would work out? —(Mr. *Newson.*) It should in theory, but

the trouble is that local authorities, like some individuals, are so jealous of their own reputations they say, "Because it is done in Hertfordshire it will not work in Middlesex", and so forth; but they could have their heads knocked together by you people.

Chairman.

1395. I think what we are concerned with is your own experience, and it is very interesting to hear the experience you have had. I was wondering if you could tell us whether in the building of your schools you manage to get the schools up as quickly as houses, or whether you find any particular problem of lagging behind?—Historically we did have a very bad time, because at one period we were only allowed to start the schools—indeed they were only sanctioned—when the contract for the houses was let. That meant we were inevitably behind, because it takes longer to design a school than houses. The situation has changed now. The Minister of Education is prepared to approve schools for the number of children we estimate will be in a particular place. We have agreed a formula. We take 3.5 persons per house for the number of houses programmed for a particular area. Of the total population arrived at in that way we take 18 per cent. as being under the age of five, 6 per cent. between five and seven, 7 per cent. juniors, and 5 per cent. secondary. The proportions of children in the different age groups vary according to the nature of the new building. For example, the L.C.C. will evacuate—I do not think there is any other word—quite rightly, from their point of view, the people living in the most overcrowded conditions, with tubercular homes and all sorts of trouble, and therefore you tend to get large families with ages of 0 to eighteen. When you come to New Towns, because the rents are not subsidised and because it is a bit of an adventure to go to them, you get younger people who must be earning pretty good money, and their children are probably of primary school age. At Hemel Hempstead and Stevenage we have noticed a good home background, with a lot of junior children and very few secondary. We approach the problem of what to build by thinking: "What is the social problem that has created this new community?" We are fighting against time all the time, because it does take longer to build schools than some houses. There is the factor, too, that inevitably the tempo of housing fluctuates according to admonitions from on high. That may mean you suddenly get out in your estimate of child population. You may have been told there are going to be 500 houses in a certain area with a certain density to the acre, and then the density is increased, the houses are smaller or closer together, and you have got sixty children who were not programmed for.

1396. On the whole you are not having very much difficulty; you are not finding houses up and no school?—We are just reaching what I hope will be the final difficulties from the early days when there was not adequate co-ordination between those responsible for building houses and social services. We are having trouble on one or two new sites because we have not enough schools, but from now on we are going to be all right.

1397. Are you getting closer co-operation with the authorities responsible for the houses?—Yes, and the Ministry of Education are allowed to sanction the building of a school now when they are satisfied that the plan to build the New Town or housing estate has been approved, even although the contract is not let. There is a terrific delay between the time when you programme the houses to be built and the letting of the contract.

1398. How recent is that change?—About the last eighteen months. (Mr. *Tatton Brown.*) Even so, we have been asked to produce a school in Hemel Hempstead by next September. We were asked a week ago.

Mr. *James Johnson.*

1399. Can you tell us how many new schools you began last year and how many you hope to begin this year?—At the end of the year, it is twelve primary and six secondary. It has been about the same this year.

1400. You expect to begin this coming year as many as last year?—Yes.

1401. You are not at all bothered about keeping up with the school population at secondary age?—(Mr. *Newsom.*) No. One of the troubles in all this planning is this question of working within a financial year. It is far too short a period in which to plan. You start a school on March 30th and call it one year's building programme, and on the 1st April it is next year's. It is all absolutely bogus. We think, with the programme the Ministry have allowed for this coming year, we shall just about scrape home if we get it up in time.

Mr. *Norman Cole.*

1402. Primary and secondary?—Primary and secondary.

Chairman.

1403. How much are you spending on transport, because there is no school in particular places?—There are two reasons for transport; firstly, in rural areas you have primary children to take into secondary schools. We spend on that as a County about £80,000 a year.

1404. That has got to be spent in any case?—Yes. We have spent very little on transport because we have failed to build schools on time. We did have some trouble

at Oxhey and had to spend money for a couple of years.

Mr. *Norman Cole.*

1405. There is no other education authority in the County?—No.

1406. You have no large town or county borough?—No. Watford is a big town, but it is within the County Authority.

Miss *Ward.*

1407. Based on your experience, it almost seems, if it was decided to telescope the building programme for the whole country, we might emerge in actual expenditure as having spent less year by year?—I think your point is if we could get a move on and do it. A lot depends on what is going to happen.

1408. I mean, if you set down your building programme over the country in order to allocate year by year a certain proportion of capital expenditure on school buildings, it might be more economical. You would be planning for a greater number of schools, provided they followed the principle you have applied?—(Mr. *Tatton Brown.*) Yes. We would be in danger of reaching saturation point. About a year ago the Ministry imposed the moratorium on starting dates, and for three months they said no new school could be started. That was the best thing that could have happened to us. Our jobs were going slower and slower. The five men on the job dropped down to three or two. With the moratorium it went up to ten or twelve, and we got the schools finished. In the office we had time to spend on the design, getting cheaper prices, estimates and tenders and everything. I think if we tried to build more schools or faster we would reach saturation point.

1409. In other words, there was a period since the war when too many schools were started?—Yes. We did gain by building them fairly quickly in the early years. We got them down before wages and materials went up. We did not get the situation some authorities got, where they had schools going on three or four years, and the final cost would be terrific. (Mr. *Newsom.*) The great vintage year of Hertford school building was when we built twenty-one primary schools, laid down in ten and a half months and all completed in a further twelve months. That was before prices went up.

1410. Can you state what you think is the most economical number of schools to be aimed at in any one year?—It is awfully difficult to generalise about that. There does come a point within the structure of the County Council and the rather cumbrous way in which the machinery works when there is a limit to what can be done with administrative efficiency. They will not give you more staff to do a job like this, but I think we have about reached the maximum that our particular staff can do, in terms of giving adequate supervision and encouragement and so on.

Chairman.

1411. You have also got the problem of teachers?—Yes.

1412. You have not had much difficulty in that?—We do not have much trouble for a number of reasons. We are a Home County. People like to come near London and not in London. Another reason is because such a high proportion of the schools are new and they know they have decent conditions. Another thing which undoubtedly attracts teachers is the fact that we give more freedom to our head teachers than anybody else. We give them real freedom to spend their money as they want to. We give them cash and they write cheques. We save thousands in administration and at the same time give them a feeling of being responsible. They all come to work for us because they are treated more reasonably.

Miss *Ward.*

1413. How did you develop that scheme. Is it allowed?—It has gone on for three years now and I think we can say now it has proved its virtue. In most areas the cumbrous nature by which money is spent on schools, stationery and books and so on, was to put in requisition and people said whether you could spend 2s. on this and 2s. on that and so on. That meant clerks checking people and checking the price and all sorts of people signing their names, giving a terrific air of administrative efficiency but of course not efficient at all really. People were not reading what they were signing and not competent to make judgment on the things done. We made the supremely simple decision, and said the headmaster of a school who is competent to look after the spiritual and mental growth of 400 boys and girls is competent to handle public money and decide how to spend it. We actually gave him complete authority. We said for expendable items you can have £400. It is not just the grammar schools; it is from the little parish schools to the grammar schools, all on the same basis. The accounts are audited and they send in a statement of account at the end of the year. We have saved between £5,000 and £7,000 worth of unfruitful clerical labour and we have made people feel responsible.

Mr. *James Johnson.*

1414. To follow up Miss Ward's question about starting dates, is it fair to say that in your view if we had begun fewer schools, as obviously you have done, we would finish

more schools?—(Mr. *Tatton Brown.*) I think broadly speaking that is true.

1415. Would you care to amplify that in the light of your experience?—The limiting factor in our particular county—and mind you we are peculiar in certain respects, quite different from certain areas where they have got building labour unemployed—in our particular county the limiting factor is site labour, and therefore the fewer schools we build the quicker we will get them done. We did appreciate it very much when the moratorium on starting dates was put on because the rate of completion went up.

1416. You obviously know how many you have got to build for your secondary pupils in the years ahead. Would you say by beginning fewer schools and finishing them you can get what is required for that bulge as it goes up the schools?—(Mr. *Newsom.*) If the Ministry will let us build what we want to build then we can do it, and at the moment it is just on balance. It would be silly to say we are sure we could not find a place for every child, and the right place. It would be also silly to be too much in advance. It is just a borderline business, whether there are going to be enough places and in the right schools. One of the problems of the secondary school is that you have got to provide the adequate number of grammar and technical places as well as secondary modern. We are slightly worried in Hertfordshire about whether we are going to be allowed to build sufficient grammar school extensions to get that proportion right in the secondary places.

1417. The limiting factor is not the work you begin; the number of schools finished is conditioned by what the Ministry allow you to build?—It is both. It is no good the Ministry allowing us to build schools we cannot build because we have not got the labour. On the other hand, it is exasperating to know you could get it up but it has not been sanctioned.

Chairman.

1418. In some parts of the country where these new schools are going up they are overcrowded from the start?—Yes.

1419. Can you tell us what your experience is? Have you got any figures about size of classes?—Many of ours are overcrowded. The overall statistics are that the number of classes with over 50 children in them was 10 in 1952 and it is 18 now. Those are the real sort of horrors, but these are bad enough: the number of classes with between 40 and 49 children in them was 498 in 1952 and it is 565 now. The ratio of teachers to children, which last year was 29.7 children to each teacher, is now 30.1. It is worsening; there has been a steady increase in the last three years in the number of over-size classes.

Mr. *Norman Cole.*

1420. That is taking into account the beneficial contribution of the parish schools?—Yes. There again, no one stopped us doing what we wanted to do. We have hired every bit of accommodation we can. The County Council always allowed us the teachers. This is the peak year; nothing can be done about it now except hire accommodation. From now on the situation is going to ease because there will be smaller numbers coming in.

Mr. *James Johnson.*

1421. It may be worse, because one expects to have smaller classes at the secondary stage. These large classes in the junior schools will move up to the secondary schools in the next few years?—I do not think that is so bad. A primary school is simply a collection of class spaces on a hall. A secondary school has got not only its classrooms but woodwork and metalwork shops, domestic science rooms, needlework and so on.

1422. Yes, but I am thinking of the size of classes. You say there are 565 classes with over 40 children in them?—Those are all primary.

1423. When they move up in two years' time you will have 565 classes with over 40 children at the secondary stage?—No, because of course we are building our secondary schools on the assumption that there are to be 30 in each class. It is also true that roughly half the curriculum in a secondary school is in the craft classes. The primary school children are together in that great mass the whole day long. My daughter has been to one of our secondary schools, with a class of 38, but she is only in that class half the day and spends the other half day in needlework or something like that, with a class of about 15. In the primary school you can never get away from this multitude. It is not so bad in the secondary; every child in the secondary has virtually two places.

Chairman.

1424. What are you planning in the secondary programme?—Our secondary school programme at the moment is about six new schools a year and about four major extensions.

1425. Are you able to keep within the Ministry's figure there?—Yes, just.

1426. It is more difficult?—It is more difficult in the secondary.

Mr. *Norman Cole.*

1427. Do you build traditional or non-traditional?—Mainly in the same idiom—Hills. This term we have opened three new three-form entry secondary modern schools, which were all built within 23 months.

Chairman.

1428. How many storeys?—Two storeys.

Mr. *Norman Cole.*

1429. There is one point about traditional schools. Can Mr. Tatton Brown tell us this; there are three points. First of all, would you say conclusively or not that non-traditional has proved much more speedy in erection. Secondly, with an expanded programme in future when the best is possible would you choose traditional or non-traditional? Thirdly, could you tell us something about your experience of maintenance of non-traditional since you started in 1947?—(Mr. *Tatton Brown.*) On the question whether non-traditional will always beat traditional on time, the answer is no. It depends on the plan, the locality, and a number of other factors, whether bricks can be obtained or not. We have had several non-traditional schools which have taken longer than a traditional school going on alongside. We do know in Hertfordshire, where there is a shortage of building labour, if we put all our eggs in the traditional basket they would all be very much slower than now. For that reason we have gone in for the non-traditional.

1430. The second question was, in a time when the best is possible which way would you build, traditional or non-traditional?—We do not make this distinction between traditional and non-traditional. We think more in terms of wet and heavy, which is brick construction, or dry and fast, which is the pre-fabricated method. Of course, there are always the pre-fabricated windows—even the brick itself is pre-fabricated—in the traditional building, and conversely we like to have, for aesthetic and other reasons, a good deal of brickwork for retaining walls and terraces and so on.

1431. In short, a happy combination of both?—Yes.

1432. The third thing is the maintenance of the non-traditional schools since 1947. Is it higher than non-traditional, or is there not sufficient time to judge yet?—I should say it is too early to judge. Inevitably, because, we have been experimenting, we have had failures in minor details. For instance, we were using fibrous plaster for the underside of our cornices, and that has had to be replaced by asbestos wood. Is that a bad wearing thing or bad design? I think it is really bad design. We did not know enough; we put in the wrong thing. This asbestos wood will undoubtedly last perfectly well. This figure of the Ministry's in an age of rising costs is driving us into cheaper and cheaper floor finishes. The old wood block floor cannot be beaten as a class room or corridor floor; it is first class and it will last for years. We are being forced into cheaper substitutes, thinner and thinner floor finishes. That is poor economy, because in 10 or 20 years time to take up the floors is going to be expensive.

Miss *Ward.*

1433. Is that the only substitute material you would criticise in the general pressure to get down the cost of materials?—No, it does not stop at that. It comes into things like ironmongery, doorhandles and so on; we have had to have cheap aluminium doorhandles that have broken. We have had to use 32 ounce glass, which breaks more easily. All round we are feeling the pinch. If we could spend another £10 per place we could improve the quality enormously.

1434. Really you are piling up your replacement charges on the smaller items?—We are tending to, yes. We are always fighting against that. Fortunately, our County Council has been extremely enlightened. Where we have had open tenders and a contractor has put in a price of £135 a place, we have said "For that extra £5 a place we can have wood block throughout. Will you pay?", and they have said "Yes".

Mr. *Norman Cole.*

1435. The Ministry?—Both the Ministry and the County Council.

Chairman.

1436. What you are really saying is that you are building in those materials which are no luxury in any sense but are necessities in a school which would be economic?—In the long run.

Mr. *Norman Cole.*

1437. You would say it is a wise thing to do to get a tender of minimum satisfactory quality and then if you have room in the price to add a few things on for future economy?—Yes. (Mr. *Newsom.*) We did it when we got the tender under £140.

Chairman.

1438. What about timber schools? Will the maintenance be much higher?—(Mr. *Tatton Brown.*) I do not think so.

1439. You have got to paint them more? No. We are using finishes like western red cedar, which does not need painting.

Mr. *Malcolm MacPherson.*

1440. How many timber schools have you?—We are starting five this year.

Chairman.

1441. Do they take a shorter time to build?—Yes, I hope they will.

1442. Is the primary school, to be built by next September, of timber?—Yes, that will be timber.

Mr. *Norman Cole.*

1443. Did you say you can build a timber school with no painting on the shell?—If you are allowed western red cedar, which is scarce because of dollar restrictions.

Mr. *Malcolm MacPherson.*

1444. In your programme you are giving full weight to the bulge in the birth rate?—Yes, on the secondary side.

1445. Not primary?—We have beaten the bulge in primary. We have got to the biggest number we are going to have in our schools.

1446. Does that mean after the bulge is over in primary and secondary you are going to find yourselves with a certain amount of unnecessary buildings in hand?—That would be so if we had not got so many overcrowded classes. We have 1,700 classes in primary schools, and 570 are over 40 children in a class; 662 are between 30 and 40. If one took the perfectly reasonable figure of 30, which is sound educational practice, for primary, too, for that matter, there will not be empty places in Hertfordshire schools. If we were running now with classes of 35, we should have the vacant places in time.

Chairman.

1447. I think we have covered a very wide field. Mr. Newson and Mr. Tatton Brown, the Sub-Committee would like to thank you very much for the patience you have shown in listening to all our questions, and I must say the evidence you have given us this afternoon has been extremely interesting and very valuable to us. We should like to thank you for the forthright manner in which you have answered our questions and for your co-operation?—Thank you, Sir.

The witnesses withdrew.

Adjourned till Wednesday next, at a Quarter to Eleven o'clock.

WEDNESDAY, 25TH MARCH, 1953.

Members present:

MR. YATES in the Chair.

Mr. Norman Cole.	Brigadier Peto.
Mr. James Johnson.	Miss Ward.
Mr. Malcolm MacPherson.	

Mr. K. C. F. FOSTER, Mr. N. LONGLEY, Mr. J. IAN ROBERTSON and Mr. C. GORDON ROWLANDS, the National Federation of Building Trades Employers, called in and examined.

Chairman.

1448. Gentlemen, we are very pleased that you are able to meet our Sub-Committee this morning to give us some information in regard to building of schools. Mr. Robertson, perhaps you could introduce your colleagues to the Sub-Committee, and we take it that you are representing the National Federation of Building Trades Employers?—(Mr. *Robertson.*) That is correct. On my left is Mr. Norman Longley, who is a Past President of our National Federation. He comes from Crawley, Sussex. Behind him is Mr. Foster, Junior Vice-President of the London Master Builders' Association; he is, of course, from London. Then there is Mr. Gordon Rowlands, Secretary of our Federation. My name is Robertson; I come from Burton-on-Trent, and I am also Past President of the National Federation.

1449. Have you special experience in regard to the building of schools at all?—I think we have all built a certain number of schools. I would not say we are school specialists, but we have had some experience of school building.

Chairman.] You know we are a Select Committee of the House of Commons examining the expenditure on education, and we are at present examining the school building programme. It is, of course, our duty to make recommendations to Parliament if we think that economies can be effected, economies which are consistent with the policy which is implied in the Estimates. We have been gathering a good deal of information about the building of schools, the various methods of building, and the difficulties which are being encountered, the differences between traditional and non-traditional building. We should be very glad if you could give us the benefit of your knowledge and experience in regard to these various types of building, the traditional method and the non-traditional method, and also if you could tell us something about the special difficulties in regard to labour or materials in various parts of the country, which are both essential to the building of schools.

Brigadier *Peto.*] May I ask also if a word or two could be said about their views on economies?

Chairman.

1450. Yes?— Perhaps first of all I might say a few words about traditional schools. One feature which we feel rather strongly about is that there is still insufficient proper pre-planning. Let me give you an example of what happens. A building contractor receives an invitation to tender for a school. The time in which he is allowed to make his tender varies, but it is generally about a fortnight or three weeks up to a month for a big school. That in itself is sometimes a rush. Then he sends his tender in. Nothing happens for some time. He then makes inquiries of the architect, and is informed that he is the lowest and is likely to get the order, but it has to get Ministry sanction. Time passes on. Months go by. Eventually the contractor may get the order for the job for which he originally tendered. He may, on the other hand, be told the job is going to be cut down. What then happens is that a starting date is given. The contractor is rushed to the site, and the drawings are not properly ready. That is happening not only in schools but in other things as well, but it happens, I think, particularly in the school programme. There I think a good deal of time and money is being wasted through lack of proper pre-planning before the job starts. I can quote you a concrete example which happened in my own firm. We tendered for a job about this time last year. It hung fire all through the spring. In the middle of the summer we were told the job was going to be cut down, and we started work at the back end of the year, about November last, doing excavation work in the winter, which, of course, is a costly business, and even tomorrow, as a matter of fact, I am meeting the architect and the consulting engineer, because we still really have not got adequate information to build the school. That is my first point.

1451. Would you say that is a general complaint of builders?—I would say it is a general complaint. (Mr. *Longley.*) I could quote a case in my firm when we tendered for a school which had a large amount of excavation in it and some quite deep drainage works. We were given starting dates as far ago as last June, which were put forward progressively until some date in the early autumn, when we started. It would have been more economical had we not started at all then until the present time.

Miss *Ward.*

1452. You think that would have been a saving of money?—It means that a contractor tenders for a job, and he knows there is a risk, although the job is apparently going to start in the building season—building is still seasonal to a certain extent—he is nervous he may be held up. He is running the risk of working in the winter instead of the summer. Nothing increases the price of building so much as uncertainty. I would like to suggest the building industry is entitled to know the date when the work will start at the time of tender. Then our tendering would have one of the big unknowns removed.

Mr. *James Johnson.*

1453. Have you complained, and if so what answer did you get?—We get the answer that no starting date has been given. The capacity of most firms to work at an economical level is limited. If the job for which the firm knows they are the lowest tenderer is held up, they are obliged to take other work to keep their regular employees busy, and that means when subsequently a date of starting does come along they are overloaded because they have got two jobs. They could make their plans if they knew when they tendered when the work was going to start. They could tender more cheaply for the job they want to take because it fits into the other work. When there is the uncertainty about starting dates it plays havoc to the management of a firm on economical lines.

Chairman.

1454. Are there any particular areas in the country where you would say planning is good and this does not arise?—(Mr. *Robertson.*) I do not think so. (Mr. *Longley.*) There are some better than others, but I would not be in a position to make the comparison.

1455. It is a matter for the local authorities, and it must vary from authority to authority?—(Mr. *Robertson.*) The

answer one always gets is that they are waiting for Ministry sanction. (Mr. *Foster.*) I think in the case of the secondary schools, which, of course, are much more complex buildings than the primary schools, the architects have not sufficient time from when the project is included in the authority's programme until the authority require the tenders. There does not seem to be sufficient planning far enough ahead. There may be very good reasons for it. This is a point I have had put to me by architects when I have mentioned that a building does not appear to be ready to start, that the project has been included for such and such a date in the particular year's programme, and they have only got a certain time in which to plan and get all the details prepared. (Mr. *Rowlands.*) Following on that point, our Federation received complaints about two years ago that by reason of the Ministry of Education's financial year arrangements a large number of school contracts were issued for tender all at the same time of the year. It might very often happen that it was a bad time of the year for the building season, but the complaint was that there were so many jobs issued for tender at the particular time of the year in order that the tender could be let so that these jobs could be counted within one particular financial period. I do not know if the Ministry of Education have altered the procedure in regard to that, but those complaints were about two years ago. About a dozen schools were issued to tender by one County Council or local authority within about three weeks. (Mr. *Longley.*) In other words, building being seasonal, it should be made to suit the season rather than the financial set-up.

1456. It really amounts to uncertainty, that there does exist uncertainty due to the inadequate planning, and if some arrangements could be made whereby this delay could be avoided, where builders could know well in advance, it would be more economical in the long run?—Yes, and also having regard to the season. We do not want them all let in the winter.

Miss *Ward.*

1457. Could I ask whether it has been general over recent years to have a cut after the original plans have been put out for tender?—(Mr. *Robertson.*) No, I would not say it is general. Quite a number of projects are reduced from the original scheme, but I would not say it was by any means general.

1458. Has there been a tendency for it to be on the increase?—No, I do not think so.

1459. It has been a normal practice?—Yes.

Mr. *James Johnson.*

1460. Your worst time would be just over twelve months ago when the moratorium was announced?—Projects stopped altogether then.

Miss *Ward.*

1461. I do not think that quite squares up with my question. I was asking whether it was a general complaint that projects were cut down after they had been put out for tender?—No, it is not a general complaint. It happened in that one particular concrete example I quoted, but it is not a general thing. (Mr. *Foster.*) I would say in my experience more projects have come within the ceiling limit than have gone over and had to be reduced. I should say about one-third have had to be reduced and about two-thirds have come out at a figure within the estimate.

Chairman.

1462. Whilst that may be the position in regard to the points you have just raised, it is a general complaint that you are not given adequate time, or at least you cannot get the answer, as to whether the tenders are accepted or not?—(Mr. *Robertson.*) That is so.

1463. That is general?—Yes, that is general. (Mr. *Longley.*) Can we emphasise this: one often knows one is going to do it, but one does not know on what starting date. That ought to be determined when you are invited to tender. We see no reason why we should not know when we tender at what date we are going to start.

1464. In any case there are long delays, you say, of months?—(Mr. *Robertson.*) Sometimes.

1465. You were going on to deal with some other points?—Going on from there and coming to the more particular, still sticking to traditional construction, I think one of the most striking things—it must strike everybody, quite apart from architects and builders and people technically interested—is the enormous area of glass which there is at the present day in schools. Whether that is absolutely necessary it is perhaps not for us to say, but there is no doubt that this enormous quantity of glass must and does have an effect of making the construction of a school very costly. You will appreciate, I think, if you have got an enormous area of glass with only just a thin pier between the windows, that pier has got to be of a very substantial nature. You cannot have a 14 × 9 brick pier. It must be reinforced concrete or constructional steel. There is no doubt that this enormous volume of glass is adding enormously to the cost of school building. Not only do you have your enormous window on the outside of the classroom, but in order to get an equality of light

there is invariably a window high up on the other side, over the corridor, and that makes for difficulties of construction in your corridors if it is a multi-storey building, and it has the further effect in that this enormous volume of glass means that heating of a school has to be very much more elaborate than it would be if the glass employed were less. You will appreciate the cold gets through the glass, and the heating has to be much better to counteract that. The heating of schools itself is a matter which I think merits some consideration. Whether the present method, namely, heating chamber with a boiler and low pressure pipes and radiators, is the best, I would not like to say. I do not pretend to be a heating expert, but there is no doubt that as designed at present in most schools there is very often a very large heating chamber built below ground; nearly always it has to be asphalted, which is a costly procedure, and it means the walls have to be very thick and the floors have to be very thick to withstand water pressure. It has struck me personally there are other more modern methods of heating, which might conceivably be more costly in the first place, but it is possible that they might be cheaper in the long run. It must always be remembered, too, that radiators and hot water pipes tend to make dirt, and it means the school has to be repainted more often when it has that system of heating. I think that covers that point.

Miss *Ward.*

1466. What do you think about the new system of blowing hot air in?—It has been tried. I have not seen it in any schools I personally have built. I do not know how it compares in cost. (Mr. *Longley.*) The Sub-Committee will no doubt have available the results of the trial school at King's Langley. I recommend the Sub-Committee to get information from the Building Research Station on the school in King's Langley, where they have three complete types of heating. One type of heating is the radiator system, one floor heating, and one blowing in hot air. They have got groups of classrooms in different parts of the same school heated in different ways.

1467. Where is that?—King's Langley. There must be information available on running costs.

Mr. *James Johnson.*

1468. Mr. Robertson said this amount of glass leads to much more expensive cost per school place?—(Mr. *Robertson.*) Yes.

1469. Have you done any scientific costing at all? Would you say it is £5, £10, £20 more per place? Have you tried to estimate as between the types of schools you have been building?—We are frankly not interested in the cost per place. It does not concern us at all. We are merely interested in the cost per school as it affects us. We are not educationists; we are not the local authority, and we do not pretend to know how it affects cost per pupil.

1470. Let us put it in another way. Let us take the global cost. You must have in your files many different types of school you have built. Would it cost £80,000 whereas it formerly cost £65,000 or £70,000?—I would say from my general knowledge that a school built with smaller windows in the older-fashioned way, with load-bearing brick walls and perhaps steel joists at the floor level—we used to use timber a lot—is a good deal cheaper than a structure built with steel right from the word go, with stanchions or reinforced concrete.

Miss *Ward.*

1471. Could you put a percentage on it?—I should hesitate to put a percentage to it. (Mr. *Longley.*) Our difficulty as contractors is that it is awfully difficult to compare. We have merely got the price of our building. We do not know anything about playing fields, etc.

Chairman.

1472. Is the tendency to increase the area of glass in the new schools?—(Mr. *Robertson.*) I think they have reached the stage now where they could not increase it any more, because it would be all glass.

1473. I would not say that, not from the schools I have seen. Would you agree it is very important to have adequate light?—Yes, quite.

1474. In the new plans that are coming forward are they still increasing the area of glass?—(Mr. *Longley.*) We agree that adequate light is necessary and desirable, but it is possible to overdo that. We do not know at what stage it is going to be overdone. We do know as the glass area increases you get greater cost. We know as the glass area increases you increase the cost of heating schools in the winter, and that you are then faced in the summer with protecting the children from glare, and there must come a time at which you are getting too much glass.

Mr. *James Johnson.*

1475. Might we ask you to think about this, because many people have sent us papers afterwards. Would you care to think about it and see if you can get out some comparative figures, without too much detail?—(Mr. *Robertson.*) I do not think we can. (*Mr. Foster.*) We are comparing post-war schools with pre-war, and there are so many other factors involved. I do not think we could make a comparison just on this point of more or less glass. I would

not say the glass is still on the increase. We are really comparing post-war with pre-war. The point which makes it so expensive in the planning is this, that besides having the windows on one side you must have some along the corridor to even up the light.

Chairman.

1476. Have you as Building Trades Employers ever been consulted on this by the Ministry of Education or the authorities concerned?—(Mr. *Robertson.*) No.

1477. Do you think it would be a good thing if there could be some consultation or discussion about it?—(Mr. *Longley.*) The real way of consultation is for a local education authority architect to design one school one way and one school another way and get the comparative cost in the form of tenders. That is a direct and fair comparison, and it is so simple.

1478. Yes. Now, you were going to mention some other points, Mr. Robertson?—The only other point I wanted to raise on the traditional methods is a small point. Architects now seem to be indulging in the practice of multi-coloured decoration. They tend to have one wall sky blue and the one opposite pink. That means the painter has got to have different kinds of paint, and obviously that tends to increase the cost. It is only a small point, but there is something in it.

Mr. *Norman Cole.*

1479. Why does it increase the costs? I have seen actual rooms with four different colours, but why does it increase the cost?—There is always a certain amount of waste in paint, and there is the increased labour: he has to put one pot down and go and fetch another, and so on. And he is always scared that he may have got it the wrong way round. May I put in a plea for the withholding of permanent decoration of new schools? Distemper enables brickwork or plaster to breathe. There is always moisture in a new building. It enables the wall to get dry without affecting the decorations. Often schools are painted immediately they are built, which causes the decoration to be defective very quickly, and it is a waste of public money in my opinion. There is no reason why a school could not be provisionally decorated with distemper, and then permanently decorated when it is dry. That is what a householder does with his own house.

Chairman.

1480. I think that is an interesting point. Is it the general practice to paint immediately?—It is done in quite a lot of schools. (Mr. *Robertson.*) Yes, quite a lot, not always but quite a lot.

Mr. *Norman Cole.*

1481. May I ask this: bearing in mind the cost of distempering ten or fourteen classrooms and then painting them later, would that be less than the cost of redecorating by virtue of the decoration being affected by the dampness?—My own view is yes.

1482. It would be better to put distemper on and do it all over again?—I think so, yes.

Chairman.

1483. You had some other points to raise?—I do not think I want to raise any other points about traditional?—(Mr. *Longley.*) I would like to raise one point which I think your Sub-Committee should have a note of. I cannot say it affects everybody who designs schools, but the question of production by operatives starts on the drawing board of the architect. So many people fail to have regard to production when they are first making the drawings for schools. If they are straightforward in character, you get operatives able to earn bonuses because the work itself is straightforward. As we are often told production is not what it might be, we would like to call attention to the fact that production starts on the drawing board.

Brigadier *Peto.*

1484. You want a simpler drawing?—That should be borne in mind as the biggest contribution to economy.

Mr. *James Johnson.*

1485. We have been told at other meetings that economies over the last two years or so have meant you have had to stint in the type of materials, and we have been especially told about floors. Would you care to comment on that?—(Mr. *Robertson.*) I think that the quality of the floors going in today is perfectly good. I see nothing wrong with it. All schools we have built I think have been very adequately floored.

Chairman.

1486. There is nothing to beat the wooden blocks?—There is nothing to beat that.

1487. Are not they more economical in the long run?—(Mr. *Longley.*) They are not entirely free from imperfection. We have had trouble with wood blocks.

Mr. *James Johnson.*

1488. We have had a complaint about mastic flooring?—Perhaps you mean the new plastic tiles.

1489. You would not say there has been any complaint about the type of floors you are putting in now as compared with, say, six years ago?—(Mr. *Robertson.*) No.

Chairman.

1490. You were going to tell us something about prefabricated buildings?—Yes.

1491. You have experience in that, too?—Yes. My own firm have built one prefabricated school a few years ago; it was in Birmingham, your city. It was one of the very, very early ones, and quite frankly the difficulty we had on that school was one of obtaining the units for the school in the right order and at the right time. I think that a lot of those initial difficulties have now been overcome, but quite frankly my own personal experience from that one job we did was a most unhappy one. I am not by any means saying that is condemning the prefabricated school.

1492. Where was that school?—That was at Evelyn Road, Sparkhill. It was an Orlit concrete one. So far as the prefabricated school in general is concerned, I am informed that the theory behind that is that they are up to last some thirty or forty years. I imagine they will be up somewhat longer, but I believe that is the sort of underlying date they have in mind. There are, of course, certain obvious advantages in prefabricated methods of building schools. Firstly, I think, speed; a lot of schools have been put up in Coventry of these prefabricated types, and I am told that a lot of them were built in one year; they averaged about one year to put up, whereas the traditional school takes perhaps two or even longer. As to the price, I am told also that the initial price is at least comparative and very often cheaper than a traditional school. Another advantage, of course, is that there is a saving in site labour, applying particularly in places like Coventry, where there is a terrific shortage of building labour. Another advantage is, of course, that there is a saving in scarce materials, such as bricks, where they are in very short supply. On the other hand, little is known as yet about maintenance costs of prefabricated schools.

1493. We should like to know about that?—I fear it is almost too early to have any figures. So far as we personally are concerned, that one we built in Birmingham is standing up well; it appears to be in quite good condition. I do not anticipate myself that the maintenance costs of most of these prefabricated schools will be anything very much greater than of the traditional school.

Miss *Ward.*

1494. You have not had any experience of maintenance costs on anything else, prefabricated houses or anything like that?—No, I have not.

Chairman.

1495. Have you built any timber schools?—No. (Mr. *Longley.*) My firm built a timber school in 1926 or 1927 at Worthing, and I understand it is still most satisfactory. That was not a case of prefabrication.

1496. The maintenance of timber schools would be much higher, would it not, and the heating too?—Timber is an excellent insulator. If by timber schools you mean timber externally, I would say it would add to the maintenance. But if you mean timber as one of the components used for prefabricated structure, I would say it would not add to the maintenance cost.

1497. Are any of your members building timber schools at the present time?—I would like to say, if there is any tendency to develop along prefabricated lines, to extend that type of construction, I would suggest that one of the best materials is timber, and I believe the time is coming when more timber will be available. We have in the country a large amount of productive capacity in the woodworking industry which is under-employed at the present time. It is a material used by one of the traditional crafts, that is carpenters and joiners, who are available, and I would suggest that timber as a means of prefabrication be given very serious consideration. It has the advantage that it lends itself to modification on the site in the event of adaptation being required.

Mr. *Norman Cole.*

1498. Are you talking about timber outside or inside?—Inside.

Mr. *James Johnson.*

1499. As opposed to aluminium, for example?—Yes.

Chairman.

1500. What sort of timber are you referring to?—I would suggest the best source of supply is Scandinavia, which is a non-dollar area. Our importation has been only about half of what it used to be.

Mr. *Malcolm MacPherson.*

1501. Which types of firms are you telling us are under-employed?—People who have woodworking machinery. Joiners and woodworking machinists have been under-employed ever since the war, because the softwood imported into the country has never exceeded half what it used to be. It is a most valuable material which has been traditional in England, and we have been prevented from using it by the strict control of use at the consumer level. At the moment the importing industry can go and buy timber, but it is controlled at consumer level. I see no reason why there should not be a lifting of the ban on consumption for those designing schools.

Mr. *James Johnson.*

1502. Was it our custom to build timber schools before the war?—No; but it was not our custom to use prefabrication.

Mr. *Norman Cole.*

1503. Is there any viewpoint on the fire risk in these timber schools? You may not have any view about it. Have you had any knowledge of that?—I would say the fire risk would militate against multi-storey timber buildings.

Mr. *Malcolm MacPherson.*

1504. What would you say would be the cost of Scandinavian timber for the school building programme?—I do not know. (Mr. *Foster.*) On that point which has been raised, my firm have done some additions to existing schools in prefabricated timber building. We have not prefabricated them ourselves. I understand the cost of those has been about the same as using brick construction; that is, the initial cost.

Chairman.

1505. However desirable it may be to use more timber, is it not a fact that our difficulty today is to get adequate supplies of timber for other buildings, like houses and so on?—(Mr. *Longley.*) No.

1506. It would mean having to import more timber?—We understand that there is no physical difficulty in making more timber available to the industry in this country. It is the foreign exchange control reason. We are continually making representations in the right quarter. We say a greater use of timber would release certain other materials more valuable to our economy, such as steel or other metals, which may be used in industries which are themselves exporting.

1507. You mentioned steel, but are there any other materials that might be freed?—I do not know what the demand for aluminium is. If you are building a school in one material, you dispense with another one, and if a school were built in wood instead of aluminium there would be less aluminium wanted, which is also a raw material imported.

1508. The wood you have in mind is softwood?—Yes.

Mr. *Norman Cole.*

1509. Can any of these gentlemen give us any objections they have found, other than the obvious ones like time and so on, to the prefabricated building of schools?—(Mr. *Robertson.*) I do not think there is any objection whatever. There are quite a number of advantages. I think at present it is all very much in its infancy, and there is enormous scope for further research into prefabricated methods. I think some degree of standardisation would probably have to come. Heaven forbid that we should have a National School Mark I, but I do think there is scope for some standardisation in some way or other.

Brigadier *Peto.*

1510. Could you not standardise a great many of the parts used in traditional building?—That is what I mean, the parts rather than the school itself.

Miss *Ward.*

1511. Do you think that would be a saving?—Yes, I think it would.

Mr. *James Johnson.*

1512. Have you had any delay lately in getting components, getting parts and materials for schools, that has held you up and made more overheads?—With traditional schools, yes, bricks in quite a lot of areas.

1513. Which means you have labour standing idle or not fully employed?—Not fully employed.

1514. What about other items?—We get periodic shortages of cement. The East Coast disaster rather disrupted that, because a lot of the cement, especially from the Eastern Counties, was used up in that.

1515. What about the fittings inside? We are told there are sometimes delays in getting lavatory fittings, pipes and so forth?—It all rather comes back to my original remarks about pre-planning. Provided we can get the information early enough, we get the stuff. It is when last minute decisions are made that we run up against difficulties.

Mr. *Norman Cole.*

1516. In other words, it is the flow?—Yes.

Mr. *James Johnson.*

1517. You could do the job more quickly and cheaply?—We could do the job more quickly and cheaply if it was properly preplanned and we had all the relevant information when we started. (Mr. *Longley.*) In America one of the biggest contributions to cheap production is that when a building starts everybody knows what it is going to be, and it is not altered. In this country it has become the practice to see what it looks like.

1518. Is not this a matter for the building industry itself, for time and motion study by the builders themselves?—No.

Miss *Ward.*

1519. You mean the alteration of plans, the position of, say, lavatories or cupboards and that sort of thing?—Yes, or perhaps the school contract is let and there would be

some uncertainty as to what the heating system is going to be. We say that should be agreed and settled before we start.

1520. That is a responsibility of the local authority; they should make their decision as to what they want?—Yes. It is not peculiar to schools. It is an inherent fault in the mentality. (Mr. *Robertson.*) A school we are still finishing now, again in Birmingham, was almost complete when a lady who is the head of the school's catering department arrived and said: "I do not want that cooker there, but over there; I do not want that sink there, but over there", after it had been fixed, and we had to set to and move it all.

1521. Do you ever make any sort of joint representations to the Ministry of Education, to their Architect's Department?—I think we make our voice fairly loudly heard in different places and different quarters. (Mr. *Longley.*) There has been a working party set up by the Ministry of Works into the industry in which all this was dragged out and put on record, and ever since we have been urging people to take notice of this most important side.

Brigadier *Peto.*

1522. In the building of New Towns, why is it that the building trade seems to lag behind in building schools and prefers to build houses?—I can answer that. I am in a New Town, and I am on the local education authority that was responsible for school building in Crawley. It is much more easy to start and construct houses than schools. The machine operates more slowly in school building. It has got to go through the local education set-up. In our authority's area, two schools in Crawley are on the reserve list for 1954-55, which indicates the uncertainty that surrounds these schools. They are planned, and the site bought from the Development Corporation. In due course they go to tender, and they take a long time to build. The Development Corporation is right on the mark with housing. As soon as roads and services are put in, houses start to go up. To that extent schools are at a disadvantage. Housing rather goes in advance of schools. You do not put schools up and hope that children will come. You put schools up because the housing is going on and children are going to be there. It would be just as wrong to build schools ahead of houses as to build them a little behind them. It is almost impossible to coincide exactly. You build a new school for 600 and open it. Immediately there are spare places, and there comes a time when the children overflow the school before the next school is begun. In other words, houses are built at the rate of 20 or 30 a week, and schools in bunches of 600 places. You are bound to get scope for people to complain that schools are not there soon enough.

Chairman.

1523. There is a certain amount of time lag which may be inevitable in that kind of planning, but if you could reduce the delay by having some means whereby the builder could be absolutely certain that is the plan and there can be no query, that would help?—Yes, and you must remember the local education authorities on whom these New Towns have been placed have not been accustomed before to having such a big programme put in front of them. Their staff was not geared to cope with it. It has been quite a problem for them. I suppose it has put 30 per cent. on their school building programme in one blow, and in places like Hertfordshire it must have doubled their programme. It is difficult to absorb.

Mr. *Norman Cole.*

1524. I am not entirely satisfied with that, with respect. Speaking about a New Town, which is more clear-cut than a housing estate, is not it possible to know the first 200 families who are going to occupy the first 200 houses and how many children they have, or are likely to have by the time they occupy those houses, and make the school ready at the same time?—I would say it would be possible if you had a prefabricated school, but the overall period of building houses is something between eight and nine months, which is much less than the time for building a school.

1525. Yes, but this is 200 houses, not one. Two hundred houses means roughly 700 people, or more. Of those, there may be 200 children of primary school age; take it as 300 children of primary school age, and therefore you have a 300 place school. Surely in a New Town it must be known who are going to occupy the first 200 houses. Therefore, would not it be possible to find out the constitution of those families before they take the houses?—Yes, but those 200 houses will not provide enough pupils for a school. They will have about a quarter class entry. It does present a difficulty, but there is nothing insuperable about it.

