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Survey of Teachers 2010

Support to improve teaching practice

Helen Poet
Peter Rudd
Joanne Kelly

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Executive summary

In 2010 the annual survey of teachers, conducted on behalf of the General Teaching Council for England (GTC), explored teachers' experiences of the different forms of support they receive to help them maintain and develop their teaching practice. Teachers were asked for their views on the following:

- their participation in Continuing Professional Development (CPD)
- their involvement in activities to improve teaching practice
- use of observation and feedback
- use of research
- performance management, and
- the professional standards.

The survey gathered the views of a nationally representative sample of teachers, drawn from the GTC's Register of Teachers, and was conducted by the National Foundation for Educational Research (NFER). The final response figure for the main sample was 4,392, which was 33 per cent of the 13,500 teachers contacted. In addition to providing analysis of the basic frequencies of the responses, NFER conducted more sophisticated analyses, including factor analysis and statistical modelling.

Key findings

Professional development and learning

On the whole, teachers had a positive attitude towards practice improvement and almost all felt that they had a professional responsibility to maintain and improve their practice. Teachers also felt strongly that they should have an entitlement to time and support in order to meet this responsibility.

About two-thirds of teachers were positive about the impact of professional development and learning activities on their teaching, and on the learning of their pupils. This suggests that most CPD activities are relevant and do indeed have an impact upon teachers' practice. Collaborative (peer-to-peer) learning activities were the most common type of professional development activity teachers had been involved in over the last 12 months.

Further analysis of the responses, by teacher characteristics (age, role, length of service, gender, etc.), revealed that senior teachers and teachers with additional responsibilities were more likely to feel positively about the extent to which professional development could improve their teaching practice. Interestingly,

younger and less experienced teachers were also more likely to take a positive view of professional development as a means for improving teaching.

The survey findings suggest that there may be a 'gap', however, in terms of desired professional development and access to CPD activities and experience. Personal motivation to improve teaching appears to be widespread, however many teachers felt that they did not have enough time, or did not have sufficient access or opportunities, to participate in professional development and learning activities.

Using research

The survey asked how teachers used research to inform their teaching practice: these questions covered both teachers conducting their own research and using research conducted by others. Conducting research was not particularly widespread among the sample, but it appears that many teachers would like to be able to be more involved in research.

One third of respondents (33 per cent) said that they had undertaken their own research and enquiry to improve their practice in the last 12 months but about half (49 per cent) said they had not. Of those people who had used research, most had found it a useful way to help them to improve their teaching practice.

Statistical analyses revealed that teachers that had been involved in a higher number of professional development activities in the last 12 months were more likely to have a positive view about the use of research to improve their teaching.

Part of the gap between what teachers would like to do and what they actually experience in terms of professional development may be explained by the presence of what might be called a weak 'culture of research' at some schools: it was clear that some teachers felt that schools could do more to support and encourage their use of research and other self-improvement activities.

Performance management

Teachers held mixed views about how the performance management process supported them to improve their teaching. Although around half of teachers agreed that performance management helped them to identify areas for improvement and areas of strength, fewer than three in ten teachers said that performance management was a key factor *per se* in helping them to improve their teaching. Working towards performance management objectives appears to be considered more useful than the performance management process overall.

Professional standards

The professional standards framework was introduced by the Training and Development Agency for schools (TDA) in 2007. The aim was to provide a framework which teachers could refer to when considering their professional development, for example to consider gaps or strengths in their practice. Responses to

the survey showed that although most teachers reported that they had a good understanding of the professional standards framework, overall, teachers had mixed views about how it could help them to improve their practice.

Teachers that had experienced a higher variety and frequency of professional development activities within the last year were more likely to have a positive view about how the professional standards could help them to improve their practice. In addition, both senior teachers and teachers who were relatively new to the profession (although not necessarily younger teachers) were more likely to perceive the standards as helpful.

Views on different approaches to improving standards

A number of questions included in the survey sought to obtain an overview of how teachers felt about the usefulness of different approaches to practice improvement. Which approaches did they use most and which did they value most highly? The method of improving teaching that was valued by the most teachers was self reflection; almost all teachers (97 per cent) reported that 'reflecting on my own practice' had been a very or fairly useful way of improving their teaching over the last two years. Although reflection on their own practice was by far the approach that the most teachers found useful in terms of improving their teaching, around three in four teachers also said that the following methods were very or fairly useful:

- observing my peers' teaching
- receiving feedback from pupils
- peers observing my teaching and giving me feedback
- reviewing my practice as part of school self-evaluation
- using teacher assessment data

Teachers therefore are open to range of approaches to improving their practice, though self reflection, observation and receiving feedback are seen as the most useful approaches.

Conclusions

Statistical analysis indicated that *recent* experience (within the previous 12 months) of participating in professional development activities helps to instil a positive view of the impact of such activities. In this respect it is important that professional development takes place throughout teachers' careers, not only at the early stages or when teachers hope to progress in their career. Teachers newer to the profession were among those more positive about the role of professional development activities, and also about the role of observation and feedback in improving their teaching.

A number of common findings emerged from the analysis that looked at the differences in teacher views about the various aspects of practice improvement by their characteristics. For example, it was found that senior teachers were positive about *all* the aspects of practice improvement featured in the survey. Similarly, it was found that male teachers were less positive about all the aspects of practice improvement discussed (except one – 'using research'). On the whole, differences in teacher views about improving their teaching were related to personal characteristics; school-level factors (such as proportions of pupils eligible for free school meals (FSM) or overall achievement) generally had little or no effect on teacher attitudes.

Overall, teachers were motivated to improve their teaching and reported using a variety of different approaches to develop elements of their practice. Approaches which could be classified as informal (such as collaboration with peers, self reflection) were more commonly used than more formal support such as the performance management process and the professional standards. Further investigation could be carried out to explore how performance management and the professional standards support teachers to act on their motivation to improve their teaching practice.

1. Introduction

1.1 Background

The General Teaching Council for England (the GTC), as the independent professional body for teaching in England, has commissioned six annual surveys of teachers since 2004 which have explored a range of issues affecting teachers and the teaching profession. The survey, in addition to giving registered teachers a voice, is essential to informing the policy advice that the GTC provides. Each year the survey has gathered the views of a representative sample of teachers on issues such as accountability, personalised learning and other issues of professional interest, all of which affect future teaching practice and policy.

In recent years the survey has moved from an omnibus style survey covering a broad range of topics to one that explores specific themes. The 2010 survey was conducted by the National Foundation for Educational Research (NFER). This year the survey explored teachers' experiences of the different forms of support they receive to help them maintain and develop their practice. Teachers were asked about participation in Continuing Professional Development (CPD) and its impact; use of and engagement in research; sources of feedback; the professional standards framework; and support to meet performance management objectives.

In addition to this survey, the GTC commissioned a qualitative study about how teachers improve their practice, which was also carried out by NFER and published in 2010.

1.2 Aims and objectives

The key aim of this year's survey was to gather the views of a representative sample of teachers on issues affecting current and future teaching practice and policy.

More specifically, the objectives of the 2010 teacher survey were to:

- gather the views of a representative sample of registered teachers in England in relation to the development of teaching practice and the support available

- provide detailed analysis and interpretation of the data in an accessible report aimed at practitioners and policy makers

- provide an additional report on the sample of registered teachers of Black and minority ethnic backgrounds (BME)[1].

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[1] A booster survey of teachers from Black and minority ethnic backgrounds was also drawn from the Register in order to facilitate analysis of the views of different ethnic groups. The findings are documented in a separate report.

1.3 Methodology

Sampling

NFER drew a sample of teachers from the GTC's Register of teachers. Teachers were considered eligible to take part in the survey if they were:

- fully registered with the GTC
- listed as in service, i.e. working as a teacher in an establishment where registration is required, such as community or voluntary aided schools
- aged 65 and under.

Teachers were excluded if they had been involved in the 2009 survey, had been involved in other research within the last 12 months, or had requested that they were not to be contacted. The criteria used to select the sample of teachers were as follows:

- gender
- phase of education
- type of school
- age group
- Government Office Region (GOR).

