

wellcome trust

# BELIEVERS, SEEKERS AND SCEPTICS

## What teachers think about continuing professional development

## Introduction

Teaching is principally a human activity. While new technologies may enhance the learning experience, they will never satisfactorily replace the personal tuition and mentoring that a talented, trained and motivated teacher can provide. The success of the UK's education system is thus inseparable from the quality of its teaching workforce.

Investing in education therefore means investing in people. And this doesn't come cheap. Over a 40-year career, in salary terms alone, something like two million pounds is invested in each and every teacher.

Effective teachers also have to be learners. Whether they seek improved skills to enhance classroom performance, new roles in management, or a better understanding of curriculum developments or the latest work in their subject, teachers need continuing professional development (CPD). 'Lifelong learning' is *de rigueur* in many fields of employment – and surely if any vocation should embrace the concept, it is the teaching profession.

But what CPD do teachers currently get? What do they think of it? What do they want more of in the future? To help answer these questions, in 2005 the Wellcome Trust commissioned a survey of teachers and managers in state maintained schools in England, focusing on three main aspects of CPD:

- What do different types of teacher want from CPD?
- What are the benefits of CPD, and for whom?
- What, if anything, stops them getting the CPD they want?

## Context

Initial teacher training prepares teachers for the classroom, but sustaining a lifetime's professional practice needs more than just a job and a salary. There is growing awareness that teachers' confidence and morale can be improved by CPD that enhances their knowledge and skills. Some teachers seek CPD for professional advancement. Others rely on courses to keep them abreast of curriculum developments and new approaches to teaching.

Formal recognition that professional updating is part of a teacher's working life emerged a generation ago with the introduction, in some parts of the UK, of five statutory inservice training days. Ideally, teachers would spend some of this time on implementing new government initiatives, some on trying out new teaching methods, and some updating their own subject knowledge and subject-specific professionalism. However, concerns have been expressed that the balance for

these and other 'training' opportunities has tipped towards implementation of education policy at the expense of the teacher's own needs:

"...since the 1988 Education Act, Conservative and Labour Governments have developed policies that result in greater control of teachers' time and limits to their personal autonomy. Limited time for subject-based professional development means that many teachers are increasingly directed towards fairly instrumental, information-led training, such as briefings on examination syllabi. This training in turn feeds into a school development plan, which is informed by Government objectives and priorities. The training is, in effect, depersonalised".1

This is particularly of interest in relation to science teaching, where three major drivers of change are having a profound influence not just on what is being taught but on how it is being taught. The pace of scientific discovery continues to accelerate, developments in ICT open up new opportunities in learning environments, and social and ethical context is becoming an ever more significant aspect of science and science teaching.

A further issue relates to the nature of the science education that should be provided in our schools. On the one hand there is the need to train the next generation of scientists, which means equipping students with the basic scientific knowledge that will be essential in their chosen careers. On the other hand, there is also a necessity to provide a science education for the much larger number of students who will not be working in a scientific arena but will need skills to survive, participate and thrive in a technologically advanced society.

Fulfilling these needs is important if we are to achieve the desirable dual goals of both a healthy economy and a trusting, questioning electorate. And it was this horizon-scanning of the future of science and science education that prompted the Wellcome Trust to implement its shared vision with the Government in developing and funding the  $\mathfrak{L}51$  million Science Learning Centres initiative. The Wellcome Trust sees this unique programme as symbolising career-long learning that moves beyond the day-to-day needs of the school and helps to enhance teachers' professional self-image and aspiration.

In England, the environment for CPD will be set by the Training and Development Agency for Schools (TDA), under its newly acquired remit.

<sup>1</sup> Leaton Gray S. An enquiry into Continuing Professional Development for Teachers. London: Esmee Fairburn Foundation; 2005.

# Findings

#### 1. Attitudes to CPD

Attitudes to CPD tended to cluster, enabling teachers to be grouped into four categories, which the research team has characterised as: Seekers, Believers, Sceptics and Agnostics.



#### **Believers**

Some 38 per cent of the sample, they were more likely to be in primary schools or working as senior managers. They felt they had benefited from CPD, and were enthusiastic about others having access to it. They did not necessarily look for a great deal more CPD for themselves, but managers were convinced of the continuing need in their schools. As one primary senior manager put it: "Wholeschool benefits naturally flow from individual benefits. Investing in skills and teacher confidence can be achieved through CPD."



#### Seekers

These teachers, most often in secondary schools and/or heads of department, thought CPD should be on offer to all. However, they also tended to feel that opportunities were too few, or were based on whole-school initiatives rather than subject-based need. And they thought managers failed to support CPD, or did not have the money for it. Some 16 per cent of the total, they were receptive to efforts to boost CPD. As one said: "I would like the school to be more involved in planning my future and developing me."