Chairman.

1526. There is this quesion about building labour. Could you tell us whether there are any problems in regard to labour, and may I ask you this too; is it correct to say that in some cases there is a tendency to encourage the building of houses rather than schools because there are more advantages in the way of bonuses or otherwise for the people who are building them, or is it more remunerative in any way to build houses than schools?—I would say there

is slightly better morale about house building and factory building, because you feel that there is more obvious demand and incentive to get on with the job. You feel when you are building a house the application of bonus is more simple. People say: "Every time we do this we have finished a house for a family." There is not quite the same drive behind school building, which is for a local education authority, which does not make itself felt as being such an important factor in living.

1527. Is there any way in which that could be remedied?—There is a way. I can only speak of my New Town. The whole of the Education Committee is visiting the New Town on Tuesday. Every school site is being shown to it, the condition of the various developments going on, where the houses are going to be; they can see the houses round the school, either in front or behind, and in that way the education authority is itself being educated into the problem.

Mr. *James Johnson.*

1528. Is not the answer that you pay workers in the house building more than you pay on the school building?—(Mr. *Rowlands.*) No. I think the Ministry of Works figures will show that incentive schemes are being operated on a larger percentage of school sites than of housing sites.

1529. Would not you say that a number of schools lag behind and do not get sufficient skilled labour because they have not got bonus schemes?—I think if you get schools more or less of the same type—you cannot have every school of an identical plan, but you can do a lot towards reducing the number of divergencies—it is almost as easy, I would say, to bonus school building as it is housing, but the proportion of the total amount of work on a school that is capable of being bonused is, however, less than on new housing.

1530. That factor you dismiss, then. Workers on school building get as good wages as the workers on house building?—I do not think that it has any appreciable effect on the progress of the school building programme.

Chairman.

1531. Is there anything else you wanted to say to us?—(Mr. *Foster.*) There are one or two further points I would like to make. If a school has ground floor only the construction can be fairly light. If you go up one floor above you have got to make it much more substantial. If you are going up one floor, then it is more economical, instead of ground and first floor, to go up another floor and have ground and first and second. I think with primary schools, where I think it suits the educationists to have them all on the ground floor, I would not say they are more expensive than having higher schools, because the construction is much lighter. But if you are going up above the ground floor I do plead that you should go up ground, first and second. The second thing is, I should like to reinforce what my colleagues said about standardisation of components. I think we could have some standardisation of windows, for instance, and classroom fittings, blackboards and cupboards and so on. Some authorities, I believe, are standardising for their own authority, and that is leading to economies, but I believe there again it is because of the local committee, and the preference of the teacher sometimes comes into it. There is also this question of substituting timber for steel. There was a tendency after the war when we were so short of timber we had steel for everything. I do think we want to reverse that a little now and bring in timber instead of steel. (Mr. *Longley.*) It seems to me if prefabrication is to be embarked upon it should be encouraged in districts where the traditional materials are not available. In some parts of England bricks are plentiful. The costs of building are increased by transportation, and it is wrong to take bricks to places where there are not bricks and take prefabricated parts to other places where there are bricks. In prefabrication, to get the full advantage, the person who is producing the parts ought to know the scale on which he is going to produce, how many and how long; otherwise you fail to get the full advantage of prefabrication. The third point is rather an oblique one. Where we are getting classrooms used for dining rooms, a clear-cut decision regarding dual use of furniture should be made. At the moment the financial cost falls partly on the local education authority and is subject to different grants. There is a tendency, if a table is used for a desk and a dining table, for the different system of grants to make the local authority say: "We will have this for a single purpose", and the other department to say: "We will have this for a single purpose", whereas if they were brought together both could get a saving. At the moment the financial set-up tends to obscure the economics.

1532. I am sure, Gentlemen, you have brought to our notice this morning some very interesting points that had not occurred to us before, and we shall take into consideration very carefully what you have said. We are much obliged to you for coming to give evidence, and we hope you will read our Report when it is issued with some interest?—(Mr. *Robertson.*) Thank you, Mr. Chairman.

The witnesses withdrew.

25 *March*, 1953.] [*Continued.*

Sir WILLIAM MURRIE, K.B.E., C.B., Mr. A. G. RODGER, O.B.E., and Mr. R. S. MORTON, called in and further examined; Mr. A. DAVIDSON, Assistant Secretary, Scottish Education Department, called in and examined.

Chairman.

1533. Gentlemen, after having evidence from you earlier, you very kindly agreed to give us further information, and perhaps I may refer first of all to the additional information you have given to us. In the supplementary memorandum* you report on the unsatisfactory schools, and you give the number of schools which require immediate or early replacement if such replacement were possible. There are 12 schools requiring replacement in industrial areas and 36 in other areas. Can you tell us, Sir William, how many schools there are in Scotland?—(Sir *William Murrie.*) Perhaps Mr. Davidson could answer that. (Mr. *Davidson.*) There are over 3,000 schools in Scotland.

1534. And 12 schools in industrial areas and 36 in other areas would be quite incapable of improvement and should be replaced. On this particular matter the Sub-Committee have had before them a Report on School Buildings for Scotland,† which was issued by a Committee appointed by the Secretary of State. I think you were a member of the Committee, Mr. Rodger?—(Mr. *Rodger.*) Yes.

1535. Have you got a copy of it with you?—Yes.

1536. If you refer to page 3, there is a reference to the unsatisfactory buildings. In paragraph 3 it says: "With regard to unsatisfactory existing buildings, we take this opportunity of emphasising that rooms where artificial light is constantly necessary, where deafening is seriously defective, or where heating and ventilation are bad, rooms with no access to a corridor or which can be entered only through other rooms, and the lack of reasonably satisfactory cloakroom accommodation or of latrine and lavatory arrangements are amongst the defects which should no longer be tolerated." Is that view which was expressed by the Committee still your view?—(Sir *William Murrie.*) That is a view expressed by an Advisory Committee.

1537. What notice did you take of it?—We have allowed education authorities to go on with the improvement of conditions in schools where that could be done. For example, in the past year I think we approved about £500,000 worth of works of improvement in unsatisfactory schools.

1538. Coupled with that in this same publication, on page 20 there is a reference to the improvement of existing buildings, and it is said: "In paragraph 27 we mentioned that the Scottish Education Department should furnish education authorities with a list of those schools in their area which, for various reasons, should be regarded as obsolete and on which it would not be prudent to expend further money; in such cases new accommodation should be provided if it is still required in the area served by the existing school." Was that recommendation carried out? Did you advise authorities of the schools upon which it would be imprudent to spend further money?—(Mr. *Rodger.*) Since the war, Sir, the position has changed. A vast amount of new building has been done in housing in the peripheral areas of cities, and a very considerable amount is still to be done. As the new schools in those areas are completed, many of the existing schools will have considerably reduced rolls, and it is part of the general policy that the worst of the schools will be closed is a result of the easement of the old areas as brought about by the development of the new.

1539. It went on further to say on page 21: "There is, however, quite a large number of schools in Scotland which, though not as modern as might be desired, can be considerably improved." Is that this number here in the memorandum, or have you carried out any further survey since the war?—The figures with which you were supplied are the results of a very recent survey.

1540. That would look as if it was not a considerable number out of 3,000?—(Sir *William Murrie.*) A considerable number of schools need some work done. The memorandum shows schools that need to be completely or partly replaced, and we distinguish these from schools that need to be made better by a certain amount of work. Those schools that can be improved by work being carried out on them are being improved in that way.

1541. That brings us to another point. What is the allocation that is made to you for the improving of these schools? You know in England there is a figure of allocation of 9s. per pupil plus £25 for each school. Could you tell us whether you have an allocation for Scotland and if there is a limit on minor projects of £6,000 as in England?—We get a total allocation which is, I think, about £7 million, for all school building work in the year. That is for the year 1953. A good deal of that goes on new school building, but we estimate that £1½ million will be spent on what are called repairs and maintenance. Much of that is running repairs, but we know that some of that £1½ million—we do not know how much—is devoted to what might be called improvement of schools. Apart from

* Annex 4.

† Post-War Building Studies. No. 21. School Buildings for Scotland.

that £1½ million, we know that in 1952, for example, schemes of improvement of £200 or upwards, totalling about £430,000, were started. In addition to that, there was started in 1952 about another £550,000 worth of work which consisted mainly of extending the accommodation in schools, but it included a certain amount of improvement. You occasionally get a school where you need another two classrooms and you want to improve the lavatory accommodation at the same time. The two jobs would be carried out as one project and would be counted in the reckoning of the amount of work done for increasing accommodation. I cannot, therefore, tell you exactly how much money is spent on modernising, except that it is considerably over £400,000, because we know that it is £400,000 at least, plus what may be done as part of repairs and maintenance and plus what may be done in connection with extensions of the amount of accommodation.

1542. If, for instance, you adopted a different system, similar to the one that is adopted in England, of allowing for these minor improvements and repairs, a formula, would you consider that would be disadvantageous in any way as compared with your present system? I take it your present system is to survey what you consider to be the need and then do the work?—Our present system is to allow the education authority, who are primarily responsible for determining the need, to do the work. We have not said to any education authority: "You cannot put up to us schemes totalling more than any particular ration." I should like my colleagues to confirm that. (Mr. *Rodger.*) I have nothing to add.

1543. Mr. Rodger, would you think that adopting a formula like that would be a good or bad thing?—I think there are advantages and disadvantages. To give the authorities a formula enables them to know precisely what they can do, but I think our authorities are doing as much as they would be allowed to do under the English formula. There is this disadvantage: if one gives the authorities allocations and the authorities, or any particular authority, does not use its allocation, that is so much building expenditure allocated to us left unspent. We feel it is our duty to spend as much as Parliament allows us to spend in these days when educational building is so desperately required.

Mr. *Malcolm MacPherson.*

1544. Would you be in a position at the Department to give the authorities a formula for guidance? Is there in the Department enough detailed and extensive knowledge for a formula to be laid down, or do you think the English figures would be appropriate?—In point of fact, since this discussion began I have tried to estimate what the English formula would allow in Scottish building, and it is actually less than the £430,000 we have mentioned.

1545. That is not quite the point I am on. The initiative comes in this kind of thing from the local authorities. Have you in the Department enough knowledge to say whether those local authorities are in general exercising their initiative wisely; in other words, are they doing less than you would want them to do if you were deciding it, or are they doing more?—I would say, considering the situation of the times, when there is so much other building work to be done, that the authorities are doing very well on this.

Miss *Ward.*

1546. You do not think there would be a tendency for the local authority to hold up making improvements on the basis of the minor projects scheme, hoping that if they did not do it they might get a new school allocated to be built in their programme?—I have no evidence whatever of that kind of thing.

Mr. *Malcolm MacPherson.*

1547. Have you any evidence that schools which are themselves good, solid buildings and would be a good investment are not being repaired because the authorities want to use their funds otherwise?—No, Sir, I would not say so. We do know, however, that in many of the Highland areas, where the bulk of the schools date from the 1872 Act or earlier, lots of the schools require a certain measure of improvement, and the authorities just cannot do all that in one or two years. Some authorities have programmes of this work. For example, Berwickshire, is modernising its latrines over a period of years, so many per annum.

1548. Have you given any guidance about priorities in that kind of thing to the authorities?—Have you ever suggested the first thing they should try to do is modernising the latrines or anything of that sort?—No.

Chairman.

1549. Have you ever declined to agree to schemes put up to you by the local authorities?—The only ones I can remember that have been turned down were in Glasgow, where they would have come into conflict with very important new buildings which were going on. Glasgow at that particular time was doing rather more building—the city as a whole, not only education—than the building industry could stand. Therefore, if certain rather big latrine improvements had been made in Glasgow it would have entered into serious competition with the building going on. Some of those had to be postponed. In my memory, that is the only case of improvements we have had to turn down; indeed they were not turned down, they were postponed.

1550. There was one other recommendation in this Report that interested me, and I wonder what your view is now, because you were on this Committee that made the recommendation. You said on page 21: "We recommend, however, as a general guide, that reconstruction of unsatisfactory existing buildings should be attempted if the cost will not exceed 50 per cent. of the cost of erecting a completely new school." Are you still of that opinion?—Yes, broadly I think I would subscribe to that opinion still.

1551. You think it would be a very good thing if these unsatisfactory schools were brought up to standard provided you kept within that particular recommendation?—That particular recommendation says this, that it is not economical to modernise very bad schools unless the modernisation can be achieved at half the cost of building a new one. I should perhaps now think of a figure a little higher than 50 per cent. Anything that would save money would be justified.

1552. On the question of the new school programme, it has been suggested to the Sub-Committee that there is a great deal of uncertainty on the part of authorities in regard to plans for schools in Scotland, that in fact local authorities submit plans, and then the Scottish Education Department calls for an alteration of those plans, and they are then resubmitted, and then perhaps the Scottish Education Department declines again, which adds to the cost of the architects' fees, and there is a general feeling of uncertainty. Can you comment about that?—(Sir *William Murrie.*) May I say first of all that the arrangements for submitting plans are set out in a document called the School Building Code. I am not sure whether you have a copy of that document or not. If you would like to see it we will submit it to you. It is a document which lays down all the stages that a school building project should go through, and it was drawn up by the Scottish Education Department in consultation with the Association of Local Authorities on the Local Government Man-Power Committee for Scotland.

1553. When was that?—It was drawn up in 1950. In 1952, that is last summer, the second Report of the Scottish Local Government Man-Power Committee came out and said: "The code—that is the code I am referring to—which prescribed a simplified procedure to be followed by the education authorities and the Department respectively, in applying for and giving the advice, approvals and consents required for a building project, has been brought into operation. It is working successfully, and no suggestions have been made for its modification." That was last summer, and that was subscribed to by the Local Authorities' Associations as well as by the Department. It is nevertheless true that we occasionally ask an education authority to alter its plans. The general procedure is that the education authority discusses what kind of school it needs, what number of classrooms and so on, with the inspector, and they are given an idea at that stage of what we should be likely to approve. Then they make sketch plans and those are submitted to the Department. I think it was recognised when the Building Code was drawn up that the point of submitting the plans in sketch form rather than as complete working drawings was to allow for some discussion and possible changes in the plans before the work had gone too far. I should admit quite freely at that stage we do sometimes suggest to the local authority architects that it would be better to plan the school in a slightly different way. We should also at that stage when we get an estimate of the cost of the school look at that and if it seems excessive we should suggest modifications. Then there is the last stage when the education authority have had their sketch plans and their estimated cost approved and they get tenders for the school. I know of one or two cases in which the tenders have turned out to be much higher than the estimated cost on which the sketch plans had been approved, and in which we have suggested modifications. One particular scheme comes to my mind. In that case we suggested that the amount of excavation work on the site should be cut down, that the amount of playground covered with tarmac should be restricted, that the circulation space should be reduced, that they should not have a rather costly plate glass and metal door and should restrict the amount of stone facings on the building. We try in those cases to restrict our suggestions to what we should not regard as essentials for education. I do not think that that kind of criticism means that there are constantly changing standards.

1554. It has been represented to us that authorities are not clear about what your standards are. If in fact they could know beforehand that these items which have tended to increase the cost would be beyond what you would approve, then they would not be put in, and time and expense would be avoided. May I call your attention to the answer you gave to me when you came to see us before? It is Question No. 323. I said: "But you say no general limit of cost has been imposed?" and you said: "In dealing with the education authorities we do not say to them: 'We will not approve any project if it costs more than £170 per pupil place', but we limit the plan area to 55 square feet per pupil place, which at that time worked out at about £170." That seems to be the impression that has generally been created, that in fact you do not say: "You must keep within a figure", and therefore if they submit

plans, say, of a secondary school, they find you also have an idea of a limit in your mind, but it is not made clear. If it is not made clear it does lead to uncertainty about the preparation of their plans?—I should have thought it would not. We have told them that we are aiming at getting the price of a school down to £140 per pupil place. That is the target that we set. We have not said: "We will never in any circumstances approve a school that costs a little more than that", but we have asked them to aim at that target. Our inspectors and we in the Department give them general guidance on the size of rooms, the number of rooms and other standards of that kind. I do not think, therefore, that there is any serious uncertainty, though I admit that sometimes when it comes to the point of getting tenders the school turns out to be more expensive than we had hoped and they had hoped, and then we have to sit down with them and say: "How can we cut down the cost?".

Mr. *Malcolm MacPherson.*

1555. If it were possible to initiate some prototype plans or guide plans in the Department, rather than leaving every plan to be initiated locally, do you think that would be in the first place feasible, and in the second place economical? You could embody from the very beginning a large number of things which the architect has to embody in the course of discussions or later on?—We could, I think, give more guidance about plans than we have given in the past, but I do not think that we could ever draw up a model plan that would be imposed on all education authorities. I do not think that is what you had in mind.

1556. No, but generally speaking the class is roughly of the same size; the classroom needs roughly the same kind of things. I was thinking of a set of half a dozen or a dozen different prototype plans allowing for variations. Would not that kind of thing, more specific guidance than they are getting now, be useful?—Might I ask Mr. Morton, who is an architect, to say whether he thinks that would be helpful?—(Mr. *Morton.*) It would give a certain amount of help to architects designing schools, but we are anxious to avoid rigidity and uniformity and taking away the initiative from the education authorities. Sites in Scotland vary a great deal, and on the whole they are fairly difficult to build on. I do foresee dangers in laying down plans which would inevitably be copied in many cases where there is so much variation in sites.

1557. Is there any possibility in exploring along that avenue? One cannot lay down plans, certainly, but is there any possibility in finding a meeting ground between local decision and the things which in any case you would insist upon as being more or less standard?—Yes, I think there is, and I think we have taken advantage of that possibility. There is a great deal of informal discussion between ourselves and our architects and the architects of the local authorities and private architects working for them. We have given a great deal of guidance and advice at the informal discussion stage, and we know all the architects in Scotland designing schools.

1558. In the case of the school which was going to have a metal door, for instance, one would have thought you could have said at the beginning the doors will not be metal doors?—In the great majority of cases we do give guidance on points such as that.

Chairman.

1559. I wanted to get this rather clear about uncertainty. It does seem clear in your circular that you tended to specify the cost in regard to primary schools, but you did not seem to have laid down a figure in regard to secondary schools?—(Sir *William Murrie.*) That is so.

1560. And it was the secondary schools I really had in mind, because we had, for example, a school mentioned to us where the cost had been worked out under the original plan at £350 per place; that was in the County of Midlothian?—Yes.

1561. Then it is thrown back and they have to alter the plans again, and it comes back to you. What I would like to know is, have you really given the guidance to the local authorities on this question of planning schools that is really necessary? May I couple that with this: in the last circular which you issued, which was Circular 232, 27th February, 1952, you said: "Further effort must be made to exercise economy in the planning of educational buildings. A new circular, to replace Circular 173, of 8th December, 1949, will be issued shortly and will deal with secondary as well as with primary schools."?—Yes.

1562. That was February, 1952. Why has not that circular been issued?—When we wrote this we assumed too quickly that we could give advice on how to economise in the planning of schools. On going into it more fully, we reached the conclusion that any advice that we gave must be first of all advice that would stand for some years; we did not want to give advice we should have to change again in a few months. We also wanted to devise a system which would give an incentive to the best planning of the schools, and we reached the conclusion that we ought to lay down minimum standards of classrooms and other educational accommodation; secondly, give the local authorities the percentage which they could add to

that for the non-educational accommodation; and, thirdly, fix a maximum price per square foot of the accommodation provided. We decided that it would be better to seek to achieve economies in that way rather than by giving them simply an overall price per pupil place. Each of these calculations has had to be based on the study of existing schemes, and we have not yet been able to get out the promised circular. We hope to get it out very shortly, and when I say very shortly this time I really mean very shortly. We do recognise, I think, that we ought to get it out as quickly as possible.

Chairman.] That would remove a certain amount of uncertainty.

Mr. *Norman Cole.*

1563. I have one overall question on this matter allied to what we have been talking about but on a rather bigger issue. Do any of you gentlemen feel that it would be a good idea to have a central place in Edinburgh where architects who are asked to devise a plan for a new school could go and see the latest ideas of schools being built in Scotland and what is or is not approved, where there would be perhaps half a dozen prototype plans; in other words, they would get guidance, particularly in the case of those architects who may be designing a school for the first time in their career. With such a centre, they could go and get guidance before they laid the plans down?—I should accept this, that we ought to have in the Scottish Education Department more advice and guidance for education authorities in the planning of schools. I doubt whether it is necessary to set up a centre separate from the Department. I am not sure whether you had that in mind?

Mr. *Norman Cole.*] I do not mean anything elaborate; perhaps just one room in the Department where they could go and get advice and ideas.

Chairman.

1564. You have not got an Architects and Buildings Branch?—No.

1565. Do not you think that would be an advantage?—Yes. We think we ought to have a team something like the team that works in the Ministry of Education, and we have in fact already gone one step towards that in adding one architect to our existing architects on school buildings, and we propose to add two or three others. We propose also that these architects should work as a team with one of the inspectors of schools, who will be able to bring in the educational side, and we hope that out of that team we may be able to get more guidance for education authorities than we have been able to give them in the past.

Mr. *Norman Cole.*

1566. Sir William does appreciate that what I was suggesting was a centre of information, a place of information to which they could go, peopled by your team you have in mind?—Yes.

Chairman.

1567. In regard to buildings including community centres, it has been put to the Sub-Committee that it is a great disadvantage not to cater for the public in the way of community centres, which it is suggested should not be included. Could you give us your view about this? For example, we understand in one mining area the miners are interested in putting up a community centre, and in fact the local authority would be anxious to include that in their plans, but the Scottish Education Department said: "No, we cannot approve of that." The miners will probably put that building up themselves, and it is suggested it is not a very good way to proceed, by segregating sections of the community like this. What do you think about that?—I do not know the particular case to which you are referring. In general, our view at the moment is that some community provision of a limited amount can be allowed in new schools. It is limited because all our provision at the moment necessarily has to be limited. I should admit that we do not allow as much community provision in new schools as the people who are enthusiastic about community provision would like to see, but we do allow it up to a point.

1568. It was in the County of Midlothian?—I do not think we know about this particular case.

1569. We understood that you had declined it?—Would you like us to give you a note on that particular case?

1570. I think it might be useful. On the question of new buildings and the building of schools lagging behind the building of houses, we rather gather that position is very serious in Scotland. There seems to be some lack of co-operation between the planning of the housing authorities and the education authorities in Scotland. Could you tell us why it is that there is not this co-ordination which would lead to the more speedy building of the schools to meet the demand of the new estates?—In many areas, for example Glasgow and Edinburgh, the same body, the same Town Council, is both the education authority and the housing authority.

Mr. *Malcolm MacPherson.*

1571. And the same Ministry is responsible?—The same Minister is responsible, but it is primarily for the local authority to

see that their school programme goes hand in hand with their housing programme.

Chairman.

1572. You will agree that is not so; it does not work out like that?—It does not always work out. I know of some areas in Scotland where it has worked out and others where it has not. It is perhaps invidious to mention names, but it can work.

Mr. *Malcolm MacPherson.*

1573. Would not you say there is some responsibility on the Scottish Office, since it is responsible for both sides, to see it does work out as well as possible?—We do what we can to try to make it work out, but, as I said, I think the primary responsibility lies on the local authority.

Chairman.

1574. I was wondering what could be the cause of this. I was wondering whether the overall estimate of the number of places required is not correct, so that more houses are going up than the authorities anticipated. For instance, we know there is a target aimed at. If, for instance, the aim is to build 300,000 houses a year, and in fact we put up, say, 230,000, whereas the planning authority are planning on 300,000 it would throw the estimate out all over the country?—Yes. We have asked each education authority to give us a statement of the schools they propose to build and to relate that statement to the new housing in the area. I should not say that any time lag was due to the authorities not knowing that they ought to provide so many schools in any particular area.

1575. Do you think, as some people suggested, it is because the local housing authorities are not so interested in the schools as they are in the housing and they are giving much more weight and push to the houses than to the schools?—I think there is a quite natural and understandable urge to go on with housing as fast as possible.

1576. At any rate, it would be a good thing if we could get closer collaboration on this?—It would be an excellent thing.

1577. To enable this difficulty to be overcome, because if the schools are not up, then you have got to pay a lot of money in transporting children, and if we could somehow improve the machinery that exists for co-ordination it would be a good thing?—It would be an excellent thing, and we have done all we could to encourage it.

Mr. *Norman Cole.*

1578. Is it the fact in Scotland that in your local government there are many more housing authorities than education authorities, and do you feel that might at times lead to delay, that the smaller housing authority might have no concern with the building of the schools?—It is true that there are more housing authorities than education authorities, but I doubt whether more difficult problems of schools lagging behind houses arises in those areas where there are two different authorities. I think there is just as much difficulty in areas where there is one authority.

Miss *Ward.*

1579. There really should not be any conflict between the provision of houses and schools. There is no particular reason why there should be a conflict?—No; I do not think there is a conflict.

1580. I meant an emphasis. Perhaps I ought to have smoothed it down a little and said an emphasis, not a conflict. If you have a different policy for looking after both anyhow, there is no particular reason, provided your housing it going ahead, why the schools should lag behind. It is not from the estimating point of view. The provision of labour and materials, so to speak, is different; the whole problem is different. So that they ought to be able to run parallel really?—They should.

1581. Even if you were violently interested in promoting house building and think it more important than schools, it may be a matter on which people do feel very strongly, but there is no reason why they should not go parallel?—I agree.

1582. You can understand there might be an emphasis at national level on the amount of capital investment to go into one project or another, but once you have got permission to spend a certain amount on school building there is no reason why one should lag behind the other?—No.

Chairman.] That, of course, is a point we are really interested in, because it does not apply only to Scotland but to England and Wales as well; if we could find some means of improving that it would be a good thing.

Mr. *Norman Cole.*

1583. Does Sir William feel that inevitably in the nature of things a school must lag behind the houses because you do not know what school you want till you have got the houses?—No, I do not think so, as long as you know what houses you are going to put on the site.

Chairman.

1584. But every authority has got to estimate, and the question is whether the method of estimating is correct or can be improved upon. We have to avoid this position where transport costs are mounting?—(Mr. *Rodger.*) I agree the estimating is very difficult. It is one of the most difficult aspects of school building, possibly.

1585. At any rate, there is a need, not only for Scotland, for some closer consultation on this problem between the various authorities concerned which might lead to improvement?—(Sir *William Murrie.*) Yes.

1586. There is one other point we are rather interested in. We understand that the teachers of Scotland are not brought into consultation by the education authorities in Scotland, that no teachers are sitting on any local education authorities, as we find in England. In England in some cases teachers are co-opted on the education authorities, but in Scotland there is no such provision. Could you explain to us why that is so? Would it not be a good thing to bring the teachers more closely into consultation on these matters, particularly on the question of new school buildings, because the teachers have got to work in them?—I cannot speak about the position in England. (Mr. *Davidson.*) There is a statutory prohibition against servants of a local authority being members of that authority, but there is provision under the statute whereby the education authority can set up advisory bodies on which the teachers can serve. It may be true all education authorities in Scotland have not taken advantage to any great extent of that provision, but the provision is there.

1587. That is rather interesting. There is a statutory prohibition that no servant of the local authority can sit on any committee?—Can be a member of the authority. No servant of the authority can be a member of the authority.

Miss *Ward.*

1588. Even by co-option? I can understand it by election but not by co-option? —Not by co-option.

Chairman.

1589. Where is that provision?—It is in the Local Government (Scotland) Act, 1947.

1590. Do I understand that the teachers of Scotland have requested several times some provision to enable them to come into your authorities or sit on the authorities? —(Sir *William Murrie.*) The teachers have made representations to us about this. I should not myself agree with them that they ought to be members of the education authority or of its committees. I think the proper way is for them to be consulted in other ways, but not to be members of the employing body. I see nothing wrong with the existing statutory provision. That does not mean that education authorities should not consult with teachers more frequently perhaps than they do.

Mr. *Malcolm MacPherson.*

1591. I was going to ask whether you thought there had been enough consultation in the past. You think there has not been? —I should not like to go on record as saying there has not been; there may not have been.

Mr. *Norman Cole.*

1592. You did say that not full use has been made of the Advisory Committee provision?—(Mr. *Davidson.*) That is my impression.

Chairman.

1593. What methods do you adopt to get this consultation?—The education authority may set up an advisory body to advise it on one aspect or another.

1594. It may, but it is not customary in Scotland?—I am afraid it is not.

1595. It does seem that great changes are being brought about in the schools, and those who are working in the schools are not adequately consulted in Scotland. That is the feeling of the teachers. I understand even very recently this request was put to you—last week?—(Sir *William Murrie.*) Yes, they saw us a week or two ago and made that point.

Miss *Ward.*

1596. You have not really consulted with them on matters appertaining to design of the schools so far as the teaching aspect of it is concerned. For example, would you ask them what their views were on the cutting down of circulation space?—(Mr. *Rodger.*) Teachers were represented on the body that produced this Report*, and furthermore some authorities in planning the schools consult their headmasters. Whether they consult other teachers or not I could not say, but I know for certain that headmasters have in some instances been consulted.

Mr. *Malcolm MacPherson.*

1597. Do you give them any guidance for the consultation with headmasters or other teachers?—(Sir *William Murrie.*) I do not think we have ever given education authorities any lead towards consulting teachers about school buildings. We have left it to them to do it as they thought fit.

1598. Would not it be true to say, although the teachers were represented on the body which produced this Report, they feel the Report has not been carried out as fully as one would expect?—(Mr. *Rodger.*) I think that Report formed the basis of the Department's policy in the years following the war, but the buildings proposed in that Report are very costly.

Chairman.

1599. Could you tell us what control they have over equipment or furniture: how much control have the teachers or head

* See Q. 1534.

teachers; can they order what they like?—I do not quite know how much control the authorities give to their individual teachers.

Mr. *Malcolm MacPherson.*

1600. There is one question on general policy which I am not very happy about. When you were first here, Sir William, you gave us to understand that the main basis of the post-war building policy was not the bulge in the birth rate, but that was taken rather incidentally in your stride; the main basis was other factors. It would appear that the Ministry of Education is giving, or at least the English authorities and, I think, the Ministry too, are giving far greater importance to the bulge in the birth rate than the Scottish Office is doing. When you remember that the Ministry already has a considerably lower figure for class maxima, would not it suggest that some reconsideration of this particular aspect of the programme might be worth while?—The relative increase of school population as the result of the higher post-war birth rate is higher in England than in Scotland.

1601. Yes, but you have got a relatively higher size of classes in Scotland already; 45 as against 40 in the primary schools?—The difference in the code is as you state but I wonder if the difference in the size of classes is really in fact very great.

1602. You have got a couple of thousand classes over 45 in the primary schools?—Yes.

1603. And the number over 40, which is the English maximum, would be what?—We have 3,000 between 40 and 45.

1604. That means 5,000 classes over the English maximum?—Yes.

1605. Could I suggest you are being a little over-cautious in dealing with the fact that the bulge is temporary? I know in any case your total capital for investment is fixed, but apart from that under your own planning would not it be wiser to give more consideration to the fact that the bulge will be there, and to assume that the buildings provided to meet it when the bulge is over are not particularly likely to be redundant?—(Sir *William Murrie.*) I am not sure whether you are suggesting that our total programme for any given year of all building should be increased, or whether you are suggesting it should be split up in a different way.

1606. The suggestion I would like to make is the one you have just put, but since it is a matter of policy I cannot very well make it. I am not suggesting the split-up should be in any other way, but simply the basis on which you make the split-up. You are apparently giving less weight to the problem than they are doing in England. It seems to me you should give as much or even more. I am wondering whether it would not be worth while thinking it over again?—We do not in fact take £7 million and carve it up and say: "£2 million goes for the bulge and £2 million for new housing areas." We say: "What does a particular authority need", taking into account both the bulge and the new housing areas. If it seems a school here is wanted more desperately than anywhere else, we encourage the authority to go on with it.

1607. You did give us the impression at our first meeting that the bulge was very much a minor consideration compared with the basic considerations as you saw them?—(Mr. *Rodger.*) I would suggest it depends on the order in which you consider events. If you give consideration first to the bulge, then the residuum goes to the new housing areas. If you give consideration first to the new housing areas, the residuum goes to the bulge. Provided you take full account of both it does not matter.

1608. Provided you do take full account of them both?—We have tried to do that.

Mr. *Norman Cole.*

1609. The two are not separable, because a large part of the bulge is on the new housing estates?—Yes.

Mr. *Malcolm MacPherson.*] You are not really more afraid than England are of being left with redundant buildings after the bulge. That was what I felt might have been in your mind.

Chairman.] On the last occasion when you met us, according to Question 210, you said you were trying to steer a middle course "between doing nothing to meet the higher birth rate, and therefore having a very awkward situation during the next seven or eight years, and providing accommodation simply to meet the higher birth rate, which after that time would be completely useless."

Mr. *Malcolm MacPherson.*

1610. Would not you say the phrase "completely useless" is perhaps a little strong?—Yes.

Chairman.

1611. To meet the size of classes, are the rooms in Scottish schools for 45 bigger than the rooms we would have in England for 40?—After the war our rooms were 29 × 22 ft. They are now mainly 27 ft. 6 ins. × 22 or 25 ft. × 22. These figures we are adopting now are larger than the smallest English rooms, but there are many English rooms just as large.

1612. What do you regard as the ideal building? What is the most economical, the two- or three-storey building?—(Mr. *Morton.*) Is the question whether two- or three-storey building is more economical?

1613. Yes. What do you regard as the ideal where you have to go up?—Taking

everything into consideration, I think two storeys is ideal for the teaching part of a primary school, and three for a secondary school.

Mr. *Norman Cole.*

1614. Would Mr. Morton agree that if you have to go to two, then it is more economical to go to three, or would not that be so?—I do not think it would be so.

Chairman.

1615. You would not think in any case of going to three for primary schools? In England the primary schools are on the ground only?—Yes.

1616. Whereas I take it your tendency is to go up?—Our tendency is to go up rather than out. We would think of going to three storeys in some cases in primary schools.

1617. We understand there are a lot of difficulties in obtaining sites and differences between planning authorities, having a lot of negotiations and fights over getting sites, and byelaws differ, too. Would you think it would be a good thing if you could have these byelaws tidied up between the various Departments?—(Sir *William Murrie.*) So far as getting the sites is concerned, I think it is the procedure under the Town and Country Planning Act that may give rise to difficulties. Here, again, in most of the big areas the planning authority is also the housing authority and the education authority, and if their committees are working well together there should not be undue delay. When you say byelaws, I am not quite sure what you mean. Do you mean the building byelaws?

Chairman.] Yes. I think you mentioned it is in this Report* somewhere.

Mr. *Norman Cole.*

1618. If we went back to a previous question, the suggestion about correlation of ideas in a central place, you might well find the virtues of that being spoilt by the different byelaws in the different authorities, who would not allow the different prototypes?—I think there might be some difficulty over the local byelaws.

Chairman.

1619. In this Report you did say standardisation of local byelaws would remove some causes of delay and would on other grounds be desirable in the national interest?—(Mr. *Morton.*) At present model building byelaws for Scotland are in process of being revised, and I think that will improve the situation you have touched on very much.

* See Q. 1534.

Mr. *Malcolm MacPherson.*

1620. May I ask about this two- or three-storey idea of height? To the layman it would look as if from the point of view of cost once you have gone up two storeys you may as well go up three. What are your reasons for saying there is no considerable advantage?—One reason is that in two-storey building you can dispense with a frame, and it would be very difficult to do so in three-storey building. Another reason why I think two-storey is better than three in a primary school is for the convenience of the users.

1621. Yes; but I was thinking entirely of cost. You are arguing from the point of view of cost only there would be no great advantage in going up to three storeys?—Yes.

Chairman.

1622. I think it is mentioned in Circular 173 also. It says on page 4: "A large school in two or three storeys is normally cheaper, more economical of ground, and better knit educationally than it would be in one-storey construction; standard primary schools should, therefore, in general be built mainly in two storeys, and large secondary schools in three, or in particular cases, four." That is the point you are putting to us now?—We have had in the past some difficulty in persuading some education authorities not to build only in single storey. Two-storey is a considerable advance over single storey in primary schools.

Mr. *Malcolm MacPherson.*

1623. You do not think three-storey is an advance on two-storey?—(Sir *William Murrie.*) It is not the case that the ratio is diminished as you go up? You get great economy in going from one-storey to two-storey, and some more economy, but not so much, in going from two-storey to three-storey; then you come against the user, for whom a three-storey building may not be suitable.

Mr. *Norman Cole.*

1624. What about the question of land space: is that of any great consideration financially?—(Mr. *Morton.*) No, it is not a big consideration.

Chairman.

1625. It makes a bigger demand on steel?—It does.

1626. We should like to thank you for coming again and answering our questions. It has been very interesting to us to obtain all this information?—(Sir *William Murrie.*) May I thank you on behalf of my colleagues and myself, and if there is any further information you would like we would be very happy to give you it.

The witnesses withdrew.

Adjourned till Tomorrow, at Manchester.

THURSDAY, 26TH MARCH, 1953.

Members present:

MR. YATES in the Chair.

Mr. Norman Cole.
Mr. James Johnson.
Mr. Malcolm MacPherson.
Miss Ward.

Evidence taken at the Town Hall, Manchester.

Councillor M. P. PARISER, Chairman of the Education Committee, Mr. N. G. FISHER, Chief Education Officer, Mr. L. C. HOWITT, City Architect, and Mr. S. G. B. ROBERTS, Deputy City Architect, Manchester Corporation, called in and examined.

Chairman.

1627. Gentlemen, first of all may I say how much we appreciate what you have done to show us all the various schools this morning, and we can no doubt ask some questions about the schools we have visited in the course of general discussion. I thought it might be convenient if we looked at your memorandum* first, and then the Sub-Committee could ask any questions, so that we can be quite clear in our minds exactly how you are looking at the problem. Looking at the memorandum, the first point I want to mention is in the fourth paragraph. You say: "There are still delays on the Authority's side in preparing plans, although progress in the actual construction of new building has been greatly improved." I wonder, Mr. Fisher, if you could explain to us exactly what you mean by that?—(Mr. *Fisher.*) I think our biggest difficulty now is in the number of quantity surveyors who are available for this work, so that although the City Architect is able to design a school and produce a sketch plan which we can all agree upon and get the Ministry to agree upon, it does take a fairly long time after that to get the quantities ready and get the full plans out and get ready for tender. Then by our own rules we may not start work on any job until the contract is actually signed. These things do mean that the planning stage is a fairly lengthy one.

1628. You are quite satisfied there is no serious delay with the Ministry at all?—I think we are well satisfied, except in one thing. We now as a rule send an officer to the Ministry; the architect, normally, and one of my colleagues go personally with a set of plans to the Ministry—sometimes two or three sets of plans—and they settle there and then on the spot with the Ministry's officers whether the Ministry will approve of the plan, or what modifications may be required. Our biggest delay is over borrowing power. Once we have the Ministry's approval and all the other stages are gone through, we may not act at all until we have applied for borrowing power for the capital sum involved. That may involve a delay of up to six weeks.

1629. Does that mean you are therefore delayed in the starting date?—Yes. Everything else can be ready, but until the loan sanction or borrowing power is approved we may not sign the contract.

1630. Does that mean you have to go to a Ministry other than the Ministry of Education?—Yes. We make our direct application to the Ministry of Education, but they get it through a special committee; it is through the Ministry of Local Government and Housing.

1631. Do you get fairly good liaison between the authorities within the City, the housing authority and yourselves?—Within their own limits I think the housing authority do treat us reasonably well. So long as they were tied to annual programmes, as I understand they were until a year or so ago, of course it was difficult for them to be able to tell us exactly how many houses they would build in a particular place. Now, of course, Wythenshawe is very largely built up, and it is not difficult for us to see where the remaining houses are going up. Again, on our side, the Ministry of Education have recognised the special needs of Wythenshawe, and they have rarely been prepared to give us permission to build all the primary schools Wythenshawe is to have as fast as we can build them. We have completed the primary schools and we are now on the secondary schools.

Chairman.] Have any Members of the Sub-Committee any questions on Section I of the memorandum?

Mr. *James Johnson.*

1632. I notice in the third paragraph you say, "there have been intermittent and sometimes acute shortages of labour and materials". Would you care to amplify that, particularly on the labour side?—Yes. We have had considerable difficulties over certain skilled trades. One job is the extension of the College of Technology. That for a very long time has been badly held up by a shortage of bricklayers. There are various possible reasons for that which we have explored. One of them is, I believe, that the travelling allowance is paid to

* Annex 10.

bricklayers on the assumption that they live in the centre of Manchester and travel to Wythenshawe. That becomes in effect an extra bonus payment, because a great many of them live in Wythenshawe. Therefore, if you are doing a job in the centre of the City, in fact the bricklayer may find he is worse off working there than at a job in Wythenshawe.

Miss *Ward.*

1633. Who pays the travelling allowance?—The contractor will pay that. It is by an agreement between the unions and the employers.

Mr. *Norman Cole.*

1634. In the fourth paragraph you say: "The delays in planning are due partly to limitations of staff and partly to the observance of local government procedures which are themselves designed to prevent waste and to ensure honesty." Is there any cogent suggestion you would like to make about the elimination of any part of that procedure?—I think we rather feel that if you are to safeguard local government from any possibility of malpractice over contracts, for example, you have to follow certain procedures which are in themselves essentially not speedy. They are designed to preserve public morality and avoid waste and not build rapidly. Therefore, for example, the Education Committee must approve everything they propose to build; they must go to the City Council for the approval of the Finance Committee; and again, there are moments when we know we shall get the borrowing power, when we are ready to start, but the Town Clerk, I think quite properly, insists that we may not start until the borrowing power is formally received and the contract signed. There have been times when we could have started a month earlier if we had not gone through that procedure, but I think it is arguable that we ought to go through that procedure. (Mr. *Howitt.*) I think it goes a little beyond the stage of just letting the contracts, because every contract contains p.c. amounts for specialist works and materials within the contract. If they are over a certain amount you must get competitive tenders. The subject of every p.c. amount of that kind has to go to the committee and be confirmed by the Council, and then the contractor is instructed to accept. It used to be the procedure here, and I believe it is adopted by other authorities, that once the contract has been let the architect has full authority to deal with all subsequent sub-contracts for specialist work, and, of course, he can place them right away without this delay.