Response rates

The final response figure for the main sample was 4,392, which was 33 per cent of the 13,500 teachers contacted. Of this, 1075 responses were gained online (24 per cent), and 3317 responses were gained from paper responses (76 per cent). The sample was compared with the profile of the registered teacher population to check representativeness. Weighting was not deemed necessary due to the high number of responses achieved and the small differences between the main stratifying variables of the profile of the achieved sample compared to the population (see Table 1.1).

Table 1.1 **Sample representativeness**

		GTC Register of Teachers	Achieved sample
Gender	Male	25%	19%
	Female	75%	81%
Total		100%	100%
Phase	Primary	44%	47%
	Secondary	42%	37%
	N/A	14%	16%
Total		100%	100%
Age Range	Under 25	4%	4%
	25-29	15%	12%
	30-34	15%	13%
	35-39	13%	12%
	40-44	12%	12%
	45-49	11%	12%
	50-54	12%	14%
	55-59	13%	15%
	60-65	5%	6%
Total		100%	100%
School Type	Community	52%	50%
	Foundation	12%	12%
	Voluntary Aided	15%	15%
	Voluntary Controlled	6%	7%
	Special	3%	4%
	Pupil Referral Unit	1%	1%
	Sixth Form Centres	0%	0%
	Supply Teachers	10%	11%
	LA Nursery School	0%	0%
Total		100%	100%
GOR	Not known	4%	4%
	North East	5%	5%
	North West/Merseyside	14%	12%
	Yorkshire & The Humber	10%	10%
	East Midlands	8%	9%
	West Midlands	11%	11%
	Eastern	11%	12%
	London	13%	11%
	South East	15%	17%
	South West	10%	10%
Total		100%	100%
Length of Service	Less than 5 years	24%	21%
	5 to 9 years	19%	18%
	10 to 19 years	25%	23%
	20 to 29 years	12%	13%
	30 plus years	20%	24%
Total		100%	100%

Questionnaire development

The 2010 survey focused on support for improving practice by exploring the following topics:

- participation in Continuing Professional Development (CPD)
- activities to improve teaching practice
- use of observation and feedback
- use of research
- performance management, and
- the professional standards.

The questionnaire was designed by NFER researchers in close consultation with the GTC's Research and Policy staff. Following this, piloting was carried out, with minor amendments made in light of comments received from the pilot.

Three questions from the previous year's survey of teachers, asking about teachers' specific roles, working hours and the key stages they currently work in were repeated in the 2010 questionnaire to enable the drawing of comparisons and analysis of responses by these variables. A further two questions, focussing on professional development were also repeated, with small adjustments made to a few of the statements within the questions. The questionnaire was made available to respondents both online and on paper.

The administration of the survey was based on the five-stage method for survey administration recommended by Don Dillman[2]. Sampled teachers were sent information about the survey in advance of the questionnaire itself. When the questionnaire was sent to the sample, teachers with e-mail addresses received an electronic invitation to complete the questionnaire online in the first instance. All teachers without e-mail addresses were sent paper copies of the questionnaire along with information on how teachers could complete the questionnaire online if they preferred. Two weeks after the despatch of questionnaires, reminder postcards were sent to all teachers within the sample, carefully omitting those who had already requested to be withdrawn from the study. Six weeks after the initial despatch, all non-responding teachers were sent paper copies of the questionnaire, accompanied by details of how to complete the survey online. Telephone reminding was carried out for the teachers with telephone numbers listed towards the end of the survey period, along with a reminder e-mail to all non-responding teachers with e-mail addresses. The survey period was between March and May 2010.

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[2] Dillman, D. 2007. *Mail and Internet Surveys: The Tailored Design Method.* 2nd Edition, 2007 Update. Hoboken, NJ: John Wiley.

Analysis

Analysis of the survey was carried out by the NFER's team of qualified statisticians along with the research team. The basic analysis of the survey data involved simple frequencies[3] and some cross-tabulations.

In addition to providing basic frequencies of the responses, more complex analysis was carried out including factor analysis and regression modelling[4]. Where applicable, this report will make reference to these analyses, with greater detail included within Appendices B and C. By including these techniques, we were able to ensure that the results of the statistical analysis were thoroughly robust. The BME booster sample respondents have been included along with the main sample respondents for the regression. Through including the BME booster respondents in this regression we were able to make the estimation of an association between BME and any relevant outcome more assured. Regression models are reported fully in this report, with any association between BME and outcome (or the absence of such an association) also being highlighted in the BME booster sample report.

School-level variables

In addition to conducting analysis by teacher characteristics, it was also possible to explore the effects of some school-level variables. The data for the school level variables was obtained from the Register of Schools held by NFER.

In particular the GTC was interested to know if teachers working at schools that encounter particular challenges held different attitudes. As a result, two measures of challenge were agreed:

- a measure of socio-economic challenge – challenged schools were identified as those in the top quintile of the percentage of children entitled to free school meals (FSM)

- a measure of academic challenge – challenged schools were identified as those in the lowest quintile for Key Stage 2 (KS2) attainment (primary) and Key Stage 4 (KS4) attainment (secondary).

Each school was placed in the appropriate quintile based on their position relative to all other schools in the population[5]. Attainment was to be based on KS2 for primary schools and KS4 for secondary schools; the data was obtained from the NFER register

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[3] Percentages within this report have been rounded up to the closest integer. The results are presented in full in Appendix A with the percentage response to each question displayed in tables. The percentages shown in the tables have been rounded to the nearest whole number. Due to rounding, the percentages may not sum to 100. Where figures have been presented in the text, they are based on those shown in the tables and consequently are also rounded values.

[4] For a full list of the variables included in the factor analysis please see Appendix B, and for the variables included in the regression models, please see Appendix C.

[5] In previous years, the analysis based the definition simply on whether a school had higher or lower levels of challenge in a particular area, based on the school figures relative to the other schools in that sample. This year we used quintiles which were calculated based on the population of schools as a whole, not just the schools of the teachers of the sample.
A fairer assessment of challenge is obtained when looking at the whole population of schools and not just the sample because although the sample is representative of the teaching population, we do not know if they come from a group of schools that is representative of all schools nationally.

of schools. Although the attainment data is only available for KS2 and KS4, it can provide an indication for that school and therefore can be used for KS1 and KS3 teachers respectively at those schools.

Other school characteristics included in the analysis were:

- the percentage of pupils with English as an Additional Language (EAL) attending that school
- the percentage of pupils with special educational needs (SEN) attending that school.

These variables were used separately and not incorporated into either of the two measures of challenge (as had been the case in previous years) because they provide measures of slightly different things:

- We chose not to combine EAL and FSM into a single measure because having English as an additional language does not affect a child's attainment in the same way as being in a school with a high level of FSM. EAL is likely to affect attainment but differently depending on how well the child speaks English.
- We chose not to combine SEN and attainment because these are not directly related – poor attainment levels in a school do not necessarily occur because there is a high proportion of children with SEN in that school. In addition, there are many types of SEN which can affect attainment in different ways.

2. Professional development and learning

Key findings:

- around two thirds of teachers were positive about the impact of professional development and learning activities on their teaching, and on the learning of their pupils

- collaborative learning activities were the most common type of professional development activity teachers had been involved in over the last 12 months

- teachers with more responsibilities in school were more likely to feel positively about how professional development and learning activities could improve their teaching practice

- younger and less experienced teachers were more likely to have a positive view about the role of professional development and learning activities in improving their practice

- supply teachers, part-time teachers and those working in secondary schools were more likely to feel negatively about professional development and learning activities as a way of improving their teaching.

2.1 Levels of participation in Continuing Professional Development activities

One question in the teacher survey sought to find out which professional development activities respondents had experienced in the last 12 months, along with an indication of whether these activities had been experienced 'frequently' or 'occasionally' or not at all. Nine types of professional development activities were listed in relation to this question. By combining the percentages of respondents who indicated that they experienced the activity either frequently or occasionally we could devise an indicative list of the most prevalent professional activities. These were as follows:

- collaborative learning with colleagues in my school (77 per cent)

- collaborative learning with external partnerships / networks (61 per cent)

- participating in an external course (59 per cent)

- engaging with subject or specialist associations (55 per cent)

- being assigned to mentor or coach someone (50 per cent).