#### Sceptics

This was a smaller group (12 per cent) but notably disaffected. They were concentrated in secondary schools, and disproportionately male (49 per cent, compared with 34 per cent for the sample as a whole). They associated CPD with imposed changes or new initiatives that did not improve the quality of education. As one secondary science teacher put it: "You rarely get to do something that will genuinely help you or is tailored to your needs." Many saw their future in the classroom and had little interest in CPD as an aid to promotion.



#### **Agnostics**

This large group (33 per cent of the sample) tended to approve of CPD in principle, but was less convinced than Seekers or Believers about the value of existing CPD. They were more open to persuasion than the Sceptics. However, they would need to be sure that CPD was of high quality, and related to their subject needs, and would enhance their development and teaching approach. They were wary of the time courses might take.



Cluster analysis was carried out on the data, using the response to a series of attitude statements about CPD. The process divides the sets into a number of different groups (clusters) where members of each cluster possess similar attitudes. Once clusters were defined, it was then possible to look at the profile of each, for example whether one cluster was more likely than another to contain science teachers.

### 2. Experience of CPD

On average, survey respondents had spent 19 days on CPD in the last five years, most often on courses related to enhancing their teaching skills and delivery. The primary teachers had made more use of CPD than secondary teachers, on average, and were more likely to have attended subject-related courses. Senior managers were heavier consumers of CPD than class teachers.

Levels of satisfaction with CPD were fairly low. Only training related to whole-school strategies satisfied more than half of the sample. Training related to government initiatives scored among the lowest, at 29 per cent, along with courses on administration and marking, and on pastoral issues.

### 3. Views of CPD

Despite their comparative lack of satisfaction with what was on offer, most of those questioned felt that CPD was important and relevant to their teaching. Updating subject knowledge and teaching skills were rated the most important areas for CPD, with courses linked to whole-school strategies close behind. There was strong agreement that CPD could make teachers more confident in their role, increase morale and benefit the whole school.

Managers tended to be more positive about CPD than classroom teachers, and more likely to believe that their school encouraged people to make use of it. This division of opinion was strongest in secondary schools, where 94 per cent of senior managers maintained that their school encouraged CPD, with 72 per cent of teachers agreeing with them.

#### 4. Obstacles to CPD

Time and money were commonly cited as barriers to wider take-up of CPD. Around a third saw additional work as a barrier, particularly to pursuing CPD off-site, and the same proportion mentioned lack of funds. Some felt that it was easier to get the money for training related to government initiatives than for other kinds of CPD. The money needed for supply cover, on top of the cost of the courses, made it hard for some schools to afford external CPD, echoing the findings in an earlier study on science teachers' professional development by King's College London, highlighting how:

"Almost half of the primary and secondary headteachers were concerned about the availability of supply cover of sufficient quality."

#### But it also concluded that:

"...school management issues are vitally important considerations. In particular, managers have a responsibility for the creation and maintenance of a pro-CPD culture in a school. Management should have the capability to sustain and nurture the subject-related expertise of its teaching staff effectively within the existing very real constraints on science teachers' CPD which the study has highlighted, namely the provision of time and funding, an appropriate reduction in workload and fatigue, and the necessary supply cover for teachers to attend external courses."<sup>2</sup>

Another common disincentive was a feeling of guilt because colleagues had to cover lessons, or because pupils might fall behind in the teacher's absence.

Teachers in secondary schools were more likely than their primary colleagues to see barriers to CPD. Not surprisingly, the perception of obstacles varied widely across the four attitudinal groups: Sceptics were more likely to cite extra work, Seekers lack of money.

Experience of poor-quality courses was also a barrier for some. A fifth of the sample felt that they were poorly served by CPD courses compared with their perception of provision in other professions.

### 5. CPD for science

Several issues seemed to affect scientists particularly. For instance, secondary science teachers were particularly keen to update their subject knowledge – 72 per cent wanted more CPD in that area, as against 60 per cent for other subject teachers – while only 35 per cent were satisfied with subject-related courses compared with 48 per cent for secondary-school teachers as a whole.

Secondary heads of science were less likely than classroom teachers to feel that CPD was encouraged by senior management – only 52 per cent felt it was (compared with 67 per cent of other heads of department). Even more striking, half of all secondary science teachers had had no subject-related professional development in the past five years. This might explain why secondary heads of science were generally less confident in their skills and performance than heads of other departments.

### 6. In-service training

Attitudes to formal statutory in-service training were ambivalent at best. Secondary-school respondents in particular were sceptical that such days contributed to their professional development.