1635. Does every part of the procedure have to be approved by the full committee?—Yes, if the amount is over £250. Sometimes, if it is specially urgent, we could get the approval of the Chairman, and it has to be confirmed, but it is not a power you would want to abuse. (Mr. *Fisher.*) The standing order of the City Council is that we must always accept the lowest tender, and if we do not we must state a case why we do not, and if we do not that may lead to considerable delay.

Miss *Ward.*

1636. You cannot really give your contractor at the first stages a starting date?—(Mr. *Howitt.*) It does not affect the main contract. It is the work of the specialists rather than the main contractor's work. It is a fact that because we are not able to issue the order to proceed to the contractor until all the contract documents have been completed and signed it is not possible to say in advance at what date the work will be commenced. It depends on the period occupied in obtaining the borrowing powers and completing the contract. The Town Clerk will not complete the contract until borrowing powers are received.

Chairman.

1637. This all leads up to the next section of your memorandum, which goes on to explain the time lag of school building behind house building. I think we should like to know quite definitely why it is there is this very serious time lag. On this particular question you do mention the Wythenshawe Estate and the fact that you are having to carry children by buses. Could you first of all tell us what really is the cause of this time lag, and how in your opinion it could be reduced; and, secondly, what is the full cost of your transport? Have you got any figures? You mention transport for the one estate here?—Yes.

1638. What does this amount to, looking at Manchester as a whole, in the course of a year? Is the figure increasing?—(Mr. *Fisher.*) In regard to the first question, I would say first of all that one has to remember that priority in building since the war has been given to houses. I think no one would contradict that statement. Secondly, the housing authority may be the education authority and it may not be; in Manchester it is. But in a large authority such as this the work is considerably departmentalised. For example, the Housing Department here has a different architect from the rest of the Corporation. The housing people, therefore, have looked at their problem and tried to find the best way of meeting it, and they have gradually accelerated their pace of building, standardised their houses, and improved the techniques of building, and their problem is, compared with ours, a comparatively simple one. They are elaborating or varying a single unit. Every school, on the other hand, is a separate problem. It is

very difficult to produce a standard school design which is useful in more than one place. It is very difficult even to produce a school which is based upon a standard unit of construction, as some authorities, such as Lancashire, have tried to do. You must remember also that in the years from 1946 to 1951 the local authorities were having an enormous struggle to get the building programme going at all with any kind of speed.

Mr. *Norman Cole.*

1639. The school building programme?—The school building programme. Their architectural staffs after the war were relatively small. They were necessarily inexperienced in this type of work. Local authority procedures were, if anything somewhat more cumbersome and slower than they are now, and the Ministry's procedures also in the years after the war were slower. Therefore, as the years passed in that period I think there tended to be a greater and greater gap between the rate of house building on the one hand and school building on the other. Of course, that is cumulative in its effect. Now I think we have passed rather beyond that stage. We have come to the point where both by simplified procedure and planning on the one hand and by developments of technique of building on the other it is possible for us to get a school open within, say, three years from the time when it is authorised in the building programme. Would you say that is about the period, Mr. Howitt?—(Mr. *Howitt.*) I think that is about it. (Mr. *Fisher.*) From the moment you get approval from the Ministry of Education to build a school to the day of opening three years seems to be a reasonable estimate of time. I should have thought it is much more feasible now to expect the housing authorities could give us some kind of forecast of what they will be doing over the next three years, so that if we could have a longer period of notice it would be an advantage. If we were, for example, to have a triennial allocation, I think we should get much nearer to synchronising schools with houses, although in my opinion there will always be some time lag.

Chairman.

1640. When do you get your annual allocation?—Last November we got it for the building year which begins on the 1st April.

1641. Do I understand that is the only notice that you have of the actual permission to build in that year?—To build schools.

1642. And therefore it is impossible to look ahead beyond a year?—Yes.

Mr. *James Johnson.*

1643. Do you think if you could build schools in sections, if you could build a school hall and a wing to accommodate 175 youngsters, and then add another wing as each year went on, that would be an improvement? Instead of waiting until you have got a demand for a school for 240 and then building the whole school, you could build it in sections?—I do not think it is worked quite like that. If you take Wythenshawe, which is where our main problem has been, the housing people set out to build an estate. They have probably finished the particular estate which creates the demand for the whole school within six to twelve months. So that our job is to build the whole thing as quickly as we can.

Mr. *Norman Cole.*

1644. Is there any delay in the local office at all? For instance, if you have six months notice of your 1954-55 programme, is it possible you would not put your plans up to the Ministry before the end of the programme year and therefore you yourself, without blame, might have lost seven or eight months?—We would always get the plan up as soon as we get it ready.

1645. In a matter of weeks?—Yes.

1646. Could we assume that in that six months before the beginning of the programme year you would have your plans for the following year up to the Ministry?—I am not quite sure whether I have got the question right. Can I take the present moment? We are in the last few days of the 1952-53 building year. Then we start the 1953-54 building year. Some very good starts have been made on the projects for that year. We have got out sketch plans; the architect has got them out, and we have looked at them and agreed what we want done. They include Poundswick Grammar School, Plant Hill Secondary School, a special school for educationally sub-normal children in Wythenshawe, and West Wythenshawe School, which was held up because of some purely local difficulty in deciding precisely what kind of school it should be.

1647. In November, 1953, you will get your programme for 1954-55?—Yes.

1648. How long elapses before the Ministry have your plans in accordance with the programme they have approved for the following year, particularly bearing in mind new housing estate building? If there is, without your fault, a delay of seven or eight months before the plans go to the Ministry, and in the meantime the houses are going up, even if the Ministry have reasonable celerity in their approval, with respect, eight months has been lost locally before the Ministry see the plans?—There

are two stages in which the Ministry come into this. First of all there is the getting out of sketch plans, which we would normally manage to do before or in the early part of the building year.

1649. That is to say, about six months after the notification of the programme?—Supposing they give us our programme in November for the building year which starts the following April, between November and April we would reckon to get the bulk of our sketch plans up to the Ministry and approved. Then comes the next stage, which is preparation of quantities. There we may get six or eight months delay because of the pressure in the office.

Chairman.

1650. The point is that the Ministry will only consider one year at a time?—That is broadly true, although in giving us last November our programme for 1953-54 they have also agreed provisionally upon a programme for 1954-55.

1651. I take it that you think it would be a much better system if you could have a survey of your own area and look ahead at least three years and draw up the programme for at least three years?—Yes.

Miss *Ward.*

1652. Do you think that would lead to a good deal of economy in the cost of building, an overall economy having regard to a possible reduction of transport charges?—It is possible. The tendency of annual building programmes is to spread an inadequate amount over a number of local needs so that you give a little bit to the north of Manchester, a little bit to the south, a little bit to further education, and so on. That is an uneconomic way of doing things. For example, at West Wythenshawe we are going to build two secondary schools side by side. We shall get one in one annual building programme and the second one in some other annual building programme. The same with Plant Hill in the north.

Chairman.

1653. On the question of cost of transport, you have mentioned in your memorandum that with regard to Wythenshawe Estate the peak period was in the summer of 1952?—Yes.

1654. You had 21 buses running at a cost of £105 a week. That was the peak. You said on page 2: "With the addition of the bus wardens' wages this is equivalent to an annual expenditure of £5,600"?—Yes.

1655. Is that the only estate where you have to provide transport, or what would be the cost generally?—That estate is our biggest problem in transport. Conveyance of children is, of course, a complicated thing. Our current figure in Wythenshawe is about three-quarters of that, about £74 a week, owing to the fact that we have opened about half a dozen schools in Wythenshawe since then.

1656. That is only in Wythenshawe?—Yes.

1657. Have you got an idea of the amount you are paying out in transport costs, other than the transport for, say, handicapped children, transport which is directly arising out of the fact that the schools are not there on the estate in time?—I doubt whether I could give you that figure straight off. The gross figure for conveyance of children is £28,000 odd, but that includes £5,000 for handicapped children, and also, of course, travelling allowances for children who go by public transport. For example, a great many children go to grammar Schools, and they are able to claim if the school is more than 3 miles from their homes. But the bulk of our expenditure on special buses which is due to shortage of places is at Wythenshawe; there is very little anywhere else.

1658. What year is this in reference to?—That is for the forthcoming year, 1953-54.

1659. That is an estimate?—Yes, that is an approved estimate. There is one bus in the north which does a longish journey, which takes children from prefabricated housing estates, which is comparable. Then we have other special buses used to take children to school because there are dangerous roads to cross, and other reasons of that kind. You could say at any rate nine-tenths of the expenditure directly due to shortage of school accommodation is in Wythenshawe. (Mr. *Roberts.*) Before we leave the question of the annual building programme, may I say this? The difficulty the City Architect's Department finds with the annual building programme is that all our jobs take about nine months to twelve months from the receipt of instructions to starting the job, and the late starters in the financial year come in November or December, which are bad building months because of frost and rain, and therefore costly, because we get a lot of lost time. We feel if we had the three-year programme we could fit the programme in better with the resources we have. (Mr. *Howitt.*) It means also that the quantity surveyors are overloaded with their limited resources.

1660. Have you ever made this suggestion to the authorities, to the Ministry?—(Mr. *Fisher.*) I have made it personally at the Association of Education Officers Annual Meeting, where it meets with applause, but it rather rests there.

Miss *Ward.*

1661. To some extent your particular point of view would depend on the size of the local authority?—It would be much more difficult for the small authority.

1662. It might be no advantage at all to the small authority?—No.

1663. That relates to all your commitments, not only education?—Yes.

Mr. *James Johnson.*

1664. Also it would depend on national policy. Surely, with the ups and downs we have had in the last four or five years, they cannot give you a longer programme? —Is it not done now for housing? It is done for universities. The University Grants Committee give a five-year grant.

1665. Yes, but do you think it would be better for educational policy with the housing policy as it is at the moment?—We really feel one goes with the other. You cannot really have a housing estate without schools any more than without roads. (Councillor *Pariser.*) Perhaps where the problem, as it is here, is tied up with the creation, as it were, almost of New Towns, as in North Manchester and South Manchester, a strong case is there for the triennial programme, because we see our future so clearly ahead. We know over a certain number of years the population of the new towns is going to reach a certain figure. The commitments are there, and we could easily, I think, be given the licence to go ahead and provide the schools for these growing towns. Everything else is being provided for these growing towns. It seems a programme could be made for the educational work.

Mr. *Norman Cole.*

1666. Have the Corporation in its own private work got a triennial programme in view for schools? Do you know what you have in mind to build in the next two or three years?—(Mr. *Fisher.*) We know what we would like to build, yes. We have always to keep an eye on Wythenshawe. We have been doing that for a number of years. Now we are trying to work out where we shall be with secondary schools in five years from now. I am reminded by one of my colleagues that the Council did ask us to provide a three-year forecast of capital commitments.

Chairman.

1667. I think that has rather covered that point. Your memorandum goes on from the question of the time lag to the question of old schools. You mention that there were 36 Manchester schools on the Board of Education's black list in 1925. That black list, I understand, was divided into three categories?—Yes, I believe it was. We did not have any in Category C. They were Categories A and B.

1668. Yours were all in Categories A and B?—Yes. The majority of them were in Category B. There were 8 in Category A and the rest in Category B.

1669. I take it the five that have been closed were in Category A?—I am not sure whether they were in Category A or B. That was before my time.

1670. At any rate, there are 21 schools out of the 36 that are still in use?—Yes.

1671. And they have deteriorated further?—I am afraid that is true, yes.

1672. Are all those schools capable of improvement if you were able to spend the money on them, or are some of them so bad they ought to be replaced?—It entirely depends, I think, on what standard you are prepared to adopt. On this we did not see eye to eye with the diocesan authority, although we do try to meet their point of view. If you take, for example, a school like St. Cross Church of England School, Clayton, that is a school which was on List B. I dare say it is a good deal worse now than it was then. We proposed in our Development Plan to close it. We are faced, in keeping that open now, with considerable expenditure, although I think it has got aided status. That is No. 9 in the Appendix to the Memorandum headed "Aided and Controlled Schools". We could quite easily accommodate those children in County schools in the area on the other side of the school, but as the church parish does very much want to keep its school it is prepared to take aided status, which means the managers must shoulder part of the burden themselves. Accordingly we have agreed that it can continue. May I put it in this way: when I first came back into this work in 1946, in another authority, we did a survey of all schools in order to prepare a Development Plan, and taking the standards and criteria we were adopting at that time, I should have said the majority of these schools we should have proposed to close, if not all. Time has passed, and we have become a little less optimistic as to the rate at which we can tackle the problem and the amount of money available for it, and nowadays I think in Manchester we recognise that the majority of these schools will be with us for at least another generation, and we think the day when they disappear will possibly be the day when whole areas of Manchester will be substantially rebuilt under replanning. When that day will be is anybody's guess.

1673. Since the Ministry of Education circular rather inferred that you must keep these schools going and not build except to meet the birth rate, do you maintain these schools can only be used properly if they are brought up to higher standards? —Yes. I would say these schools which are contained in this list of 11 which you have in the document are schools on which we must spend the sums of money mentioned here if we are to keep them in use. I think they will go out of use if this money is not spent on them in the next few years.

1674. How many primary schools have you got in Manchester?—These totals are slightly inaccurate because there are several of those new schools you have seen today to add to them.

1675. What is the number approximately?—There are 98 County and 92 voluntary.

1676. Roughly 190?—Yes.

1677. In this same paragraph you say 50 of the schools were built by the Manchester School Board before 1902?—Yes.

1678. So that apart from those very bad schools you must have a considerable number of very old schools?—Yes.

1679. What will the general condition of those schools?—We thought that Webster Street, which you saw last this morning, which was opened in 1892, was a fairly representative one of that kind. There are some which are perhaps worse; there are many which are a good deal better. It is a fairly typical example. Can I ask my colleagues if they agree? . . . Yes, they do.

Miss *Ward.*

1680. Looking at this brief description of work that requires doing, this is the absolute minimum. It does not provide anything for painting the interiors attractively or altering some of the ancient furniture?—It does not include anything for furniture. It does include some painting. You will see All Saints, West Gorton, does mention decorations.

1681. Yes, but in most of them there does not seem to be any provision for anything like the more modern approach at all?—No, it is really to keep them going and arrest complete disintegration.

1682. Yes, but it makes no provision for making the children feel they are having serious attention paid to their schools, which is the modern approach to school life such as you find in the new schools?—I think that is true. Since the war, although we have expanded a good deal, the amount of educational services—we have added to the length of school life, developed schools for handicapped children, added to further education, technical education, built up a big school meals service, and so on and so forth—nevertheless the condition of the ordinary school in which the majority of children are educated in Manchester, that is the majority of our schools which were built, say, before 1920, has remained no better and in some cases has got worse.

1683. It is not really a modern standard at all?—No. It is to keep them at a reasonably hygienic and structural level, roughly as they always have been.

Mr. *James Johnson.*

1684. Are you telling us that if you were to make your own black list you could easily do so, but you cannot close a single school in Manchester because you need the places to house your present school population?—Yes. I would not say we could not close a single school in Manchester. We could close a number of the smaller Church schools. But where we propose to do that we have to recognise the rights, and they are rights, of the voluntary schools which are recognised in the Education Act. We always try to be reasonable with all denominations.

Chairman.

1685. Do you think the time has arrived when all the schools in the country should be surveyed, as they were in 1925, in order to find out according to modern standards which schools are below what are considered to be the right standards today?—Theoretically that was done after 1945 in the survey made for the Development Plan. That is referred to in the second paragraph of Section I of the memorandum.

1686. What was the standard?—That was a very high standard. That was the standard of the Building Regulations, 1945.

1687. In that did you put any schools into the category where it would be uneconomical to spend any more money and they should be closed?—Yes, a number of schools it was proposed should be discontinued, though, of course, there was a different factor involved there, that the Ministry were very insistent that every school it was proposed to continue should have a site area in accordance with the regulations. I was not in Manchester but in another authority, and there a great many of the schools it was proposed to close were proposed for that reason, because it was patently impossible to bring the site up to anything like the minimum standard.

Mr. *Norman Cole.*

1688. It is true that for the survey in 1945 you only carried out a sample survey?—In Manchester it was only a sample.

1689. So that you really have no authoritative data for that survey?—I do not think we have.

Chairman.

1690. You have said that so many schools are very bad and you have got to spend money to put them into reasonable condition. You cannot close them because the schools have got to go on and you need all the buildings you can get. You also go on to say: "It seems most likely that within twelve months a further report in similar terms on an equal number of Voluntary schools will have to be presented"?—Yes.

1691. So that we may take it it is your opinion that unless something is done to put these old schools into a better state of repair, in fact there will come a time not very far distant when the cost will be enormous to the authority. Do I understand that?—I think that is quite correct. Under the Education Act all voluntary schools are to adopt a particular status. For the great majority it must be either aided or controlled. Once a body of managers has applied for aided or controlled status and the Ministry has agreed, then certain responsibilities which have not in the past been ours fall on the local authority. What happens to all these schools is that they are, as it were, imposed upon us and become our responsibility. These 11 are the first and most outstanding. We suddenly find we have legal obligations to put into repair schools which were the managers' responsibility before. There are nearly 100 voluntary schools in Manchester, and a considerable number of them are in a dilapidated condition to some extent or another. We do not know exactly the rate at which they are going to ask for status or whether they are to be aided or controlled, so we cannot forecast what the cost will be.

Mr. *Norman Cole.*

1692. St. Augustine's, I understand, came into your charge a couple of years ago?—It is about two years since their status was defined.

Chairman.

1693. I think it would be useful if Mr. Fisher could explain to us first of all what formula is in operation here, because I am not absolutely clear about what they can spend on repairs and maintenance and what can be spent on capital development. If you could explain that to us first of all I think that would help us?—You really want to distinguish between three distinct things. The first is the major building programme, the second the minor building programme, and the third is the rest. The major and minor building programmes are by and large concerned with new places, actual construction of new educational space. The rest concerns the maintenance, repair and improvement of existing premises. These aided and controlled schools which we have been talking about come into the third category. They are not capital expenditure. They are the repair and improvement of existing premises, and they are a revenue charge. We do not have to go to the Ministry and ask for authority to do it. We are not limited in that respect.

1694. That is the point I wanted to be clear about. This question of 9s. per pupil does not apply to that at all?—No.

Mr. *Norman Cole.*

1695. What is the limitation on the money expended on this rehabilitation process as distinct from providing new places? Is it the limitation of your own finances?—Yes. Normally we find it extremely difficult to get enough money to keep up with such things as painting, day to day maintenance and ordinary improvements, which include such things as putting back railings which were taken down for scrap material in the war (because it leads to a lot of damage when they are not there), putting hot water supplies in for the children to wash in the schools which have not got it, which is the majority, improved sanitary appliances, which in the great majority of schools are totally inadequate, and in relatively small jobs, like making doors and windows and things like that. I did quote in the Appendix to this Statement a notice which we put in our School Bulletin. That is in Appendix B. It really was intended to explain this. It followed a conference which the City Architect and myself had with the head teachers, who had become rather indignant over the fact that they seemed to have an enormous amount of work they had asked for which was not done. We had to explain to them that we were dealing with it by sorting it out into priorities.

Miss *Ward.*

1696. Those are your own schools and not the ones you have taken over?—This would include certain voluntary schools where we were responsible, and it is quite a separate matter from the list of 11 schools.

1697. I would be right in saying with regard to the older schools which were local authority schools some have not been modernised in the way in which you would think it might be advisable to modernise them; that is to say, they have not got the advantage of modern furniture and interior painting and the like?—Webster Street, which you saw this morning, would be an example of that.

Mr. *James Johnson.*

1698. With regard to these schools that came to you, say, two years ago, do you get any financial help from the Ministry?—We get the normal rate of grant on this expenditure in what I said was the third category, repair and improvement.

1699. What does that amount to?—It is roughly 60 per cent. Can I give you the financial history of this group of 11? This group of 11 schools comes to about £50,000, but it is only fair to point out that No. 3 in the list, St. Philip's, Bradford, does involve £29,000, and I ought to say there is some disagreement between the managers of the school and our own architectural

advisers as to whether in fact it is necessary to incur so large a sum of money to make the school usable. If you take out that, you can say for the remaining 10 you have a sum of about £30,000. We felt that was an extremely large sum to ask the Revenue Fund, the Rate Fund, to pay in one year. My Committee, therefore, recommended to the Finance Committee that it should be financed from a short-term loan, but the Finance Committee, on purely technical grounds, advised us it would not pay to do it. The loan charges would be so high that it would be cheaper to do it from revenue. It was then understood they would do their best at any rate to allow us to have extra money in the coming year's revenue estimates to do this work. As things have worked out, owing to the desire of the Council to keep the rate down to a fixed amount, we shall probably get for this purpose £7,000 for next year.

1700. From the Revenue?—Yes, from the Revenue. May I make it clear, although the gross cost of this would be over £50,000, we calculate allowing for commitments of our own architectural staff we could probably carry out in twelve months about half of it, so we were asking for roughly £23,000; that was what we thought we could do in one year.

Chairman.

1701. This is what I want to get clear. I am not very clear in my mind. What you do in regard to repair of these old schools, whether it is painting or anything, is a matter for the local authority, and for you only, to decide whether that is required?—Yes.

1702. Therefore one can say that the Ministry of Education do not limit you at all in the amount of work that you do or desire to do in getting these schools into an adequate state of repair?—That is perfectly true.

1703. Now I want to find out about this allocation that the Ministry make of 9s. per pupil and £25 for each school. What would that sum of money amount to so far as Manchester is concerned, and what do you do with it?—On the 9s. a head basis it gives us £43,000. I can quote, if you would like to hear it, the actual list of projects which were included in our minor building programme for the current year, the year which is just ending. Christ the King Roman Catholic School, two extra classrooms; College of Housecraft, alteration of the housecraft room; Greenend County Primary School, adding certain lavatories and converting certain rooms; St. Catherine's Roman Catholic School, extra classrooms; St. Margaret Mary's, extra classrooms; the College of Art, improvements to dining accommodation; certain works in Buglawton Special School; Margaret Barclay Special School; reinstatement of school kitchen at St. Thomas's.

1704. Those come within the Ministry's maximum of £6,500 that you can spend on each particular project?—Yes.

1705. The total you have received is £43,000?—Yes.

1706. Did you ask for more than that, or was not it competent for you to say to the Ministry: "This does not touch our problem in Manchester"? Did you say that?—I think our attitude has been that we have been very reasonably and generously treated over the major building programme, and we have rather accepted the minor building programme.

1707. Suppose the Ministry had said: "In view of this list of very old schools that you have, we think another £20,000 or £30,000 might be given to you which you could use for the purposes for which at present you can only use the rates", is it not competent for you to transfer some of that money, even the £43,000, and use it for the very urgent purposes which you have explained to us this afternoon with regard to these old schools?—In the first place, of course, with the limit of £43,000 for minor building projects, we have always to leave undone a great many jobs which are urgent, and therefore we have regarded these aided and controlled schools as something extra and above. If we attempted to put them on the minor building programme we would really sink it. We should simply have wrecked the thing altogether, because we already have had to cut out of our minor building programme a great many things we wanted to put in it.

Miss *Ward.*

1708. It is a matter of priorities?—Yes, but there is also the point I mentioned earlier, that the minor building programme generally is for capital construction, increased accommodation.

Mr. *Norman Cole.*

1709. The £43,000 is related to additional accommodation. These 11 schools are schools which require rehabilitation without extra accommodation?—Yes.

1710. Is that £43,000 only 60 per cent. of what you have spent this year on minor projects, and you have also spent 40 per cent. from the rates?—No, the £43,000 is gross. I do not think the Ministry would agree—we have never asked them, but I am sure they would not—to our putting repairs and improvements on to the minor building programme.

Mr. *James Johnson.*

1711. Did you say you get 60 per cent. of what you spend given you by the Ministry?—Yes.

Mr. *Norman Cole.*

1712. But that is not for extra places. It is what you spend from your own ordinary rates, which is not a capital charge, for which there is no ceiling, of which the Ministry will approve a grant of 60 per cent.; that has no relation to extra places but is merely bringing the old schools up to a better standard?—Yes. The minor building programme, very broadly, is for adding one or two classrooms as a rule, or doing small jobs like adapting a house, such as the synagogue you saw today, for further education.

Mr. *James Johnson.*

1713. Can I ask what you have spent in the last year and what you think you could have spent?—I think we will have spent up to our allocation. (Councillor *Pariser.*) Do you mean on minor building or improvements and repairs? (Mr. *Fisher.*) We are talking about the minor building programme?

1714. I am talking about the two, about the minor building programme and also these old schools we have seen today?—On the old schools in the current year we have spent a negligible sum. We have simply squeezed what we could out of revenue expenditure for maintenance and improvement and devoted it to such urgent things as you saw at Holy Trinity this morning.

Miss *Ward.*

1715. The gas heaters?—Yes, and another school where the school was closed because the floor was uncertain. A job like that must be done. On the minor building programme our sanction was for £43,000, and we have committed ourselves to the full amount.

Mr. *James Johnson.*

1716. You would have liked to spend much more than the £43,000?—Yes.

1717. Is it possible to say twice as much or something like that?—Sticking for the moment to the minor building programme, which is not concerned with improving existing schools but rather adding to them, I should say we would have liked to spend about another 10 or 20 per cent. That is by way of being a guess.

Chairman.

1718. Bearing in mind that you have got so many of these old schools in the City, if it had been possible for you to have a larger amount for the minor programme, part of which could have been used for improvements, that would have made your position better?—No, because we could not do the improvement of the old schools out of the minor building programme. The Ministry would not agree.

1719. But you did not ask them?—No.

1720. It has been permitted?—In other authorities?

Chairman.] Yes. I am wondering why, if it has happened, it did not happen here.

Mr. *Norman Cole.*

1721. Surely you are not limited with the old schools. You could spend half a million if the rates would stand it?—I think the Chairman's point is that if we could do it out of capital rather than revenue account it would be easier. The Finance Committee advised us that the kind of loan you are allowed to get for this kind of thing, which is related to the estimated length of life of the building, is so short that the capital redemption charge on the loan in certain years is higher than your actual payment would be.

1722. The loan charges would be more than the expenditure to do the job?—Yes.

Mr. *James Johnson.*

1723. You have spent £43,000 on minor buildings whereas you might have been able to spend £60,000?—Yes. We are, of course, limited by what the architects and quantity surveyors can get through in one year.

1724. Yes. On the old schools you have spent a few thousand when you could have spent tens and tens of thousands?—Yes. We think on the eleven schools we put on the top of the list we ought to spend £50,000 and in one year we could spend about half that.

Miss *Ward.*

1725. If your minor building projects are related almost entirely to adding additional classrooms, I take it that precludes from the minor building programme doing anything which might enhance the length of the life of the school, which, if nothing was done, deteriorates and makes the ultimate maintenance expenditure rise?—Yes.

1726. If your whole minor building project goes entirely on extension of classrooms, that is doing nothing to increase the stability or life of the school itself?—No, but I think one draws a distinction between what is regarded as capital and what is revenue expenditure.

1727. Supposing for example you spent on a minor building project some sum and then in a few years time the main building collapsed or wanted such a vast sum expended on it the rates could not stand it and you had to close the school, that would in fact amount to a waste of money on the minor building project?—Yes.

1728. You could argue that. I am putting it in rather an exaggerated form but you could argue that?—I think it is certainly arguable. I rather see it in this way. Since the war we have been doing two things in school buildings. On the one hand we have been trying to expand our service, for example by the raising of the school leaving age, spending a large sum of money on HORSA huts, making the school meals service more widespread and spending a lot of money on dining rooms and kitchens, building new technical colleges, buying old properties and converting them into schools for handicapped children; that is the first thing. Secondly we have been trying to live from hand to mouth, the hand always a little behind the mouth, to keep up with new housing on the one hand and the swelling number of children in the infant school on the other. In focusing our minds on these two things we have rather forgotten about the main core of the educational system, which is the school built 50 years ago, and it has tended to deteriorate in condition.

Mr. *Norman Cole.*

1729. Could I put one question for the record. The happiest position for you and any local authority would be to be able to get ministerial approval and grant for minor projects side by side with an ability on your part to carry out the rehabiliation of the same school and the rest of them without increasing places. By that I mean get your increased classrooms and also the rehabilitation of the rest of the school to give it a new lease of life?—Yes.

Miss *Ward.*

1730. It would not make for a happy school if your two new classrooms were on modern lines with modern furniture and the other part of the school remained in the condition some of them are in?—Quite. Of course, members of the public, I have had parents from Webster Street, come to see me to say they have heard about and been to see schools at Wythenshawe and is it not scandalous that we do so much for Wythenshawe and so little for them. It is very hard to explain to them that one is a capital project and is not counted in the same way against rates as their school, which is a revenue project.

Mr. *Norman Cole.*

1731. The £43,000 is capital expenditure?—Yes, but for the old school like Webster Street, to modernise it and put asphalt on that surface, that is revenue. (Councillor *Pariser.*) It is really a matter of Committee policy. The Education Committee has really never had all the money it has needed to do all its jobs properly and it has taken the line that it is better to look after the children in the schools and give them the teachers they need than spend that same money on the buildings. Purely as a matter of policy we have had to let buildings go to look after the other side. That is our avowed policy for the coming year, when although we know what exactly should be done we have to turn our back on it—not only the schools you saw, the voluntary schools we have been talking about—but our own schools. We have been advised for instance that we are in arrear with our painting programme to the extent of nearly £¾ million. We shall add to that considerably this year and do practically no painting at all. The money that should go there we have decided should go to the children.

Miss *Ward.*

1732. What I was trying to aim at was this: as well as looking at it from the point of view of the expenditure necessary now, whether by letting the painting programme go you are not further increasing your expenditure in the years to come?—Quite frankly we are and we know we are but the only alternative to it that the City have is to reduce the number of our teachers or something drastic like that.

Mr. *James Johnson.*

1733. Your choice is to have larger classes but fewer teachers or to look after the children and provide the teachers?—Yes, and each year we have had to let the buildings go, against the advice of our City Architect.

Miss *Ward.*

1734. The City Architect does appreciate the considerable cumulative deficiency which will have to be made up at some future time?—Yes. (Mr. *Howitt.*) Unquestionably it is not economy in the long run.

Chairman.

1735. Before we finish with this question may I ask your definite opinion about this formula of 9s. Do you think it is unsatisfactory as a method of assessing what is really required?—(Mr. *Fisher.*) We think it is rough justice. It is based on the number of children in an area. If you were to say that the education needs of one area as compared with another are in proportion larger because of the relative numbers of children then this would be justice, but that cannot be so. There are some areas which have not the legacy we have of rotting, ancient schools. There are many areas which have not the same problem of new housing estates. But I do not see how otherwise the Ministry could do it. Who in the Ministry is going to know enough about Manchester to be able to compare its needs with those of Sussex or Essex, and by what standard are they going to compare. I should have thought this sort of rule of thumb is probably the best rule provided it contains, as it does.

the proviso that authorities may apply for a supplementary allocation if they can make a good case.

Mr. *James Johnson.*

1736. Did you do so in this City?—No.

Chairman.

1737. I think Mr. Fisher's point was that they had been generously treated under the major building programme?—Also we had really abandoned the policy of adding temporary classrooms, particularly in huts, to existing schools. On the whole that is the sort of thing which tends to absorb the money. We greatly prefer to try to build new schools wherever we can.

1738. Nevertheless the question, as we see it, is really becoming a very serious problem for a city like this where you have so many schools in need of repair. If some scheme could be devised whereby there could be a method of allocation which took into consideration not only the need to put up additional classrooms but the need also to keep the schools from decaying it would be a good thing?—At the moment the choice as to how much we spend and whether we spend anything on repairs of old schools rests entirely with ourselves. That falls on the revenue, and we get the normal rate of grant for it. Inevitably, I suppose, where you have a big legacy of old schools, as Manchester has, it is going to drive the rates up to a very formidable sum.

1739. Going to the next page of your memorandum, you say: "in 1953-54 the money available will be sufficient for the internal decorating of 5 and the external decorating of 9 schools out of 257 schools." Have you got a plan at all for the decorating of schools? Is it done periodically?—Yes. The architect would really like to get back to pre-war standards. It is mentioned here on page 3. Schools were decorated inside every four years and outside every five years. For the first few years after the war this was modified to seven outside and six inside. But in 1951-52 we have been able to do virtually none. In 1953-54, when this memorandum was written, we thought we should have money to decorate five internally and nine externally. Since then we have had a cut in the Estimates, and the only money we have for decoration will be for whitewashing lavatories in certain schools.

Mr. *James Johnson.*

1740. There will be no decorating?—Virtually none for a third year in succession.

1741. According to a statement which appeared in the Press with regard to the last school we visited, that school had not been decorated for twenty years. Is that correct?—Was that St. Augustine's?

1742. Yes?—I think it is very likely correct. But there again the local authority must be exempted from responsibility for the external painting, which was the managers' liability, and I should not think that had been done for many years. The internal painting should have been done by the local authority, but it was not done, I am told, in the past because the state of the premises inside was such that there was no point in decorating it. You have to wait for the repairs to be carried out before you can decorate. If the roof is leaking you are throwing money away if you paint the walls. The repairs to the roof until recently were the managers' responsibility, being the main fabric of the building.

1743. Would you say the Ministry should make a sort of special dispensation to you in respect of these schools that have recently become your responsibility? It seems most unfair for you to shoulder the burden of all the expenditure?—I think you could make out a very good case for a special rate of grant from the Ministry for this type of work. The Ministry do pay a 100 per cent. grant on certain services. They have just offered to pay 75 per cent. grant to certain further education purposes. I should have said there was a case for the Ministry paying a 75 per cent. grant. Personally, I am opposed to any service for which the Ministry pays 100 per cent. I should have thought there was a case for a higher grant for this work.

1744. Because it is an extraordinary obligation you would not be expected to budget for. It merely comes to you at the volition of independent authorities outside the L.E.A. You are saddled with the fact?—Yes. We may pay the bill for their own past neglect, for which one does not necessarily blame them, but the neglect is there. (Councillor *Pariser.*) Also it will fall on some authorities, like us, but not on others. Some authorities may not have anything of this kind.

1745. There might be a case for the Ministry to survey these schools and say which of them are either on the black list or a list very near to being a black list, and make a special allocation to help your local government finance in this matter?—(Mr. *Fisher.*) I should have thought a survey should be made by the local authorities and they should state a case to the Ministry. Her Majesty's inspectors are usually very well aware of these schools. Her Majesty's inspectors have been telling me about St. Augustine's for some time past. They would be able to say whether the case is made out.

1746. You would be happy to have a local survey vetted by the inspectors, and then, if the case is made out, a higher grant from the Ministry?—Yes.

Chairman.

1747. You are rather discouraging the idea of temporary building?—Yes.

1748. That to some extent would penalise you in regard to the grant, because if you are not adding in that way that would cut down the figure of £43,000?—Yes. You remember that towards the end of your tour this morning you saw an old school built in 1910 side by side with one built in 1908, one temporary and the other permanent. Owing to the pressure in Oswald Road—that is the permanent school —we were asked to provide some additional temporary classrooms. Instead of doing that, we are adding permanent classrooms to the building to bring it up to the standard laid down under the Development Plan.

1749. You think it is very uneconomical to have a lot of temporary rooms?—I think first of all most temporary building is unsatisfactory; for example, those Ministry of Works huts which you saw today. I think you will agree they are very uncomely and not pleasant to work in. Secondly, if they are really temporary, if they are ultimately to be pulled down, presumably something else will be put in their place unless the need has passed away. In that case you will have to build twice. What in fact tends to happen is that that which is built as temporary is built sub-standard and is in fact permanent.

Mr. *Norman Cole.*

1750. What is the difference in time in putting up temporary huts and building additional classrooms?—I think there should be very little difference, and certainly very little difference in cost. (Mr. *Roberts.*) If we build a temporary building we have to use a cavity wall owing to the humidity, and we might as well build a permanent building straight away.

Chairman.

1751. Have you many temporary buildings?—(Mr. *Fisher.*) We have Horsa huts.

1752. How many?—Over 100. One hut may be more than one classroom. On a classroom basis it is over 100. Then we have kitchen dining rooms, two or three central kitchens in huts.

1753. I think we ought to ask you a few questions about types of buildings?—That is on page 4, paragraph 6.

1754. Yes. On the whole, may we take it you are not very much enamoured of non-traditional?—I would like to go back to the point which Mr. Johnson raised earlier about shortage of labour. When we got the extra allocation for Wythenshawe the Ministry made it a condition we would use non-traditional construction so that we would not compete too much for the labour force. Therefore, we have had necessarily to build different kinds of construction. We have one school in the north of Manchester built entirely from Ministry of Works hutting. You saw an aluminium building this morning. We also have an Orlit method. We find either traditional or integrated construction most satisfactory, although we think the Newell Green Secondary School, which will have a traditional ground floor and aluminium first floor, will be a very good building when it is complete. (Mr. *Roberts.*) We think there is very little difference in cost between a meccano school and the ordinary traditional school. There, again, the weather is an important factor. We save very little in time if we could have a guarantee of building materials like bricks and steel and cement. I think the greatest time will be saved with a traditional carcase, which the building people in this part of the world are used to, and some sort of method of cutting out the wet trades, plasterers, who are very short. I think that will speed up the construction of our schools tremendously.

Mr. *Norman Cole.*

1755. By "meccano" you embrace all forms of non-traditional?—Yes.

Chairman.

1756. Have you any idea what the teachers think about the new types of school which we visited this morning?—(Mr. *Fisher.*) Where we have opened several new schools, after a time we have called conferences of the Heads and the City Architect and his colleagues, and certain of the local inspectors have attended; we have discussed the merits and defects of these schools. Then we have summarised the views expressed and tried to extract those we think are practical and tried to put those into force. On the whole I would say that the teachers' view almost without exception is most favourable. There is every reason why it should be, I think. In many ways the schools, particularly the first post-war schools, were built to higher standards than had been adopted before. The criticisms have been mostly on points of detail. I think perhaps the criticism of the elongated corridor has come from ourselves rather than the teachers. They have criticised certain things. (Mr. *Roberts.*) Type of floors, finishes, and equipments. (Mr. *Fisher.*) Tiles, drinking fountains, things of that kind.

1757. Are the teachers represented on the authority?—They have one representative on the authority, but it is a Manchester tradition that we do consult the teachers.

Miss *Ward.*

1758. Is the teacher a co-opted member of the Education Committee?—Yes.

Chairman.

1759. That member has full executive powers with other members, voting rights and so on?—Yes.

1760. May I ask Councillor Pariser whether he thinks that is satisfactory?—(Councillor *Pariser.*) Yes. The teachers' representative has his own contribution to make, and it is generally a very valuable one. I would favour the extension of that, and I would gladly welcome at least one more teacher. The work of the Education Committee is so large that I think it could well be divided between two teachers' representatives rather than one trying to cover all the meetings of the Committee and the sub-committees.

1761. Does the representative attend the sub-committees as well?—Not the Staffing Sub-Committee.

Mr. *James Johnson.*

1762. You do know, I suppose, that many authorities have got three, one for junior schools, one for secondary schools and one for further education?—I think it would be a good idea, and would lighten the burden on the teachers' representative.

Chairman.

1763. And also help to bring this question of consultation even closer?—Yes.

Mr. *James Johnson*

1764. With regard to materials, would you say we have got as much glass in our buildings as we have need of? We have had complaints about dazzle in summer and also heating in winter. Would you care to comment on that?—(Mr. *Fisher.*) We have had complaints about heating, but I do not think that is concerned with heat lost through too much glass, but just that the teachers do not seem to think the volume of heating is adequate or adequately distributed. I do not think we have had complaints about too much sun being admitted in the summer. I have heard it elsewhere ; they say it is like a greenhouse and they need blinds. I do not know whether any of my colleagues have heard this complaint? . . . No, apparently they have not.

Chairman.

1765. Looking at the new schools you are building, I think they are very impressive and I very much like the corridor space, the way that was used, the cloakrooms and so on. Have you ever experimented with having cloakroom accommodation inside the classroom, or having a cloakroom accommodation on a sort of stand brought into the classroom or put into a storeroom?—(Mr. *Roberts.*) We have never had the actual cloakrooms in the classrooms, but we have got examples of cloak accommodation being wheeled into the classrooms, particularly in infant schools.

1766. What do you think about that?—As far as I know, the teachers like it very much. (Mr. *Fisher.*) That is, of course, for very young children. (Mr. *Roberts.*) Yes, and particularly where you have a plan where the cloakrooms are some distance from the classrooms. They like it very much.

Mr. *Norman Cole.*

1767. Have any of you gentlemen any views about the economical and educational value of using central halls as a means of communicating with the classrooms?—You saw that in a small way in Poundswick, where you proceed through the hall into the dining space. If you are considering using the hall as the lung, with the classrooms off, schools have very often in the past been planned in that way, but you have to be careful with sound distraction.

1768. What about embarrassing the people using the hall?—From our experience it has not been terrific. (Mr. *Fisher.*) I would certainly approach it with some caution myself. The old School Board building, which was in many ways a good building, was based on that principle. You have noise, for one thing, and now we do use the halls a good deal for physical training and so on, and to have people passing through the hall is distracting.

1769. Is it economical from the point of view of building?—Yes, it saves cost.

1770. Have you found in any non-traditional design there has been some excellence of design that you could not incorporate into a traditional building, or have you found the designs absolutely interchangeable?—(Mr. *Howitt.*) I do not think we have found any quality in the non-traditional which we could not put in the traditional.

1771. Or vice versa?—That is not quite the same.

1772. It is true to say that non-traditional buildings are rather bound to a set plan which you have to accept?—It is based on a unit system which is fairly flexible.