One clear finding here was that collaborative learning is an important, established and widespread part of professional development. Most teachers and educational commentators would agree that this level of collaboration would not have been evident, say ten or fifteen years ago. However in this survey two in five (40 per cent) survey respondents said that in-school collaboration with colleagues took place

frequently or on an ongoing basis and, in addition, a similar proportion (37 per cent) said that this took place occasionally. Within a school, colleagues are clearly an important source of support and advice for individual teachers.

External collaboration and partnership working is also important, though this was not as frequent or as widespread as internal collaboration. Such external working would probably have been quite rare in, for example, the early 1990s, when competition between schools would have been the norm for many. This finding may partly reflect the development of school partnership working, which has been encouraged within the English educational system since the late 1990s, through, for example, Beacon Schools, clusters of schools, City Challenge projects, Federations and School Chains. Although such programmes may have a central model of school to school support to improve pupil outcomes, the sharing of good practice between teachers, either formally or informally, was often an important element of the scheme.

'Traditional' professional development in the form of taking part in external courses was still a common experience for the survey sample: with 18 per cent of respondents experiencing this frequently or on an ongoing basis and 41 per cent participating occasionally. But it is also interesting to note that half of all respondents (50 per cent) had at least occasionally been assigned to mentor or coach someone, suggesting that mentoring and coaching are widespread and are being used at a variety of levels of responsibility. (Interestingly only about one in four respondents reported having a coach or mentor assigned to themselves: i.e. coaching roles were considerably more prevalent than 'coachee' roles in the sample).

On the basis of numbers experiencing the activity, and frequency, the least prevalent professional development activities were: 'undertaking action research', though more than one in five (22 per cent) respondents reported having experienced this at least occasionally in the last 12 months; 'studying for a postgraduate qualification (e.g. Masters)' (eight per cent); and 'participating in the Teacher Learning Academy' (five per cent). It should be borne in mind, of course, that a lower frequency does not mean a lower importance for this activity for an individual teacher: for example, taking a Masters Degree course is likely to take up much extra time and effort, especially for a full-time teacher.

By looking at the number of responses to the different elements of this question it was possible to identify the proportions of the sample who could be described as 'inactive', 'active' or 'very active' in terms of taking part in professional development activities. Almost all respondents (92 per cent) ticked the 'frequently or ongoing' box for at least one activity. Thirteen per cent of respondents were classified as 'very active' – they had been involved in at least four professional development activities 'frequently' within the last 12 months. This figure is comparable to the 2009 survey when 14 per cent were classified as being 'very active'. Only a minority (eight per cent) had not experienced any form of professional development activity listed within the previous 12 months (six per cent in the 2009 survey).

The latter point raises some interesting questions. For example, why did nearly one in ten of the sample not take part in any professional development activities during the previous year? This partly appears to be related to the role of teachers; 45 per cent of supply teachers were 'not active' compared with only 4 per cent of all other teacher types. However other factors may also influence levels of participation in professional development activities, for example the availability of activities, school support, time to engage in such activities and, possibly most importantly, teacher self motivation to be involved in professional development. Although it is not possible to fully investigate these issues using survey data, it was possible to begin exploring them using modelling in Section 2.3.

One aim of the survey was to find out more about teachers' access to and experience of professional development activities. We asked respondents to use a broad definition of 'professional development' so that, for example, it included coaching and mentoring and undertaking action research, as well as participating in an external course or studying for a qualification. We asked them to indicate their level of agreement with a variety of statements about professional development based upon their previous 12 months' experience.

One of the main findings in relation to this question was that teachers felt strongly that they should have an entitlement to professional development: nearly six out of ten respondents (59 per cent) 'strongly agreed' with the statement that 'Teachers should have an entitlement to time and support for their professional development', with a further 37 per cent 'agreeing' with the statement. Only two per cent of respondents said 'neither agree nor disagree' and none disagreed or strongly disagreed. This is a strong indication, then, that teachers feel that they *should* have an entitlement to professional development.

This finding, however, needs to be considered alongside responses to a further question about teachers taking individual responsibility for their practice. Again, nearly six out of ten respondents (57 per cent) 'strongly agreed' with the statement presented: that 'I have a professional responsibility to maintain and improve my practice', and a further 38 per cent 'agreed' with the statement. Only two per cent of respondents said 'neither agree nor disagree' and none disagreed or strongly disagreed. Teachers therefore feel strongly (and in almost equal measure) that they have a responsibility to improve and maintain their practice, and also that they should have an entitlement to time and support for their professional development.

Although most teachers held a positive belief about the importance of improving their teaching practice, access to professional development and learning activities appeared to be a concern for some. Almost three in five teachers said that their professional development needs had been identified by their school/employer in the last 12 months (59 per cent), and almost half of the respondents agreed that they had access to adequate professional development opportunities in the last 12 months (48 per cent). Even though other factors such as motivation also play a part in practice improvement, a notable proportion of teachers reported that access was an issue for

them: one in five teachers felt that their school had *not* identified their development needs (21 per cent) and almost a third of teachers said they had *not* had access to adequate professional development activities in the last 12 months (30 per cent). On the whole, teachers who felt their needs had been identified also said they had access to adequate CPD; however 14 per cent of teachers who felt their needs had been identified by their school did not feel that they had received adequate professional development opportunities within the last 12 months. In addition to receiving support through their school or employer, teachers may need to take a proactive approach to practice improvement in instances where professional development opportunities are limited.

Access appeared to be a particular issue for supply teachers; only 16 per cent of supply teachers agreed that in the last 12 months they had access to adequate professional development opportunities, and almost half (48 per cent) of supply teachers disagreed to some extent with this statement.

In addition to access, time for professional development was limited for almost two-thirds of teachers (65 per cent) who agreed that they need more time to engage in professional development activities. Time seemed to be more of an issue for secondary school teachers than primary school teachers: 73 per cent of secondary school teachers felt they needed more time to engage in professional development activities, compared with 60 per cent of primary school teachers.

2.2   The impact of professional development

Part of the survey was devised to gain a general assessment of how much impact teachers felt professional development had on their teaching and on their pupils' learning. Two-thirds of teachers (67 per cent) agreed or strongly agreed with the statement that 'Participation in professional learning and development activities has had a positive impact on my teaching practice in the last 12 months'; a further 16 per cent neither agreed nor disagreed and less than one in ten respondents (nine per cent) disagreed or strongly disagreed with the statement. The majority of teachers, therefore, take the view that professional development has a positive impact on their teaching. This indicates that on the whole, teachers see the benefits of engaging in professional development and learning activities such as attending courses, mentoring and coaching and collaborative learning.

What about perceptions of the impact of teachers' professional development on learning? Again, a majority of teachers held a positive view on this: six out of ten respondents (60 per cent) agreed or strongly agreed with the statement that 'I have seen a positive impact on my pupils' learning as a result of my professional and learning and development activities in the last 12 months'; 21 per cent neither agreed nor disagreed and less than one in ten respondents (nine per cent) disagreed or strongly disagreed with the statement.

This finding should be encouraging for providers of professional development activities for teachers: two-thirds of teachers take a positive view of the impact of professional development activities upon their teaching, and 60 per cent believe that a positive impact is passed on to their learners. The latter finding can be seen as being particularly encouraging: it suggests that a majority of teachers see professional development as being not only positive for their own pedagogy, but also as something that translates into, and is of practical relevance, to the learning experience of their pupils. Of course there is always room to improve teachers' professional development – and it would be interesting to explore the reasons *why* nine per cent of teachers did not feel that these activities had a positive impact on learning[6] – but this finding suggests at least a basic level of satisfaction with the relevance of such activities in the past 12 months.