2 Dillon J et al. A study into the professional needs of science teachers in primary and secondary schools in England. London: King's College; 2000

### Satisfaction with different types of CPD

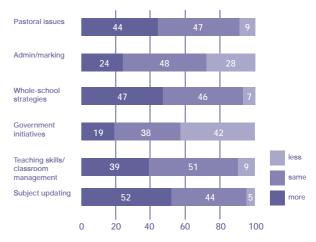
% satisfaction with different types of CPD



Base: All respondents, 825 (weighted)

#### Future CPD type preferences

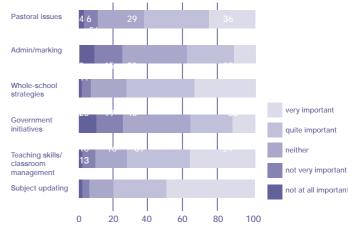
% wanting more, less or the same amount of CPD of different types



Base: All respondents, 825 (weighted)

#### Importance of different CPD types

% taking different attitudes to types of CPD



Base: All respondents, 825 (weighted)

# Key findings

- A large majority of respondents felt that CPD was important, although far fewer were impressed with the CPD courses they had attended.
- Primary teachers spent more time on CPD than those in secondary schools.
- CPD linked to subject updates and teaching skills was most highly valued.
- Desire for subject knowledge CPD was high, particularly in science.
- Satisfaction with current subject-updating CPD was low, particularly in science.
- Half of all secondary-school science teachers had had no subject knowledge CPD in the past five years.
- Secondary-school senior managers believed that professional development was more strongly encouraged than classroom teachers believed.
- The main barriers to CPD were seen as financial and attitudinal.

# Detailed analysis of attitudes to CPD suggested that teachers can be placed in one of four groups:

### • Seekers (16 per cent)

Valued CPD but found their opportunities to benefit from it were limited. More likely to be found in secondary schools.

### • Believers (38 per cent)

Felt their careers had benefited from CPD. More often found in primary schools and among senior managers.

## • Sceptics (12 per cent)

Dubious about the benefits of CPD, which they saw as focused on government initiatives rather than their own professional needs. Mainly found in secondary schools.

#### • Agnostics (33 per cent)

Might agree that CPD was important in principle, but doubted its quality or relevance. Needed convincing that future CPD would deliver something of value.

"I am quite reflective and appreciate finding new ways to do things. I come back invigorated."

"I would like the school to be more involved in planning my future and developing me."

"It gives you the confidence to take the next step in your career."

"There's strong evidence that the skills of less experienced staff increase after CPD."

## The survey

The survey involved 825 telephone interviews with teachers and senior school managers. It was confined to state schools in England, but covered the whole country, and included all types of school, with teachers in different disciplines and of different ages and levels of experience. The sample was structured to include sufficient science teachers and senior managers to enable robust statistical comparisons to be made between science staff (275) and others, and between classroom teachers and school leaders (139).

Results from the standard, quantitative interviews were weighted so that they were representative of the profession in England in terms of their roles, the regions where they worked, and whether they taught in primary or secondary schools.

The 275 science specialists comprised secondary science teachers, heads of department and primary science coordinators. However, the final data sample was down-weighted to ensure that the overall findings were representative of the English teaching population.

To gain some further insight into the survey responses, 12 follow-up detailed telephone interviews were conducted to bring the findings to life through personal views and experience.

The research was commissioned by the Wellcome Trust from the education consultancy EdComs (www.edcoms.com) and the polling firm ICM. A fuller technical report is available from the Wellcome Trust (www.wellcome.ac.uk/believers).

## The Wellcome Trust

Developing people is one of the six strategic aims of the Wellcome Trust. Scientific research is dependent on committed, innovative and highly trained individuals. Training and career development funding schemes ensure that researchers can progress and develop their essential skills throughout their working life.

As part of its public engagement activities, the Wellcome Trust is committed to enhancing professional practice for those involved in educating young people, some as future scientists and all as informed citizens.

The UK's teachers will be nurturing the next generation of scientists, as well as preparing all students for life in a scientifically advanced world. The Wellcome Trust is therefore committed to enhancing CPD for science teachers through its development and funding of the Science Learning Centres network. It has also been actively involved in curriculum development, commissioning research to inform policy making, and supporting the development of innovative new approaches to science teaching.

www.wellcome.ac.uk/education

The Wellcome Trust is an independent charity whose mission is to foster and promote research with the aim of improving human and animal health. We have three principal aims:

- 1) Advancing knowledge: To support research to increase understanding of health and disease, and its societal context
- 2) Using knowledge: To support the development and use of knowledge to create health benefit

3) Engaging society: To engage with society to foster an informed climate within which biomedical research can flourish.

In support of these aims, we also recognise the importance of promoting the development of individuals application, and constantly improving the way we operate.

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