Mr. *James Johnson.*

1773. May I ask your views about timber schools?—Have you built any timber schools?—(Mr. *Roberts.*) The only one we have done in timber, when the last instructions from the Ministry of Education came we found that we had to design a truss and timber building, and that is the only real experience we have had since the war.

Miss *Ward.*

1774. You have not had a real timber school?—Not since the war, anyway.

1775. Had you before?—I could not tell you. I was not here.

Mr. *James Johnson.*

1776. You do not think you are likely to build timber schools even at Wythenshawe because of the large influx of pupils?—It might be possible to build one. (Mr. *Fisher.*) My colleague here is reminding me that he has put forward the suggestion that for 1958 we might do certain secondary schools in timber, but I am not convinced even there you could not best meet it by doing something permanent.

Chairman.

1777. On the question of the size of classes, which is contained in Appendix C to your memorandum, you say in 1952 37 per cent. of the classes were over 40. Have you any later figures than that?—No. We have our school attendance returns quarterly, and there will be one due next month, which will give the first three months of 1953.

1778. This goes up to the end of 1952?—Yes. I think the tendency is still up.

1779. What is the position of the secondary schools? The limit there is 30. You have not given those figures. Are those classes overcrowded?—There are a great many secondary school classes with more than 30. There are very few classes in secondary schools over 40.

1780. You have not any figures available on that?—I have not got them here.

Mr. *James Johnson.*

1781. Can I ask how you are going to cope with these large classes when they get to the 12-year old or 13-year old level?—That is something we are working on, and we have managed to make a forecast of where we will be up to 1958. We think, with additional secondary school building, we expect to be able to accomplish, and perhaps some such device as keeping some 11-year olds in primary school, we shall manage, but it will be at the cost of the same kind of overcrowding in the secondary as now exists in the primary.

1782. If you keep the 11-year olds in the primary school it will mean more expense buying larger furniture for these children?—When the children reach a certain size we shall be buying furniture anyway, and we can swap it about between the schools.

Chairman.

1783. With regard to playgrounds, some we have seen are very bad?—Yes.

1784. Which scheme does that come under?—That comes under repairs. It is a revenue charge. We have a priority list.

1785. Have you had any accidents due to this?—We had an almost fatal one at Ardwick School a few years ago.

1786. I have heard of two cases where legs have been broken?—We had a broken arm this morning.

Mr. *Norman Cole.*

1787. Was that because of a bad playground?—Yes.

Mr. *James Johnson.*

1788. Is there any system whereby your head teachers do give you a list of those accidents?—Yes, there is a strict rule about that. It must be reported, and it is referred to the Town Clerk, because of compensation, Workmen's Compensation and so on. (Mr. *Howitt.*) We might mention that any unsatisfactory conditions are noted at the Clerk of Work's fortnightly visits.

Chairman.

1789. Is the supply of teachers satisfactory?—(Councillor *Pariser.*) Manchester, I think, is fortunate in that we have not been short of teachers.

Mr. *James Johnson.*

1790. If you could get the school buildings you could keep down the size of classes?—Yes.

1791. The important fact is school buildings and not number of teachers?—(Mr. *Fisher.*) Yes. Of course, there are certain specialist teachers who are short, science teachers in grammar schools for example.

Mr. *Norman Cole.*

1792. Is it the experience of the Corporation that new schools are overcrowded from their very inception?—I should think almost invariably.

Chairman.

1793. The Sub-Committee would like to thank you very much indeed, Gentlemen, for the patience you have shown in answering our questions, both on the record and off the record. We very much appreciate your co-operation, and we trust when our Report is presented to Parliament you will read it with some interest?—We will watch particularly for it. May I say we have enjoyed your visit very much.

The witnesses withdrew.

Adjourned till Wednesday next, at a Quarter to Eleven o'clock.

WEDNESDAY, 1st APRIL, 1953.

Members present:

MR. YATES in the Chair.

Mr. Norman Cole.
Mr. James Johnson.
Brigadier Peto.
Miss Ward.

Mr. G. N. FLEMMING, C.B., Mr. B. L. PEARSON, C.B., D.S.O., M.C., and Mr. D. M. NENK called in and further examined.

Chairman.

1794. Gentlemen, I think we are now in a position to ask a few questions with perhaps a wider knowledge of the subject than we had when you came to see us before. Mr. Flemming, I think we should like to have clear in our minds first of all exactly how you estimate the number of school places which are required. Perhaps I should explain that it has been submitted to us that, for instance, for 1953 the number of school places which you estimate will be required is 1,150,000?—(Mr. *Flemming.*) That was the number to be provided by the end of the year. That was a guess made a number of years ago as to the point to be reached from the end of the war until the end of 1953.

1795. You agree with that figure of 1,150,000?—We agree that was the guess we made, I cannot remember exactly when —I think it was 1950—of the measure of what was to be reached by that time.

1796. We have been informed that is a figure which has been accepted by the Minister as being the number of children for whom there are no school places who must be provided with school places by the end of 1953?—I think that is an unnecessarily cumbersome way of putting it, but it comes to the same thing. It was the number of additional places which should be provided by the end of 1953 from the end of the war.

1797. Apparently that figure is not a generally accepted figure by the authorities. Has that matter been discussed with the authorities concerned, and if so what was your attitude in regard to it?—That figure is necessarily relative to the standards at which you are aiming. You can think of any figure you like really according to how optimistic you are as to your being able to abandon relatively unsatisfactory premises; it is a question of just where you draw the line. It is not a purely mathematical conception of what is needed to see there are not children left in the street. What determines it is the standard you are able to achieve.

1798. That was not a figure agreed with the education authorities in the country?—That was our own guess.

1799. Has it been pointed out to you that in past administrative experience you never reach more than 90 per cent. of the number of places?—I do not understand that, I am afraid.

1800. Can I put it like this? You build schools in units of 40. Therefore, in order to arrive at a satisfactory figure, or at least in order to prove that that figure is correct, you would have to build a school, say, for 357 in one place and 469 in another, in order to get that ratio correct? It has been submitted to us that this figure is quite out of keeping with what is required in the country?—I can only repeat what I have said. I have seen that said by many people many times for many different reasons. I would like to emphasise many different reasons, not one different reason or one calculation. It all comes back to the point I have made, that your requirement is related to the standard which you are able to achieve or would like to be able to achieve in a whole number of matters, the most vital one being the extent to which you can give up use of relatively unsatisfactory schools.

1801. Is it really in fact the standard? I want to find out how you estimate that 1,150,000. Do you estimate it on the basis of the number of children you are quite sure will require to be placed?—No, it is nothing like as simple as that. I want to emphasise that I would be the first to claim because it is made nationally there is a whole mass of guesswork in it, but I have never seen any criticism which would do it better. It is not a question of taking so many children and deciding they are going to be divided into little pockets of 40. You have to take into account various factors. You have got your estimate as to the additional number of children. Against that you set off the number of those who can be fitted in without new places. As a different calculation you have got the number of new places which are going to be needed because of movements of population to new housing estates. You have got to estimate how far you think that is meeting the same need, that is to say, the place provided on the new housing estate is incidentally going to meet the requirements of the additional children. I am sorry it is

complicated, but it is a complicated calculation. That was a calculation in terms of school places, not children. I do not pay very much attention, if I can be quite blunt, to some of the criticisms made of us, because they do change very much in form. There was a famous figure of 100,000 thrown about. First of all we were told we were not going to achieve the target by that number. When we said we were going to reach that number by the end of 1953, they said perhaps it is not going to be enough, which is a completely different line of criticism.

1802. If there is such an element of guesswork in this on your part, have you discussed this with the Association of Education Committees?—We discussed the programme for individual areas. They have never attempted to form a national calculation. What happens is that each authority wonders whether their own needs are going to be met, and that is where my question of standard comes out. I would admit readily that a very large number of authorities would like to do more building because they would like to have their provision made to a more satisfactory standard.

1803. Do you also take into consideration the number of houses it is estimated are to be built in the country in the year?—We take into account the estimated number of school places needed on account of movements of population. It makes all the difference where a new house is built. If it is built next door to a fine old school it makes no difference at all. If it is in a green field it makes all the difference in the world.

1804. If it is estimated that in the whole country there is a building programme of 200,000 houses, that would be the figure you would consider?—With the qualification I have made. It makes all the difference where they are to be.

1805. What happens if the programme is increased from 200,000 to 230,000? You have not taken that into consideration?—Indeed we have. As I have said before, I am not going to die in the last ditch for the accuracy of this particular figure achieving any particular standard. It was a figure thought up in 1950.

1806. In a case like that is it not better that you should have consultation with the authorities concerned?—There is consultation frequently, but they have never contributed anything in the way of a national calculation. They have frequently criticised what we are doing based on the experience of individual authorities and the wishes in the matter of standards of the individual authorities. A number of them, either individually or collectively, have told us they do not think the standard this is going to enable us to achieve is satisfactory. They have never produced one shred of evidence or argument in this kind of form, that so many children are going to be in the street because the programme is not big enough.

1807. I think on the question I originally put to you about administrative experience we are not quite clear. The administrative experience is that you are never closer than 90 per cent. to your education accommodation?—I am afraid I can just attach no meaning to that statement at all, and still less can I accept it as having any relevance to this calculation.

1808. It is submitted to us that your estimate is based upon the factors you have mentioned plus the fact that there are likely to be a number of school places required in the country?—Can I perhaps put my point negatively? We are not such complete and utter lunatics as to base any calculation on the assumption that every school place in the country is going to be filled neatly with a child. Can I say that again? We are not such utter lunatics as to base any calculation at any point at any time on the assumption that every school place was going to be filled with a child.

1809. In other words, you must have assumed when you were planning this number of places you would not really have the accommodation available, and therefore would have overcrowding of schools?—Not at all, I am sorry. I can see no connection between those two statements at all.

1810. It seems to be the general experience in the country that the new schools up and down the country are overcrowded from the start. There must be something wrong in that?—This is quite another issue. I am quite prepared to believe that many new schools are overcrowded, or at any rate more overcrowded than they will be in the long term, but that is a local issue partly to do with the timing of the local school building in relation to local house building, and partly that is just what I meant by standards. Obviously, if you are having a great movement of population at the same time as a great temporary increase in the number of children, one of the ways by which you get by is to put up with relatively low standards and makeshifts for the time being. That is admittedly part of the current policy.

1811. I think we will have to come back to that later when you talk about overcrowding. Having decided what your building programme is to be based on the figures of places required, how do you determine with regard to each individual area whether their programme is to be accepted or not?—I am sorry if I have misled you, but may I first correct the assumption which seems to be implied in your question? This decision, as you call

it, that this should be the target is not in fact an operative decision on which each year's programme is fixed. I was wrong in saying this figure was estimated in 1947; it was 1950. That was a guess made for the purpose of taking a long-term view, but in fact each year's programme is decided year by year on the basis of the latest information available. I am not going to suggest for a moment that one decides what one does in 1953 because of the figure one thought of in 1950 if something has happened in the interval to make one want to do something different. I am not quite certain whether that was implied in your question; but the programme is decided year by year taking account both of need and of the national resources and the other claims on the national resources.

1812. May I read to you something which has been expressed to us*: "The second assumption relates to the relationship between the provision of new school places and the number of children who will require to be accommodated in them. The total increase in the school roll was inevitably adjusted after due regard to the school places available, and resulted, we believe, in the establishment of the fact that new school places were required for 1,150,000 children by the end of 1953. The Ministry appear to make the assumption that the provision of 1,150,000 school places is adequate for that purpose. This proposition we reject. Administrative realism demands that for such a number of children the number of school places must be at least 100,000 more"?—The word "children" has been put into that paragraph at one point where it makes a vital error. That assumes at some point somebody has thought of 1,150,000 children. Our calculation is in terms of places needed for a complete situation in which the number of children is one of the factors. It may be a good calculation or a bad calculation, but it was a calculation in terms of places, and that paragraph, assuming it was in terms of children, is as irrelevant as if one substituted apples for sixpences.

1813. It would appear on the fact of it that there is a necessity for some closer consultation with the authorities concerned in this?—May I be frank? You can consult till you are blue in the face. If the other fellow does not want to understand you he will not, and the only result is that he thinks of a different reason for making the same remark as he made before, and that is precisely what has happened. I have seen that answer of 100,000 arrived at by three or four different routes because the person who is putting it wanted to arrive at it.

1814. May I say we have been much impressed with the very great satisfaction that exists in the country as to the consultation between the Ministry and the local authorities. I was not suggesting there is any lack of it, but I would not think our experience would lead us to believe that if you talked to people till they were blue in the face you would not get any real satisfaction?—I only want to make clear where the real difference lies. It is perfectly proper, and indeed natural and reasonable, for an authority to want to get the best standards of provision it can for its children, but they are up against the brick wall of the limitation of national resources which comes through our channel, and it is their business to try to get a bit more.

Mr. *Norman Cole.*

1815. Could Mr. Flemming tell us in the forthright fashion which is so useful if he has really found any reason in the last three years, in the Ministry anyway, to alter the overall total of 1,150,000 on the same sort of basis of calculation as was used in 1950?—Yes. It is not quite big enough, and I am glad to say we have every reason to believe the result achieved will be slightly bigger.

1816. Would you care to give any sort of figure?—I would rather not give a figure. Our building is an extremely speculative matter, but our present hopes are that we shall surpass that 1,150,000, and naturally we do not think that is wasted; we think that will be very useful.

1817. You said you do not base the annual programme on this 1,150,000 places. Can you tell the Sub-Committee on what basis the annual programme, apart from national stringency, is based?—It is based on a calculation starting with all the information we have at the time as to numbers of children, extent of housing development and the rest, on our side. Then it has to go into the tug of war of what share it is to get of the national resources, of course.

1818. Could that be put another way? Would this be a fair way to put it, that the Ministry looks at the representations of the local authority, based in the first instance on what they think the school place position is, and also bearing in mind the overall problem of that particular authority as represented to the Ministry, and after that comes the tug of war?—In compiling each year's programme one of the most relevant pieces of experience is our experience in dealing with the authorities over the previous year's programme. Again, it really boils down to this: it gives us a fairly clear idea in this form. If we can get a building programme of such and such a size, the real consequences to the schools, whether in terms of children being in school or out of school, or whether in terms of their being

* Annex 5.

in schools of a given standard, the accommodation will be such and such.

Miss *Ward.*

1819. I would rather like to put something the other way round. Where you have some local authorities who do not perhaps lay so much emphasis on education as on other aspects of their local administration, how do you ensure that the lagging local authority provide for their proper number of places?—The consultation about the programme is always liable to be two-way. It does not consist entirely of holding back, though under present conditions it does usually, I am afraid. It is perfectly possible, and is happening every day in our discussion of programmes with authorities, that attention may be drawn to a need they seem to be overlooking.

1820. I do see the point about the difficulty of the housing programme, because local authorities sometimes have their difficulties about obtaining sites, and all sorts of complications arise. The other point was this. When you have a large number of schools submitted from an area, in fact do you take the final decision or do you say to the local authority or the area: "Please eliminate"? I have seen a great number of lists go in, because I have tried to follow this pretty closely, of a large number of schools which sooner or later are to be built in an area, and I am awfully anxious to know who really does the final elimination?—It may be either. There may be an item in a programme in regard to which we would say: "This has got to go out because of these standards which national policy at present makes necessary; we cannot regard this school as needed." It is, relatively to the national policy to which we are driven, an unnecessary project, and therefore it is out.

1821. But how do you decide between them?—That is, roughly speaking, the only category of case about which we should decide. Then within the programme there may be other items where it is not so clear cut but where the thing is scaled down by the to and fro of consultation.

1822. Do you generally win the battle? Does the Ministry generally win the battle or the local authority?—You cannot generalise. It is not a battle if the circumstances are such as I have described; that is to say, that there are items which are, by reference to present austere standards, unnecessary. If that could perhaps be described as a battle, certainly we win. But a great deal of the discussion does not concern items of that kind. It is much more marginal, just to and fro consultation, which could not be described as battles.

Chairman.] I thought we would first of all clear out of the way the question of the national figure.

Miss *Ward.*] I thought it was, so to speak, a problem which arises out of that.

Chairman.] The question I was trying to clear up was whether the method of estimating was right.

Miss *Ward.*] It is bound up; it must be bound up if the national figure is merely a guess.

Mr. *James Johnson.*

1823. Can I put one question about figures? The point is the Ministry seem to make a mathematical calculation. In other words, if this year you have got 6,100,000 in the schools, it may be that next year we shall have 6,250,000. The feeling we have is that the Minister makes a mathematical calculation and gets the extra 150,000 places, but this does not balance out because in many areas you build a school for 310 pupils and you have got 290 or 380; in other areas they get a school for 340 or 360, where they cannot fill that school?—I have tried to answer that by saying whilst admittedly one cannot at national level get all the sums right, we are not such fools as to do a calculation in those simple mathematical terms without allowing for the experience we have accumulated as to the relevant factors.

1824. If you have to find 150,000 places by 1954, you build a school in one area which will accommodate the extra people——?—Are we not muddling places and children again? Do you mean 150,000 places or 150,000 children?

1825. 150,000 children?—I must repeat what I said at the beginning. If we know the population is going up by 150,000, that is merely the beginning. No one would dream of writing the figure down as places. We have to decide how many can be fitted in without any additional places, because there is an empty seat in a room that is not full already. You have got then to go through what in recent years has been a far more important thing, to see, quite apart from additional children, what places you want because children are moving from here to there. In our calculation of the number of places needed the number of children is only one factor in a complicated calculation.

1826. In other words, it is a false assumption by people whom we have met that the Minister only finds 150,000 places. You may find 180,000 places or 200,000 places for an extra global increase of 150,000?—It might be 100,000, because there was room for 50,000 in existing schools. There is no direct connection between additional children and number of places. There is an indirect connection but not direct (Mr. *Nenk.*) Would it be helpful to state categorically in that connection that in fact our calculation of the number

of places required for this whole period exceeds the number of additional children on the school rolls?— (Mr. *Flemming.*) Movement of population is such a large factor.

Chairman.

1827. But what is submitted to us is that if you like to say that is your scientific figure, those who are in the administration say from administrative experience you only achieve 90 per cent.?—This is not a quarrel about scientific figures; it is about standards, and what people really are saying—and they are fully entitled to say—is that our calculation brings about conditions which call for overcrowding, or we have to keep unsatisfactory schools in use which we would like to get away from. They are fully entitled to say that, because all these things are not scientific; they are relative to some particular arbitrary standard in all kinds of matters.

1828. I should have made it quite clear we were thinking about providing places within the regulations which the Minister has set. If you say now that you cannot provide those places within those requirements, that is another matter. The argument is that the schools are overcrowded?—Let me say straight away this calculation has never assumed that during the time of this very great growth in the number of children it would be possible simultaneously to effect a very great reduction in the size of classes. We started this whole operation with very large classes exceeding the size in the regulations, and it has never been assumed it would in fact be possible either in terms of buildings or teachers to cope at the same time with this enormous growth in numbers and to secure a big reduction in the size of classes.

Mr. *James Johnson.*

1829. What you do say is this, quite categorically. You are providing more places in the schools than the actual global increase of the school population up to next year?—Certainly.

1830. That is a fair question and a definite answer?—Equally, I take no great pride in that, because the movement to new housing estates might be such as to make it still thoroughly unsatisfactory. Unless you have got some calculation as to their movement you can take neither blame nor pride for such a result.

Chairman.

1831. Coming to the question Miss Ward raised, having decided what numbers are required and what the programme for the country is, how do you determine the need for the particular area?—Again, I am sorry I must just correct the assumption from which we start. It is not a question of having decided what we need; it is having decided what we have got. You come down to the programme for individual authorities after we have got the overall decision as to what building resources are to be at the disposal of the education service. That is the cake which has to be cut up. Need has been one of the elements at the top level of Government policy in arriving at that, but it is after that we have this business of cutting up the cake. The process is that the individual authorities submit their own programmes under general advice and instructions from us as to the kind of projects which can be considered, and then there is the process of to and fro consultation which I have described when Miss Ward asked me this question before. It is nothing like as simple as I was putting it, but one would have to go through dozens of illustrations to be more precise. One can make the point of principle that there may be certain proposals put forward by local authorities which we have quite flatly to cut out as being not permissible consistently with the principles to which at that moment we are working; but otherwise it is a matter of haggling to and fro with them in order to see that the most urgent jobs get done within the resources at our disposal.

1832. May I just give you one example of this? One authority which was planning its schools had a big programme costing £1 million, and it was suddenly asked to reduce that programme, I suppose in accordance with what was required in the country, and it came down from £1 million to £68,000. After urgent representations to the Ministry their case to be allowed to go further is declined?—Could you give me the approximate date of this? There have been so many changes in this since the war that it makes rather a difference.

1833. The £68,000 is for this year?—(Mr. *Nenk.*) Is the statement that last year's programme of the authority was £1 million or that they put in a list for £1 million and got £68,000?—(Mr. *Flemming.*) I can only say that kind of ratio is not at all typical.

1834. I was wondering how you would decide it?—I can only repeat what I have said. In any case like that there must have been projects included which are just right outside the picture of the kind of thing we should consider at all in these hard times. There is virtually no limit to the amount of school building you could do if resources were unlimited. You could pull down all the schools and say they ought to be rebuilt. I can only say that kind of ratio is quite unusual, and I can only imagine it was a very ambitious authority concerned to put everything to rights in one year.

Miss *Ward.*

1835. Perhaps it had a lot of leeway to make up?—Yes, but it is a question of the standard which it reaches.

Chairman.

1836. We understand the authorities in the country were asked to gear up their machinery for a very big building programme which at a later date was reduced?—Not by the sort of order you are talking about. On the contrary, they have been steadily building up till the thing is ticking over very nicely.

1837. I think the total building programme for the country was reduced by the Minister by several million pounds?—Yes, but I should not like to say it had been geared up to anything very much bigger.

1838. Was not there a committee that made recommendations in regard to expenditure, the Cleary Committee?—That was just after the war, but a great deal has happened since then. I should not like to say anybody built up their machinery in accordance with the recommendations of that committee.

1839. The information that is passed over to us is that quite a number did gear up their machinery and had to gear down again, which meant there was some loss?—I have never heard of architects being sacked, or anything like that. On the contrary, I think it has been a matter of difficulty in these times to build up the machinery they need.

1840. This is a case where originally their plan was geared up to £1 million?—Let me say quite bluntly, if we had given this authority the £1 million programme, no-one can persuade me to believe they would have done 25 per cent. of it.

Mr. *James Johnson.*

1841. Who does decide to cut down, for the sake of argument, half a million to a quarter of a million. Do you depend mainly on the H.M.I.'s in the neighbourhood and their inspection of the schools and standards of the schools, particularly old schools?—It is done by discussion at which the H.M.I.'s knowledge is relevant and also the officers of the Ministry at headquarters who know the general standards we are driven to accept by the national position.

1842. Would you say sometimes even if the local H.M.I.'s say a school be, shall we say, demolished, or should have a new school put in its place, because of your lack of capital expenditure at headquarters you cannot carry out what is advised by the local inspectors?—The local inspector does not advise in those terms at all, because everything is relative. There are certain things which it would be nice to do but only certain things it is possible to do, and everything is really in those terms; is it sufficiently important to do it to be able to get it done; there is no black and white, this should be done and this should not be done.

1843. Whether a school is a class A, B, C or D school is determined in the light of how much money you can spend nationally?—By and large we have not been able to replace unsatisfactory schools at all in recent programmes. Authorities know this and this is what I had in mind as a perfectly proper cause of quarrel in terms of standards—our programmes have been almost entirely devoted to the needs of the additional children and movement of children to housing estates. Except in so far as by meeting those needs you can incidentally achieve one of those other desirable objects, they have not had a look in. That is what I meant by the standard which naturally the local authority on the spot is reluctant to accept.

Miss *Ward.*

1844. I suppose it would be fair to say that because of the policy adopted in relation to the new towns that section of the community is going to get more of the capital resources available for schools than areas which have got a lot of leeway to make up because they have a large number of old schools within the local authority boundary?—May I put it this way. If we had not got to cope with this movement of population and had the same amount of building resources made available to education a great deal more could be done towards improving or eliminating bad old premises.

1845. I suppose it would not be for me to say that some people are getting a larger slice out of the education exchequer than others?—I do not know you can put it in terms of a larger slice. There are other disadvantages involved. It has already been said from your side that these fine new schools in the new towns are going to be overcrowded from the word Go. That is one disadvantage. The people of these new towns do lack a good many other amenities which the people in the older areas have. They have to pay a certain price of inconvenience and lack of amenity even for the delight of a new town.

Mr. *James Johnson.*

1846. Would you say in places like Manchester and Liverpool the old schools were becoming even worse because of the decantation of the population to the adjoining county council area where you have to build new schools?—Except in so far as that is compensated by the movement of population. As the population moves out you can either completely give up these old schools or use them for considerably smaller numbers. It depends how the movement of population continues. When the birth rate bulge passes through the primary schools a considerable number of the old primary schools in the older parts of the town will be either given up altogether or used for very much smaller numbers.

Chairman.

1847. To complete our questions on this matter, could you tell us whether the programme that we are talking about now——?—The annual programme for an individual authority?

1848. That is an annual programme?—Yes.

1849. Opinions have been expressed that it would be very much better if they could see further than one year in the programming. Could you tell us what your view is about that. May I tell you what has been expressed to us about this. There is an opinion which says, "In so far as possible there should be reasonable continuity in a job of this kind. It must take a considerable number of years. In other words, if the Ministry can say to an authority 'You in this area are going to need £10 million worth of work; let us tackle it at the rate of £X per annum, and do that', then that is a more economical way of doing it than saying 'We will do so much this year and nothing next year'"?—Of course it would be very much nicer for us all in all our private affairs and public affairs if we could see years and years ahead. It would make our lives very much simpler if we knew exactly what the demands of the defence departments and other sections of the economy were going to be next year and the year after. I will admit that readily. It would be very much nicer if we could tell people firmly. But being deprived of that very desirable luxury I think for inevitable reasons of the facts of life, what we have succeeded in doing very largely is in being able to give people not an assurance—because the state of the world may change next year—but informal guidance. We have in fact managed so far, apart from the quite exceptional moratorium which was imposed by the present Government when they came in for quite different policy reasons, to see that the thing has been ticking over at a level rate and there has been nothing like the violent fluctuations which seem to be suggested.

1850. The opinion I put to you was an opinion which looked as though it was a ten year programme, and I can appreciate your answer there. But what about this, for instance*, "While there are doubtless good national reasons why the annual building programme is necessary from the point of view of this and similar authorities, there is no doubt that a capital allocation, say for three years, would be much more satisfactory and there appears to be no reason why the authority should not be regarded as competent to decide how to use it"?—There are two rather different statements telescoped into that. The first, as far as I can understand it, assumes we should be able to tell them two years in advance what their actual ration is to be. I can only say on that, just as I said on the ten years suggestion, we do not know what the country's resources are going to be three years ahead and it is simply idle to suggest in the present state of the country's economy one could know three years ahead.

Miss *Ward.*

1851. A three year programme might tend to economy, might it not in terms of planning?—It would be very nice for all kinds of reasons if it were possible.

1852. Whether it is possible or not is another question, but it would make for economy?—I am not sure. It depends what you mean by programme. Perhaps I can come to the last sentence. The second sentence, it should be left to the authority to decide to do, seems to me quite irrelevant to the question of three years. That would apply equally to the one year or ten years.

Chairman.

1853. Perhaps I should read a further sentence from this: "There is by this time, presumably, enough evidence in the Ministry to make a reasonable estimate of Manchester's needs and building resources in comparison with those of other authorities". Is not that possible?—Three years ahead?

1854. Yes?—No.

1855. Would you agree it would be desirable?—What I agree would be desirable is this (let us take it step by step); it would be very nice if we knew exactly what we were going to have three years ahead for education services as a whole. We do not know that and therefore I have not gone on to face the other questions. Of course it would be very nice if one could see further ahead. As regards the advantages to the person at the other end, and again leaving out this proviso about their making their own choice, I can see an added difficulty. We have been talking about these complications about housing movements and so on. The whole circumstances of the authority may change in three years. We have seen several upsets and changes in housing programmes and new towns and so on. If you are operating to a very tight margin, and that is the whole assumption of the whole of this operation, if you are trying to stretch something to do more than it really can, you cannot afford to run more than quite small risks at the edges. I should not like to prophesy for certain what the position is going to be in an individual area two years ahead. Of course, we get as near to this as we can. Each year when we discuss the programme there is a considerable amount of informal discussion based on the hope as to what we are going to have next year. It can

* Annex 10.

only be a hope. Always in discussing an authority's programme there is at the back of our minds the hope as to what we will be able to do the following year if things go on as they appear likely to, but it is in a different tone of voice from the one year you are discussing as a matter of business.

1856. The facts in some cases would not appear to justify what you have just said about not being able to look ahead. In a county, for instance, we have a case where a five-year programme was really put into operation at a cost of £7 million and they built 50 schools. If you could do that for a new town is it not possible to be able to decide over the country as a whole what work you can do in three years and would not it be better to have a figure for three years rather than for year to year?—It is taken right out of our sphere. Unless you can tell the Government what is going to happen years ahead in America and Korea and Timbuctoo, all those things come into it. What you are asking me to do is to prophesy in advance that this authority should have that amount of building resources come what may.

Miss *Ward.*

1857. No, you have got it wrong?—I am sorry.

Chairman.

1858. Is it not possible to be able to estimate what are the country's requirements from the point of view of education for the next three years. You know how many children there will be, the bulge in population and so on?—I am sorry but I get back to my bogey word "standards." I cannot estimate what provision the state of the country is going to make it possible for us to provide, or the policy of the Government of that day.

1859. We are not bordering on the question of policy. Policy can change from Government to Government?—I am saying that policy is vital. That is the fallacy, if I may say so, of the whole argument, so many children so much provision. The whole question is what standard of provision. My view is that the country, as I understand it, will seek to make the best provision it can and what the standard will be depends on the situation of the time.

Miss *Ward.*

1860. Supposing you had the choice. Supposing the Cabinet decides it will make its estimates on three years rather than one year—we know an atom bomb may drop in maybe a day—but if you were to have a free hand, would it be more economic from the point of view of cost of putting up buildings. Do you think it would be more economic to plan on a three year basis from the point of view of local authority, or a one year basis, and do you not think it would be equally easy to discuss the needs of a local authority over three years as over one year, on the basis you have described?—I am afraid I cannot make the effort of imagination required to answer that. My experience is that on the national plane to attempt to look forward that distance is always frustrated by events. I may be wrong but it is my experience. Therefore the fundamental assumption becomes one of words.

1861. You have never looked at it from that point of view?—I have frequently looked at it and always been frustrated. On the second question I would only agree if we were operating with a much wider margin of resources. When one is cutting one's coat according to one's cloth and with no margin at all I think one would lose on the total. If I may say again, we do try to get the best of both worlds as far as we can, and without it being a formal written programme (I think our people who are involved in these discussions would confirm what I am saying) there is a great deal of discussion of forward plans over more than one year, without it being a written bond.

Chairman.

1862. In the statement which you sent to us, the supplementary memorandum* of the Ministry of Education, you did say "It is the policy of the Government that the school building programme should, in general, keep pace with the housing programme". You have got the policy and we are not arguing whether it is right or not, but within the policy do you not think it would be an advantage, even if perhaps it had to depend upon an annual agreement, to be able to have a programme over three years?—We are always extending it a little bit. We have our ordinary procedure which includes a reserve list of items which we can encourage an authority to do all the preliminary work on. In other words we are in effect telling them that short of an atom bomb there is this that and the other which we have every reason to hope we shall be able to programme in the next year. They do get a great deal of guidance from us which enables them to do the preliminary work looking rather more than one year ahead. It is not absolutely rigid. You do not settle the year's programme and then have a whole year during which they cannot do any preliminary work.

Miss *Ward.*

1863. Work involving expenditure?—Yes, preliminary expenditure on architects and so on. They definitely get encouragement. It partly emerges from the discussion and partly it is an explicit reserve list.

* Annex 2.

Chairman.

1864. We are putting this to you because authorities feel they are rather uncertain?—I am sure they do. After all this has been a very uncertain world for the last few years. I am not denying there have been zig-zags on what we prefer to be a straight course.

1865. We are trying to discover whether it would not be more economic to make it more certain?—There is nothing in this in terms of procedure. I think the procedure is as good as it can be. I do not mean to be quite as complacent as I put it. But in the state of the world we have got it is as good as it can be. What we require is that the overriding conditions which affect policy should not be upheaved for a year or two.

Mr. *James Johnson.*

1866. We are asking Mr. Flemming now to attempt a three year programme for 1953-54-55. Are you saying you could not have done this in 1950 because of what happened in 1951 and 1952?—It was not my argument, but certainly if we had tried it it would have been torn up by the roots.

1867. It is your point of view that you cannot in the light of experience have a three year or five year programme?—Not in the terms in which it has been put to me, something handed firmly to a local authority as a firm commitment. We do not stop thinking a year ahead because we cannot give a firm programme a year ahead. We are naturally studying and thinking in terms of requirement, whether we think the population will be greater ten years ahead and so on, but that does not mean we can turn that into a programme to be handed out to local authorities on a plate.

1868. Is it possible to have a three year programme for a city like Birmingham in regard to say 80 per cent. of their needs. Is there a hard core you could say go ahead with?—I should say without having to put it down in black and white, that is only putting in slightly different words what I have been describing as happening. They know perfectly well that certain kinds of project are the kind of thing allowed. They have got the experience of what is going on now and they carry out preliminary work in a way which achieves a great many of the advantages of a firm programme.

1869. It is possible for the Ministry to give the L.E.A. a modified three year programme?—I am not saying three years.

Chairman.

1870. You cannot have it much less than three years?—Try and put yourself in the position of a local authority at the receiving end of this. You get through your 1953-54 programme. It has not been just a list sent back with a red pencil through it. It has been carefully discussed. You can then say to yourself if the Ministry's policy remains unaltered and the state of the world remains unaltered that gives you a pretty shrewd guess as to where you will be in the following year. You can go ahead with your preliminary work. In the discussion of this year's programme you know that the Ministry's officers agree with this line, although nothing is signed on paper beyond this rather important reserve list of items to be whistled up if we get any unexpected room in the programme. (Mr. *Nenk.*) Would it be worth inserting two points. One is that where the authority come along and say: "Beyond this reserve list for the year after next which you have already given us we know there are certain jobs in individual areas which will have to be done. Could we get on with them in the meantime", we give them every help and encouragement to do so. If an authority can agree that in a year's time certain jobs are undoubtedly going to be needed, there is nothing to stop them getting on preparing them. Secondly, I rather get the impression that the Sub-Committee have possibly not been fully informed of the number of changes which authorities of their own volition make in their announced annual programmes after the Ministry in consultation with the authority has settled the programme. For example, in the 1953-54 programme, which officially begins to-day, and which was announced to authorities last summer, there are numerous changes being made all the time simply because authorities, either as a result of a change in the housing programme of some urban district council or because they cannot get the site or because they get a different idea of the relative urgency of two jobs, make changes in their programmes already given to them and take one job out and put another in.

1871. The original programme which you say has changed might have been altered completely if they had been able to look ahead three years. For example there are authorities which, because of the fact that they can only be certain of one year decide to do a little bit to that type and a bit to the other type, rather than having a more economic way of dealing with it, and they are asking to have a little more certainty about how they can proceed?—(Mr. *Flemming.*) What they are asking in effect is to have a larger programme, which again I quite agree would be perhaps sometimes in the end more economical but it is the one thing we have not got at our disposal to give them.

1872. You have misunderstood the point. They are not asking for a large programme; they are asking for a three-year instead of a one-year programme. Your policy determines what resources you have but only for one year. The question is how can they

proceed looking forward on the basis of three years?—My experience is that in fact we are working in the hope—it can be no more—that our programme continues at roughly the same level. I do not think they would do anything different if they could be told that, but unfortunately they cannot be told that.

1873. You are prepared to give an unwritten programme but not a written one. You can say you can look ahead three years but you are not prepared to put it firmly? —We are prepared to say in the state of the world as it is the only thing a reasonable man can do, both our side and their side, is to go ahead with preliminary work in the hope that things will continue to be no worse in the matter of the building resources allowed for them. In fact so long as things can be kept stable that enables a very great deal of preparatory work to be done and certainly makes it quite unnecessary to do uneconomical planning of a bit here and there. That can only be done, I suggest, for reasons of local politics. It is the feeling that unless you can make a firm promise to your local people you have got to give this place and that place a bit.

Brigadier *Peto.*

1874. To give an instance of uncertainty which might be cleared up under a three-year plan, one particular large authority has given evidence* of the deterioration of the state of old schools. They say, "Uncertainty about their obligations and future under the Education Act has contributed to the common reluctance of Managers of Voluntary Schools to make an adequate annual expenditure on maintenance, or to undertake badly needed alterations and improvements". If they had less uncertainty as to their future and the amount they could spend they would be able to carry out more of these very necessary repairs?—That is another uncertainty. That is a statutory uncertainty as to their status under the Act. That means that the process of determining the status of voluntary schools under the 1944 Act was hanging over people's heads and managers were not going to spend money, but that has nothing to do with this programme.

Chairman.

1875. I think we have discussed this fairly well. It does seem obvious in regard to new towns, and I have quoted one already, it would have been impossible for them to have built a new town if they could only have looked one year ahead. What you are saying is that you could in regard to new towns have looked ahead even as far as five years. You are not saying it, but they have done it?—You have got to live five years whether you look ahead or not. All you are saying is that they lived five years.

1876. They planned. What you are saying is that local authorities cannot be allowed to plan?—(Mr. *Nenk.*) The implication there, with respect, is that the plans for the new towns have forged ahead as originally laid down without hindance, without error or backsliding, nothing could be further from the truth. If you take the particular case of one new town in the county to which you have referred——

1877. I did not refer to any particular town?—You will find that the housing programme of that new town fell several years behind its target and that in fact schools were built and completed and brought into use in that new town by the local authority concerned before they were needed because the plans for the new town had not matured in time. Any suggestion that the people who have planned new towns have carried out their plans exactly, whereas plans for schools ought to have matched that regular and mechanical process is really rather far of the mark.

1878. That is not a bad thing if they could get schools before the houses?—Yes, but where you are dealing with a limited amount of cloth if you build a school, say, in Stevenage two years before it is needed in Stevenage someone else has perhaps gone short of places they could have been using in the meantime.

1879. I do not think with respect that that applies to this. This is the statement†, "We estimated with geographical distribution we would have to build fifty new primary schools in five years, and because, I suppose, what is to some extent unique in the way we worked we said we must think of this as a major operation, a complete £7 million programme, not individually fifty schools, and therefore we must think of a standard form of construction" and so on. The point is that here they planned; they were apparently allowed to plan. I should say that the result here is rather good.—(Mr. *Flemming.*) Now you are using the word plan. I would not accept the last statement. On the contrary, we encourage authorities to plan ahead. We do not give them a firm programme because of the national situation but any suggestion that we actually discourage people thinking ahead is not acceptable to me.

Miss *Ward.*

1880. I do not see why you find it so difficult to say it would be of economic advantage to plan. I was merely asking whether you thought it would be an economic advantage to plan in a three-year cycle rather than a one-year cycle, and you said you did not want to answer it, and I

* Annex 10.

† Q. 1313.

cannot see your difficulty?—It is partly illustrated by what my colleague has just said. It would be an economy if it all worked out neatly according to plan.

1881. I realise the frailty of human nature?—Not human nature, the nature of the world.

1882. If local authorities change their plans surely that is the frailty of human nature?—Not at all. Circumstances may have changed. They may not have been able to crystal gaze correctly.

Mr. *James Johnson.*

1883. Are we not at cross-purposes here. We have been told by Mr. Flemming in fact something like 80 per cent. of the hard core of the next year's programme the L.E.A. know they can get on with?—If you can get us more certainty I will be grateful. I will answer to that extent affirmatively.

Mr. *Norman Cole.*

1884. Can we then take it for the record that if it were possible in a secure and continuing world, you are not satisfied necessarily even then a three year programme would be more economic than a one year programme?—Not unless there was considerable flexibility with it as well.

Chairman.

1885. Now, having looked at the new building programme, perhaps we could look at the old schools. At question 11 when you came to give evidence before we asked about the black list. Mr. Nenk said, "The whole recording of the black list was stopped when the war broke out, and a number of these schools were on the black list not because of any particular defect in the building, but because the building was unsatisfactory for the number of children who used it". We understand that is only one category of the black list of 1925; that is the C category. We understand the black list of 1925 was divided into three categories, A, B and C. I think in another place, Mr. Flemming, you said you did not think it was a very scientific method in 1925?—I am frankly not very interested in what happened in 1925. I will answer your question as far as I can, but there are so many unsatisfactory schools now that were never thought of in 1925 that that black list is merely academic.

1886. We were anxious to find out how many black listed schools were actually in operation to-day, and I think Mr. Nenk's suggestion was that the majority of those schools were black listed because of unsatisfactory numbers. We want to get the facts right as to what those categories were?—It is a long time from 1925 to 1939. What Mr. Nenk was saying is that you might put a school in one or other of the categories but it might now, or in 1939, be being used for fewer children than when it was placed in that category. You may say it does not matter at all if the building is thoroughly bad; it is thoroughly bad even if it has got one child rather than two; but he was adding that it might have very many fewer children in it now.

1887. I think you said in question 31, "The original list was not drawn up on specific scientific principles". I assume there was no really sound principle on which that was possible, but it does seem rather a sound principle to survey your schools as between A, B and C, those that are totally incapable of any improvement at all, those that are capable of improvement if a certain amount of money is spent, and thirdly those in the category put by Mr. Nenk?—(Mr. *Nenk.*) That has been done since the war in the course of preparing development plans, and that is one of the reasons why the 1925 black list is now really quite irrelevant to the problem.

1888. But it is not irrelevant because there are so many of the black listed schools still in operation?—There are 595 schools still in use which were on the 1925 black list out of a total of something like 28,000 in the country.