The survey sample were also asked for their views on whether their school (or employer) evaluated the impact of professional learning and development activities on teaching practice. A greater proportion of respondents agreed that professional development was evaluated, than disagreed: 47 per cent agreed or strongly agreed and 20 per cent disagreed or strongly disagreed. The 'neithers' and the 'don't knows' added together, however, amounted to 27 per cent, suggesting that over a quarter of teachers were unsure about whether or not such evaluation takes place: perhaps where such evaluation is occurring, schools and local authorities (LAs) could do more to demonstrate to teacher participants that they are indeed evaluating such activities and that they will seek to improve them based upon these evaluations.

2.3 Teachers' characteristics and their views about professional development

Analysis was carried out to explore whether there were differences in the background characteristics of teachers who had a positive attitude towards the role of professional development and learning activities in terms of improving their teaching practice.

Factor analysis was used to create a single measure of teacher attitudes towards professional development by combining a number of related questions. The factor included participation in CPD activities; views on access to CPD and attitudes towards the impact of professional development activities on teaching and learning (see Appendix B for a full list of questions). This means that each of these questions were answered in a similar way, so we know that teachers who had experienced more professional development activities also had a positive view about the availability of professional development support, and tended to feel that such activities had a positive impact on their teaching and their pupils' learning. Equally, teachers that had experienced fewer professional development activities tended to also have a negative view about being able to access professional development and to disagree with

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[6] This has been explored to some extent in the accompanying qualitative study: How teachers approach practice improvement (2010). Commissioned by the GTC and conducted by NFER.

statements about professional development having a positive effect on teaching and learning.

Regression analysis was then used to ascertain the relationship between teacher views about the benefits of using professional development and learning as a way to improve their teaching, and the background characteristics of the teachers – the results of the modelling are shown in Figure 2.1 below.

Overall, teachers that were more likely to have a positive view about professional development had recently experienced more professional development and learning activities and consequently they had had more opportunities to see the benefits of engaging in such activities. These teachers were also more likely to have a positive view about access to professional development and about the impact on teaching and learning that professional development could have.

Figure 2.1 Differences in teacher characteristics in relation to views about whether professional development and learning activities help them to improve their teaching

Teachers were more likely to have a **positive** attitude towards the role of professional development and learning activities in relation to practice improvement if they:

- were a senior teacher (including deputy heads, assistant heads and headteachers) or a middle manager (e.g. head of department or key stage)
- were a teacher with additional responsibilities
- defined themselves as having a teaching role not otherwise listed (teachers could specify their role and this included advanced skills teacher, LA advisory teacher, PPA cover teacher, SENCO)
- had been teaching for less than five years
- were 34 years old or younger.

Teachers were more likely to hold a **negative** view about the role of professional development and learning activities in relation to practice improvement if they:

- were a supply teacher
- worked part-time
- were male
- worked in a secondary school
- defined themselves as being disabled (in line with the Disability Discrimination Act)
- said that they preferred not to say what their ethnicity was.
- had been teaching for between 20 and 29 years.

(see Appendix C for more details)

Teachers with more responsibilities – for example senior leaders, middle managers (such as heads of departments or key stages) and teachers with additional responsibilities – were more likely to have a positive attitude towards the benefits of professional development and learning activities in terms of improving teaching.

Younger teachers and those with less teaching experience were more likely to be positive about professional development and learning – perhaps recognising the potential benefits from development and learning opportunities for those with less practical experience of teaching. In contrast, teachers who had been teaching for between 20-29 years were more likely to have a negative view about professional development as a way to improve their teaching, compared with teachers in the profession for less than this, or for more than 30 years. Of course, it is not possible to be sure about the reasons behind this, however teachers who have a long experience of teaching might feel that they have gathered the experience they need from teaching, rather than professional development activities such as attending a course or being involved in mentoring or coaching.

Working in a school that experienced higher levels of economic or academic challenge did not have a significant effect, either positive or negative, on teachers' attitudes towards the contribution of professional learning and development activities towards improving their teaching. Other school-level variables such as percentage of pupils with EAL and percentage of pupils with SEN did not have a significant effect either.

Supply teachers tend to feel more negatively about the role of CPD activities in improving their teaching and this may be related to the nature of supply work and of working in a variety of different schools over the same school year, making it harder for them to gauge the impact of their professional learning on their teaching skills and the pupils they teach. Furthermore, this indicates that supply teachers are more likely to feel that they do not have access to CPD, and, as highlighted in Section 2.1, supply teachers had a lower level of participation in development activities than other teachers. There might be a similar issue about limited continuous contact with the same pupils for part-time teachers, who were also more likely to have a negative view about professional development.

It is interesting to see that teachers from the secondary sector were less likely to feel positively about the influence of professional learning on the development of their teaching than teachers from primary and middle schools. This could be related to having the time or opportunity to participate, which, as discussed above, seemed to be more of an issue among secondary school teachers.

There were some interesting findings in relation to personal characteristics, and how they interacted with views about professional learning activities. For example, male teachers were more likely to feel negatively about professional development and learning activities as an approach to improving their teaching than female teachers. There was no significant difference in relation to views on professional development

by teachers of White and BME backgrounds. Teachers who said they had a disability were however more likely to feel negatively about the impact of professional development and learning activities.

As outlined earlier, almost all teachers agreed that they had a professional responsibility to maintain and improve their practice. Thus it appears that the commitment to becoming better teachers is present in most of the workforce, and the challenge is translating this into real practice improvement. Support from schools, LAs and professional bodies is important here, but teachers' motivation to make this step is also key.

3. Using research

> **Key findings:**
>
> - conducting research was not particularly widespread among the sample, but it appears that many teachers would like to be able to be more involved in research
>
> - teachers that had been involved in a higher number and wider variety of professional development activities in the last 12 months were more likely to have a positive view about the use of research to improve their teaching
>
> - younger teachers were less likely to feel positively about the use of research to improve their teaching practice.

The survey provided an opportunity to ask how teachers used research or enquiry to inform their teaching practice: these questions covered both teachers conducting their own research and using research conducted by others.

3.1 Teacher views on using research to improve their practice

Only a third of respondents (33 per cent) strongly agreed or agreed with the statement that 'In the last 12 months I have undertaken my own research and enquiry to improve my practice'; a further 13 per cent neither agreed nor disagreed and just under half (49 per cent) disagreed or strongly disagreed. Indeed, although a sizeable proportion of teachers reported that they had not undertaken their own research (29 per cent) or used other people's research (24 per cent) within the last two years, of those people who had used research within the previous two years, most had found it a useful way to help them to improve their teaching practice. For example 86 per cent of teachers who had conducted their own enquiry or research found it 'very' or 'fairly' useful, and 76 per cent of teachers who had used other people's research reported that had been useful.

Motivation for professional self-improvement by conducting research does not appear to be a problem, since six out of ten respondents (60 per cent) agreed or strongly agreed that: 'I would like more opportunities to do my own research to improve my teaching'; and nearly two-thirds (65 per cent) agreed or strongly agreed that 'I would like more opportunities to collaborate with other colleagues on a piece of research'. Confidence in their own research skills seemed to be an issue for some teachers: only around half of respondents (52 per cent) agreed or strongly agreed with the statement that 'I feel confident in my research skills to conduct my own enquiry' while 18 per cent disagreed or strongly disagreed and 25 per cent neither agreed nor disagreed with this statement.

In terms of using the findings of research carried out by others, a good proportion of the teachers surveyed knew where to find relevant research that may help to inform

their teaching (61 per cent), yet only 49 per cent of all teachers said that the research they had found they had been able to understand and use. The message here may be that research needs to be made more accessible and more concise for busy teacher audiences.

The barriers to teachers doing their own research appear to consist of a combination of a lack of time and, to some extent, a lack of encouragement from schools, as indicated by the following findings:

- nearly six in ten respondents (58 per cent) agreed or strongly agreed with the statement that 'I do not have time to conduct my own research';

- just over two fifths of teachers (42 per cent) said that they did not have time to use research findings by other people;

- less than one in four respondents (23 per cent) agreed or strongly agreed with the statement that 'My school encourages me to undertake my own enquiry';

- a similar proportion (24 per cent) said that their school encouraged them to use research findings to improve their practice.