1889. What we wanted to find out was whether that number on the 1925 list was likely to be increased. The evidence supplied to us is that a number of these black listed schools are still in use and have deteriorated still further and there is a further number that would be regarded to-day according to standards as black?—(Mr. *Flemming.*) There is a very large number of schools which one would like to see either given up or substantially improved if one had the building resources to tackle that part of their building job.

1890. Can you tell us what number of schools were in these categories. Do you have those figures in A, B and C. We have got it for individual authorities?—If you want to know what was the position in 1925 we could check that up from the records. I do not want to play this down as irrelevant. I think it is extremely relevant merely as a pointer to the problem of unsatisfactory schools, but the really interesting thing is the total list of unsatisfactory schools, which is very much larger than this. That was what local authorities were concerned with in their development plans, which schools they meant to continue and which to abandon.

Mr. *James Johnson.*

1891. Is it possible to get something on these lines. When Mr. Nenk was last here he talked about the old black listed schools being in a somewhat phoney category, which meant it was unscientific. You said you have got post-war evidence of the

numbers that are unsatisfactory. Have you any indication how many of those there might be?—(Mr. *Nenk.*) It would be an almost impossible task, I think, to go through every local authorities development plan and try to put your 28,000 existing schools into some particular category. One could quite easily get from the development plans the number of schools which the authorities expected to replace altogether but it would be impossible to get an idea of the number of schools which at present are bad which they think can be brought up to reasonable standards on their present site.

1892. Can I ask how you come to the conclusion that 595 of the original list are to-day still blacklisted?—Simply that the thing stopped being used in 1939. It just happens there are 595 schools out of the 2,500 which were put on the 1925 black list which are still in use. (Mr. *Flemming.*) How black they are now is quite unknown. The particular business of striking schools off the list or marking them grey has been dropped for many years.

Chairman.

1893. Mr. Johnson asked a question, question 15, "Would it be fair to say that there must be a much larger number now than there was in 1925". You said, "No, I would not even accept that, because there has been a considerable volume of school building going on all the time"?—Larger number of what? Perhaps I misunderstood the question. If that means a larger number of unsatisfactory schools one would like to see greatly improved or closed, I just do not know. I should not have said No, but I would not like to say Yes or No. I would say there is certainly a very much larger number of schools which one would like to see closed or very much improved than this 600, but we have not been listing them one by one since 1939.

Mr. *James Johnson.*

1894. Would you accept it is all a question of standards. When I asked a question some weeks ago Mr. Nenk said it is a phoney category, which means he does not accept the basis of the list?—I think the way I was put this question is that it is misleading to concentrate very much on these particular 600. It is highly likely, but not quite certain, that all those 600 are still schools one would like to see closed or considerably improved. What is phoney is the inference that it is really a precise guide to the number of unsatisfactory schools which are still in use. (Mr. *Nenk.*) As I have been attacked rather for the use of the word "phoney", what I had in mind is not only the point Mr. Flemming has made, that it is completely useless as a guide to the number of unsatisfactory schools now, but also at the time it was drawn up it was not a satisfactory guide. It was not a reliable guide in 1925 and it is very much less reliable now.

1895. The officers of the Ministry do not accept that classification as being genuine?—It is useful rather than genuine.

1896. You say any attempt to classify them today would be equally phoney?—(Mr. *Flemming.*) We have not really got to that point because under our present restrictions of building we do not see any useful purpose would be served by national listing. We simply use our immediate resources to the best advantage and we can do so little by way of replacement of old schools it would be useless from our point of view to compile a list on a national basis.

Chairman.

1897. I think what we were anxious and still are anxious to find out is how many bad schools there are in the country that it would be economical to put into proper order. It is not a question of attacking. We are asking for the truth and facts, and opinions do come into this. I am afraid Mr. Nenk gave us the impression that this problem was not so great?—On the contrary, I want to say straight away there is an enormous problem, so big we have not got the measure of it, of schools which one would like if building resources were available to see improved, and I would not like to see the Committee misled in the downward direction by attaching too much importance to the 600.

1898. I think that makes it clear. In question 28 Brigadier Peto said, "I gathered Mr. Nenk to be giving us the information that the term "black list" is wrong, and there might be for one reason or another certain schools which were black listed which now would not come under that category?" Mr. Nenk said, "It is quite possible, because several million pounds a year are being spent on improvements of the kind Miss Ward referred to to existing schools, some of which may have been on the black list at one time". That, I think, was calculated to give us the impression that the Ministry was spending millions of pounds in putting all those old schools right. That is the question of repair and maintenance of bad schools and secondly the question of minor improvements. If an authority keeps the schools in good order, that is to say, maintains them well, because this has to come from the rates or the revenue——?—(*Chairman.*) Nobody raises a loan for it, you mean. (Mr. *Flemming.*) This rates for grant like any other current expenditure.

1899. It is the responsibility of the local authority to repair and maintain the old schools?—Just as it is to build the new schools.

1900. But in regard to new schools there is capital limitation and so on, but in regard to maintenance of schools there is no limitation?—No. Do you mean the actual painting and repairs? There is no limitation on that.

1901. If an authority cares to spend whatever the rates can stand, they could carry out as much repair work as they liked?—In fact, yes. The only thing we might theoretically limit was the amount of expenditure which would reckon for grant. It is open at any time for the Minister to say, "I will not reckon that for grant."

1902. What is the grant in that case for maintenance?—(Mr. *Pearson.*) 60 per cent.

1903. If the authority does not carry out reasonable repair work and the schools gradually become derelict, is not that a matter in which the Ministry would be interested?—(Mr. *Flemming.*) Yes.

1904. What would you do in a case like that? Supposing a local authority decided they could not afford to carry out the necessary repair programme and in consequence the schools were getting into a very bad state. Would you discuss it with them?—Yes. I have never known it actually happen, but I have heard of a case which might arise.

1905. If, for example, an authority said they had only got a sufficient amount of money to paint five out of 257 schools that needed painting, would you regard that as a false economy?—I certainly should myself.

1906. Is this not a problem that authorities are faced with where so many voluntary schools have been handed over to the authority and given controlled status and therefore they have an enormous problem of having to repair and decorate those schools. It becomes a burden almost impossible to bear?—Everything is a burden and particularly the increasing number of children, but I have not had it represented to me that it is a burden impossible to bear.

1907. If, for example, an authority was painting schools every four years and now had to only consider every six or seven years, does not that mean that eventually the authority will have to spend a lot more money and therefore you will have to pay a higher grant?—I would want to have expert advice on the particular case before I committed myself to anything in such a precise form, but I am ready to agree in principle it is the Ministry's concern to see that authorities do not allow property to deteriorate.—(Mr. *Pearson.*) And it is true that the more schools become controlled schools the more expenditure is likely to fall on the authority because that is the very essence of accepting controlled status.

1908. I am thinking, for example, of an area where there are 50 schools which were built before 1902. Those schools are now very old and in an authority which has had 90 voluntary schools handed over to it, many of which have not been kept in repair. In fact it would appear that it is many years since one school, for instance, was painted. That means an enormous cost to the authority. Would it not be a good thing if those schools could be surveyed in the country so that you could know exactly what to programme for?—(Mr. *Flemming.*) I am rather reluctant to spend money and man power on national surveys until it is proved beyond all question it is the only way to get the job done.

1909. I am only suggesting that is a part of the problem, repairing and maintaining schools, which appears to be rather serious?—I accept the statement of the problem certainly.

1910. Taking the next question, the question of the minor programme where the authority can spend up to £6,500, do you think that the vast number of authorities in the country instead of using its allocation for the purpose of getting schools into order, that is to say, the sanitary arrangements being improved and so on, are actually using the money for the purpose of adding to the school accommodation?—It is being used for both purposes, which is what it was intended for.

1911. It was submitted to us, for instance, in a large authority that 60 per cent. of their allocation was being used for adding classrooms in order to provide accommodation and in consequence it had been impossible for them to carry out these improvements which might extend the life of the school and therefore make it more economic?—That is a particular case of the general problem with which we dealt earlier. If we had not got movements of population to housing estates and a great growth in the number of children life would be very much easier and one could do far more of all kinds of desirable things like improving old schools.

1912. What I am trying to find out is how far these old schools upon which this money ought to be spent in improvement and keeping them in a reasonable condition are not actually getting it, which means that ultimately the Ministry of Education will be faced with a very high demand for putting these schools right or closing them down?—I am not necessarily accepting the "ought". It may be it would be desirable to do it, but no-one ever thought of a figure and calculated what was required for the specific purpose of bringing old schools up to date and then filched some, so to speak, for new places. But I would be quite prepared to agree less money is being spent on old schools than one would like. Here again we get to your three year programme in another form. One does not know to what extent they are going to continue in use.

Some may be schools in areas of depopulation which may have a short life. It is a very tricky problem once you break it up into its separate bits.

1913. Where you get a number of schools handed over, voluntary schools, has it ever been discussed whether in fact in cases like that there ought to be a special grant at all?—A special sum from the Exchequer?

1914. Yes, a special allocation to those authorities that are faced with this sudden problem?—Do you mean a special grant from the Exchequer in relief of the rates or a specially large allocation of building resources.

1915. I should have thought as you allocate £6,500 as an allocation?—There are two separate problems. I am not sure whether you mean allocate the actual amount they are allowed or give them money in relief of rates. It has never been suggested that the Exchequer should give help on rates because this business of handing over controlled schools was a part of the voluntary school settlement in the 1944 Act. On the question whether where this is happening the local authority faced with a number of these schools ought to have a bigger ration allowed it for minor works, it has not been worked out on a formula, but we allocate part of it on an automatic formula and keep some back for individual authorities who come along and represent that they have a heavy burden to take on. That would be one of the factors which would come into the picture then.

1916. That brings me to the further question I wanted to ask. If authorities approach you and say "We cannot possibly manage on this allocation to the minor building programme", do you generally agree to increase that figure?—We agree so far as we can within the total of our resources available to us on the national programme.

1917. We cannot quite understand why, for example, in one area you could agree to as much as £60,000 addition and in another comparable there was no allocation in addition granted, where so many of the schools to which I have referred exist?—One must assume the authority did not apply.

1918, That is so but there is one authority that has got an enormous problem of old schools which gets no increase to its allowance under the formula whereas another does?—There are two separate processes. In the actual process of cutting up the cake we are concerned to meet the applications. In the longer term, of course, we do in the ordinary run of business if an authority seems to be neglecting its duty treat that as a matter we should take up with them. We certainly should not be automatically surprised because a particular authority did not ask for an additional allocation. The whole purpose of having the automatic ration plus the additional allocation is to leave it to the initiative of local authorities.

1919. If an authority decides that £80,000 would not cover their problem and you grant another £60,000 on a supplementary list, and if that authority says they could spend the whole of that in putting the sanitary accommodation right in the area, would it appear that this formula of 9s. per pupil and £25 per school is not really scientific?—No, of course it is not scientific. I have never implied that anything in our programme is scientific. It cuts out all kinds of things which one would like to do if the standards were higher.

1920. I am just wondering what is the use of a formula which does not work?—With all respect it does work. We have to make the resources available to us used to the best advantage we can, and we think it gets as good a result as one can hope to get under present conditions.

1921. Have you ever considered the experience in Scotland in this connection?—No.

1922. You have never examined the practice in Scotland?—No. My colleagues may have done?—(Mr. *Nenk.*) I think the situation there is rather different. They do not, in fact, have an annual building programme of the kind we operate. It is very much more on a first come first served basis. They do not dole out allocations. They have a very much smaller population to deal with.

1923. Would it be any trouble to give us a list of the number of authorities where you have increased the quota in the last year?—(Mr. *Flemming.*) Quite easy. (Mr. *Nenk.*) Could I make one point. Whether it is a matter of concern or not that authority A has not made application for an extra allocation cannot be considered in the abstract. The question is what they need to use their original allocation for. If it happens to be an area where they do not in that particular year need to put up additional class rooms and more extensions, they may be able to spend the whole of their original allocation on improvements. Another authority with the same allocation, and for the sake of argument the same population, may be in a situation where they have to spend most of their original allocation on providing additional places. So that circumstances alter the argument. The thing has to be looked at in the light of local conditions.

1924. Yes, I can see that. I am talking of large authorities. Where you have one large authority and another fairly comparable, it seems where the facts show that they are building classrooms and they are using this money for the purpose of additional accommodation, and where also the

same authority has very bad schools, worse than a number of large authorities, it does strike me as curious as to why the Ministry could not or would not in a case like that say "What are you doing about these schools"?—(Mr. *Flemming.*) There may be some prodding but it would not necessarily take the form of prodding them to apply for an increased allocation.

Mr. *James Johnson.*

1925. You said earlier on the initiative is always via the local education authority. We expect that to be so. Local councillors want decent schools for the children. Are there any cases where the H.M.I.'s have seen bad schools and where you have seen fit to give an extra allocation of money to the L.E.A.?—It is no good giving an extra allocation of money. We have to get the authority to ask for it. They have got to be willing to spend their part from the rates before our money comes.

1926. Really it is a two-way job. The H.M.I.'s are working quietly telling councillors and aldermen "This is bad and you ought to do something about this", and that comes up to you via the local education authority?—I have seen one case where it looks as though we may be involved in correspondence as a matter of principle, not in relation to particular schools.

1927. So there are backward authorities you have to treat in this way, unofficially, I suggest?—It may be officially as well, but it would have to be very bad. Naturally with limited resources one tends to satisfy the applicants and not place as much emphasis as one would otherwise on particular areas that do not apply.

Mr. *Norman Cole.*

1928. Can I get the machinery clear. Some of the things we have been told in the last few minutes do not agree with what we have heard in other evidence. There are two separate categories. The 60 per cent. grant from the Ministry is for the ordinary straightforward maintenance of schools, but the other thing is the minor building programme which is 9s. per pupil?—They are two separate categories of expenditure but not of grant. All the authorities' expenditure over the whole range we are discussing ranks for 60 per cent. grant. The difference is this: the authority is free to spend on maintenance what it likes so long as it is not called capital. As soon as it is called capital then they get a ration specifying the amount they can spend in a year.

1929. That brings me to another point I would like to clear up. Is it true that the minor project capital grant, the 60 per cent. from the Ministry, is only granted where the minor project connotes an increase in the number of school places of that school?—You have telescoped again the grant and the permission to do it. May I put your question this way. You are really asking is it true that the Ministry allows the authority a ration of capital expenditure on minor work for the purpose of additional places. The position is this: the amount of allocation is, as I or Mr. Nenk said before, quite explicitly intended for the two purposes of improvements and extensions which provide new places.

1930. You are still dealing with the minor project, capital?—Yes, the whole thing. When you come to asking for an additional allocation to your minor capital ration we have at various times emphasised the importance of seeing that part of the case is made for additional places. At no time has it been restricted to that either in the main allocation or the supplementary allocation.

1931. Therefore it is possible if someone was granted the maximum of £6,500 for minor product, to which the Ministry would give 60 per cent. grant, to use the whole of that money on works other than the provision of new places?—Certainly.

Miss *Ward.*] It rather sounds as if this living from hand to mouth on the part of the Ministry in relation to unsatisfactory schools may lead in the years to come to vast additional expenditure. Purely from the point of view of looking over a period, might it not be wiser if these schools are going to be kept in operation to have a thought-out programme of improvements? That is my first point. The other point I want to make is this. Looking at it from the point of view of the children and the expenditure on education, is not it rather hard on some of them if their schools get no improvements at all and those other schools go up looking so beautiful? Might it not be that expenditure has perhaps been slightly wasted if improvements such as can be carried out, which after all must be limited to that which is vital, are not carried out, so that they may have the benefit of a little more amenity in the bad schools, and might it not increase their ability to absorb the educational advantages?

Mr. *Norman Cole.*

1932. Is it not true that the vast majority, say 75 per cent., of school children are at school today in the old schools?—May I take the first question. I do not quite see the connection of programming with the problem of maintenance.

Miss *Ward.*

1933. No, I am not talking about minor projects. Can I give you one example which impressed me enormously. We saw a certain school where several of the classrooms had the benefit of gas heating put into the walls, which made the classrooms very much better from the point of view of the

children and amenities. The rest of the classrooms had the old coke stoves which from time to time necessitated the children being sent home because the atmosphere became so bad. I thought that was quite ridiculous. I thought if you could find sufficient money to put in proper heating in two classrooms you could have done it in the whole school?—I thought you meant maintenance. It is in the question of maintenance I can appreciate you are piling yourself up later trouble.

1934. You might be piling yourself up trouble in the fact that you have got to abandon schools altogether because they get so out of date.

1935. That is a question of looking ahead; it is a question of whether or not you have stupid economy. On this question of improvements I would agree most readily it would be very much nicer and more pleasant for everybody if one could do more for the old schools and not, as we are being driven to do through the limitation of our total and the extent of the movement of new housing, devote such a tremendous proportion of our resources to coping with the purely numerical problem. It is not merely improvements. It irks us that we can do so little to complete reorganisation in the rural areas, for example. We cannot do building for this purpose unless it comes in as a purely incidental gain to those other purposes. It would certainly make all the conditions more satisfactory if one could do more.

Chairman.

1936. We want to be clear. It really is not so much a question as to how much you can do. We are only asking whether it is economical?—It was, if I may say so, the relation between the old schools and the new. We cannot switch from the new to the old without a child on the new housing estate being left out in the street. Within our total we are driven to that and therefore driven to not doing as much as one would like or would be fair for the old schools. That follows inevitably from the total which we have in the national cake and the demands of the housing areas and the growth of population. As to whether one uses what one has got in the most economical way or not, I just do not know. I am inclined to agree with Miss Ward in that particular case. I do not know what the local reasons were. It sounds stupid to do a little bit of a job at one school and not finish it. It may be in a couple of years those unheated rooms are going to be abandoned. Unless there is some special reason, I agree the proper way to use this ration of minor works is to use it on the assumption it is going to go on for some years and to use it economically on that assumption.

1937. I did put the question to you earlier about a survey in the country. Whilst I think we would be reluctant to suggest a lot of money should be spent on a survey, do you not think it would be an advantage, especially as local authorities have prepared a development plan for the needs of the area, to get from the authorities what is the total number of schools, for instance, it would be economical to improve, so that you could see exactly what this programme is? It does seem to us it is a long time since such a survey was made?—In my own view a better time for that would be when we can see ourselves getting a little nearer to the end of the growth of the postwar population in building terms.

Mr. *Norman Cole.*

1938. You have still to think of the secondary school bulge?—Even that in building terms is planned for.

Chairman.

1939. We have asked for information from local authorities and they are able to give us it individually?—It is much more useful individually. I am afraid I am rather against collecting information that does not produce action. We do not feel any lack of this when we discuss individual programmes, where the action operates.

1940. But unless you can have a picture of the number of schools that are going to cost an enormous amount of money for the reason that they are neglected now——?—I find it so difficult to accept your terms. Which are the schools we are talking about now? Is this on the assumption that repairs and maintenance are not being done?

1941. That is one part of it. If you do do not know whether authorities are all maintaining their schools in a satisfactory way you do not really know what you are going to be in for. That is on the maintenance. On the other side, if the authorities are using the grant of 9s. a head for additional classrooms and not carrying out these improvements which will extend the life of the school, assuming they have got to use these schools——

Miss *Ward.*

1942. And stimulate the children?—I am sorry, but this is simply an argument for what I do not need argument for, that we could do with more money.

Mr. *James Johnson.*

1943. Are you telling us at the moment it is a waste of time to have this sugegsted survey until we can spend more money on the schools? Is that what you are saying? —I am saying under present conditions it is much better tackled by the local authorities than by a survey adding up a lot of figures which are always rather in incomparable categories.

1944. Can I ask if it is possible for you to tell us when you think we shall be able to have a go at these old sub-standard schools none of us like very much; we have seen so many of them lately?—As you know, the peak of the secondary school bulge is reached in about 1960, and if all goes well that means that the last school building to meet the needs of that bulge will have to be started in 1957 or 1958, allowing a couple of years to build the schools. When we get within sight of planning the last of those so far as numbers are concerned—I do not know what is going to happen to housing policy—then obviously you are in a different position in relation to old schools.

1945. Would you say it would be a good thing to have this survey to get the overall picture, but the best time would be perhaps four or five years hence?—I am not at all sure even then a national survey is the proper thing. I am quite open to conviction, but I should have thought it was better done individually.

Chairman.

1946. I have before me an article in the Manchester Guardian on economy that the City's education can ill afford. I have no doubt you read it. There is also a letter which appeared in the name of the Chairman of the Education Committee, in which he said the arrears of painting now amounted to £250,000. Surely if conditions do exist such as are mentioned here, is it not important that there should be some kind of investigation or survey. Could you not ascertain from these authorities in very quick time what exactly their problem is? —That seems to be, if I may say so, the clearest possible illustration of the opposite need, that it should be dealt with individually. I do not know what the situation is now in Manchester; it changes hour by hour; there is a report in the paper this morning about something in the Council yesterday. Clearly the situation in Manchester is something which will concern the Minister over a whole range of issues. That is the kind of situation one has to be prepared to deal with, rather than drawing up paper surveys.

1947. If it were only Manchester I do not think we would be concerned about it. It is because there are so many areas in the country where we are told it would be an economy to put these schools right and the country will gain. We cannot do that without a survey of some kind?—With all respect, we can do it perfectly easily without a survey. If we had more capital resources at our disposal we could dispose of them tomorrow.

Miss *Ward.*

1948. But would you dispose of them in the way suggested by the Chairman or would you try and dispose of them in some other way you may think of in the Ministry?—I am still a little bit confused whether we are discussing maintenance. Assuming maintenance is out, which is a different problem; I can say straight away practically the whole of our resources have to go into building works designed to meet the needs of new housing and the increased birth rate. If we had more, that obviously would go to the other educational requirements, which can broadly be summarised under the head of the needs of the old schools.

Chairman.

1949. You are not able to tell us the extent of this problem in the country. We understood first of all it was not such a big problem, but going up and down the country and getting the information we find it is a big problem. You cannot tell us how many schools would be in that category?—All my experience is that to attempt a national survey on such flexible standards causes a great deal of work and has very little meaning.

1950. But does it? We have asked individual authorities how many schools they have got in categories A, B and C, and they can give us an estimate?—And A, B and C will have the same meaning in Northumberland as in Devon, for instance? You can assure me of that?

1951. No; I do not know?—I know it would not. It would mean something different, and there would be no point in adding them together. I say the right way to tackle this is locally and not nationally. (Mr. *Nenk.*) There is a further technical point. If you want a survey to find out the total demand for this type of work over the country, it is not a matter of saying there are 20 in A category and 20 in B. It means you have to find out how much you have to spend on each school. It means a technical man going round and making a proper detailed survey and proper plans and estimates for doing the work that is necessary, and that is a vast undertaking.

Miss *Ward.*

1952. What you are saying is that the local authorities do not already know. Would not it be fair to say a good local authority should know the details of their schools; they ought to have that information? I agree next year it may be more or less expensive to carry out the maintenance and improvements, but they should be able to say now what expenditure is necessary? —Not with detailed drawings and calculations of new heating plants and so on, the estimated cost of electric wiring and that sort of thing.

Chairman.

1953. We asked a large local authority to tell us how much they require to put the schools in order. Within a week we had the information?—No doubt, but I

have no doubt also the figure is not based on detailed surveys and detailed estimates, which are the only figures which would be of any use in trying to make up your mind how much total work of this kind is necessary.

1954. You are rather inferring that we are talking without any knowledge. We have the detailed schedule of requirements for each school, and it was done within a week?—That would presumably be the results of the Development Plan survey.

1955. I am suggesting surely it is possible, with 146 authorities, to find out in a very short space of time?—(Mr. *Flemming.*) I am suggesting they would be absolutely incomparable and not worth adding up. (Mr. *Nenk.*) The basic point is what would be the use of asking for it at the moment when for the next few years we are not going to be able to spend more on these schools than now.

1956. You mentioned prices. The figures I have are 1953 prices. I am trying to show the authorities can do what you say they cannot do?—It would be interesting to see those estimates.

1957. The other question is that you, Mr. Flemming, do not think it is valuable?—(Mr. *Flemming.*) I do not think it is valuable as a national survey. I am not saying it is not valuable as a survey of that particular bad school.

Mr. *James Johnson.*

1958. Mr. Flemming told us, and I accept it, that a survey now could not be carried out within four or five years, because you have to build new schools and do more urgent tasks. But is it not a fact in this matter of getting details of King Henry VIII school here and such and such a school there, local authorities can and have done this survey and can say £20,000 for this school, and £5,000 for that, and so on?—It can be done as soon as it seems worth while doing it, but for a great many authorities it certainly would involve additional labour. The fact that this particular authority could give you it in a week does not mean that authority B would not have to take on surveyors and use hundreds of man-hours. You cannot infer the others have got it or ought to have it.

1959. Would you agree that the normal local authority would do this as a matter of fact with its own office staff?—They will do it when they see themselves being able to do the job. If experience suggests you are not going to have the resources to do the job, you do not embark on a detailed survey.

1960. It is partly academic in view of present conditions?—Yes.

Chairman.

1961. You agreed, Mr. Flemming, you could make the survey. It is only a question of whether it is valuable or not?—It would be laborious in time and labour. Therefore it is proper to ask the question whether it would be valuable.

Mr. *Norman Cole.*

1962. I have taken most of Mr. Flemming's points, and I largely agree with what he has said, but leaving the question of financial ability apart, I think one of the burdens of Mr. Flemming's argument was that no two local authorities would have the same standard in their detailed surveys?—Yes.

1963. But in 1925 when the standards were laid down—this may be answered one way or the other—do you tell us by and large local authorities did not adhere to the principles?—The 1925 list was drawn up by H.M. Inspectors, which makes it easier to get uniformity, but even so I am very far from satisfied there was uniformity. But they were only broad categories with no detailed estimates.

Chairman.

1964. Gentlemen, I think we should like now to discuss the question of the time lag that seems to exist between the building of houses and the building of schools. It does appear that there is a time lag in various parts of the country, some worse than others, which of course means, as you know, additional cost in various ways. We have been wondering how that time lag could be reduced, or what could be done about it. We wonder if you can give us some views about that. What do you think can be done?—(Mr. *Flemming.*) We have indeed thought about it because naturally it has worried us very seriously. It is something that is always bound to be difficult because it takes longer to build a school than a house, but that does not make us at all complacent about it. That is simply part of the problem with which we have to cope. I do not put that forward as an excuse at all, but it does make it a bit difficult. We think we have got through the worst of that, and our general drill should avoid anything very serious of that kind happening in the future. From the start some bad things have happened and are going to happen, but that is unavoidable. In general this dates from the time when we had not got the whole technique of programming and planning school buildings to as good a pitch as we have got it now, nor had individual local authorities. We think in a general way our whole programming procedure and the experience of local authorities being much greater than it was two or three years ago are likely to make this a much smaller problem.

1965. There seems to be a feeling that there could be speedier erection if there was closer co-operation between the education authorities and the housing authorities. The procedure is sometimes rather long. Have you ever considered in any way trying to reach some agreement about the procedure which ought to be applied between local authorities?—Yes. Obviously they should have the fullest and earliest information, and our impression is that, after some experience, learning the hard way and falling down on the job, they are now working very much better. Our recent experience is very much more satisfactory than that of two or three years ago. Mistakes were made then of which we are now reaping the fruits.

1966. Is it getting better because the view we have been given is that it is rather getting worse? Transport costs are mounting, and there are occasions where there is no school available to which children can go?—Our impression is that it is getting better. The machine is working better for the start of building. I would entirely agree with you that, as a consequence of some bad work two or three years ago, some of the actual events in the front line are going to be even worse.

1967. We understand that one of the difficulties which builders experience, for instance, is that they cannot get the starting date early enough. They do not get that starting date at the time of the tender, and therefore they say that they are in great difficulties because of that?—Has this been stated to you in the special context of the new towns or as a general proposition?

1968. As a general proposition. We understand that builders throughout the country do complain that they cannot be given a starting date, and therefore that delays them for some months. Similarly, the authorities say they are waiting for the Ministry?—You know the purpose of the starting date machinery, I suppose. There is no need for me to go over that. Its purpose is to prevent overloading of the building industry either nationally or, more important, regionally and locally. There would be no purpose in imposing starting date delays but for the fact that without them the industry would be overloaded locally, all jobs would go more slowly, and nobody would gain. Naturally the individual builder does not see it from that point of view. He would like to get on with his work, but from the overall picture it would merely cause delay and inefficiency.

1969. The builders say that it is a general complaint. They do not say it is a complaint made by one or two; they say it is general?—That does not surprise me at all. If you add up what all these individual builders say it does not follow that it makes sense. Each one of them is thinking of his own particular experience and his own results, and not putting himself into the position of having to make sense of the whole picture. No individual business man ever does.

1970. Examples have been brought to our attention where they have had to wait a very considerable time, and sometimes, after months of delay, there has been a number of starting dates given to bring them within the programme for that particular year. The builders say that is not a very satisfactory arrangement?—I would say that, if they all started when they wanted to, that would not be satisfactory. The experience is that by overloading an industry you get nothing else but delays and waste which do nobody any good.

1971. Can there be any logical reason why you cannot build a school on a housing estate in time? The firm building the housing estate have got to make sewerage arrangements and all the rest of it. Why cannot there be some arrangement whereby delay could be avoided and the school could really go up in time?—I quite agree there is absolutely no reason why it should not be done, and I have every reason to think that, unless we have very drastic and sudden changes in local housing policy, in future that will be the result. By "in future" I mean in relation to future starts. They will be started in time.

1972. This morning Mr. Nenk did mention that, in Hertfordshire I think, in some cases schools had been erected before the actual houses had been completed?—That was suggested for Stevenage, I think.

1973. Is there any reason why that could not be done? At least I do not say put them up before, but so that they can really be open in time?—I entirely accept that. If I may repeat this, I did mention the fact that it takes longer to build a school than a house, but I do not for one moment suggest that is an excuse for not getting the timing right at the end. It is perfectly possible to get the timing right at the end, and we have every hope that will in the great majority of cases be secured.

1974. In some cases it is said there is priority given to houses rather than schools. Have there been any directives at all insisting on priority for houses?—No. Of course everybody always feels in particular cases that they have been "hard done by", but there is no policy directive to that effect. As far as possible the policy is naturally to make the two match.

1975. Have you any evidence at all that builders concentrate more on houses and less on schools because they are more remunerative? Are there more incentives in regard to building houses as against schools?—(Mr. *Nenk.*) I would say that is broadly true with certain classes of builders.

1976. That is something over which you have no control at all. You cannot do anything about that?—Not without spending a lot more money. (Mr. *Flemming.*) The point is that you must get another builder to build the school. I do not think our experience as a rule among contractors is that that should prevent one getting on with the schools.

1977. Mr. Nenk, what did you mean by "Not without spending a lot more money"?—(Mr. *Nenk.*) I mean that if one were to pay the labour on schools the kind of bonuses and incentive payments which are paid on houses, the total cost of school building would be increased.

Mr. *James Johnson.*

1978. It could be argued that you would finish the building much quicker, without long hours being spent on the job. The final wage bill might not be much higher. Is not the whole point in house building getting them erected more quickly?—I doubt it really. There is only a certain number of bricklayers and a certain number of plasterers, and they are the key trades for traditional building. In fact there are three-quarters of a bricklayer per building firm in the whole industry.

1979. I thought it was one half, but never mind?—Whatever it is, I do not think bidding up wages by various forms of bonuses and incentives is going to get the job done quicker in the end. The answer is that, if you are trying to build a school in an area where site labour is short or where most of the existing site labour is being attracted to building houses, you should try to build it in a system of construction which does not call for the same kind of labour. That appears to us to be the sensible way to avoid competition for already scarce labour resources which in the end can only result in putting up costs.

1980. Would you say, Mr. Flemming and Mr. Nenk, that you could build a school—I will not say by wings—certainly in sections to suit the size of the estate, and not build a completed school in an estate which only has 140 youngsters? You could built one wing and add to it as the estate became larger. You could get the base at the beginning, and add to it with the development of the estate. Is that done at all?—(Mr. *Flemming.*) It is very common in so far as it is economic, but it depends upon circumstances and the rate of development whether it is economic or not. In certain cases it might be.

1981. We have met the argument that there is no sense in building a school at the beginning of an estate because it will be some time before you have got 240 youngsters, or whatever the number may be, for that school?—Both are true. There comes a point where the sensible thing is not to build at all. It depends upon circumstances. There may be a period where it is sensible to transport; then there comes a stage when you build; and then there comes a stage when you complete it. It is far more economic if you can, to carry the matter a stage further, where you are going to have two schools, to build one and then build the other one later on—but circumstances vary.

1982. Would it not be more sensible to save on bus fares because there has been an increase of £17,000 on fares? If schools had been built as houses were erected that would have been saved?—I am not saying there has not been a lot of travelling which was not sensible. I am only saying there may be in almost every case a stage at which a certain amount of travelling is reasonable.

Miss *Ward.*

1983. Can I go back to the matter of the starting date? I understand what you were meaning, that you must not give a starting date when the industry is overloaded; but I understood the builders' complaint to be that once a tender was accepted they did not know what starting date was going to be given to them. Does it take such a long time after the tender has been accepted to have a sort of look round to see what would be a convenient starting date? You may say the starting date would be ten months ahead, but as long as they knew what the starting date was—I understood that was their difficulty. As they did not know what the starting date was going to be they could not, so to speak, get their organisation together which is, if I may say so, rather a different point from what you were making?—I was dealing with the general principle of having starting dates.

1984. I do not think that was the complaint at all; the complaint was that they were not given a starting date, and I wondered what the difficulties were there?—In general it depends on the circumstances of a particular area. If you have an area where there has been or there is at the moment of giving a tender a considerable overload, it may need pretty close watching. The whole basis of this starting date procedure is related to what is actually happening in a particular area. It is rather difficult to foretell. It may depend upon whether some other project is going to be finished; you think it is, and then perhaps it is not. It is very difficult to prophesy in a difficult case. (Mr. *Nenk.*) In fact the normal procedure is that, when the scheme is approved and the authority have the Ministry's approval to accept a tender, at that stage a starting date is given. It may be immediate if the labour situation in the area is relatively favourable, or it may be six months ahead. They are at that stage given

a starting date. It is not in general correct to say that a builder, having had a tender accepted, does not know when he will be able to start the job. I think they may be harping back there to the situation which existed at the beginning of 1952 where you had a three months' ban on new starts. A certain number of jobs were probably at the tender stage, and the authorities said, "All right, your tender is within the maximum limit; we will accept it, but we do not know when you will be able to start because there is this ban". In that limited period, because of the ban and because of the shortage of steel, it may have been true that builders had had tenders accepted and did not know starting dates. The normal drill is that, when a tender is approved, they are also given a starting date, which may be immediate or some time ahead.

1985. I am right in assuming, from what you say, that relatively that position has just been remedied, within the last twelve months?—(Mr. *Flemming.*) It was a temporary situation. It should not be implied it had been wrong for a long time. Mr. Nenk was referring there to special difficulties in this temporary period of hold-up, which lasted from December, 1951, to March, 1952.

1986. I suppose it would be fair to say there is not likely to be any complaint in the future. Would that be a fair assumption?—There is not likely to be, except in the circumstances of an extremely difficult area and then it would be owing to some special difficulties.

Chairman.

1987. The point which I was trying to put was this. This was one complaint, that by reason of the Ministry of Education's financial year arrangements a large number of school contracts were issued for tendering all at the same time of the year. It may very often happen that it was a bad time of the year for the building season, but the complaint was that there were so many jobs issued for tendering at a particular time of the year in order that the tender could be sent so that these jobs could be counted within one particular financial period. I do not know if the Ministry of Education have altered the procedure with regard to that. Those complaints were about two years ago. About a dozen schools were issued to tender by one county council or local authority within three weeks. Building, being seasonal, should be made to suit the season rather than the financial set-up?—I think I can deal with that. I am interested in the fact that that was some time ago. We do still find it necessary to operate by the year, but we do encourage local authorities to be ready earlier. They have really got to the stage, with increasing experience, of being ready earlier. That is a combination of circumstances. That could only result from our having to work to a year and the authority being behindhand so that all their projects come to a head at once in the programme rather than being issued fairly regularly. It would only be through some very unfortunate accident or error on the part of an authority that proposals would bunch like that. That takes us back to the programme. Our programme is sufficient far forward to enable authorities in nine cases out of ten to avoid that kind of bunching.

1988. What would you say to that, Mr. Nenk?—(Mr. *Nenk.*) What the Secretary has said represents our aim. I would not myself put it quite as near to achievement as that, if I may say so. The fact is that authorities do have a tendency to bunch their starts towards the end of the programme year. It is a thing which we are trying to encourage them not to do so far as we possibly can. We give them the earliest possible notice of their programmes that we can so that they can start planning sufficiently far ahead to get a spread of starting dates throughout the programme year. We have not achieved it yet, but no doubt in time we shall as the programme carries on in a stable run.

1989. Anything which can be done to assist that, to avoid the delay caused by that, would be all to the good?—That is the point we have been making to the authorities ever since the programme procedure started.

Mr. *Norman Cole.*

1990. I have two brief questions. First I must say I think it is very nice to hear Mr. Flemming say we are getting over this lagging of schools behind houses. Do I understand him correctly that we can in future, despite all the evidence we have had to the contrary, be sure that, for instance, when 300 houses are erected on an estate with roughly 300 primary schoolchildren wanting places, the school will be there?—(Mr. *Flemming.*) I put it rather more cautiously than that because unfortunately the future, as regards the needs of schoolchildren, to some extent depends on actions taken a long time ago. Some of those actions were unfortunately far from ideal. I have a horrid fear that we have still got some very nasty cases of this kind which we are going to experience in the very near future. I would not like to mislead you on that point. It would be very silly if I did. I am more optimistic as regards starts of building houses and schools from now on. In other words, the results in one year, two, three and four years hence will be far more nearly matched, but there are some horrid cases still to come to light owing to delays in starting schools two or three years ago.

Miss *Ward.*

1991. Does not the decision of the local authority come into that, because in a new housing estate in my constituency which is just approaching completion the local authority decided that it would build an old people's hostel in preference to a school? The school has been left to the end, and the old people's hostel has just been built. Where does the local authority come in planning this programme?—I do not like to put the complete blame on any individual local authority, but I am certainly not accepting for the Ministry prime responsibility for the worst delays which have occurred. They have not occurred through any limitation of the authority's programme. The worst cases have arisen simply through delays which we should have thought were avoidable—they may not have been—on the part of the local authority.

1992. That is just my point. You said you thought you were getting over the worst. What I am saying is that, if a local authority decide on another method of programming, it is rather difficult?—I am rather surprised. You know that particular case. It has not been our experience that an authority has deliberately decided to have children out of school on a housing estate. What has happened in the past has been that through various administrative delays arising from lack of experience—remember we are tackling a building programme very much greater than this country has ever tried to tackle before—the machine for putting it through was by no means in perfect running order. I am not aware of any case where it has arisen through the sheer, wilful decision of an authority that a school had better not be built; it has arisen through most unfortunate delays in getting the thing actually started.

Miss Ward.] I think in this particular case it was the first experience of putting an old people's hostel as a sort of community centre in a housing estate; and it was considered by the Minister concerned, who came up and paid a special visit to it, as a wonderful achievement. It was not your Minister.

Mr. *James Johnson.*

1993. Where does the Ministry come in this matter of planning for the school population? Does the local H.M.I. work in liaison with the director of education or the education officer in this matter of a new housing estate?—It also comes up in this discussion on the annual programme. One can build on the information supplied by the H.M.I. on what is wanted, and also details from the Ministry of Housing. One can, of course, question an authority on the whole of its planning.

1994. You have your finger on this the whole time. You can at any given moment chide a local authority which does not do its job. You have the final decision in this matter, have you?—Yes, but unfortunately, as I was saying just now, it is not really a question of chiding; it is a question of efficiency in putting the thing through. If a school takes twice as long as it should from the decision that it should be built to the laying of the foundation stone, chiding will not do; it is a question of efficiency in working a complicated procedure.

Mr. *Norman Cole.*

1995. That was the next question to which I was going to come, but Mr. Johnson has asked it for me. I was going to ask this. From all the evidence we have had the Ministry—I am making no complaint about it—controls the programmes of local authorities from year to year, but does the Ministry do anything (*a*) about that programme being carried out and (*b*) as regards the speed at which it is carried out or the lack of it? In other words, does the initiative in these matters sometimes spring from the Ministry or the reports of H.M.I.'s?—You are talking of speed as a matter of foreseeing need or efficiency in carrying a job through?

1996. The question of need rather?—As regards the need, yes. I can only say what I was just saying to Mr. Johnson. At any time in discussing an authority's programme we might say, "That is all very well. This is quite a nice proposal to put up, but what an awful mess you are going to be if you do not get started".

1997. I am assuming the start has already taken place?—I will ask Mr. Nenk to tell you whether he has any experience of that, but there is a great deal of consultation on the planning of the whole project. I mean there is very close interconnection between the actual planning in the architectural sense and the planning for speedy and economic execution.

1998. What I mean is this: if, for instance, through no fault of their own a local authority were held up owing to a shortage of steel, would the Ministry step in and try to facilitate those cases where the need was greatest?—Indeed, yes. We have not only H.M.I.'s but our regional priority officers who are there both to stimulate and help.

Chairman.

1999. I take it that in some local authorities there are building bye-laws which cause delay? I assume you would agree it would be a good thing if those bye-laws could be revised or, as it were, brought up-to-date?—(Mr. *Nenk.*) Under the Education Act the Minister has power to exempt

school buildings from the operation of any local bye-laws so that there is no reason why a local education authority building should be hampered by any local bye-laws. But of course there are some cases, I think, where in the interest of good relations between different committees the education committee do in fact observe local bye-laws, some of which are not too well adapted to the needs of the time.