Although peer support and collaboration with colleagues was highlighted in Chapter 2 as an important resource for teachers wishing to improve their practice, only 16 per cent of teachers said that they had frequent (at least termly) opportunities to discuss relevant research findings with their colleagues. In turn, over half of teachers (54 per cent) said that they did not have frequent opportunities to discuss relevant research findings. This suggests that utilising research by other people has not been integrated into the ethos of improving teaching practice in a good proportion of schools. While this cannot be taken as active discouragement by schools, this does point to the possibility of a 'weak' research culture within many schools.

3.2   Teachers' characteristics and their views about research

An overall measure of teacher attitudes towards using research was created using factor analysis (see Appendix B), and regression analysis was carried out to look at the relationship between this measure and teacher characteristics. The results of the regression are displayed in Figure 3.1.

Figure 3.1 Differences in teacher characteristics in relation to views about how using research supports them to improve their teaching

Teachers were more likely to have a **positive** attitude towards using research (either their own or research done by others) as a way of improving their teaching if they:

- had experienced a higher number of CPD activities within the last 12 months
- were a supply teacher
- were a senior teacher
- defined themselves as having a teaching role not otherwise listed (teachers could specify their role and this included advanced skills teacher, LA advisory teacher, PPA cover teacher, SENCO)
- said that they were of BME ethnic background
- taught part time
- taught at a school with a higher proportion of pupils with special educational needs (SEN)
- were between 50 and 65 years of age.

Teachers were more likely to hold a **negative** view about the use of research (either their own or research done by others) as a way of improving their teaching if they:

- were between 25 and 34 years of age
- had been teaching for between 20 and 29 years.

(see Appendix C for more details)

Teachers who had been involved in higher levels of professional development and learning activities were more likely to feel positively about using research or enquiry as a way of improving their teaching practice. Undertaking action research and studying for a postgraduate qualification (for example a Masters) were included in the definition of professional development activities that were used as part of the measure of level of engagement and activity in relation to professional development and learning over the last 12 months.

There were differences in views by teacher roles; senior teachers, supply teachers and teachers with 'other' roles were all more likely to have a positive opinion about the contribution that research and enquiry could have to practice improvement. Senior teachers were perhaps more likely to see the strategic benefits of research, and for example, also have more control over their workload so that issues such as having the opportunity to conduct or discuss research were likely to be less of a problem. Many of the teachers in the 'other' role category were those with specific areas of interest, which often involve – and in some cases require – research, for example part of the role of an advanced skills teacher involves disseminating best practice based on educational research.

Teachers from schools with a higher proportion of pupils with SEN were more likely to be positive about the use of research compared with teachers at schools with lower proportions of children with SEN. Sharing knowledge and finding different ways to

teach and engage pupils with a variety of needs could be one reason that teachers in these schools could see the value in research. Other school-level variables such as the level of challenge, or the proportion of pupils with EAL did not have an effect on teacher views about research.

Part-time teachers were more likely to have a positive attitude about the role of research in their practice improvement, compared to their colleagues who worked full time. The additional non-contact time available to part time teachers means this group have, theoretically, more time and opportunity for research, but this difference could also relate to the perceived differences in value that full and part-time teachers place on research.

Differences were also apparent in terms of personal characteristics of teachers. Compared to teachers from White ethnic groups, teachers from BME backgrounds were more likely to hold a positive view about research in relation to practice improvement. Teachers aged between 50 and 65 years were more likely to have a positive view about research, while teachers aged between 25 and 34 years were more likely to have a negative attitude. It was not possible to explore the reasons for different attitudes among different age groups, but one possibility is that 25 to 34 year olds are concerned to 'establish' themselves in the profession before turning to research as a means of professional development. Family and social factors may also have an influence on these attitudes. Those supporting teachers in their efforts to become better teachers may wish to consider promoting the benefits of research in relation to teachers of all age groups and ethnicities.

Interestingly, there was no difference between the attitudes towards research of male and female teachers. This is in contrast to the findings in relation to performance management, the professional standards, observation and feedback and professional development and learning activities; compared with female teachers, male teachers were more likely to have a negative attitude towards all of these things.

4. Performance management

> **Key findings:**
>
> - there were mixed views about the role of performance management in practice improvement. Although around half of teachers agreed that performance management helped them to identify areas for improvement and areas of strength (53 per cent and 49 per cent respectively), fewer than three in ten teachers (28 per cent) said that performance management was a key factor in helping them to improve their teaching
>
> - teachers that worked at schools experiencing 'economic challenge' (which had a high proportion of pupils eligible for FSM) were more likely to have a negative view of the performance management process in relation to practice improvement compared with those that worked at schools not experiencing economic challenge
>
> - teachers at schools with a higher proportion of pupils with SEN were more likely to feel positively about the performance management process.

4.1 Experiences of performance management and its impact

Part of the survey focused on how teachers felt that the performance management process supported them to improve their teaching, both in terms of helping them to identify ways to improve, but also in terms of the support and opportunity it provided.

More than half of respondents (56 per cent) agreed or strongly agreed that the evidence used in their performance management processes provided a fair picture of their performance. It is worth noting that almost one in five respondents (19 per cent) disagreed or strongly disagreed with this statement. It may also be worth noting that one in four teachers (25 per cent) felt either that this statement was not applicable to them, or gave a 'don't know' answer, or neither agreed nor disagreed. Overall then, teacher views were mixed about how well performance management reflects their actual performance.

In order to enable the research team to explore the impact of performance management upon teaching in more detail, the survey included a specific question on this topic, with a range of different statements on performance management. Figure 4.1 illustrates the responses to this set of statements. One finding from this set of questions was that between about a fifth (19 per cent) and a quarter (26 per cent) of respondents felt that they were unsure about various aspects of performance management, as indicated by selecting the neither agree nor disagree category. This suggests that those who oversee performance management, at a school level or at a broader policy level, could perhaps review and improve teachers' awareness and understanding of the purposes of performance management and how these processes could assist teachers in improving their teaching.

Figure 4.1 Teacher views about performance management in relation to improving their teaching practice
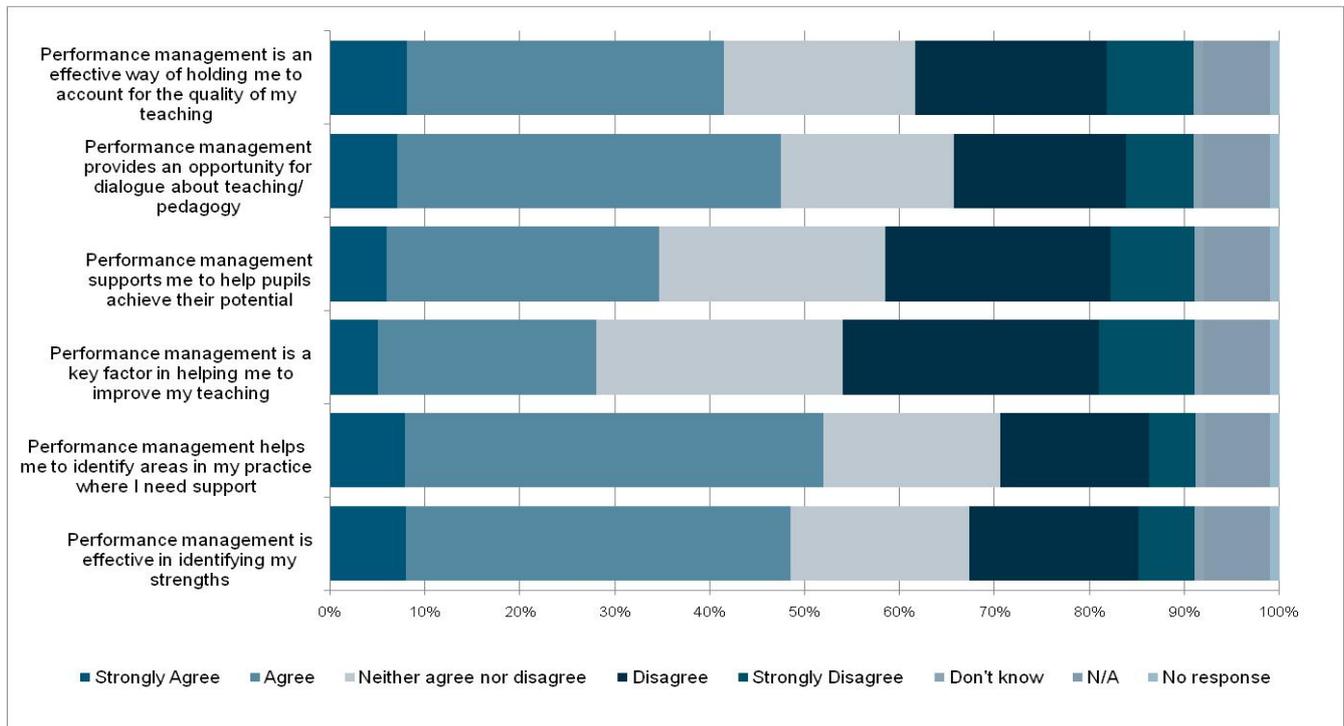
If we look beyond the uncertain group we find that, for most of the statements, more respondents took a positive view of the impact of performance management upon their teaching than took a negative view. For example:

- fifty-three per cent agreed or strongly agreed that performance management 'helps me to identify areas in my practice where I need support', compared with 21 per cent disagreeing or strongly disagreeing;

- forty-nine per cent agreed or strongly agreed that performance management was 'effective in identifying my strengths', compared with 24 per cent disagreeing or strongly disagreeing;

- forty-seven per cent agreed or strongly agreed that performance management provided 'an opportunity for dialogue about teaching / pedagogy', compared with 25 per cent disagreeing or strongly disagreeing;

- forty-one per cent agreed or strongly agreed that performance management was 'an effective way of holding me to account for the quality of my teaching', compared with 29 per cent disagreeing or strongly disagreeing.

As shown above, not all teachers agreed that performance management helped them to identify their strengths and weaknesses. However once the objectives had been identified, 64 per cent of teachers found working towards their objectives a 'very' or 'fairly' useful way of improving their teaching. Although rated by many as a useful exercise, less than half of teachers surveyed felt that they had support (46 per cent) and access (45 per cent) to CPD activities to meet their performance management objectives.

Respondents were more divided on the impact of performance management processes on improving practice and pupil outcomes. For example:

- there was an almost even split in opinions in relation to the statement: 'Performance management supports me to help pupils achieve their potential', with 35 per cent agreeing or strongly agreeing with the statement; 24 per cent neither agreeing nor disagreeing; and 33 per cent disagreeing or strongly disagreeing;

- in relation to the statement that 'Performance management is a key factor in helping me to improve my teaching', 28 per cent agreed or strongly agreed with the statement; 26 per cent neither agreed nor disagreed; and 37 per cent disagreed or strongly disagreed.

It seems that performance management is important for some teachers in terms of encouraging dialogue about teaching practice, identifying areas of strength and identifying areas where support is needed, but, for around two-thirds of teachers, it is not perceived as a key factor in helping teachers to improve their teaching.

4.2 Teachers' characteristics and their views about performance management

Questions about teacher attitudes towards performance management were combined into a single factor which provided an indicator of how a respondent felt about the performance management process as a means to support them to improve their teaching (see Appendix B). It was then possible to run a regression analysis to explore what the characteristics of teachers were with different views about performance management, the results of which are shown in Figure 4.2 below.

Figure 4.2 Differences in teacher characteristics in relation to views about how the performance management process supports them to improve their teaching

Teachers were more likely to hold a **positive** view of the performance management process if they:	• had experienced a higher number of CPD activities within the last 12 months • were a senior teacher (including assistant head, deputy head and Headteacher) • had been teaching for less than five years or for more than 30 years • said that they were of BME ethnic background • taught at a school with a higher proportion of pupils with *special educational needs* (SEN) • taught part time.
Teachers were more likely to have a **negative** view of the performance management process if they:	• were male • worked at a secondary school • worked at a school that experiences higher economic challenge • defined themselves as being disabled in line with the Disability Discrimination Act • said that they preferred not to say what their ethnicity was.

(see Appendix C for more details)

Teachers who had a positive view about the performance management process and how it can support them to improve as a teacher tended to be those who had engaged in more professional development and learning activities over the last 12 months. Part of the performance management process involves identifying areas for development and finding ways to support the teacher to improve on that particular aspect of their teaching practice, so it is understandable that teachers who had had the opportunity to work on developing their teaching through such activities were more likely to feel positively about performance management. However, it does not automatically follow that their opportunities to participate in development activities were provided *as a result* of performance management, and other factors such as personal motivation could play a part.

Senior teachers were more likely to have a positive view about how the performance management process could support improving teaching practice. This could be because, as senior leaders, they have more control and ownership of the performance management process in their school and more responsibility for delivering it. Senior teachers and governors may wish to consider ways to communicate the links between performance management and practice development to the other teachers in their schools. Perhaps one of the first steps could be to explore why other teachers do not feel as positively about the support that performance management can provide them in helping them to improve their teaching – for example this could relate to different

ways managers approach performance management, or how teachers measure the impact of their performance management activities.

In terms of length of service, teachers either at the beginning or towards the later stages of their teaching career were more likely to feel positively about how performance management could support them to improve their teaching. Although the reasons for this distinction are not clear, perhaps these groups of teachers were more optimistic about the support that the performance management system can provide, compared with their colleagues.

Part-time teachers were more likely to see the benefits of the performance management process than their full-time counterparts. There was also a difference in terms of the phase at which the teacher taught; secondary school teachers were more likely to feel negatively about performance management than their colleagues working at primary and middle schools. These, and the other differences described, could be related to the perceived amount of access to CPD activities required to meet their objectives, and the level of support received in relation to performance management – attitudes towards support, opportunity, and access, all formed part of the factor encompassing overall views towards performance management.

Teachers from BME groups were more likely to have a positive attitude towards the role performance management plays in supporting them to improve their teaching, compared with teachers of White ethnic backgrounds.

Male teachers, as with the findings of the other regression models described in this report, were more likely to feel negatively about the role of the performance management process in practice improvement, compared with female teachers.

Teachers who had defined themselves as disabled were also more likely to be negative about the performance management process.

The performance management model was the only regression carried out for this study where economic challenge was a significant factor in the model. In this case, teachers at schools experiencing a challenge in terms of the socio-economic status[7] of the children attending the school were more likely to be negative about the performance management process. In comparison, however, teachers working at schools with a higher proportion of pupils with SEN were more likely to be positive about performance management. Schools knowingly facing these types of challenges may wish to consider reviewing or evaluating how the performance management process supports their teachers to improve their practice. Other school characteristics (such as the proportion of EAL pupils and if schools faced academic challenge) did not have a significant effect on teacher views regarding the support available through the performance management for practice improvement.

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[7] Measured by the proportion of children eligible for free school meals.

5. Professional standards

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Key findings:

- although most teachers reported that they had a good understanding of the professional standards framework, overall, teachers had mixed views about the professional standards framework in terms of how it could help them to improve their practice

- teachers that had experienced a higher variety and frequency of professional development activities within the last year were more likely to have a positive view about how the professional standards could help them to improve their practice

- both senior teachers and teachers who were relatively new to the profession (although not necessarily younger teachers) were more likely to perceive the professional standards as helpful.

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The survey also provided an opportunity to explore teachers' views on the professional standards framework, and how and if these standards influenced their approaches to improving their teaching practice. As was the case with performance management, a number of statements were offered to respondents and they were asked about their extent of agreement or disagreement with these statements.

The professional standards were introduced by the Training and Development Agency for schools (TDA) in 2007. The aim of the professional standards framework is to provide a tool which teachers can refer to when considering their professional development, for example to consider gaps or strengths in their practice. The framework provides a series of reference points which teachers at different stages of their career can use when thinking about improving their practice and career progression.