2000. The Minister has power to disregard any bye-laws, I see. That brings me again to this question of transport. We did obtain some figures from a number of authorities in the country showing there was a considerable sum of money being spent on the transport of children. For instance, in one city there was the transport of as many as 1,500 children from one estate back to older schools elsewhere in the city. The figures which we were able to gather from twenty-two counties and twenty-five county boroughs appear to show that in total the estimated cost of school transport in the financial year 1952-53, which would not have needed to be provided if school places had been available to keep pace with new houses, was £135,094. Have you got the figures for the whole of the country?—(Mr. *Flemming.*) Not under that head. The only figure we have is for school transport as a whole, for all causes.

2001. You cannot give us the total amount for the country?—We should not be able to tell you that. I think I did mention this in the document* which I sent after your last meeting. We are not able to say the amount being spent at any given moment for transport for this particular purpose.

2002. In one area only in the last five years the amount has been increasing. In 1946-47 it was £800; in 1951-52 it was £12,101; and in 1952-53 it was £17,000. It looks, Mr. Flemming, as if this is still increasing; it is rather a serious figure?—It would be rather surprising if it had not gone up from 1946, if you consider the amount of new housing which had been completed by 1946. The problem was not there in 1946.

2003. That is so, but there is a lot of houses to go up still?—Yes.

2004. The point is this. If you have got to have a building programme, as I suppose you have for the next ten, fifteen or twenty years, then surely it should be the aim of those responsible to get the schools which are necessary to meet the demands of a new housing area in a more economic way than they have been able to do in the past few years?—I entirely agree. That is just another way of saying what we have been discussing already. We very much hope the timing will be better; it certainly ought to be; there is no question about that.

2005. You think you are taking adequate steps to do that?—I think it certainly will be better. I do not think it will be perfect. Again I am saying that as regards those schools which are only now being or have recently been started. There are many other factors contributing to the transport problem. This is such a small item in relation to the whole of school transport. Do not let me be misunderstood. I expect the total expenditure on the transport of schoolchildren to go on increasing because the number of children is increasing so rapidly. This is only one small element in school transport. The total bill of local authorities for the transport of school children is about £5 million a year. A large part of that is due to rural re-organisation, denominational interests and all kinds of permanent causes, not this cause related to school building. The expenditure will go on and will indeed increase as more children come into the age groups concerned. I must not be interpreted as saying I expect the total bill for school transport to go down, even if we get a better matching of school building with house building.

2006. We quite appreciate you have got to provide transport in accordance with the Act and in accordance with regulations. That has to be done in any case, but what we should like to think is that you are planning to avoid what is an unnecessary addition to your transport costs in what appears to be a waste of public money in having to carry children long distances because schools are not there for them near their homes?—I certainly hope we can, at any rate for long periods. The timing is another element in this. It may be quite reasonable to do it for a very short time, but extremely wasteful to do it for a long time. I accept your criticism straight away. Here is something which ought to be diminished.

2007. That finishes with the question of transport. Now I think we had better take the question—a very important one—of traditional versus prefabricated building. As you know we have had a good deal of information about this. We have seen some of the schools which have been built. It would appear, I think, that on the whole there is no real saving in cost in the methods of prefabrication. As far as we are able to gather there appears to be a saving in time of erection which is offset by the extra cost of materials and so on. Would you agree that prefabrication has been used in areas where labour is scarce,

* Annex 2.

where the time is pressing or where traditional materials are scarce, but that generally speaking, comparing the various costs, there is no real saving in money?—(Mr. *Nenk.*) Up to now I think that is true in relation to costs on tender. Whether it will still be true when final accounts are settled is perhaps open to some doubt because in a period of rising prices, if you take two years to build a school instead of one, it is certain that the difference between your tender cost and your final cost will be greater. Therefore, if two schools of the same size are being built both at the price of £x, one of non-traditional construction which will enable it to be completed in twelve months and the other in traditional construction which will take two years, the final cost for the non-traditional school may well be lower than the final cost for the traditional school.

2008. It would appear to be logical to expect that. I would have said, when we were first looking at this and when we looked at the school which you brought to our notice and gave us figures of costs, that there was a saving in cost, but since then we have looked at other schools and we have had examples given to us. I will give you one. We had an example brought to our notice of one authority building a school by traditional methods and the same kind of school by non-traditional methods side by side. The traditional method resulted in a school of 42.9 square feet per place at a cost of £135, and the non-traditional amounted to 43.9 square feet per place at a cost of £140. In the face of that it would look as though, where you get a traditional and a non-traditional being built side by side, it does not work out quite as you have suggested?—First of all the question is whether the difference of one square foot per place in area is due to the type of construction or due to some other factor of design which is quite independent of the method of construction. The second point is that you are talking, I presume, of the cost per place on tender. I have accepted as generally true that on tender non-traditional schools of a given quality are no cheaper than traditional schools of comparable quality. No one has ever pretended they are yet. At the moment we have not got enough final costs in to determine that because it takes two years after a school is opened before you get the final account settled. The likelihood I think is that we shall find the final cost of the non-traditional school will be closer to the tender cost than the final cost of the traditional school, so that I do not think the figures you have quoted disprove that general argument.

2009. The case I have in mind is that of two comparable schools, and I do not think it was on tender but on final cost?—(Mr. *Flemming.*) It has never been part of our thesis that the non-traditional job was of universal application on the ground of cost or any other ground. It has been one form of building which can play a very useful part at the present time. Although Mr. Nenk has very properly raised a query on what you should infer from these figures we certainly would not dissent from your general conclusion, if this be your general conclusion, that both types of building have got a very useful part to play in the present programme.

2010. We agree of course that you cannot at present build all schools by traditional methods; that is certain. The time factor also comes into it, the question of speed?—The time factor and the scarcity of materials. It is doing our plain duty by the general economy of the country to make some contribution by non-traditional methods. We have never put that forward as a panacea.

2011. It would seem most people do prefer the traditional methods if they have the means to build that way?—It depends on your experience. Most people are conservative by nature, and until they have experienced a new thing they are not very keen on it. Some have experienced these non-traditional schools, and have loved them. (Mr. *Nenk.*) Most of these systems which are now being used are very new in terms of the history of the building industry and of industry in general. At present they are comparable in cost with traditional building, which is all we expect. Whether in the course of time, as industry gets bigger orders, the machine gets run in and designs improve, they will be cheaper or still be only comparable remains to be seen.

2012. I can also think of one case where a school, which was built by prefabricated methods, had got to be put up very quickly, and it was put up in the main by overtime labour. That is very expensive, is it not? Therefore costs in that particular case did not show a very good result. Is there much building like that going up? Are you having to pay overtime?—That is one of the objects in using a non-traditional system. If the same school to which you refer had been built in traditional construction the total charge for overtime would have been still greater, because the content in terms of total manhours is much greater. No doubt that was a case where for some reason or another the authority got badly behindhand. Possibly the housing went up quicker than they expected or something, and they had to make a rush job of it and pay overtime, but by using the non-traditional system of construction they paid less overtime than they would have done if they had used the traditional.

2013. The fact is that they did pay overtime. Is that general?—Certainly not.

2014. Do you think that is an isolated case?—A very isolated case.

Mr. *Norman Cole.*

2015. I do not want to change the whole trend of what we have been discussing, but I would like Mr. Nenk to give us his view of a remark which I believe was made to us the other day that in the experience of one local authority in point of fact non-traditional building had not proved any speedier than traditional building. Has Mr. Nenk any experience of that?—Yes. You come back to the question of what you mean by non-traditional building, of course. There are certain types of construction being used for schools which are non-traditional but are not particularly labour saving.

2016. This remark was apposite to prefabricated building, but I have taken your point?—Then the question still arises that the job has to be organised, and some authorities like to combine a non-traditional prefabricated system of construction with a traditional element, possibly gable walls of brick. Our general experience is that where authorities try to get that sort of mixture, and some of them still do, they probably do not save much time because it takes so long to do the traditional parts of the job that the rest is waiting.

2017. If I can codify all that, it would be true to say that any less convenient methods must be looked at in the background that it does not always follow that construction in prefabricated materials would necessarily be quicker than construction in traditional materials, which has a bearing on the point you were making on their tender prices—you realise that?—It depends how efficiently it is used. If someone does not use it intelligently, yes. (Mr. *Flemming.*) If I may link that up with our discussion, it does even more depend on whether you can gain a few more long runs to see where you are going a long way ahead. Mr. Nenk has just been referring to the industry getting run in. You get the maximum advantage if you can see a great volume of this work being done over a long period of years.

Chairman.

2018. With regard to temporary building one authority informed us that they wanted to discourage temporary building at every point. It was generally unsatisfactory and it tended to become permanent. The authority had got schools which had been built in 1908 as temporary, corrugated iron schools, and they were still in use?—I have heard of that.

2019. Do you generally discourage the temporary building?—It is rather difficult to generalise. One certainly does on that ground, but here one has another consideration. One has this special period of peak pressure. I would discourage children being born unevenly in different years, but as we have these unfortunately heavy birth years of 1946, 1947 and 1948 there may be cases in which it would be sheer extravagance not to use temporary buildings, abandoning them after the bulge has passed through. It depends very much on the local circumstances. There may be local cases where it would be the only reasonable solution.

2020. Do you issue directives at all about prefabricated versus traditional?—(Mr. *Nenk*). Not directives, no.

2021. We did have one example brought to our notice of an authority that built additional rooms by non-traditional methods whereas the bricks were on the other side of the road, and by building with bricks they could have saved a good deal of money rather than have to go for prefabricated parts a longer distance away. Would you not think it was good to give them some advice on matters of that kind?—We do give them advice. Our general advice is that where traditional labour and traditional materials are readily available, so that at relatively low prices a relatively quick period of construction can be expected, there is no reason why they should use anything else.

2022. That is the advice you tender; perhaps they did not take your advice?—They do not always.

2023. There was a question mentioned to us about glass in schools. Builders tell us that glass is very expensive, and that the area of glass has increased to such an extent that, well, there is nothing else but glass. What is your experience on that? Have you considered that with the builders?—That is of course quite a common thing that people could say about modern school buildings. The amount of glass you have depends on how much light you want, and the amount of light you want depends on the physiological requirements of children's eyes. That has been very carefully studied by the Building Research Station and various medical bodies, and we are assured that our building regulation minimum for daylighting is in fact a physiological minimum. To have less glass will simply mean using electric light during the day if the children's eyesight is not to be harmed.

2024. Do you find that you are having to do something to prevent the light from becoming harmful by having to put up blinds and that sort of thing?—In some cases venetian blinds, light curtains or something of that sort are provided, but it is one of

the requirements of good design to provide your daylighting to the required level without glare. That is one of the problems for the designer, and considerable advances have been made in overcoming it.

2025. Are you satisfied that the area of glass in the new buildings which are going up is the right area?—I am not in a position to question the medical and scientific advice we have got about the level of daylighting which is required if children's eyesight is not to be impaired, and I do not think there is any reason to suppose, given our system of cost controls, that architects and authorities are providing more expensive buildings than are necessary in this respect to attain this level of daylighting.

Miss *Ward.*

2026. It costs more to heat if you have a larger area of glass, does it not?—Yes, probably, but of course the larger the area of glass the more heat you gain when the sun does come out so that it is not a complete dead loss.

2027. You balance the grey days against the sunny?—If you have got thermostatic control, such as we have discussed before, when the sun comes out you get more heat in through large windows than through smaller windows.

Chairman.

2028. Have the builders brought this to your notice at all? Have you discussed this with them?—Candidly I do not think it is a matter on which the comments of builders are very valuable. The builder is not an expert on lighting.

2029. I should have thought that a builder was the person who could tell you what it costs to build, and I should have thought that was valuable. If a builder says it is much more costly to build with that area of glass, I should think that would be an opinion which you would welcome?—(Mr. *Flemming.*) Mr. Nenk has just told you that our minimum is based on technical advice about what the children's eyes need, and if a builder thinks that we can save money at the cost of children's eyesight we should not as a Ministry encourage that. (Mr. *Nenk.*) Furthermore, we do not rely on builders for our knowledge of what things cost. We have quantity surveyors for that purpose.

Miss Ward.

2030. Could I just comment on that? What about all the children who have got to go into the old schools?—(Mr. *Flemming.*) I agree that is a very good reason for wanting to improve them. We are very unhappy about them indeed. But that is no reason why the other children should not have as good buildings as we can give them. We do not want to go on putting up bad ones.

2031. As you go round the various buildings you see that you have a variation in the area of glass according to the design. Would it not be possible to reduce the amount of glass in some of these new schools, and use that for improving the old schools?—Please do not ask us to insist on a rigid uniformity.

2032. Is it a sensible criticism that there tends to be too wide an area of glass?—We are not accepting that, with all respect, generally. Our thesis is that our regulations prescribe a minimum. We are not then going to police everyone and say: "You must not exceed that minimum by one square inch". If we did that we had better abolish all the local authorities and run the whole of the education of this country from the Ministry. We do not accept the view that there are substantial variations from that minimum.

2033. It is quite an interesting point. It is a sensible reason if you say the glass is necessary for the preservation of children's eyesight, but if it is expensive——?—We have a cost limit procedure which we set out in full in our first memorandum. That is exerting pressure all the time on the designer to design a school in the most economic manner possible. There is the cost limit pressure on the one side and the minimum standard based on medical advice on the other. There are two general procedures which, without a great deal of policing of individual cases, satisfy us there is not going to be very much margin one way or another from the minimum.

2034. Can Mr. Nenk say whether more than the minimum requirements of glass, an additional area of glass in a school building, tend to add to the cost?—(Mr. *Nenk.*) I do not think you can generalise about that. It depends how it is used.

Chairman.

2035. It is not a question of generalising; it is a question that builders say that, if you have the area of glass which is going up in some schools to-day, it is much more costly if you ask them to tender. They would tender a lower figure if the area of glass was less. They say it is not only the glass itself but it is the construction that is necessary to carry the glass?—(Mr. *Flemming.*) I will accept that and say that does let us out from doing anything more about it. That means all schools have got to be so tightly designed to get within our cost limit to give a very strong incentive to the designer not to put in any more glass than he thinks is absolutely necessary for the minimum.

2036. That is all right, Mr. Flemming, but Mr. Nenk infers, and you have too, that you have a medical opinion on this matter which stipulates there must be a certain area of glass?—(Mr. *Nenk.*) No, a certain standard of lighting. (Mr. *Flemming.*) A certain standard of lighting.

2037. What is the technical advice that must follow on this? Who lays this down? What is the regulation about it?—(Mr. *Nenk.*) The regulation about daylighting speaking from memory, says there should be ten foot candles per square foot of working area. How you determine, when you are designing a school on paper, that you will get that specified amount of light on a given surface depends on a number of mathematical calculations with which I am not familiar in detail, and I am quite sure the Sub-Committee will not expect me to try to instruct them.

Mr. *James Johnson.*

2038. I am concerned to know the percentage of wall space occupied by glass in these new schools. Is it sixty per cent., seventy per cent. as compared with forty per cent. in the old type of school?—Roughly one-third of the wall area of the school is glass.

2039. To-day in the new buildings?—To-day.

2040. Can we say, listening to you Mr. Flemming, that all schools in the future, based upon this need to have ten foot candles per square foot of working area, will have this, as Miss Ward says, excessive amount of glass wall?—I would say that the ratio of one-third glass to two-thirds solid wall will be just about maintained unless and until the scientists give us some reason for supposing children's eyesight is better served by a lower standard of daylighting.

Miss *Ward.*

2041. It does seem to me that, in some of the assembly halls which are not used for work, there is a great deal of glass. There must be a variation between the amount required in an assembly hall, drill hall, gymnasium or whatever it may be and that required in a class room where the work is done. I think it looks awfully nice but, after all, it is only an assembly hall, and there are tremendous areas of glass in some of them. Is that glass also inserted to conform with the minimum?—An assembly hall is classified as a working space, as a matter of fact.

2042. It is?—But as the Secretary has said you could interfere with every single detail of every single school which was built if you really wanted to check up that no penny had been spent unnecessarily. For example, were the door handles and locks specified the cheapest possible?

2043. In some of the schools which we saw together you did alter the light fittings?—The point is that there is a limit beyond which the Ministry cannot go, controlling as we do seven or eight hundred major building projects a year, in instructing 146 local authorities in detail on the exact composition of every building. What we do is to set cost limits which are difficult to achieve with a good quality of building, and tell them to get on with it. The fact that we have reduced the cost of school building by nearly half in the last three or four years, given standard prices, speaks for itself. The schools which are being built now are in fact more economical than the pre-war schools. That would not be achieved by niggling about details like a large window in the assembly hall, the price of door handles or whether they have got the cheapest kind of taps, but by deciding what is a reasonable limit of cost to fix for a building to do a given job at a given standard of quality, and then leave a certain amount of scope for local initiative.

Mr. *James Johnson.*

2044. I admit all that, but I would have thought there was a difference between the hall, the canteen, the corridors perhaps and the actual academic teaching space on this minimum of ten foot candles per square foot?—The corridors are on a different scale, and so are dining rooms.

2045. One school I saw in Wythenshaw, a school of approved Ministry design, had much less glass in the corridors and elsewhere than some of the others I saw. I think it is a fair point to make that perhaps in parts of the builidng you do not want glass walls going up to the sky?—(Mr. *Flemming.*) There is always the risk that a principle may become a habit, but I should not think there is any doubt that the swing is in favour of that. You may find examples where the swing in favour of light has not been frightfully intelligently applied—we accept that straight away. (Mr. *Nenk.*) The lighting regulation for corridors and dining rooms is different. It sets a lower standard than is required in teaching rooms.

Chairman.

2046. The only point is that I should have thought it would have been a good thing for you to have had the opinions of builders about matters of that kind, especially in regard to cost, but you rather infer the builders who build the schools are not the people whose opinion you should ask about that?—If I went as far as to infer that it was a little unwise possibly. The point is that the quantity surveyors employed by the Ministry and by the local

authorities are the professional people who by tradition and their place in the industry have the job of controlling cost and advising the client and the architect on what different things will cost, where the money is going, and so on. They are the normal source of information for clients and architects about costs of building. A given builder may have an opinion about the extravagance or otherwise of a particular job, but he is not the person who is going to use the building and he is not the person who has specified the requirements which the building is to fulfil.

Miss *Ward.*

2047. The point was raised that, by having a variety of paints, it adds to the cost of the painters?—That is precisely why we have this week brought out a building bulletin on colour. That recommends a standard range for all school buildings of forty-seven specified colours.

2048. I did not quite mean that. I meant having a variety of colours in the assembly hall, in the corridors or one door in one colour and one in another. Is that the job of the quantity surveyor, or would the builder who controls the painters have an interest in that?—The quantity surveyor, by experience and examination of the bills of quantities for various jobs, can judge how far differences in colour treatment are adding to the cost of decorating a school.

Mr. *James Johnson.*

2049. Would you say this was a comparable factor? Builders have one colour to a certain height, and then another colour higher still. Do you think that would add much to the cost of building?—It would not add much ; no doubt it would add something. I should have thought that would not be good colour practice anyway.

2050. I thought so. You do not discount that would add much to the cost?—The total cost of painting is a very small percentage of the total cost of the school building, and that would be a small proportion of that.

Chairman.

2051. Did I hear a remark to the effect that the Ministry had issued some statement about painting?—(Mr. *Flemming.*) A building bulletin on colour went out only two or three days ago.

2052. May I put another interesting point? We thought it rather necessary to ask for the point of view of the builders. A builder said this,* "May I put in a plea for the with-holding of permanent decoration of new schools? Distemper enables brickwork or plaster to breathe. There is always moisture in a new building. It enables the wall to get dry without affecting the decorations. Often schools are painted immediately they are built, which causes the decoration to be defective very quickly, and it is a waste of public money in my opinion. There is no reason why a school could not be provisionally decorated with distemper, and then permanently decorated when it is dry. That is what a householder does with his own house." What do you think of that?—(Mr. *Nenk.*) I think that is quite right.

2053. You think that would be a good suggestion to make, do you?—It is one which a number of local authorities practise, in fact.

Miss *Ward.*

2054. But not all?—Possibly not all, no. It is obviously sense that you do put oil paint, which does not let moisture through very rapidly, on a surface which still contains moisture, for instance, wet plaster. Clearly that is a sensible point.

Chairman.

2055. This builder says often schools are painted immediately they are built. Would you dispute that?—(Mr. *Flemming.*) I do not think we should have the knowledge. (Mr. *Nenk.*) I cannot say how many schools are painted before they have dried out.

Miss *Ward.*

2056. That would not go round in a bulletin?—It could. If the practice of painting direct on to wet plaster came to our notice as being really prevalent no doubt we should issue some advice. It has not been represented to us before as a common thing which is happening.

Mr. *James Johnson.*

2057. It is your view that no sensible builder would do it?—(Mr. *Flemming.*) No sensible school architect would prescribe it. (Mr. *Nenk.*) The builder does what he is told by the architect. One can see a reason how that might happen. A good many authorities are not very keen on redecorating new schools soon after they are opened, and the tendency would be, having opened the school and distempered the walls, to leave it perhaps for five or six years before going back to give it its permanent finish of paint. What with the official opening and one thing and another, the architect wants it to look nice. I expect something of that kind does go on.

Miss *Ward.*

2058. One local authority told us they had initiated what appeared to be a new practice of allowing the school expenditure on curtains, books, and all sorts of things

* Q. 1479.

like that. A certain sum was allocated to the headmaster, and controlled by the headmaster; and in the opinion of this local authority it had been an enormous success. It cut out a great deal of administrative work, and it eliminated a certain sense of frustration in thus being able to control small details. In fact the experiment has proved so successful that I wondered if there were any other examples?—(Mr. *Flemming.*) We are very interested in that experiment. I know perfectly well to which local authority you are referring.

2059. I am not saying?—I have not heard of anybody else imitating it. I am sure it will attract a great deal of attention. If it is successful I should hope it would spread in the way things do in this country, by successful things getting talked about.

2060. From the ministerial point of view would you be prepared to talk about it?—I do not know because I think we are very much in the hands of the local authority to know whether it is successful. Their word on a thing of that kind is the word which means most. We would be intensely interested in what they think or say about it.

2061. Could I just put this point of view to you, Mr. Flemming? There are some local authorities which need a good deal of convincing about any new experiment. Anything which came from the Ministry would naturally concern them, so that in a way it is slightly depressing to hear you have got to wait until it is talked about to such an extent that some local education committees will take advantage of it. Would you be likely to do a little stimulating?—I have got to be much more fully informed. I very much hope this will prove to be a success. In my own view I should strongly suspect it is rather premature for this authority to be convinced about it. I hope it is right because it is so attractive a propositon psychologically. I really very much doubt if they are really quite ready to boost it yet. Before you start persuading someone you have got to be quite sure you are right. (Mr. *Pearson.*) It is also relevant to add that it has been the subject of criticism by the district auditor, and has also been criticised by a number of local authority treasurers and accountants.

2062. I would always accept that. Auditors sometimes tend to criticise anything new because they are terrified of the results?—We should have to hear both sides before we could come down on one side or the other.

Chairman.

2063. It has gone on for three years, and I should have thought it has had a fairly good chance to prove its value?—Mr. *Flemming.*) I think it has been gradually extended during that time. I am personally very much interested, but also you never know which comes first—the cart or the horse. Does success depend on the existence of good relations with teachers or is it common sense to suggest that to give teachers an area of responsibility on which no one else can impinge is a good way of producing those good relations?

Mr. Norman Cole.

2064. We have heard many reports that your good help and advice is not only available to education authorities but is also readily made available to them. The thing I am interested in is this. Can we have an assurance—I do not know whether this is economic or not but I am sure it is a good thing to do—that the matter is continually under consideration? We do not know of any section which exists at the Ministry for this purpose. In other words—I am expressing a personal view—I feel a lot of the troubles and difficulties could be got over in this way if Mr. Flemming, as the Permanent Secretary, could give us an assurance that it is the policy of the Ministry to make more advice available as new ideas are originated by or become known to the Ministry?—You are talking of building?

2065. School building?—Our building team and our development group are continually at work—it is a two-way traffic—in their own back room and in touch with local authorities, hoping for further opportunities to spread useful advice and information.

2066. Do you find local education authorities are only too anxious to co-operate to get your help and advice?—Yes, and we are always seeking to draw on their experiences at the same time.

Mr. *James Johnson.*

2067. Mr. Flemming, I take it that applies to teachers, to the National Union of Teachers as well, because we have found there are many teachers who feel some of the economies are actually affecting teaching efficiency—cupboard space, and things of that kind? We have heard a number of adverse comments, but I am sure the teachers' views will be closely considered?—We encourage that locally. It is part of the local authority's business to get right inside the skin of the user in working out their needs.

2068. I know their suggestions will be considered, and perhaps incorporated in your bulletin which you send out if you find them successful and useful?—If that is good for morale, certainly.

Chairman.

2069. Mr. Flemming, Mr. Nenk and Mr. Pearson, I am sure the Sub-Committee would like to thank you for the evidence you have given to us, for the helpful nature of your comments and for your willingness to provide all the information for which we have asked. It has been an intensely interesting subject for us. We think we have taken up rather a lot of your time, but we have appreciated your help?—It is very stimulating to us to be challenged in this way, and I hope some of my forthrightness and heat has been acceptable. It has sometimes seemed to be the only way to deal with the situation.

The witnesses withdrew.

Adjourned till Wednesday, 6th May, at half-past Eleven o'clock.

ANNEX 1

THE EDUCATIONAL BUILDING PROGRAMME IN ENGLAND AND WALES

Memorandum by the Ministry of Education

1. Schools and other educational establishments in England and Wales are built not by the Ministry of Education but by the 146 local education authorities and various voluntary bodies, such as the promotors of new denominational schools. Within the framework of the Education Acts, 1944-48, and of Government educational and investment policy the Ministry's functions are to determine the amount and kinds of educational building undertaken each year; to lay down and enforce minimum educational and physical standards, and maximum costs for individual projects; and to give advice on good and economical building methods.

The scope of post-war educational building programmes

2. These functions have grown in importance in the post-war years. More educational buildings are needed than before the war. But the demand for buildings of all kinds exceeds the capacity of the industry. Thus, the interests both of the education service and of the national economy as a whole demand that the educational building programme should provide the best possible value for the money and materials allocated to it.

3. The main objects of the Government in educational building, like those of its predecessor, are to provide sufficient new school places to maintain the present ten-year statutory period of school attendance to provide for those who stop on at school voluntarily after the age of 15, and to extend the facilities available for technical education in order to increase productivity.

4. In implementing these policies the Ministry allow schools to be built only where they are needed to house additional children coming into the schools as a result of the high birth rate in the years 1944-48, or for children moving to newly developed areas such as the New Towns. The fullest possible use of all existing accommodation, including some 600 schools " black-listed " in 1925, is required. Even so, the number of new places needed to maintain the statutory period of school attendance is very large. Including the places needed in 1947 and 1948 to enable the school leaving age to be raised from 14 to 15, the total need for places in primary and secondary schools grows in the nine years ending in December, 1955, from about 4,700,000 to 6,700,000. Although 300,000 of these extra 2,000,000 places were available in schools built before the war, and although it was decided to write off a deficiency of about 110,000 places which had accumulated by the end of 1949, the increase in the number of new places needed annually is still nearly 200,000.

5. The large increase in the school roll also means maintaining ample Training College places to make possible a continuing increase in the number of teachers, and providing more places at Special Schools, to house those of the additional children who need special educational treatment.

6. In technical education it was estimated in 1949 that a total post-war investment of the order of £50 million would be necessary before the country could claim that it had minimum facilities for technical education. Projects started between the end of the war and the middle of 1952 account for rather less than half this sum; on present plans the figure of £50 million will not be reached in terms of work started before 1959-60 at the earliest.

7. The programmes for Training Colleges, Special Schools and Technical Education, for minor works, and for work carried out and paid for by the independent schools are, however, small compared with the main school building programme. The following Table A shows the amounts allocated to the various classes of work within the total educational building programme for 1952-53.

TABLE A

England and Wales

1952-53 Educational Building Programme

Class of work	*Work to be started value £ million*
Projects costing over £6,500—	
Primary and Secondary Schools	43·2
Technical Education	3·5
Teachers' Training Colleges	1·0
Special Schools for handicapped children ...	0·9
School Meals Service (all projects)	1·0
*Licensed building (all projects)	1·3
Projects costing under £6,500	5·1
Total	56·0

8. Despite successive economic crises, the scope of the educational building programme has remained virtually unaltered since the end of the war. Th crisis of October, 1949, was met partly by stopping building for the expansion of the school meals service at existing schools and by sponsoring fewer projects for independent schools, but mainly by reducing the *cost* of individual projects, as described in paragraphs 17-31 of this memorandum; no reduction was made in the *number* of major projects included in the programme. The more recent crisis, which arose out of the overloading of the building industry, the shortage of steel and the need to divert resources from home investment to exports, could not be met in the same way; the number of projects included in the 1951-52 and 1952-53 programmes had to be reduced, as described in the attached copy of the Ministry's Circular 245. But this Circular does not involve any major change in the policies described in paragraph 3 above; the measures which it announces will enable the main policies to be implemented within a reduced investment programme at the cost of somewhat lower standards and increased inconvenience during the period of greatest pressure.

The background to the Ministry's present educational building practice

9. At no time in history has such a large school building programme been required, since never before has such a sudden and large increase in the school population coincided with big movements of population to newly developed areas.

10. It became clear soon after the war, as the first attempts to meet these needs were made, that changes, both administrative and technical, would be necessary if the local education authorities were to have any hope of tackling their problems successfully. The approach to school building was then governed largely by pre-war conceptions of planning, building techniques and adminstrative arrangements to which had been added a variety of physical controls on starting dates, timber, steel, etc. These various controls were generally unco-ordinated, so that even when a school had been approved by the Ministry of Education, the local education authority had no assurance that a starting date or a steel authorisation would be available when required. Technical staff was scarce, and was sometimes wastefully used when designs had to be altered at a late stage. There were no yardsticks of cost, and little guidance from the centre on methods of design and construction appropriate to current educational methods and to post-war conditions. Instead of a properly organised programme, there was a miscellaneous collection of individual projects jostling for resources on the basis of first come, first served. The result was that too few schools were being built, too slowly and at too great a cost.

11. In tackling the problem of putting school building on an efficient and economical basis, the Ministry have worked on the principle that all concerned in the planning of a school should be given the clearest possible terms of reference before they start drawing the plans. This has meant concentrating on a few main controls of principle, and allowing local discretion free play with them. It has also meant devising new policies which reflect the post-war facts of economic life rather than pre-war habits and standards.

* Mainly work at independent and direct-grant schools licensed by the Ministry of Works on the recommendation of the Ministry of Education. All such work is financed out of funds other than public funds.

12. Within these principles, the Ministry's first aim was to achieve quantity. This was done first by developing the technique, instituted in 1947, of compiling annual building programmes so that the local education authorities could know in advance precisely which projects they should plan for a start in a given period. By compiling, in addition to main programmes, reserve lists of projects which would be the nucleus of the next succeeding programme, the Ministry give authorities the longest possible notice of their future commitments; this helps them to make efficient use of their technical staff, to order scarce materials in advance, and generally to organise their building activities on a stable and economical basis. Secondly, the procedure of compiling annual programmes enabled the Ministry to simplify their administrative arrangements and to co-ordinate the various physical controls, so that once a major project had been included in a programme only one submission of plans and estimates of cost was required instead of two or three. This much reduced the time needed to get a project ready for a start on the site, and freed technical staff within the Ministry to give advice in principle at an early planning stage, and to engage in development work.

13. By these and other means quantity was achieved by 1949 in terms of new starts. Meanwhile, the Ministry had begun in 1948 to devise means of improving quality and reducing cost. With this in view the Ministry decided in 1949 to set up an Architects and Building Branch, which would combine in one unit all the various educational, technical and administrative skills necessary to develop new concepts of school planning and new techniques of building; to frame and operate administrative procedures which fitted these new concepts; and to advise authorities on the best use of these new methods, both by issuing general guidance and by giving them advice as they needed it in the early planning stages of their individual projects. One of the chief aims of the Branch is to maintain close contact with the authorities and their officers by visits, meetings and in other ways. For example, in the autumn of 1951 two successful conferences were held with representatives of 40 of the largest authorities (elected members, chief education officers and architects); a wide range of administrative, educational and technical problems were fully and frankly discussed.

14. In outline the Ministry's policy since 1949 has been to supplement the procedure of annual programmes by laying down in advance the conditions which a project will have to meet to obtain the Ministry's final approval. These are embodied in the revised Building Regulations*, which lay down minimum educational and physical standards, and in the limits of cost per place. Within these two main controls, architects and local education authorities are free to design their schools as they think best. But to help them do so, the Ministry have published recommendations in the Building Bulletin series† on good and economical building techniques.

The Ministry's internal organisation

15. Within the Ministry of Education, Architects and Building Branch do not decide which projects are to be included in each annual building programme. This is the job of the "user" branches. Thus, within the allocation of capital made to them, Schools Branch compile the school building programme, Further Education Branch the technical college programme, Teachers Branch the programme for training colleges and Special Services Branch the programmes for special schools and for the school meals service. Each year local education authorities are asked to submit proposals within stated categories for the next succeeding annual building programme and its reserve list. These proposals are then examined by the "user" branches, with the object of distributing the available capital amongst authorities strictly in accordance with need. The function of Architects and Building Branch in this operation is to co-ordinate the work of the user branches, to provide an advisory service on matters such as cost and the capacity of local education authorities to carry out their proposed programmes, and then to ensure that the approved programme is built as economically and as efficiently as possible.

* The Standards for School Premises Regulations: S.I. 1951, No. 1753.

† The following Bulletins have, so far, been published:—

No. 1. New Primary Schools.
No. 2. New Secondary Schools.
No. 2A. New Secondary Schools: Supplement.
No. 4. Cost Study.
No. 5. New Colleges of Further Education.
No. 6. Primary School Plans.
No. 7. Fire and the Design of Schools.

16. In order to discharge these functions, Architects and Building Branch is organised under the joint direction of an administrator and an architect as a combined administrative, architectural and executive branch, with educational experts permanently attached to it. The work of the branch is of three main kinds:—

(a) *Economic Planning:*

The educational building programme is part of the national investment programme. Government investment policy is decided by Ministers on the basis of recommendations made by the Central Economic Planning Staff. The Central Economic Planning Staff collects from the Departments concerned proposals for future investment, relates the total of these proposals to estimates of the resources of money, labour and materials likely to be available, and makes recommendations to Ministers designed to equate the national investment programme with the country's ability to carry it out.

The economic planning function of Architects and Building Branch is therefore to prepare estimates of the capital, labour and materials needed to carry out the educational policies of the Government; to submit and justify these proposals to the Central Economic Planning Staff and to advise the Ministry as a whole on the policy implications of the allocations recommended to Ministers, and on the best way of using the allocations finally approved.

(b) *Development:*

This involves investigating the architectural implications of good educational practice, so as to combine adequate educational quality with economy of floor area in the buildings provided; developing new building techniques, so as to combine an adequate standard of building with economy in capital cost, materials, labour and maintenance costs; and publishing guidance on these subjects to local authorities and architects. A development group has been established, comprising educational experts, architects and administrators working together as a team; it maintains close links with local authorities, industry and current research, particularly that carried out by the Building Research Station.

(c) *Territorial:*

This provides direct day-by-day liaison between local authorities and the Ministry. There are two territorial groups, each consisting of an administrative officer, teams of executive and clerical officers, architects and, in the localities, Regional Priority Officers. Their functions are to operate the main controls, to assist authorities to improve the speed and efficiency of educational building both in the planning stages and after work has started on the site, and to supplement the published guidance by giving informal advice to authorities on administrative and technical points affecting both an authority's programme as a whole, and individual projects included within it. Through the work of the territorial groups, the results of the Ministry's development work are passed direct to local authorities in advance of the publication of written guidance, and local experience is collected and passed back to the Development and Economic Planning groups.

The Ministry's Present Practice

A. *Economy in Cost*

17. The cost of individual school building projects is controlled by enforcing (at the final approval and tender stages) yardsticks of cost per place which are known, as a result of research and development work, to be practicable, but are difficult to achieve except with the maximum economy in space and the best possible building practice. The first aim was to reduce building costs by 12½ per cent. below the 1949 average; ceiling figures of £170 per primary place and £290 per secondary place were therefore announced in 1949 to apply for the first time to projects started in 1950-51. At the same time, giving two years' notice, the present ceilings of £140 and £240 per place were announced for the 1951-52 and subsequent programmes. As a result of further development work carried out mainly by the Ministry, it has been possible to work within these limits in spite of the rise in building costs since they were established. In terms of constant prices, this means that schools now being approved show a reduction of nearly 45 per cent. on the average costs of all local authorities for the 1949 and earlier programmes; they are also more economical than comparable pre-war schools.

18. Cost per place consists of two elements: the superficial area per place and the cost per square foot. Area per place has been reduced by about a third since 1949; this has been achieved not by whittling down standards but by thinking out afresh the fundamental educational requirements of each type of school. For example:—

(*a*) the characteristic pattern of schools designed in 1947-49 was reminiscent of the army camp. This meant a high proportion of circulation space (often 25 to 30 per cent. of the total area of the School) with a consequent high cost of services. This pattern was not only expensive, but educationally undesirable;

(*b*) a number of early post-war schools were conceived as municipal monuments rather than on the simpler, more domestic scale which is not only less expensive, but educationally more suitable;

(*c*) a high proportion of the space in early post-war schools, often nearly 60 per cent. of the total, consisted of storage, sanitary accommodation, circulation, etc., none of which is directly usable for teaching purposes;

(*d*) more particularly in secondary schools, there were many highly specialised rooms which, because they were suitable for only one form of teaching, were in use for only part of the school day.

19. Various new arrangements of planning were therefore developed, and explained to local authorities in Building Bulletins, with the following aims:—

(*a*) to achieve an economic balance between the areas not directly usable for teaching and those which are. Although the space available for teaching in schools now being approved is very little less than in 1949 (in primary schools, there is no reduction at all), the proportion of teaching area has risen from about 40 per cent. to about 60 per cent. of the total. Since this has meant building simpler, more compact schools, economy has been combined with educational advantage;

(*b*) to secure the maximum use of the maximum number of spaces by designing and grouping rooms so that all, or nearly all, can be used for more than one form of teaching activity. This applies particularly to secondary schools where the average period of use for the teaching rooms has been increased from about 60 per cent. to about 80 per cent. of the school day. The break which this implies with the traditional water-tight compartments of teaching is in keeping with modern educational practice.

20. Similar reductions have been made in the cost per square foot, in terms of constant prices. In Building Bulletin No. 4 the Ministry published guidance on a new method of costs analysis and "cost planning" designed to enable quantity surveyors to analyse the cost of a building, expressed in cost per square foot, by function (as, for example, an entire roof, including all the elements in it) rather than by trades. This information shows the architect, before he starts designing, the relationship between a function and its cost, and indicates where economies can most profitably be made without increasing future maintenance costs and how they can best be apportioned between the different elements.

21. The Ministry use this technique in their own development work, and appreciable economies in various elements of school buildings have been achieved, without sacrificing standards. For example, while heating installations were costing on average 7s 1d. per square foot, a new system has been adopted in an increasing number of projects at a cost, including associated builders' work, of 5s. per square foot. Similarly a new urinal unit has been developed costing £11 10s. 0d. compared with £26 or more for the normal product manufactured in accordance with British Standard Specifications. These and many other similar items, though small in themselves, account for a good deal of money over the programme as a whole.

22. The most important application of the technique of cost analysis and planning is, however, in the development of prefabricated systems of construction. The Ministry's work in this field is more fully described in paragraphs 32-36 below; the point to be noted at this stage is that without cost planning it would have been difficult, if not impossible, to develop labour-saving systems of construction competitive in price with traditional forms of building.

23. The Building Regulations, mentioned in paragraph 14 above, have contributed to the reductions in both area per place and cost per square foot. Compared with those issued in 1945, the 1951 Regulations prescribe reduced standards affecting both

elements, and by their greater simplicity and flexibility encourage the development of new and more economical methods. But the degree of economy attributable to the revision of the Building Regulations is not large. The main defect of the early post-war schools was not so much undue luxury as wasteful use of space (particularly the areas, such as corridors, which have never been prescribed by Regulations) based on ideas current in the 1930's.

24. The following Table B shows the progress made since 1949 in reducing cost per place, area per place and cost per square foot. To ensure comparability, all costs are quoted both in terms of the prices actually obtained on tender, and after adjustment to the June, 1952, level of prices for wages and materials.

TABLE B

ENGLAND AND WALES

SCHOOL BUILDING COSTS, 1949-52

Programme	Average area per place	Average costs on tender			Average costs at end June, 1952 prices		
		Nett cost per sq. ft.	Nett cost per place	Additional cost per place (*a*)	Nett cost per sq. ft.	Nett cost per place	Additional cost per place (*a*)
	sq. ft.	s. d.	£	£	s. d.	£	£
Primary Schools							
1949	67·3	57 11	195	20	77 8	261	26·5
1950	52·3	60 5	158	19	76 1	199	23·75
1951–52 ...	47·9	57 9	138(*c*)	15·5	60 9	148	16·5
1952–53 (*b*) ...	45·7	58 9	134(*c*)	16·5	59 6	136	16·75
Secondary Schools							
1949	110·5	58 8	324	32	78 7	434	42·25
1950	90·6	61 0	276	25	76 10	348	31·75
1951–52 ...	78·4	61 8	242(*c*)	23	65 11	259	24·5
1952–53 (*b*) ...	78·9	58 5	231(*c*)	23	59 4	235	23·4

NOTES:

(*a*) Additional cost is defined in paragraph 163 of Building Bulletin No. 2A. It covers mainly items of external works such as roads and paths, site layout, etc.

(*b*) Figures for 1952–53 are available for only about 20 per cent. of the total programme. Most of the projects concerned were originally designed as part of the 1951–52 programme, but were transferred to 1952–53 following the issue of Circular 245.

(*c*) In addition, an average of £5 per primary place and £2 per secondary place was approved in 1951–52 for abnormal nett cost items, such as precautions against mining subsidence. For 1952–53 the comparable figures are £3 and £2 respectively. Abnormal nett cost items were not separately recorded in 1949 and 1950.