5.1 Use and impact of the professional standards framework

Nearly eight in ten respondents (79 per cent) strongly agreed or agreed that they had a 'good understanding' of the professional standards for teachers. Only a small minority of respondents (six per cent) disagreed or strongly disagreed with this statement. It was also apparent that nearly two-thirds of respondents (63 per cent) felt that the professional standards provided 'a good definition of teacher competence', suggesting that these standards had provided useful benchmarks for many teachers; again, only six per cent of respondents disagreed or strongly disagreed with this statement, though there were also nearly one in four teachers (23 per cent) that neither agreed nor disagreed.

As with performance management, when statements were used to probe the detailed use of the professional standards by teachers, opinions were more divided. For example:

- in relation to the statement: 'I use the professional standards to help me identify where I want to improve my teaching', 35 per cent agreed or strongly agreed with this; 32 per cent neither agreed nor disagreed; and 28 per cent disagreed or strongly disagreed;

- there was an even split in opinions in relation to the statement: 'My use of the professional standards has already helped me to improve my teaching', with 30 per cent agreeing or strongly agreeing with this; 35 per cent neither agreeing nor disagreeing; and 29 per cent disagreeing or strongly disagreeing;

- similarly, in response to the statement: 'The professional standards support me to achieve better outcomes for my pupils', 29 per cent agreed or strongly agreed with the statement; 37 per cent neither agreed nor disagreed; and 26 per cent disagreed or strongly disagreed.

Perhaps one of the most telling responses to this series of questions was that relating to the direct statement: 'In practice, the professional standards do not make any difference to the way that I teach'. In this case, although more teachers agreed (41 per cent) than disagreed (24 per cent) with this statement, almost one in three neither agreed nor disagreed (29 per cent): a sizeable proportion of teachers, therefore were ambivalent about the influence of the professional standards on their teaching.

It seems that the professional standards provide a useful conceptual or definitional benchmark for a majority of teachers, but when it comes to assessing the practical impact of the standards upon their teaching or upon pupil outcomes, teachers are not as certain about their influence. This was demonstrated by the finding that around a third of respondents neither agreed nor disagreed with five of the seven statements about the standards, as illustrated in Figure 5.1. This may be explained by teachers not having used the standards and therefore being unable to respond to the statements, or it may be that teachers are simply attributing greater importance to other influences on changing their teaching practice.

Figure 5.1 Teacher views about the professional standards in relation to improving their teaching practice
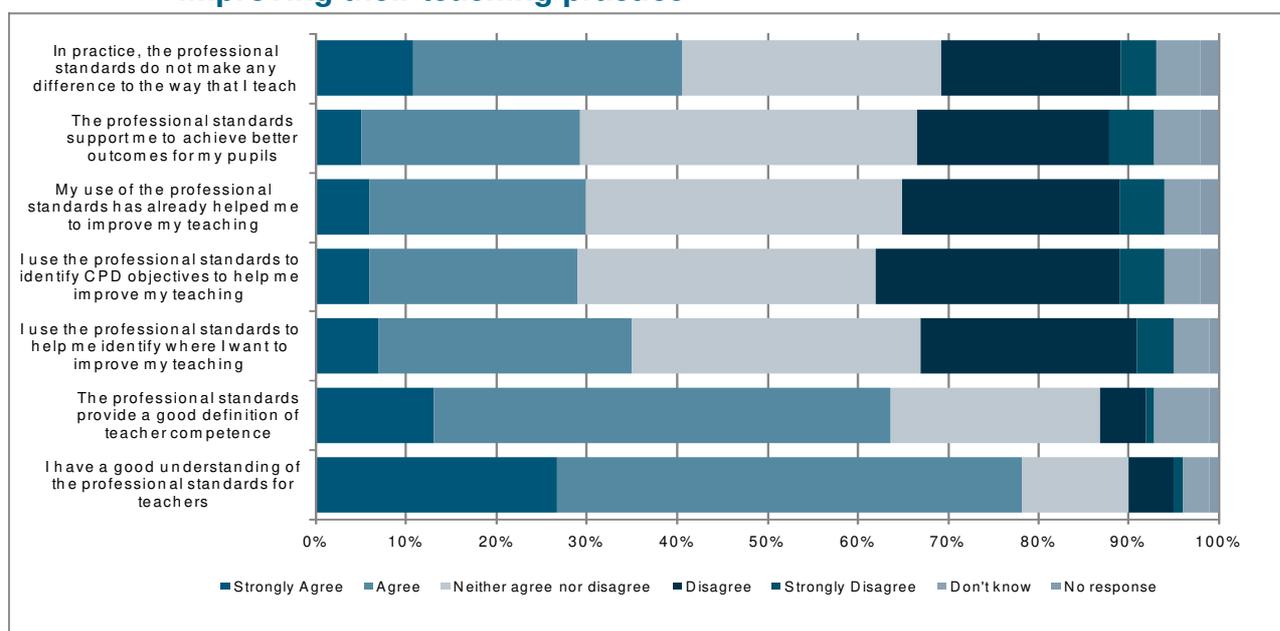
5.2 Teachers' characteristics and their views about the professional standards

After considering the overall responses to the professional standards, analysis was carried out to look at the differences in the characteristics of teachers who felt more positively or negatively about how the professional standards supported them to improve their teaching. A similar approach was taken to the other aspects of practice improvement covered in this report – firstly a factor was created to provide a measure of teacher attitudes towards the professional standards overall (see Appendix B). Regression analysis was then used to explore the relationship between teachers' views about the role of the professional standards in improving their teaching and the background characteristics of the teachers (see Figure 5.2).

Figure 5.2 Differences in teacher characteristics in relation to views about how the professional standards support them to improve their teaching

Teachers were more likely to hold a positive view about how the professional standards helps them improve their teaching if they:

- Had experienced a higher number of CPD activities within the last 12 months
- Had been teaching for less than nine years
- Were a senior teacher (including assistant head, deputy head and headteacher)
- Said that they were of a BME ethnic background
- Were a supply teacher
- Were between 50 and 65 years of age
- defined themselves as having a teaching role not otherwise listed (teachers could specify their role and this included advanced skills teacher, LA advisory teacher, PPA cover teacher, SENCO)

Teachers were more likely to have a negative view about how the professional standards helps them improve their teaching if they:

- Were male
- Were aged between 25 and 34

(see Appendix C for more details)

One of the aims of the professional standards framework is that it can be used as a tool to identify areas for improvement and objectives for continuing professional development to support the improvement and development of teaching practice. With this in mind, it is perhaps not surprising that teachers who had experienced a higher number of professional development and learning activities within the last 12 months were more likely to have a positive attitude towards the role of the professional standards in improving their teaching practice, although we cannot infer that one has *caused* the other using this information.

Teachers who joined the profession within the last nine years were more likely to have a positive view on the role the professional standards framework had played in helping them to improve their teaching. The professional standards were introduced in September 2007 and would have been an integral part of the initial teacher training for this cohort onwards. It is likely, therefore, that this group of teachers would be among those with the highest awareness of the professional standards and how they could be used to a teacher's best advantage. Interestingly, however, teachers nearer retirement (in the 50-65 age group) were more likely to have a positive attitude towards the support the professional standards framework provides in practice improvement, compared with other age groups. Furthermore, teachers aged between 25 and 34 were more likely to have a *negative* view of the professional standards, compared to teachers in other age groups. Although there is likely to be some overlap between teachers aged between 25 and 34, and teachers who joined the profession in the last nine years, this suggests that age and length of experience are not one and the same, that the two groups do not overlap entirely and that the two behave differently.

Senior teachers were also among those who were more likely to be positive about the professional standards in relation to practice improvement – this finding is similar to that reported in chapter 5 about views on performance management. If the senior teaching team in a school places importance on using the professional standards as part of practice improvement then this message may filter down to staff. Supply teachers also tended to have a positive view about the professional standards. This perhaps suggests that although supply teachers are generally not affiliated with a single school, these teachers may have independently used the professional standards.