25. New standards and cost limits apply, of course, only to schools for which tenders were received after the dates when the different ceilings of cost per place became applicable. As a result, almost all schools finished up till now are from the 1949 and earlier programmes and have been built to standards far less economical, and with cost ceilings far higher, than are permitted to-day. The number of more expensive schools still under construction is however rapidly decreasing; the last primary schools started before the introduction of strict limits of cost should be completed in 1952 and the last secondary schools in 1953.

26. Some of the 1949 and earlier schemes still under construction are of course even more expensive than the average. A wide range of costs per place between different areas was a feature of these programmes. Thus, the range for primary schools within an average of £195 per place on tender was from about £135 to about £243. These wide variations have now been eliminated. Within the average of £134 per place on tender for the most recent primary schools the range is from £116 to £140, excluding abnormal expenditure on items such as precautions against mining subsidence (see note (*c*) to Table B).

27. Similar measures have been introduced, though more recently, to reduce the cost of new technical colleges and training colleges for teachers. The cost of buildings of these types cannot be controlled or compared on a basis of cost per place, since colleges are rarely comparable in the kind or amount of teaching accommodation needed. For example, a college providing engineering courses, where large and expensively equipped spaces are needed for groups of 12-15 students must obviously cost far more per place than a college providing commercial courses, where groups of perhaps 30 students need in the main simply equipped spaces of the classroom type. The Ministry therefore control the cost of technical and training college projects by approving a detailed schedule of accommodation, deriving from the approved schedule a total superficial area for the building as a whole, and fixing the maximum cost per square foot at which this area may be built. The method is fully explained for technical colleges in Building Bulletin No. 5 ; the same technique is now applied to training colleges for teachers.

28. The Ministry are not satisfied that the limit of economy has yet been reached in educational building. Development work continues with the object of obtaining further small reductions in area per place and, in terms of constant prices, in cost per square foot. Progress will, however, be slower than hitherto ; in particular, it is unlikely that new economies can be made quickly enough to offset any appreciable further increase in prices for wages and materials. Thus the present limits of £140 and £240 per primary and secondary place, which have so far been held against a rise of over 30 per cent. in costs since they were first announced, may have to be increased in the near future ; any change will affect secondary schools before other types of educational building.

B. *Economy in materials*

29. Within the limits of cost, local education authorities have complete discretion in the choice of materials, other than steel and softwood. In the Ministry's view, the limits of cost per place compel the maximum economy in the use of materials, while avoiding undesirable intervention by central government in the detail of school building specifications. Two crucial materials, steel and softwood, are however centrally controlled.

30. Steel is allocated to authorities in bulk for most of their projects. The object of this arrangement, as with the money yardstick of cost per place, is to make the available supply provide the maximum number of school places ; if an authority use steel even more economically than their bulk allocation requires, they may apply for a larger school building programme. The bulk allocations limit the use of steel to an average of 1.1 tons for each £1,000 of building expenditure ; this represents an economy of about 12½ per cent. on consumption in 1951. Although further economies are planned, mainly through the development of systems of construction which use less steel than traditional methods (e.g. prestressed concrete : cold rolled sections), a reduction in use below 1.1 tons per £1,000 is unlikely to be practicable. The new economies are not expected to do more than offset the increased requirements which will arise as the main weight of the school building programme changes from the primary to the secondary schools, in step with the movement of the additional children up the school ladder. Nearly all secondary schools are in multistorey construction, and therefore require more steel than primary schools.

31. The use of softwood is limited to 0.14 standards per £1,000 of building expenditure. With the present programme of £56 million, this amounts to about 7,000 standards per annum, which is less than is used in the construction of 5,000 houses. This degree of economy restricts the use of softwood virtually to trims and fittings and cannot in the Ministry's view, be increased.

C. *Economy in Site labour*

32. Schools in the 1949 and earlier programmes were not only uneconomical ; they took on average too long to build. The difficulties caused by long construction times are particularly acute in the newly developed areas, since houses are inherently quicker to build than schools and the national shortage of bricklayers and plasterers is accentuated in these areas by the demands of housing contractors. The Ministry and a few local authorities on their own account have, therefore, developed with manufacturers methods of construction which avoid scarce types of site labour and rely upon prefabrication to increase the speed of erection. In order to ensure that this work is realistic from both the technical and financial points of view an otherwise normal school project has been used as a vehicle for the development of each system. Advantage has also been taken of these pilot projects to experiment with new ideas in school planning.

33. Several of these systems are already on the market; four others are being developed by the Ministry in collaboration with local authorities and manufacturers. The terms of reference of the Ministry's Development Group require them to produce systems suitable for permanent schools of up to four storeys, to be built within the same limits of £140 and £240 per place as are applied to traditional buildings. The Group do not specify theoretically desirable articles, leaving it to others to overcome the production problems and to get the new system on the market. All development work is carried out jointly with the manufacturer concerned, so that immediately the prototype of a new system of construction is started local authorities may begin placing orders at known prices. The extra cost of the pilot project is defrayed by the manufacturer and spread over subsequent orders.

34. It should be noted that the new systems are designed so as not to dictate the plan of the building. The Ministry do not develop prefabricated buildings to a standard plan; the object is to produce dimensionally co-ordinated components which can be assembled quickly and easily to form whatever type or size of school (or, indeed, room) the local authority instruct their architect to provide.

35. Results already obtained show that with the new systems of construction the average output per man month of about 35 sq. ft. of finished building can be doubled and sometimes more than doubled, and that the construction time of comparable schools is cut by 30-50 per cent. The prototype of one system developed by the Ministry has recently produced an output of over 80 sq. ft. per man month. In some areas where labour is less scarce, the use of non-traditional systems is unnecessary, and for a long time to come, a large part of the educational building programmes will be carried out by traditional methods. The Ministry expect, however, that within the next two or three years approximately 50 per cent. of new primary and secondary schools will be built by methods using the minimum of site labour; the Ministry's immediate development programme is geared to this time-table.

36. The question is sometimes asked whether a programme of hutted school buildings would not be the best way of saving money, materials and labour. In practice it has been found that where a life of more than about five years is required the cost per sq. ft. of buildings of the "hutted" type is virtually the same as that of economical permanent buildings. Apart from higher maintenance costs, the running costs of sub-standard buildings will also be heavy, particularly because of greater heat losses. Experience also shows that schools designed to be built of standard huts tend to require a higher superficial area per place for comparable accommodation than purpose-designed buildings. A high proportion of the school building programme consists of multi-storey buildings; the use of huts for new schools would therefore sterilise more land than the more compact buildings which are now being designed. It must also be remembered that the shell of a school building accounts for less than half the total cost of the project; the cost of drainage, foundations, services, etc., would not be reduced if hutted construction were adopted.

Where very small schools or small extensions to existing schools are required various forms of hutting are being used quite widely, but for complete new schools of the ordinary sizes they would not be economical.

The School Building Programme and the Ministry's Estimates

37. The Ministry's allocation in the national capital investment programme is expressed in terms of the estimated total capital value of work to be done during the period covered by the allocation. The cost of this work does not, of course, accrue as a charge wholly within any particular financial year. It is spread over a considerable period, since it is very largely met by loans raised by local authorities, Its effect on the Ministry's Estimates, as presented to Parliament, is reflected in the provision made for grants to local education authorities under Subhead C in respect of loan charges and capital expenditure from revenue. It is also reflected in the provision made under Subhead D.1 (2) (*b*) for direct capital grants made by the Minister to the Managers of voluntary Special Schools (i.e. Special Schools not maintained by local education authorities): in the provision made under Subhead D.1 (4) (*b*) for direct capital grants made by the Minister to the Governors of voluntary Training Colleges: in the provision made under Subhead D.1 (6) (*a*) in respect of approved capital expenditure of Governors of National Colleges and other institutions of Further Education receiving direct grant: and in the provision made under Subhead D.2 in respect of direct grants made to Managers and Governors of aided and special agreement schools under the provisions of Sections 102-105 of the Education Act, 1944. The main charge in the

Ministry's Estimates falls under Subhead C, since the main part of the capital investment programme represents works carried out by local education authorities. The growth in the capital investment which has had to be undertaken by authorities since the war is indicated in the growth in their expenditure on loan charges, as shown at line 9 in the Table on page 6 of the Memorandum on the Ministry of Education Estimates for 1952-53 (Cmd. 8488) and its predecessors. It is also indicated in the figures given in paragraph 7 of Cmd. 8488, though those figures are expressed in terms of approvals given during the financial year and are not, therefore, directly comparable with the Ministry's allocation in the capital investment programme or with the provision made under Subhead C of the Estimates for grants in respect of the capital expenditure of local education authorities.

The Ministry's relations with Local Education Authorities

38. This memorandum has naturally laid stress on the Ministry's part in controlling the cost of the educational building programme, and improving its efficiency. It should not be thought, however, that the local education authorities have made no contribution to the measures described or that the large economies made since 1949 have been imposed from the centre on unwilling authorities. Local co-operation in the economy drive has been whole-hearted, and many of the methods which the Ministry have been able to generalise through the medium of the cost limits, the Building Regulations and the Building Bulletins were first tried out or suggested by individual authorities. In recent years, the development of a genuine sense of partnership between local and central government has been a main feature of the educational building programme.

ANNEX 2

SCHOOL TRANSPORT COSTS IN ENGLAND AND WALES

Supplementary Memorandum by the Ministry of Education

1. Under Section 55 of the Education Act, 1944, local education authorities have a duty to provide such school transport as they think necessary or as the Minister may direct, and a power to pay the whole or part of the travelling expenses of school pupils for whom no transport is provided by them.

2. In exercising their powers under this Section local education authorities must have regard to the provisions of two other Sections of the Education Act, 1944.

(i) Under Section 39 (5) of the Act "walking distance" is defined as two miles for a child under eight and three miles for a child over eight. Sub-Section 2 (*c*) of the same Section provides that a parent shall have a valid defence against any school attendance proceedings if his child lives beyond this walking distance from school and no transport is provided by the local education authority.

(ii) Under Section 76 of the Act local education authorities are required in the exercise of their powers and duties under the Act to "have regard to the general principle that, so far as is compatible with the provision of efficient instruction and training and the avoidance of unreasonable public expenditure, pupils are to be educated in accordance with the wishes of their parents".

3. Local education authorities may, therefore, incur expenditure on school transport in either or both of two different ways:—

(i) In sparsely populated parts of the country children must be provided with transport because they live outside the statutory walking distance from the nearest school; in urban areas they may be provided with transport, even though they live within walking distance, because, for example traffic dangers are serious.

(ii) A local education authority may accept responsibility for the transport of children who attend a school outside walking distance from their homes because their parents, usually for denominational reasons, wish them to do so, even though there is a school appropriate to their age, ability and aptitude within walking distance.

Expenditure of both sorts must be regarded as a permanent feature of the educational system, although the number of children involved will vary as new schools are built and existing schools are reorganised.

4. In addition, local education authorities may, and at the present time often do, provide transport to meet a temporary difficulty. The shift of population involved in most large scale new housing means that an authority may have an acute shortage of school places in one part of their area at the same time as there are empty places in schools in other parts. If new schools are not built quickly enough in the new housing areas, the authority must provide transport to places where there is room in the schools, or there may be an interval of time during which such an arrangement would in any case be reasonable, e.g. there may not yet be enough older children on the new estate to justify the provision of a secondary school.

5. Twice during the last three years local education authorities have been asked to review their arrangements for school transport.

(i) Circular 210, dated 28th October, 1949, stated (paragraph 9) "... the Minister considers that economies [in transport] could reasonably be made, particularly in urban areas, and without exposing the children to undue traffic dangers, where children are being transported over less than the minimum distances laid down in Section 39 (5) of the 1944 Act".

(ii) Circular 242, dated 7th December, 1951, stated (paragraph 5) "... In a number of areas children are being conveyed free to school over distances less than the statutory minima laid down in Section 39 (5) of the Education Act, 1944. In present circumstances the Minister does not regard this as justifiable, though she will be prepared to consider quite exceptional cases where the authority can satisfy her that special justification exists, e.g. because of serious traffic dangers and the special needs of handicapped children. Authorities should also consider the desirability of making greater use of the facilities offered by Section 55 (2) for the partial payment of fares in the case of children who require transport in order to attend a school of their parents' choice other than the nearest to their homes".

The Minister's view remains as expressed in Circular 242; that local education authorities should base their general arrangements on the statutory walking distance defined in Section 39 (5) of the Education Act, 1944, and should not make more generous provision except where there are exceptional circumstances; and that parents who choose a school other than the nearest should make some contribution to the travelling expenses if they can afford it.

6. In one respect, however, the Minister has been obliged to adopt a policy involving increased expenditure on transport. Paragraph 10 of Circular 245, dated 4th February, 1952, dealing with the educational building programme, stated: "Similarly it will not be possible to build schools to serve new housing developments where, by the use of transport or by the adjustment of catchment areas, the children from the new houses can for the time being be accommodated in existing schools". The context makes clear that the reference is to cases in which it will not be possible to build a school as soon as would, under easier conditions, be desirable. In other words, local education authorities may in some cases be compelled to adopt for a time the expedient described in paragraph 4 above of transporting children to schools which have room instead of building new schools.

It is the policy of the Government that the school building programme should, in general, keep pace with the housing programme. The problem is primarily one of timing; although close contact is maintained between housing and education authorities both centrally and locally, the housing provision in a particular area may be so extensively and rapidly expanded that the new schools cannot be provided in time. There will, therefore, be cases in which the speed of housing development and the need to restrict capital investment make it necessary to adopt this alternative expedient. Naturally, such cases are kept down to the smallest possible number, and the probable cost of transport in each case is among the factors which are considered. It was never contemplated that transport should be used as a matter of set policy in default of new building where long distances or large numbers of children are involved.

7. This may, however, sometimes happen as the following example illustrates. In one area, where schools approved by the Ministry and included in a building programme have not been built fast enough, over four hundred senior pupils are being

carried daily for lack of a secondary school on a new housing estate. The cost of a building to house these children would be about £130,000 and capital repayments, plus interest at 4¼ per cent., would amount to about £7,709 per annum for 30 years. The estimated expenditure on transport is £5,000 per annum and produces no permanent asset. This particular case has not arisen out of Circular 245, and indeed no instances of the effect of this part of that Circular can yet be quoted, since it was issued less than a year ago.

ANNEX 3

THE SCHOOL BUILDING PROGRAMME IN SCOTLAND

Memorandum by the Scottish Education Department

1. Grant-aided schools are provided in Scotland, in the main, by the 35 Education Authorities under the supervision of the Secretary of State, who exercises his functions through the Scottish Education Department. A small number of grant-aided schools and certain other educational buildings, such as central institutions for technical education, are provided by managers. Both the Education Authorities and the managers receive through the Department grant from the Education (Scotland) Fund.

The Investment Programme

2. In 1945 there was over Scotland as a whole an estimated shortage of 24,000 school places. The deficiency was not spread equally over the country and in some areas from which the population was shifting there were even surpluses of accommodation. Since 1945 the need for new school building has increased, because of the raising of the school leaving age, the movement of families into new housing areas, the high post-war birth rate, and the reduction in the size of classes prescribed in the Schools (Scotland) Code, 1950.

About 41,000 of the 67,000 places required as a result of the raising of the school leaving age were provided under the hutting operation for the raising of the school age (the H.O.R.S.A. scheme) carried out by the Ministry of Works; about 22,000 places were found in existing schools where there was a surplus of accommodation or where by crowding up additional pupils could be accommodated; and about 3,500 places were provided in new schools built by education authorities.

It is estimated that about 40 per cent. of the new houses provided in Scotland create a need for new school accommodation and that the new housing provided since the war has led to a need for about 84,000 places. Moreover, if the present plans for new housing are carried out they will call for a further 114,000 places by the end of 1957.

The increased demand for school places due to the high post-war birth rate will be only temporary and in many areas the need will be met either by using surplus places in existing schools or by the accommodation primarily provided to meet the need arising from new housing, but it is estimated that about 21,000 additional places will be required.

About 4,000 places will be needed in order to get rid of oversize classes. The Schools (Scotland) Code, 1950, imposes new limits on the size of classes, the most important change being that the maximum size of a primary school class for normal children should be 45 instead of 50.

3. The information given in paragraph 2 may be set out in tabular form as follows:—

The general building position

Year	Number of school places required as a result of				Number of school places provided by		Deficit in school places at end of year
	Raising the age	New housing	Increasing roll	Oversize classes	H.O.R.S.A.	Education Authorities	
At end of war ...							24,000
1945 ...		1,200				2,800	22,400
1946 ...		9,400				2,000	29,800
1947 ...	19,200	14,000			7,500	2,400	53,100
1948 ...	25,500	16,600			21,800	8,500	64,900
1949 ...		15,000			8,200	12,100	59,600
1950 ...		14,900		4,200	1,500	17,300	59,900
1951 ...		12,700	1,000		1,800	18,400	53,400
	44,700	83,800	1,000	4,200	40,800	63,500	
1952 ...		15,000	6,600		600	19,900	54,500
1953 ...		16,700	5,200			19,900	56,500
1954 ...		18,400	3,400			19,900	58,400
1955 ...		20,200	1,800			19,900	60,500
1956 ...		21,600	1,600			19,900	63,800
1957 ...		21,600	1,400			19,900	66,900

The Table has been extended to show the estimated position in the next five years on the assumption that the school building programme continues at the 1952 level and that the present plans for house building are carried out. It will be observed that the existing level of school building would not be sufficient to keep pace with the estimated needs.

4. The extent to which the need for new school building can be met is limited by the general restrictions which have had to be imposed on capital investment. The Department's total capital investment allocation for 1952 is only £6.4m. and, as will be seen below, by far the greatest share is necessarily allocated to the provision of new school places. As a result, much less than would be desirable has been allocated to buildings for technical education. Fortunately little need be spent on building for the training of teachers, since the existing colleges are adequate and in good condition.

No expenditure is being incurred on:—

(1) The reduction of the size of the classes below the maximum prescribed by the Education (Scotland) Code.

(2) The replacement of obsolete or unsatisfactory premises.

(3) The provision of nursery schools.

(4) The expansion of the school meals service.

(5) The development of libraries and community centres ; and

(6) Provision for any further raising of the school age or for compulsory attendance at junior colleges.

Allocation of investment

TOTAL	£6.4m.
Schools (new buildings, extensions, adaptations)	£4.45m.
Technical education	£0.2m.
School Meals	£0.1m.
Approved Schools	£0.1m.
Other buildings (including private schools)	£0.15m.
Repairs and maintenance	£1.4m.

5. The value on completion of the new buildings, additions and adaptations under construction at 31st August, 1952, was £13m.: the corresponding figure for new buildings, additions and adaptations at the plans stage at 31st August, 1952, was £14.6m.

6. Deficiencies of accommodation cause waste of money: for example, Glasgow spent £80,000 in session 1950-51 on transporting pupils from new housing areas to schools in the city.

Procedure for dealing with building projects

7. The procedure for dealing with school building projects is laid down in the Code of Building Procedure which was drawn up and agreed with representatives of Education Authorities as part of the work of the Local Government Manpower (Scotland) Committee. This Code provides that the several factors which influence expenditure on school buildings receive separate consideration. The next paragraphs deal with these factors in turn, explaining the nature of the supervision exercised by the Department.

8. An Authority propose to erect new accommodation only after considering the needs of the area as a whole, taking into account all existing buildings. Schools Branch of the Department, with the help of H.M. Inspector for the District, examine the problem independently and suggest alternative arrangements wherever these appear to be economical. The provision of one school too many in a large area, or of a larger school than is necessary would be gross mistakes leading to the waste of very large sums.

9. When the need for a school of a particular kind is established and its probable roll estimated with care, the Authority specify the number of rooms required and the size of each. Their proposals are examined by Schools Branch and Building Branch, again with the help of H.M. Inspector; and the general aim is to ensure that so far as possible instructional rooms will be in use throughout the whole school day. In primary schools, a room is allowed for each class; and staffrooms, store-rooms and lavatories are provided on a reasonable but economic scale. In the usual primary school (most primary schools in recent years have been in new housing areas, and are for 14 normal classes, i.e., two classes per year-group), three rooms are provided in addition to the 14 classrooms—(1) for art and crafts; (2) for a backward class; and (3) for general purposes. A hall is allowed to serve for assembly, for physical education and for dining. The rooms are normally provided to seat 45 children, but if it is estimated that classes will be substantially smaller, smaller rooms are provided. In secondary schools, it has until recently been the practice to allow each full-time teacher likely to be required a room of a type appropriate to the work which he will do. This standard provides more teaching space than is strictly necessary: because (1) the room has no class during the teacher's non-teaching periods, and (2) since the teaching room provided must be big enough to hold the largest of his classes, it is needlessly large when he is teaching his smaller classes. In recent cases accordingly the Department have departed from the practice of fixing the number of rooms on the basis of allowing a specific room for each teacher and this has enabled reductions to be made both in the total number of rooms and in room sizes. The reductions in the size of rooms have varied from 8 to 16 per cent. Since secondary schools are used in the evenings for purposes of Further Education, they are sometimes provided with some extra accommodation, and a hall and a dining-room are provided in addition to gymnasia.

10. When the nature and size of the rooms of a school have been determined, the Authority's architect prepares sketch-plans. At this stage there is much informal discussion with the Department's architect. Care is taken that non-instructional spaces are kept to a minimum; for example, whereas corridors formerly accounted for 25 per cent. or more of the area of a school, the figure is seldom now as high as 20 and is often considerably less. The nature of the structure is examined to see that it is economical of money and of scarce materials (timber and steel).

11. When the sketch-plans are approved, the Authority proceed to make working drawings and to draw up specifications. When tenders are obtained, a note of the three lowest is passed to the Department who call for working drawings and specifications if, but only if, the prices seem unduly high. In several instances substantial economies have been achieved even at this stage.

12. A building must not be begun before the starting date has been fixed by the Scottish Building Committee, the body which ensures that the building industry in any locality is not overloaded. The Department apply to the Building Committee months before the tender stage is reached, provided that they are satisfied of the urgency of the building and that room can be found for it within their allocation of investment. The Department are also responsible for giving timber and steel licences and for seeking, through the Scottish Home Department, sanction for the necessary loan.

13. The officers of the Department who deal with building cases, whether they are in School Branch or Building Branch or are Inspectors of Schools or architects, form a closely knit team. They have been greatly helped, in their consideration of their own problems, by the Building Bulletins which have been published by the Ministry of Education as a result of the development work done there. These Bulletins are available to Scottish Authorities, and the Ministry's Chief Architect gave illustrated lectures in Scotland which were attended by a large number of the architects who are engaged on school building. Conditions, both educational and geographical, differ on the two sides of the Border and accordingly the advice given in the Bulletins is not always applicable in Scotland.

14. The Department emphasise to Authorities the need to economise steel and, through their architects, give much advice on the economical use of this material. The consumption of steel works out at 1.06 tons per £1,000 expenditure, when spread over the whole building programme, and at 1.25 to 1.30 tons per £1,000 expenditure, if maintenance is excluded. It is difficult to see how these figures can be reduced.

15. Hardwood (not controlled) is used for the floors of gymnasia and of some special rooms. Softwood, a controlled material, has been eliminated from school construction almost entirely except for doors and for some fittings. Consumption is running at the rate of 0.13 standards for £1,000 expenditure, when spread over the whole programme, and at 0.10 standards (or thereby) if maintenance is excluded. The Department regard these figures as the lowest which can reasonably be attained.

16. Every commercial form of prefabrication has been examined by the Department and, in all cases where the form has been regarded as suitable for Scottish schools, the Authorities have had their attention drawn to it. Prefabricated buildings have enabled some Authorities to solve quickly problems which could not otherwise have been timeously met. It has not been the Scottish experience, however, that prefabricated buildings have lessened costs. Also, some of the commercial forms of prefabricated construction are not suited to the type of school building of two or more storeys which, in view of the nature of the site, it is often necessary or desirable to provide. For these reasons the proportion of projects using prefabrication is declining. The Department's architects will continue to study the work done by the Ministry of Education in developing methods of prefabrication, with a view to encouraging the use of such methods where they can be economically applied in Scotland.

17. The Department have never had Building Regulations and their control of costs has been achieved through the Grant Regulations. Neither have the Department imposed any general limit of cost per pupil place, since they have found it impracticable to impose the same limit on all Scottish areas, irrespective of geographical circumstances, or on all buildings irrespective of differences of size or of site.

18. But, although no general limit of cost per pupil place has been imposed, the Department have constantly tried to keep down costs, first by imposing in 1949 a limit for primary schools of 55 sq. ft. per pupil place, a figure which at normal prices was then equivalent to £170 per pupil place, and later, in 1950, by asking for further economies and announcing a cost of £140 per pupil place as the objective. Throughout the scrutiny of individual projects, as described in paragraphs 7 to 11 above, a strenuous effort has been made to achieve these reductions against the rising level of building costs. Most primary schools today have areas of between 45-50 sq. ft. per pupil place. Since few complete secondary schools were planned until 1950, evidence on which to formulate a proper objective is only now becoming available. It seems that a cost, at present prices, of £200 per place (places being reckoned as total accommodation) may be attainable.

19. The average cost per pupil place for primary school projects approved up to the present is shown below. The figures are derived from (*a*) the price of the school as quoted on tender, and (*b*) the total number of children who can be accommodated in each of the rooms which is in almost continuous use by one group of children.

Date of tender	*Average cost per pupil place*
1946-48	£150
1949	£175
1950	£165
1951-52	£150

The rise in cost till 1949 reflects the general rise in building prices: the fall since that date shows that increasing insistence on economy has more than offset further rises in price levels.

The Scottish and English figures are not comparable, for two reasons: (i) in Scotland the accommodation of every normal class room is taken to be 45, which is the maximum size of class permitted by the Schools (Scotland) Code, 1950; in England the corresponding figure is 40; and (ii) in Scotland, if provision is made for backward children, the room is counted as providing accommodation for the 20 pupils who will occupy it continuously; in England, no addition is made.

20. Only 15 secondary schools have been started since the war and of these only three were started in 1951 or 1952. The cost per pupil place of these schools is worked out by adding the figures of accommodation provided by all the teaching rooms—whether class rooms or practical rooms—provided in the school. On this basis the average cost per pupil place of the schools started in 1949 is £232, and the corresponding figures for schools started in 1950 and 1951-52 are £205 and £218. This basis of calculation differs fundamentally from that adopted in England and a fair comparison between the figures for the two countries can hardly be made; but it is clear that, if recalculated on the English basis, the Scottish figures would be substantially higher than they are.

Finance

21. From paragraph 4 it will be seen that the value of the educational building work to be carried out in 1952 is £6.4m. Of that sum, £1.4m. will be expenditure on repairs and maintenance, and this will be met largely out of revenue. The remaining £5m. will be the capital sum incurred on new premises or on additions and adaptations, and will largely be met from loans. Only the loan charges (interest and repayment) on the capital sums spent in this and in previous years are met from revenue.

22. The revenue expenditure of the Authorities is aided from the Main Grant, the nature of which is explained in paragraphs 30-32 of the Memorandum on Technical Education. Grant is at the rate of 60 per cent. of the expenditure approved by the Department, but expenditure arising from those parts of buildings which are necessary for the meals service attract grant at the rate of 100 per cent. The estimated amount available from the Education (Scotland) Fund for grants to education authorities, including grants on buildings, is shown as item 2 (14) on page 93 of the Civil Estimates for 1952-53 (Class IV, Vote 14).

23. In addition to the grant aid described in paragraph 22, the following grants for building are made, subject to the approval of plans and estimates by the Department. These grants are included in the items mentioned below on page 93 of the Civil Estimates for 1952-53.

(1) Grants are given to the Managers of Central Institutions, as described in paragraph 15 of the Memorandum on Technical Education. These grants, which amount to £215,000, are included in item 2 (1).

(2) A grant not exceeding 75 per cent. of approved expenditure on buildings is paid to the National Committee for the Training of Teachers in respect of Training Colleges. Item 2 (2) includes £41,450 for grant on such expenditure by the Committee.

(3) Item 2 (5) includes £10,000 as an estimated payment, under the Residential Special Schools and Orphanages (Scotland) Grant Regulations, 1948, for additional accommodation at the Royal Blind School, Edinburgh.

(4) Item 2 (15) includes £3,000 as an estimated payment, under the Education (Scotland) Social and Physical Training Grant Regulations, 1946, to voluntary bodies providing various kinds of informal further education.

ANNEX 4

THE SCHOOL BUILDING PROGRAMME IN SCOTLAND

Supplementary Memorandum by the Scottish Education Department

1. This memorandum provides supplementary information on questions raised by the Committee when they took evidence from the Department on 17th December, 1952.

Unsatisfactory schools

2. The following table shows the number of schools, or parts of schools, which are so unsatisfactory that they would require immediate or early replacement, if such replacement were possible. The rolls concerned are also shown.

Schools requiring replacement

Location	*Number*	*Roll*
Industrial areas	12	3,700
Other areas	36	4,700

Parts of schools requiring replacement

Location	*Number*	*Roll*
Industrial areas	24	6,300
Other areas	30	4,200

Nursery Schools; Investment Policy

3. Government policy was laid down both for England and Wales and for Scotland in the Command Paper, "Capital Investment in 1948" (Cmd. 7268), in these words:—

"Paragraph 35. The statutory obligations of the local education authorities in regard to the first three requirements" (places needed for raising the school age to 15; schools to meet new housing developments; maintenance of existing primary and secondary schools, including provision to meet the rise in the birth-rate) "must be clearly fulfilled, but major projects for nursery schools and classes will be deferred, except where they are needed to assist mothers to enter industry, and no building proposed for children of compulsory school age will be sanctioned unless the Ministry" (or Department) "is satisfied that the fullest use is being made of all available existing accommodation and that no improvisation is practicable."

"Paragraph 36. The school meals building programme will be kept at the lowest level compatible with the reasonable maintenance of the service . . . ."

"Paragraph 37. In the field of Further Education all major proposals for community centres, adult education centres and youth clubs will be deferred."

There have been no major changes in this policy since 1948.

Transport Costs

4. It is not possible to say precisely how far increased expenditure on the transport of children to school is being incurred because houses have been occupied before the schools are ready, but it is estimated that the figure for Scotland as a whole in 1951-52 approached £125,000. The Education Authority areas where the costs exceeded £1,000 are:—

Area	*Expenditure in* 1951–52
	£
Glasgow	103,900
Edinburgh	10,900
Renfrewshire	1,600
Dunbarton	1,200
Ayrshire	1,200
Dundee	1,100

Cost of Timber Schools

5. The average net cost per place of the six complete schools which have been built in timber since 1950 or are being now built in that medium is almost exactly £150, which shows that this method of construction works out slightly cheaper than the traditional method.

ANNEX 5

THE SCHOOL BUILDING PROGRAMME IN ENGLAND AND WALES

Memorandum by the Association of Education Committees

We assume that the Committee already has all relevant statistical information relating to the building programme and a full statement of the procedures which are adopted relating to it. The Committee will be aware that the task facing Local Education Authorities after the war involved a very substantial expansion of their machinery for planning and building schools. This expansion necessarily required time and it will have been noted that it was not until 1949-50 that the programme reached the necessary level.

Our first comment therefore must be to draw attention with great regret to the fact that the capital expenditure approved by the Ministry which had reached the level of £70 millions in 1949-50 was reduced to some £30 millions in 1951-52 and has only been restored to £56 millions in the coming year. Local Education Authorities, having geared up their machinery to handle a building programme of the order of £70 millions a year in 1949 (£90 millions to £100 millions in terms of current prices), a figure which was recommended by a Committee of the Ministry established under the Chairmanship of Sir William Cleary, have in the last two years had the flow of school building thus established seriously interrupted. The present building programme does not, in our opinion, use the full resources which have been established by Local Education Authorities.

The second point to which we would draw attention is that the size of the building programme, while no doubt determined by the availability of materials and manpower, implies two fundamental assumptions, with both of which we are in disagreement.

The first of these is that at the end of the war the school buildings then available must be deemed to be acceptable for the next decade or more. It may be argued that the Ministry with the limitations on the building programme which exist simply recognise that they had to use the accommodation then available, but this means that it is assumed that nothing can be done over a period of ten years or more to bring that accommodation to standards which more nearly approximate to the Regulations of the Minister. This we regard as most unsatisfactory, particularly when we recall that almost one million school places were damaged or destroyed by enemy action and that the state of school buildings at the end of the war was most unsatisfactory, including as it did the continued use of some 600 schools blacklisted as long ago as 1925.

The second assumption relates to the relationship between the provision of new school places and the number of children who will require to be accommodated in them. The total increase in the school roll was inevitably adjusted after due regard to school places available and resulted, we believe, in the establishment of the fact that new school places were required for 1,150,000 children by the end of 1953. The Ministry appear to make the assumption that the provision of 1,150,000 school places is adequate for that purpose. This proposition we reject. Administrative realism demands that for such a number of children the number of school places must be at least 100,000 more. There is another way of putting this matter. By this decision the Minister requires that many of the schools now being built shall be overcrowded from the beginning. In other words not even in the new schools now being built are the Regulations of the Minister to have any real application in terms of the relationship between the number on roll and accommodation. We are therefore bound to state our view that the school building programme at present is inadequate to meet essential requirements.

With this programme the limitations are very severe. The only grounds on which school places are provided at the present time are, first, to meet the needs of the increased birthrate and, secondly, to meet the needs of children moving to new housing estates. We have noted above that the programme does not even meet these essential requirements adequately but we are bound to stress to the Committee the important additional requirements for which no provision is made at all.

First, there is the fact that the housing programme has been substantially expanded during the last year without any increase in the school building programme. Secondly, there is complete failure to make provision for bringing wholly unsatisfactory existing accommodation up to required standards.

Thirdly, there is no provision to enable reorganisation (that is the provision of secondary education for all) to be carried to completion. In particular, we draw attention to two points. In the rural areas reorganisation lags behind. In these areas the frequency of housing development is less and, as a result, the incidental reorganisation which can to some extent be carried out under the present building programme is not operative in the countryside. Thus parents in the rural areas, while paying for the provision of secondary education for other children, are denied secondary education for their own children. Until reorganisation is complete the provision of secondary education for all, which is a fundamental of the Education Act of 1944, will not be operative. The second point of great importance is that the inability to effect reorganisation in secondary schools within the present limits of the building programme has prevented the provision of technical education at this stage as envisaged in the Act. This, in our opinion, is a matter of serious concern since the provision of secondary technical education in adequate premises seems to us an essential part of the development of technical education as a whole. Some further reference is made to this matter in our memorandum on technical education.

Our first major submission, therefore, is that the school building programme is at present inadequate to the needs of the situation. While we fully recognise that the total calls on building resources exceed the capacity of the industry, we would most earnestly urge the Committee to consider whether an increase in the school building programme is not urgently required to meet essential needs.

We turn now to the effectiveness with which the school building programme is being carried out. The Committee will be aware that in the early days following the war in a rapidly developing situation substantial variation in building costs revealed itself. The Ministry of Education, in full co-operation with local education authorities, established a Department appropriately staffed which sought to achieve three results: (1) to enable the best practice of local education authorities to be made generally known by the provision of an effective information service, (2) to enable the latest research results on building procedures to be conveyed to local education authorities, and (3) to establish criteria of cost which could be made known and applied in the establishment of a cost per place formula which would ensure effective control throughout the country.

We should say at once that we recognise that this Department of the Ministry has been of the highest possible value in the development of the school building programme and we believe present standards in school building are at once more economic and more effective than at any previous time. The present scale of costs was established three years ago. It is well known that building costs have increased by some 35 per cent. since that time. Despite that fact local education authorities have built schools within the ceiling prices laid down by the Ministry. This has been achieved first by variation in Regulations, secondly by more effective planning, in particular securing the minimum of circulation space and the maximum of teaching space, and, thirdly, by a development of dual purpose practice. We do not fail to recognise that not all present practice commends itself to educational opinion. We accept present procedures and present space planning in the interests of economy, but we do not accept the claims sometimes put forward that present practices have positive educational advantage. Some of the present practices, in our opinion, are undesirable and, while they may necessarily be accepted in the interests of economy at this time, we would hope in due course to return to better standards of provision than at present obtain.

In a situation in which labour and materials are in short supply the present arrangements are of the greatest value in enabling local education authorities to use alternative building procedures involving where necessary economy in skilled labour, as for example bricklayers, or in materials, as for example steel. There has been extensive use of prefabrication in the school building programme. It is our experience that prefabricated methods of construction for school buildings do not involve any major economy in price. We do, however, recognise that such methods do involve economy in the use of skilled labour and economy in time. The average time taken to complete a school at present is substantially less than it was in earlier years. At this stage we have insufficient experience of prefabricated school buildings to produce evidence regarding the level of maintenance costs. We are, however, a little concerned lest these buildings should involve higher maintenance costs in the years that lie ahead than have previously obtained with orthodox methods of construction.

We draw special attention to the existing cost per place imposed by the Ministry in primary and secondary schools, namely £140 and £240 per place respectively. During the last three years in a situation of rising costs we have managed to build within these limits by better planning, modifications in requirements under Regulations.

improved procedures and methods of building. There is, however, a limitation to these processes and we are satisfied that no significant further economies can be achieved in this way. If, as we believe likely, further increases in building costs arise, then it is our opinion that these can only be met by an increase in the cost per place formula. We believe that a situation may well arise in the coming year when authorities will find that however ingenious their plans may be and however skilful their architects they cannot provide primary and secondary schools within the limits of £140 and £240 per place respectively, in accordance with the present Regulations.

We summarise our observations on the school building programme as follows:—

1. The school building programme should be increased. The total provision is inadequate to meet essential needs and makes no provision whatever for necessary improvements in existing buildings and for secondary education in accordance with the Act of 1944. In our opinion it is not adequate even to meet the needs of the increased birthrate and the requirements of new housing estates, which are the present priorities.

2. The general arrangements under which the school building programme is carried out, involving a close and continuing partnership between the Ministry of Education and local education authorities are working effectively. The Building Department of the Ministry has, in our opinion, made a most valuable contribution in co-operation with local education authorities to ensure more economical and effective school building.

3. New methods of construction and, in particular, the use of prefabrication, are not, in our opinion, an economy in money, but are an economy in time. Whether future maintenance costs will show an increase as a result of the prefabricated methods of construction is a question on which we have no evidence but on which we express concern.

4. While we accept in the interests of economy present procedures on school planning involving dual use of accommodation and the virtual elimination of circulation space, we note with concern that these are in some cases educationally undesirable and should therefore be reviewed when the financial position permits.

5. In our view any further increase in building costs can only be met by an increase in the present ceiling prices per school place permitted by the Ministry.

ANNEX 6

THE SCHOOL BUILDING PROGRAMME IN ENGLAND AND WALES

Supplementary Memorandum by the Association of Education Committees

When the representatives of the Association gave evidence to the Select Committee it was agreed that a further short memorandum dealing in particular with two points would be of assistance to the Committee. This memorandum has been prepared accordingly.

1. The first point on which further evidence was sought was the cost of school buildings built by orthodox methods of construction compared with the cost of similar buildings built by prefabricated methods. For this purpose we invited a detailed statement from the North Riding Education Committee, all of whose schools have been built by orthodox methods of construction, and a similar statement from Hertfordshire, where prefabricated methods have been extensively used. We attach hereto a detailed statement of the costs in the North Riding and Hertfordshire which will enable the Committee to compare the two sets of figures. In so doing, we would draw attention to the importance of comparing figures for schools built under particular regulations with schools similarly built. This is of importance since the regulations have varied.

The second point of comparison which now will be made by the Committee will be the cost per place, which is perhaps the best single measure of comparative costs. We hope this additional information will help the Committee to make a judgment on the matter which was the subject of discussion earlier.

2. The second point on which we were invited to submit additional evidence was the cost of school transport, arising directly from the failure of the school building programme to keep pace with the housing programme. The question addressed to Local Education Authorities was in these precise terms:—"It is, therefore, to be understood that the cost of transport to which we here refer is an expenditure of money which would not have arisen if school places had been provided to keep pace with new houses." We have been advised by 22 County Authorities and 25 County Borough Authorities that they are incurring expenditure in precisely these circumstances. The total cost they have estimated at £135,000 in the current year. It is to be assumed that in the other Authorities this problem at present does not arise. I attach a list showing the names of the Authorities and the amount of expenditure in each case. We would draw attention to additional expenditure which does not fall on public funds. It is to be assumed that in addition to the expenditure referred to above parents of particular children will incur expenditure on transport where the children actually reside within legal limits of the school they are attending and, therefore, are not subject to aid from public funds for this purpose, although the parents may well feel the distance of three miles in the case of children of eight years and two miles in the case of children under eight is still sufficiently great to justify them in sending the children by transport where it is available.

We hope this additional information will be of assistance to the Committee. If there is any other information the Committee feel we can provide, we shall, of course, be happy to endeavour to do so.

Name of Education Committee	*Estimated cost of school transport in the financial year 1952–53 which would not need to have been provided if school places had been provided to keep pace with new houses* £
COUNTIES:	
Bedfordshire	375
Cambridgeshire	530
Cumberland	75
Derbyshire	1,400
Dorset	1,850
Durham	1,340
Essex	28,350
Hampshire	2,000
Isle of Ely	733
Lincs.—Kesteven	3,940
Lincs.—Lindsey	80
Northumberland	2,713
Oxfordshire	150
Staffordshire	11,000
Surrey	3,038
Sussex—East	100
Warwickshire	2,500
Wiltshire	1,430
Worcestershire	170
Yorks.—East Riding	1,085
Yorks.—North Riding ...	7,000
Glamorgan	7,640
	£77,499

Name of Education Committee	*Estimated cost of school transport in the financial year 1952–53 which would not need to have been provided if school places had been provided to keep pace with new houses*
	£
COUNTY BOROUGHS:	
Birkenhead	3,000
Birmingham	17,000
Bolton	365
Bootle	35
Bradford	1,135
Carlisle	320
Doncaster	50
Gateshead	337
Gloucester	12
Hastings	150
Huddersfield	748
Leeds	910
Leicester	3,725
Liverpool	9,635
Manchester	3,780
Nottingham	1,790
Portsmouth	810
Preston	1,725
St. Helens	476
Sheffield	2,500
Stoke-on-Trent	1,627
Sunderland	5,900
West Bromwich	750
York	665
Cardiff	150
	£57,595
	£
COMBINED TOTALS:	
Counties	77,499
County Boroughs	57,595
	£135,094

NORTH RIDING EDUCATION COMMITTEE

School Building Costs

	School	Building Regulations	Number of Cost Places as M. of E.	Square feet per Place	Date of Tender	Cost per Place on Tender	Cost per Place on Final cost
						£	£
	Primary						
1	Ormesby C.P.	1945	320	57·3	6/ 2/48	113·1	114·4
2	Whitby C.P.	1945	320	64·5	30/ 4/48	131·5	133·0*
3	Newby C.P.	1945	320	70·9	6/ 8/48	143·4	147·7
4	Barrowcliff J. & I.	1945	560	61·0	29/ 4/49	121·8	122·0*
5	Saltburn	1945 Circ. 253	250	50·2	8/ 8/49	118·5	120·0*
6	Redcar J. & I....	1945 Circ. 209	560	58·8	11/11/49	130·8	
7	Grangetown C.P.	1945 Circ. 253	250	53·0	11/ 8/50	130·4	
8	Thornaby C.P.	1945 Circ. 253	250	51·0	29/ 9/50	126·2	
9	Guisborough C.P.	1945 Circ. 289	360	53·9	16/11/50	136·6	
10	Eastfield C.P.	1945 Circ. 215/253	250	52·5	17/ 5/51	134·4†	
11	Romanby C.P.	1945 Circ. 253	190	43·9	20/ 7/51	122·1	
12	Loftus C.P.	1951 Circ. 253	250	50·8	28/ 1/52	136·9	
13	Haxby C.P.	1951 Circ. 253	220	40·8	8/ 2/52	124·5	
14	Eston Infants	1951 Circ. 253	250	41·5	7/11/52	141·3	
	Secondary						
15	Catterick C.M.	1945 Circ. 209	510	117·8	3/11/49	247·7	290·9*
16	East Cleveland High	1945 Bul. 2A Circ. 289 ...	578	90·8	20/10/50	243·9	
17	Whitby C.M.	1945 Circ. 289	510	90·9	16/12/50	212·9	
18	Ryedale C.M.	1945 Circ. 289	510	86·4	12/ 1/51	232·6‡	
19	Easingwold G. & M.	1945 Circ. 289	714	96·8	2/ 2/51	260·8§	
20	Eston C.M.	1945 Circ. 289	510	93·0	9/ 2/51	232·2	

* Provisional.

† Kitchen provided for this school will also serve the proposed Junior School.

‡ Contractor and labour 23 miles from site. Allowance has been made for 3 additional classrooms to be built at a later date when the school leaving age is raised.

§ Contractor and labour 13 miles from site.

HERTFORDSHIRE COUNTY COUNCIL

Time taken for building Schools

Primary Schools

The first school built after the war, Cheshunt Burleigh, took 1 year and 10 months to complete. The average time for the 10 schools of the first, the Operational Programme, 1947, was 1 year 8 months, the longest 1 year 10 months for Cheshunt Burleigh and Croxley Little Green and the shortest 1 year 4 months for Hitchin Strathmore.

For the next programme, 1948 and 1949, 21 schools in all, the average time taken was 13½ months, the longest times being Hemel Hempstead Adeyfield and Oxhey Wood in 16 months and the shortest, East Barnet Brookside, Boreham Wood, Cowley Hill and St. Albans Mandeville in 11 months.

The 1950 programme was completed on the average in 14 months but there was one, Oxhey Little Furze on an extremely difficult site, which took 2 years.

The 1951 programme averaged 13 months, so that over the five years there has been a gradual speeding up in the time taken for building.

These details relate to the schools erected in the County Architect's form of construction, either by his department or by private architects using his system.

In addition 5 schools, two County and three Voluntary have been completed in traditional brick construction, the time taken ranging from 1 year 10 months for East Barnet Burlington to 11 months for Waltham Cross Vicarage Field, an average of 1 year 5 months.

Over the whole group of 51 primary schools now open, the average time has been 15 months, only 8 have taken more than 18 months, 6 of them in the first programme, and 8 have been built in a year or less.

These figures are for the completion of the whole school but in many cases because of the pressure of numbers we have occupied classrooms or groups of classrooms well before the actual completion dates.

Though the time taken for the brick built schools is not very much greater than that taken for our own construction it has to be remembered that in the particular circumstances in Hertfordshire, with the large building estates taking so much building labour, it would have been quite impossible to undertake programmes of the size we have had if we had relied on traditional methods.

Secondary Schools	*Time taken*	
	Years	*Months*
Oxhey, Hampden	2	7
Oxhey, Clarendon	1	9
Hoddesdon, Stanstead Road	2	1
Hemel Hempstead, Adeyfield	1	10
St. Albans, St. Julians	1	9
St. Albans, Girls' Grammar	1	8

Cost per place

Primary Schools

1947 "*Operational*" *Programme.*—Final costs have worked out as follows:—

	Places		£
Cheshunt J.M.I.	320		159
Essendon J.M.I.	120		224
Letchworth, Wilbury J.M.I.	320		168
Hemel Hempstead, Belswains J.M.I.	320		173
Bushey Highwood J.M.I.	320		164
Croxley Green, Malvern Way Infants	320		168
Croxley Green, Little Green J.M.	360		157
Oxhey, Warren Dell J.M.	360	600	165
Oxhey, Warren Dell Infants	240		
Hitchin, Strathmore Infants	360		154

This shows an average cost per place of £166, but at this time no ceiling figure had been fixed by the Ministry.

1948-49 *Programme*

We have no detailed analysis, the ceiling figure of the Ministry was £190 and the costs were all within this figure.

1950 *Programme*

Against a ceiling price of £190 the costs per place based on an analysis of the tenders accepted were:—

	Places	£
Baldock, Weston Way Infants	240	166
East Barnet, Daneland Infants	240	191
Abbots Langley Infants	240	169
London Colney, Bowmansgreen J.M.I.	320	161
Letchworth Grange J.M.	360	147
Welwyn Garden City, Blackthorn J.M.	360	148
Oxhey, Little Furze J.M. and Infants	600	177
*Brookmans Park J.M.I.	160	208

1951 *Programme*

Against a ceiling price of £140 per place the costs per place based on analysis of the tenders accepted:—

	Places	£
Oxhey, Greenfields J.M.I.	280	140
Boreham Wood, Kenilworth Drive J.M.I.	280	137
Boreham Wood, Theobalds St. J.M.I.	560	126
Hatfield, Cranbourne Infants	240	127
Boreham Wood, Summerswood J.M.	320	128
†Stevenage, Broombarns Infants	240	167

1952 *Programme*

Against ceiling price of £140.

	Places	£
Watford Garston J.M.	480	131
Letchworth, Archers Way Infants	240	142
Waltham Cross, Park Lane J.M.I.	280	138
East Barnet, Bevan J.M.I.	280	134
Bishop's Stortford, Havers Lane J.M.I.	280	134
Oxhey Site 7 J.M. and I.	560	135
Boreham Wood, Saffron Green J.M.I.	280	139

Secondary Schools

We have no details yet of the Secondary costs per place.

ANNEX 7

THE SCHOOL BUILDING PROGRAMME IN SCOTLAND

Memorandum by the Association of County Councils in Scotland

1. In extensive new housing areas it is false economy to build schools with only minimum provision for day school education without having regard to the needs for community centres. If at a later stage it is desired to build a community centre with a hall, gymnasium, lecture rooms, etc., the additional cost would be considerably more

* J.M.I. School for 280 eventually, but only 4 classrooms built in the first instance, Assembly Hall, Kitchen and Administrative rooms as for the complete school. This accounts for the high cost per place.

† A Junior school is to be built in 1953 on the same site. The cost above includes Boiler House for both schools and also Dining Room and Kitchen for the Junior School.

than the inclusion in the original scheme of sufficient accommodation to make these rooms available jointly for school and community service purposes. The policy of making one hall serve the purposes of assembly hall, gymnasium and dining room for a primary school ignores this fundamental principle.

2. Modern school planning shows a tendency for the building to spread over a wide area, e.g., the aeroplane or butterfly type. This is expensive of land, heating arrangements, corridors, roof space and to some extent increases the difficulties of general control.

3. The cost of school buildings is not determined alone by the provision of classrooms and their ancillaries. A large part is occasioned by cloakrooms, lavatories and corridors. It is increasingly desirable that modern ideas on decreasing the relatively high costs of corridor and circulation space should be made widely known.

4. In regard to materials, early intimation should be given to Education Authorities of pending or anticipated shortages so that the type of construction envisaged can be adjusted, and the abandonment of plans, or the occurrence of uneconomic delays during the course of the project, avoided.

5. The Scottish Education Department could also assist Education Authorities by bringing to their notice examples of design and of the use of prefabricated or other types of construction which have been found economic in so far as cost is concerned and satisfactory from the educational point of view. With the amount and variety of school building in progress in Britain and abroad, some useful information of the type suggested should be readily available to the Department.

6. Some Education Authorities have experienced difficulty in preparing plans of new schools during a period when the standards for accommodation and costs operated by the Scottish Education Department are constantly changing with resulting delays in the progress of projects and the incurring of additional expenditure in architect's and surveyor's fees through the abandonment of plans. While the difficulties are appreciated some economy could be effected if the Department adopted standards for all types of schools which would remain operative for a given period and which are known to the Education Authorities. In this connection the Department should in so far as standards are concerned at least, approve plans prepared by the Education Authority on the basis of standards recognised and intimated to Authorities at the time of preparation and not, except in minor detail, require them to be abandoned in the light of standards contemplated or issued subsequent to the date on which the plans are prepared.

7. In senior secondary schools, particularly for classes S IV to S VI, it is wasteful to have classrooms of normal size for small groups, those, for example, taking Greek, Latin, University Mathematics, etc. Is it necessary to have all the classrooms in senior secondary schools of the standard type suitable for the larger classes and the first three years?

8. In the larger secondary schools which have a considerable number of practical rooms a predetermined proportion of floating classes should be regarded as normal, i.e., the number of classrooms should be less than the number of classes, since accommodation for a proportion of the pupils is available and always in use in practical rooms.

ANNEX 8

THE SCHOOL BUILDING PROGRAMME IN SCOTLAND

Memorandum by the Association of Directors of Education in Scotland

The following is a summary of the views of Directors of Education in those areas in which extensive building programmes are involved:—

1. *Building Programmes and Educational Needs.*—Generally speaking the provision of school buildings is lagging behind the expansion of educational provision particularly in new housing areas. In the rural parts the problem is more one of extending and improving existing schools. In urban areas the modernisation of many existing schools is prevented by the needs of the housing areas. The cost of alternative provision particularly in urban areas by way of erection of temporary buildings, hire of halls and transport is considerable.

2. *Causes of Delay.*—There are many contributing factors to this costly delay:—

(*a*) The effects of Town and Country Planning procedure and the changes which take place in the development of new housing areas involving alterations in school planning.

(*b*) The protracted negotiations in the acquisition of sites particularly when the ground does not lie within the area acquired for housing development: accentuated by uncertainty as to the size of site that will be approved: must preparation of plans await transfer of sites?

(*c*) The slowness with which school requirements are sometimes adjusted between Local Authority and Scottish Education Department.

(*d*) Costly adjustment of plans consequent on discussion of costs and the effect of new standards being imposed in the interval between initial planning and final adjustments.

(*e*) There is need for more guidance from the Scottish Education Department on building standards and permitted costs. These should be stabilised for reasonably long periods: costs must be realistic in the light of prevailing prices and the nature and size of the school.

(*f*) Slowness with which architects prepare the final working drawings.

(*g*) Shortage of materials and diversion of labour from one job to another.

(*h*) Seldom do school projects commence on official starting dates. Is this procedure really necessary? Could relative priorities not be left to the Local Authority?

(*i*) Uncertainties in regard to standards of fire precautions lead to delay and additional cost. Scottish requirements seem to be more strict than in England.

(*j*) Shortage of staff in the architectural, technical and supervisory departments of Local Authorities: adequate salaries are necessary.

In regard to the employment of private architects, the experience has not been uniformly satisfactory from the points of view of new ideas in planning, speed of erection, or economy in design; fees make a substantial addition to costs.

What is wanted more than anything else is as great a sense of urgency in regard to school provision as is shown in regard to housing: the two are bound inseparably together.

3. *Value for Money Spent.*—Although it is difficult to judge because of the absence of criteria, it is doubtful whether many of the schools being erected today, while they are meeting the immediate situation, will ultimately prove economical particularly through the cutting down of classroom space and the omission of halls, tutorial classrooms, general purpose rooms and craft rooms. Minor economies in materials are likely to require increased expenditure at a later date. It is stressed that the schools of today must perform a dual function of educating children and providing a meeting place for adults. Any other form of social provision will prove much more costly.

4. *Non-Traditional Buildings.*—Generally speaking, experience with non-traditional buildings has been somewhat disappointing both as regards speed of erection and economy in building costs keeping in mind higher maintenance charges which will be involved in most cases. They have, however, proved suitable to the immediate needs of the situation. The one-storey types have been most costly in the use of ground. They are not to be recommended as a general form of provision except for small primary schools, nursery schools and schools for handicapped children. The future may lie in a combination of traditional and non-traditional methods.

5. *Economies in Building.*—The fullest possible value for every £ spent is a necessity. Care should be taken to avoid false economy; cutting costs at the expense of children's education is a false economy no matter the initial savings. Adequate school accommodation and getting value are not incompatible. Careful planning may often give improved facilities without additional costs and sometimes with less cost and no loss to educational efficiency. This problem cannot be solved merely by considering economy alone: a school which is cheap but is unattractive, uncomfortable and difficult in working is a disaster. A school exists to provide not only shelter but to house an educational programme for a given number of children: space, equipment and flexibility of movement are essential. The educational expert must play an active part so as to arrive at a satisfactory compromise.

Economies might be considered in the following ways:—

(*a*) Cutting down the cube content of buildings particularly in circulation space and heights of ceilings. Relation of staircases and corridors merits close examination.

(*b*) Simplifying the structural lines of building and shortening the outside shell: compactness is a primary aid to economy.

(*c*) Designing every part for maximum use although unsatisfactory combination of functions must be avoided.

(*d*) Omission of unnecessary decorative features.

(*e*) Use of repetitive structural units and standardised materials: these must, however, be simple and suitable to the particular construction.

(*f*) Material used can often serve a dual purpose, e.g., wall covering which is also the chalk-boards and pinning-up space for school work. Do not, however, cheapen the fabric too much since savings can be lost in heating and maintenance. On the other hand, do not over-build portions of the school because of too much stress on safety factors.

(*g*) Adopt a speedy system of erection since labour forms such a high proportion of the cost: this may require an alteration in traditional building procedure.

(*h*) Design for easy adaptation: schools are constantly requiring alterations, internally and externally, to meet changes in circumstances.

(*i*) Although standard plans are, generally speaking, not practicable, there are circumstances in which a good plan particularly of a primary school might form the model for several other developments adapted to suit site differences. Building costs in Scotland seem excessive when compared with England. This would seem to merit a special inquiry. With rising prices, time spent in achieving perfect economy in design may well be time wasted.

(*j*) Research is necessary into the merits of different systems of heating and of artificial lighting of school buildings.

(*k*) Information should be available on the most efficient and economical methods of placing contracts for school works.

There is need for a centre in Scotland, probably at St. Andrew's House, where ideas and experience could be collated and views readily available to school architects and educational experts when they are at the initial stages of planning schools. The cost of running such a centre at national level would be an economical investment.

ANNEX 9

THE SCHOOL BUILDING PROGRAMME (LONDON)

Memorandum by the London County Council

I. Size of Classes

The latest available statistics, viz., those for the first school day in January, 1952 (Ministry of Education Form 7), show that the average size of classes in London was then as follows:—Primary: 38. Secondary: 30. The average size can, however, be misleading.

Of the 7,033 primary school classes 2,740, i.e., 39 per cent. were, in fact, over 40, similarly of the 4,432 classes for all types of secondary school, 2,291, i.e., 51 per cent. were over 30.

II. Transport Costs

The total number of children transported daily to and from school without charge to the parents is as follows:—

Category	*Number*
Infants	400
Juniors	800
Secondary school pupils	14,500
Handicapped pupils—	
(*a*) Public transport	1,500
(*b*) School buses	3,500
Total	20,700

The estimated cost of the above transport is as follows:—

Category	1952–53 £	1953–54 £
Infants	2,200	2,250
Juniors	4,300	4,450
Secondary school pupils	77,500	84,000
Handicapped pupils—		
(*a*) Public transport	8,000	7,000
(*b*) School buses	150,000	100,000
Total	242,000	197,700

In addition children are transported free of charge to playing fields and swimming baths. The estimated cost of this transport is shown below:—

	1952–53 £	1953–54 £
Primary and Secondary Schools—		
(*a*) School buses and hired coaches ...	14,100	11,765
(*b*) Public transport	21,650	28,795
Special schools school buses	2,000	1,200
Total	37,750	41,760

There is no evidence to suggest that the development of new housing estates has materially increased transport costs since, in the main, the schools have been available in time to provide for the new child population.

The provision of new comprehensive schools is expected ultimately to reduce transport costs very considerably. In the London School Plan (Page 21, Paragraph 42) it is stated that "when the Comprehensive high school system is established there will be on the average one school to rather more than one square mile. No senior pupil should therefore have to travel so far to school as to need transport except for special reasons, e.g., when a parent desires a child to attend a denominational school, or when a child is unable to obtain admission to a school near home appropriate to his age, ability and aptitude, a contingency which would cover a pupil suitable for the education provided in one of the specialised technical courses".

III. Plans of New Schools

The arrangements are substantially as stated in evidence and may for convenience be summarised as follows:—

1. There is no consultation with teachers on plans of new schools.
2. Where an existing school is adapted or extended the Managers or Governors and the teaching staff of the school are given the opportunity of considering the plans and suggesting amendments.
3. The plans of new schools and of adaptations and extensions to existing schools are given detailed consideration by the Council's Inspectors whose advice is based on their own experience as teachers and their wide knowledge of modern school requirements resulting from constant visits to schools and discussions with teachers.
4. Through their general arrangements for regular consultation with teachers through standing consultative committees the Council's members and officers are able to obtain the views of teachers on questions of principle.

IV. Expenditure on Existing Primary and Secondary Schools

There are two main points which should be borne in mind in considering this question:—

1. The standards prescribed by the Minister in the Building Regulations, 1945, as amended in 1951.
2. The very substantial increase in the birth-rate after the war. Some measure of the effects of this increase on the school population in London can be obtained from the fact that the number of children of primary school age

actually on roll in September, 1952, was about 24,000 greater than the number in 1951. In general a review of the child population made in 1950 indicated that the number of children of primary school age was likely to increase by about 60,000 between 1950 and 1955, and the number of children of secondary school age by between 70,000 and 80,000 between 1950 and 1960.

The effect of the post-war Building Regulations is referred to in Part I of the London School Plan, Page 12 (paragraph 3) and Page 14 (paragraphs 13 and 14). It will be seen that neither the sites nor the buildings, even of the best and most recent pre-war secondary schools, reach the educational standards set by the Minister's Regulations; and that whilst for primary schools, good existing premises could be brought up to standard by some alteration and extension, the majority of the primary schools will need rebuilding.

The high post-war birth-rate has, however, made it necessary to envisage the use of existing buildings for many years to come and, at the same time, to build as many new schools as possible to cope with the additional numbers. The number of existing buildings in respect of which it would be either practicable or economical to undertake major works of reconstruction or adaptation is strictly limited and even where such work is practicable the effect is normally to reduce, not increase, the number of places. Where extensive building work has been carried out in order to reinstate war-damaged buildings, the opportunity has been taken to improve, as far as possible, the accommodation in accordance with the requirements of the Building Regulations. This has not, however, meant that more places have been provided.

In effect, therefore, it can be said that in London it would, for the most part, be neither economical nor practicable to undertake major works of extension and adaptation to existing buildings, nor would it contribute towards a solution of the problem of providing for the increased school population.

All capital work of a value exceeding £6,500 for each project must be included in a building programme the size of which for each authority in any year is determined by the Minister of Education. The full allocation for London is required for the provision of additional places either by the construction of new schools or the reinstatement of war-damaged schools.

At the same time, since accommodation in existing buildings will be required for many years, money must be spent upon these buildings. The expenditure falls under two headings, (*a*) Improvements and (*b*) Maintenance.

(a) *Improvements.*—For projects of less than £6,500 in value, the Minister of Education allocates to each Authority an amount based upon 9s. per head of average attendance plus £25 per school. This is applicable for the country as a whole though not necessarily for each individual authority. For 1953-54 the London allocation based strictly on the formula would be £217,925. Because of the special needs of London, however, the Minister has increased the allocation to £300,000.

From this allocation must be met the requirements not merely of Primary and Secondary Schools but also those of Special Schools, Training Colleges and Further Education establishments. The volume of work which can therefore be undertaken for Primary and Secondary Schools as a whole is limited whilst the extent of improvement work which can be carried out at any individual school is relatively small by virtue of the "ceiling" figure of £6,500.

Many urgent minor improvements remain to be carried out when a sufficient allocation can be made available for that purpose, but this expenditure would improve conditions and not create additional places.

(b) *Maintenance.*—So far as maintenance is concerned, the expenditure is determined by the Council's own financial policy and availability of materials, labour and technical resources. The Council's repair organisation has continuous programmes for the maintenance of London schools, including repainting at set intervals. There is, therefore, no possibility of the structure and fittings of school buildings decaying to such an extent as to make them (in these respects) sub-standard and so far there are no records of the maintenance work in any one school being disproportionately high. The standard of maintenance, therefore, will permit the occupation of existing schools for some considerable time, although the standard of accommodation will be low in some of the older schools.

The foregoing evidence, so far as it concerns buildings, relates solely to County school buildings. It should be realised that in London there are a very large number of voluntary schools. The Council's position in relation to these schools has been changed by the Education Acts, 1944-48, and the change is reflected in a continuously increasing expenditure over the last few years.

V. Provision of Additional Places for Handicapped Children

The following additional places have been provided for handicapped children in Building Programmes up to and including the 1952-53 programme:—

Category	*Residential Number of places*	*Day Number of places*	*Total*
Delicate	90	180	270
Physically handicapped	120	200	320
Educationally sub-normal	104	560	664
Maladjusted	88	—	88
Totals	402	940	1,342

ANNEX 10

THE SCHOOL BUILDING PROGRAMME (MANCHESTER)

Memorandum by the City of Manchester Education Committee

1. In the years immediately after 1944 Manchester, like other Education Authorities, sought to expand and develop its service in accordance with the Education Act of 1944 and an ambitious building programme has been attempted. This included not only new primary and secondary schools and the H.O.R.S.A. scheme but also the rapid expansion of the School Meals Service, the development of Further Education, and some building, chiefly the adaptation of old country houses, for Special Schools for handicapped children. The Authority has taken over and begun to enlarge one Teacher Training College and has recently completed the adaptation of the old Manchester Grammar School building as a second Teacher Training College. A large number of additional classrooms, many only in the form of temporary huts, have been added to primary schools since the war.

Under Section 11 of the Education Act, Local Authorities were to submit to the Minister by 31st March, 1946, Development Plans showing how it was proposed to adapt up to the standard of the Building Regulations, 1945, every existing school building which it was proposed to retain. In the preparation of this Plan the Manchester Authority, its architectural staff being already heavily burdened, made only a sample survey.

Until, approximately, 1950 the main problem was to find enough resources to build at all. Architectural staff, particularly quantity surveyors, was very scarce and in the face of intense competition from building for housing and other purposes there have been intermittent and sometimes acute shortages of labour and materials. The Authority did not at first find it easy to plan and build rapidly and experienced prolonged difficulties in adjusting its procedure and pace to that of the annual Building Programme.

The Ministry, by various measures, have greatly increased the speed of its own part in the planning of new building, while at the same time its advice and guidance has been of great value in controlling the cost of building at a time of steeply rising prices. There are still delays on the Authority's side in preparing plans, although progress in the actual construction of new building has been greatly improved. The delays in planning are due partly to limitations of staff and partly to the observance of local government procedures which are themselves designed to prevent waste and to ensure honesty.

2. Approximately 14,000 new houses have been built in Manchester since 1944 so that a very large proportion of local building resources has been devoted to this purpose. The size, position and rate of growth of new housing estates has very largely dictated the school building programme, particularly since priority in housing is given to families with children of school age. Schools have not been built to standard

plans and since the initiative has lain with the Housing Authorities, who have gradually mastered the technique of building standardised houses in a very short time, the schools have tended to lag behind on the new estates. Large classes and overcrowded school buildings were to be expected from other causes, but both evils have been greatly increased by the time lag between new houses and new schools. Special buses to take children to school have been used to mitigate this problem. In a new housing estate there may be special difficulties which make it necessary to provide transport, roads may be difficult in winter and direct access to the nearest school may not be possible. Many parents have expressed anxiety about children returning home in the winter evenings through areas where there are large numbers of men working, where there is no resident population and where there is no normal street lighting. For all these reasons the cost of special transport, particularly on the Wythenshawe estate, has been high. It probably reached its peak in the Summer Term of 1952 when there were 21 buses running at a cost of £105 per week. With the addition of the Bus Wardens' wages this is equivalent to an annual expenditure of £5,600.

3. The Butler Act introduced for the first time secondary education for all children. In Manchester in 1945 rather more than half of the children over 11 were in schools organised as separate senior schools or departments. These became secondary schools under the new Act, but many were deficient in rooms equipped for practical work, science, housecraft and physical education. Of the rest, there were a large number of Voluntary schools and a smaller number of County schools for children aged 5 to 15. It is not very difficult to select certain of these buildings and to concentrate in them the children over 11, thereby creating new secondary schools. Such reorganisations, however, involve adaptations and improvements to the old buildings, usually at comparatively small expense.

The great majority of Manchester schoolchildren receive the larger part of their education in primary schools built before 1939. There were 36 Manchester schools on the Board of Education's black list in 1925—5 of these have been closed and 10 improved. Of the remaining 21, the most important changes are to be found in the further deterioration of another twenty-eight years. There are many other schools, both County and Voluntary, up to a hundred years old, but perhaps the largest single group of schools are the fifty built by the Manchester School Board before 1902 and a much smaller number built between then and 1914. Many of these buildings, particularly the last group, are excellently constructed and still serviceable although built on plans very different and in many ways inferior to those now used. Many of them urgently need improvement, often of the rudimentary kind, e.g., the introduction of hot water for washing and improvements to sanitary conveniences.

In Manchester the school buildings used by the great majority of children have been very little improved, and indeed in some ways have deteriorated since the Education Act of 1944. Much more money than has been available since the war will be needed to improve their condition and to modernise and adapt some of them as secondary schools. No new building for the purpose of reorganisation has been permitted by the Ministry of Education since the war.

The deterioration in the state of old schools began during the war when the standard of maintenance was low and when a number of schools suffered from air raids and from their use for civil defence and other purposes. Uncertainty about their obligations and future under the Education Act has contributed to the common reluctance of managers of Voluntary schools to make an adequate annual expenditure on maintenance, or to undertake badly needed alterations and improvements. Monetary inflation has made it almost impossible for many of them to prevent serious deterioration. Attached (Appendix A) is a report on certain Aided and Controlled schools where repairs are urgently needed in order to prevent buildings becoming unusable. A proposal to finance this work from loan was rejected by the City's Finance Committee and only a small amount of money is available in the forthcoming financial year from the Revenue account. It seems most likely that within twelve months a further report in similar terms on an equal number of Voluntary schools will have to be presented.

Requests from teachers, H.M.I.s and parents for alterations and improvements at schools have so much outrun the resources available that it has been necessary to publish a notice explaining that the greater part cannot be met. (See Appendix B.) Priority lists have been drawn up for the repair of playgrounds, improvement of sanitary facilities, restoration of railings, repointing of walls and improvements and adaptations to science and housecraft rooms, but under financial pressure during the last few years very little progress has been made with these lists and the amount of

work urgently needing to be done increases each year. The priority list for improvements to sanitary conditions in schools was drawn up after the Medical Officer of Health had made a comprehensive survey.

Before the war schools were decorated inside every four years and outside every five years. Since the war these periods have been approximately seven and six years respectively. No internal decoration has been carried out, except when necessitated by other building work, in 1951-52, and in 1952-53, and in 1953-54, the money available* will be sufficient for the internal decorating of five and the external decorating of nine schools out of 257 schools.

To sum up, while some excellent new schools have been built in Manchester since the war the state of the existing schools in which the great majority of children have their education has not improved and has in some ways declined.

4. *Minor Building Programme*

The adaptations, alterations and improvements referred to above have normally to be found within the Authority's allocation for the minor building programme. Since the programme has to be used for all work below a certain financial limit the calls on it are already heavy and it seems at the moment likely that the schemes of reorganisation, both of county and voluntary schools, which have been worked out in order to give some kind of secondary education to all children in Manchester within the next few years may have to be suspended for the lack of the comparatively small sums of money needed for the buildings.

Otherwise, the minor building programme works fairly well authough it could be improved if it were handled more flexibly. For example, all the efforts of local authorities are sometimes unavailing in preventing a delay, i.e., from the shortage of quantity surveyors, in fulfilling a starting date. Again, it is sometimes found that the tenders for the project bring it over the limit of the minor building programme. More flexibility in dealing with situations of this kind would prevent delays in wasted administrative effort. On the Ministry's side there is sometimes delay when different departments of the Ministry find it necessary to debate against which of them a project must be debited, e.g., where a new dining room is built in order to free an existing dining room for conversion to classrooms.

5. *Annual Building Programme*

The theory of the annual building programme is that once the Ministry of Education knows its allocation of capital for educational building it makes allocations among its branches and apportions these allocations out among L.E.A.s in accordance with their needs. L.E.A.s then begin during the building year capital work of the value allocated by the Ministry. Strenuous attempts have been made since 1945 to translate this theory into practice. The Ministry has itself been much more successful than local authorities in modifying its procedure and quickening its pace. The task is difficult for local authorities in so far as they are bound by their own Standing Orders which are intended to ensure honesty and economy, and such external difficulties as the need to apply for loan sanctions for each project, although it has already been approved in the programme by the Ministry of Education.

Starting dates have tended to be in the last months of the building year and sometimes compliance has been more nominal than actual. The great emphasis on speed has occasionally meant that less care was given to the study of plans than in the past and it may be that a desire for speed has contributed to increased costs. While there are doubtless good national reasons why the annual building programme is necessary from the point of view of this and similar authorities, there is no doubt that a capital allocation, say for three years, would be much more satisfactory and there appears to be no reason why the authority should not be regarded as competent to decide how to use it. There is by this time, presumably, enough evidence in the Ministry to make a reasonable estimate of Manchester's needs and building resources in comparison with those of other authorities.

6. *Type of Building*

(*a*) Manchester has used aluminium, Uniseco, Orlit and Integrated constructions in addition to traditional forms. It has one school built from Ministry of Works huts and the usual H.O.R.S.A. huts and school meals huts. The use of patent methods of construction has been necessary owing to the competition for bricks and bricklayers.

* Now greatly reduced.

Prefabrication has not always lived up to expectations, particularly where part of the building has been in traditional construction and where the prefabricated block has been completed but the school unused for several months. Certain patent forms of construction have been no more rapid than traditional and none is substantially cheaper. It is not yet known what the maintenance cost of these buildings will be but it may be expected that they will be relatively high. The suggestion that, since educational aims and methods change, school buildings become quickly out of date and should not therefore be too substantial is, in the opinion of this Authority, fallacious. It ignores the fact that buildings erected as temporary are frequently kept in service as long as permanent buildings and involve a much higher cost in maintenance.

Temporary huts appear to offer the most expensive and least satisfactory of all kinds of educational building, being unsightly, uncomfortable and uneconomical. Many of them have added to the congestion of schools already on intolerably overcrowded sites and their cost has been little, if at all, less than permanent additions. The Authority has, for the last two or three years, avoided, wherever possible, the use of temporary huts and where it is unavoidable uses wooden huts of the cheapest available kind.

(*b*) The schools completed under the Building Regulations, 1945, were expensive and their plans are much too diffuse for satisfactory working. The revised Building Regulations, while approaching close to the minimum standard in classroom, cloakroom and sanitary space, and while restoring dual use of certain parts of the building, have included economies which are not unreasonable and have been accompanied by a much tidier and more workable form of school plan. The Ministry's architects have been of great assistance in developing such plans.

The cost per place figure fixed by the Ministry for new schools is the obvious way of controlling expense. If, however, the cost is fixed too low there is a danger that authorities will incur higher maintenance charges through reduced capital cost. For example, certain new schools in Manchester have been built with gas heating units which avoid the need for expensive excavated heating chambers. In practice, however, it has been found that the cost of heating schools by gas is exceedingly high. Again, it is felt that the maintenance cost of schools built by some local authorities in light standardised construction will prove to be high.

APPENDIX A

Item No. 29

REPORT OF THE CHIEF EDUCATION OFFICER TO THE BUILDINGS SUB-COMMITTEE

10*th June*, 1952

Aided and Controlled School Repairs

1. The Sub-Committee at its meeting on 5th February, 1952, considered representations made by the parents of children attending St. Willibrord's Roman Catholic School about the unsatisfactory condition of the school playground and asked for a report on this and similar cases with a view to adopting a Priority Order for such work in 1952-53.

2. As stated in another report to the Sub-Committee about school playgrounds, the repair of the playground at St. Willibrord's Roman Catholic School will need to be considered in relation to the monies available for work at Aided and Controlled Schools in 1952-53.

3. The number of Aided and Controlled Schools is steadily increasing and the Committee's responsibilities are increasing in proportion. Many of the schools are in urgent need of essential repairs and as a sum of £6,000 only is available in the Revenue Estimates for this work, the Committee in September last agreed to include the sum of £26,000 in the Capital Account to expedite progress.

4. At the present time there are 38 Aided and 20 Controlled Schools and detailed reports on the condition of premises have been received from the City Architect. A schedule is attached showing a suggested priority order for dealing with the outstanding repairs based on the City Architect's view of the relative degree of urgency, and a list of the remaining Aided and Controlled Schools, some of which will need extensive repairs.

5. It is suggested in view of the relatively high cost involved that the Diocesan Authorities should be approached about the future of St. Philip's, Bradford Road and St. Cross' Church of England Schools, particularly as in both instances it seems practicable to house the children in neighbouring schools. As the Committee are aware, St. Philip's school had to be closed on the 18th February, 1952, in view of its dangerous condition.

6. Subject to such consideration, it is suggested that the Committee should authorise steps being taken, in consultation with the Managers and Diocesan Authorities as may be necessary, to put in hand the essential repairs at the first five schools named in the schedule at an estimated cost of £25,000. The balance could be assigned later in the year to meet emergencies.

AIDED AND CONTROLLED SCHOOLS

Suggested priority order for dealing with outstanding repairs in the Financial Year 1952–53

Name of School	Status	Total Estimated Cost of Repairs	Managers' Contribution	Committee's Contribution	Brief description of work
		£	£	£	
1. Bradford Memorial C.E. ...	A	1,400	—	1,400	Reflooring (tender already accepted).
2. St. Mary's C.E., Moston ...	A	1,200	—	1,200	Draining and resurfacing of playground.
3. St. Philip's C.E., Bradford ...	C	29,000	—	29,000	Repair of dilapidations to floors, roofs, walls, ceilings, internal decoration, external pointing, re-surfacing of playground, repair of internal conveniences, rebuilding of gables, repair of damage caused by dry rot, re-laying of drains, provision of new fire escape and new heating boiler.
4. St. Philip's C.E., Hulme ...	A	9,600	5,900	3,700	Repair of dilapidations consisting of renewal of floorboards, roof repairs, part internal decorations, external painting and pointing, repairs to external conveniences, rebuilding of part of roof and first floor boundary wall and sundry items.
5. All Saints C.E., West Gorton	C	5,700	—	5,700	Repair of dilapidations, consisting of repairs to floors, roofs, wall surfaces, internal decorations, external painting, pointing, rebuilding of boundary wall and rebuilding of external conveniences and sundry repairs.
6. St. Anne's C.E., Newton Heath	C	12,000	—	12,000	Repairs to floors, roofs, wall surfaces, ceilings, external painting, relaying of playground area, repairs and rebuilding of external conveniences, rebuilding of boundary wall and eradication of dry rot.

Name of School	Status	Total Estimated Cost of Repairs	Managers' Contribution	Committee's Contribution	Brief description of work
		£	£	£	
7. Holy Trinity C.E., Rusholme	C	7,000	—	7,000	Repair of dilapidations consisting of renewal of floor boards, repairs to roofs, ceiling plaster, wall plaster, external pointing, resurfacing of playground area, eradication of dry rot in roofs and dadoes, rebuilding of chimney stacks and boundary wall, and formation of new coal store and sundry items.
8. St. Aloysius' R.C., Ardwick ...	A	10,200	2,650	7,550	Repair of dilapidations, consisting of repairs of floors, roofs, wall surfacing, external painting and pointing, and relaying of playground and repairs to external conveniences and sundry items.
9. St. Cross C.E., Clayton ...	A	4,500	1,800	2,700	Repairs to floors, roofs, windows, internal decorations, external painting, resurfacing of playground and repairs to drains and rebuilding of external conveniences.
10. St. Lawrence's R.C., Cornbrook	A	2,500	1,080	1,420	Repair of dilapidations consisting of repairs to floor boards, roofs, internal plastering, patching of playground area, eradication of dry rot in first floor beam and two windows, provision of a new fire escape, repairs to staircase and sundry items.
11. St. Augustine's C.E., Boys ...	C	7,750	—	7,750	Repairs to floors, roofs, walls, windows, internal decorations, external painting, pointing, resurfacing of playground areas, repairs to drains and external conveniences.
St. Augustine's C.E., Girls and Infants.	C	2,800	—	2,800	

Other Aided and Controlled Schools

Aided

All Souls C.E.
Fallowfield C.E.
St. Margaret Mary's R.C.
St. Joseph's R.C.
St. Peter's R.C., Baguley
St. Aidan's R.C.
St. Chad's R.C., Cheetham
St. Catherine's R.C., Didsbury
St. Peter's R.C., Newall Green
St. Willibrord's R.C.
St. Malachy's R.C.
St. John & St. Thomas R.C.
St. Cuthbert's R.C.
St. Peter's C.E., Blackley
St. Brigid's R.C.
St. Edmund's R.C.
Christ the King R.C.
St. Clare's R.C.
Jews (Wilton Polygon)
St. Anne's R.C., Ancoats
Holy Name R.C.
Shadow Moss C.E.
Didsbury C.E.
St. Wilfrid's R.C.
St. Patrick's R.C., Livesey St.
St. Patrick's R.C., Sudell St.
Bishop Bilsborrow R.C.
Withington Parish C.E., St. Paul's
All Saints C.E., Newton Heath
St. Dunstan's R.C.
St. Francis' R.C.
Gorton C.E.

Controlled

St. Catherine's C.E., Collyhurst
St. Mark's C.E., Holland St.
St. John's C.E., Baguley
St. Mark's C.E., West Gorton
St. Margaret's C.E.
St. Margaret's C.E., Central
St. James' C.E., Collyhurst
Openshaw C.E.
St. Luke's C.E., C.-on-M.
St. Paul's C.E., C.-on-M.
Northenden C.E.
St. Clement's C.E., Longsight
Christ Church C.E., Harpurhey
Holy Trinity C.E., Blackley
Chorlton C.E.

APPENDIX B

Improvements and Alterations to County School Premises

The attention of all Head Teachers is drawn to the following notice which appeared in the Bulletin on 18th April, 1951:—

> "Many requests have been received for improvements and alterations to school premises including the resurfacing of playgrounds.
>
> The money available for this work in the financial year ending the 31st March, 1952, is very much less than the cost of the work requested. It will be possible this year only to deal with the most urgent improvements. If within three months of this notice Headmasters or Headmistresses are not informed that work is being put in hand at their school, they are asked to assume that their requests cannot be met in the current year.
>
> Headmasters and Headmistreses are asked to renew requests for urgent improvements after the Midsummer holidays and before the 1st January, 1952, so that they may be considered for inclusion in the programme for 1952-53."

A number of requests have already been received from Heads for improvements and alterations urgently required and a Priority list of this work is now being drawn up, the work to be carried out in the financial year 1953-54. The amount of work which it will be possible to do in that year will, of course, depend upon the amount of money which the Council approves for this work in the annual estimates.

Owing to the need to consider the requests in relation to next year's estimates it is not possible to send individual replies at present.

APPENDIX C

Total Number of Children on Roll:—

1939*	93,941
1945*	84,031
1949–50	101,594
1950–51	102,198
1951–52	106,870
February, 1953	109,804

* Exclusive of Grammar School population.

Total Number of New Places:—

(*a*) Built since 1945	12,960
(*b*) Rented as at 31st December, 1952	1,130

Number of New Schools built:—

15 schools completed with 7,190 places.

plus 3 schools partly finished with 810 places.

Number of New Buildings and Adaptations for Meals, Further Education, Training of Teachers, Handicapped Children, etc. ... ... 122 since 1945

Number of New Houses built in Manchester since 1944... ...

11,318	permanent
3,002	temporary
14,320	

Number and Percentage of Classes over 40:—

		%
In 1951	924	30·7
In 1952	1,137	37·5

ANNEX 11

TRANSPORT COSTS FROM HOUSING ESTATES TO SCHOOLS (BIRMINGHAM)

Memorandum by the City of Birmingham Education Department

Cost of transport to schools of children from new housing estates in Birmingham

Year	*Cost*
	£
1946–47	800
1947–48	1,800
1948–49	7,437
1949–50	8,290
1950–51	8,439
1951–52	12,101
1952–53	17,000 (estimated)

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