There were also some differences in attitudes towards the professional standards in the individual characteristics of teachers. Firstly, teachers of BME backgrounds were more likely to have a positive view about the use of the professional standards in improving their teaching, compared with their White colleagues. Another interesting finding was that male teachers were less likely to have a positive view of the professional standards in relation to practice improvement compared with female teachers. Schools and other organisations promoting the use of the professional standards framework as a way to help teachers improve and develop their teaching may wish to consider ways of highlighting the benefits of the professional standards to teachers from all backgrounds, and at all stages of a teaching career.

Although there were differences in teacher views according to individual characteristics of teachers, as outlined above, there were no differences by school type (whether a teacher worked at a primary, secondary or special school). The level of challenge (economic or academic), and the proportion of pupils with EAL or with SEN did not have an effect on teacher views about the professional standards framework.

6. Views on different approaches to improving practice

> **Key findings:**
>
> - almost all teachers said that self reflection was a useful way of improving their teaching practice, with more than two thirds reporting it as 'very' useful
>
> - observation and feedback were viewed as useful ways of improving teaching practice
>
> - working towards performance management objectives appears to be considered more useful than the performance management process overall
>
> - although most teachers who expressed an opinion about the usefulness of research and the usefulness of observation in terms of improving their practice said they were 'very' or 'quite' useful, around one in four and one in five teachers respectively said they had no experience of these approaches during the past two years.

6.1 Perceived usefulness of different ways of improving teaching practice

One of the aims of the survey was to explore if teachers felt differently about the usefulness of different approaches to practice improvement.

The method of improving teaching that was valued by the most teachers was self reflection (as illustrated in Figure 6.1); overall, almost all teachers reported that 'reflecting on my own practice' had been a very or fairly useful way of improving their teaching over the last two years (97 per cent). Notably, more than two-thirds of teachers said it was 'very' useful (68 per cent). Furthermore, in response to an open question, one in seven teachers spontaneously said that self reflection was one of the main factors that helped them to improve and maintain their teaching quality (14 per cent).

Although reflection on their own practice was by far the approach that the most teachers found useful in terms of improving their teaching, around three in four teachers also said that the following methods were very or fairly useful (also see figure 6.1):

- observing my peers' teaching (76 per cent)
- feedback from pupils (76 per cent)
- peers observing my teaching and giving me feedback (72 per cent)
- reviewing my practice as part of school self-evaluation (72 per cent)
- using teacher assessment data (71 per cent)

Figure 6.1   **Teacher ratings of usefulness of different approaches to practice improvement**
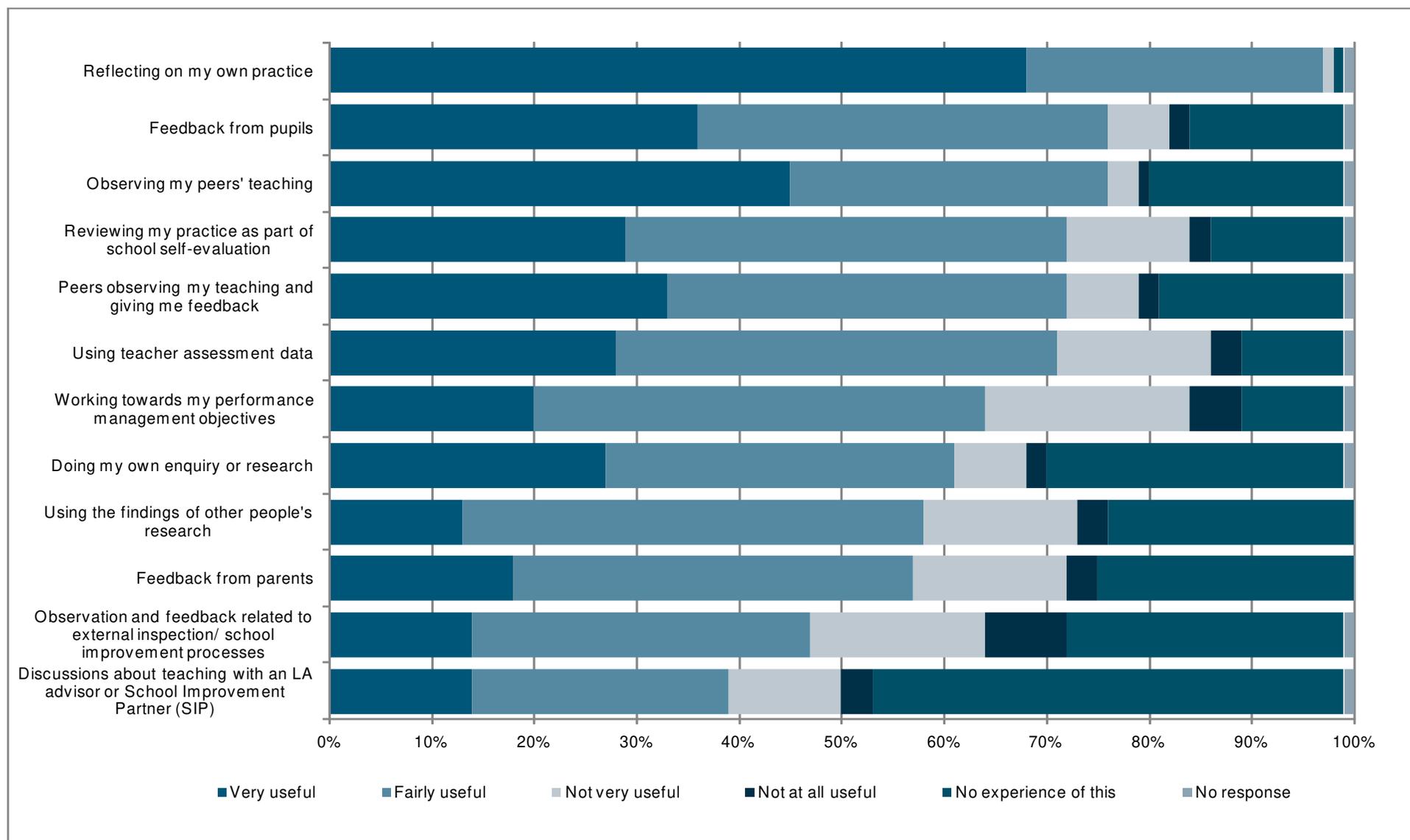
Most of the teachers who had been observed or who had observed a colleague said it was 'very' or 'quite' useful. However almost one in five teachers said that they had not observed their peers' teaching (19 per cent) and a similar proportion (18 per cent) said that they had not experienced being observed by their peers and receiving feedback on their own performance. Considering the positive views of the majority of teachers who had experienced observation, schools and teachers may wish to consider ways to provide more opportunities for teachers to use this approach to help them to reflect on their teaching practice. Finding the time to conduct observations and to feed back does seem to have a positive pay off for teachers' professional development.

Conducting their own research and using the findings from other people's research were viewed as useful by similar proportions of teachers (61 per cent and 58 per cent respectively). Notably, around a quarter of teachers said that they had 'no experience within the last two years' of doing their own research (29 per cent) or of using the findings of other people's research (24 per cent) to improve their teaching. Factors related to the support teachers feel they need in order to make good use of research are discussed in Chapter 3, but it is important to note that the proportions of teachers directly reporting that research was 'not useful' was relatively low, as shown in Figure 6.1. This indicates that when teachers have the opportunity to use or conduct research, they do find it a useful tool to improve their teaching.

Working towards their performance management objectives was regarded as a 'very' or 'fairly' useful way to improve their teaching by almost two thirds of teachers (64 per cent); however, only one in four teachers agreed that performance management was a 'key factor in helping them improving their teaching' (28 per cent agreed to some extent). Teachers appeared to have a similar view about the usefulness of the professional standards; only three in ten teachers agreed that using the professional standards had already helped them to improve their teaching (30 per cent agreed to some extent). Thus, while many teachers reported that the objective setting process was beneficial in terms of helping them to improve their teaching practice, fewer rated the performance management process overall and the professional standards as being key to practice improvement. It appears that the more focused and tailored aspects of identifying and working towards particular objectives for the individual were perceived as being more useful than the wider processes.

Using observation and feedback

Observation and feedback is now a common aspect of teaching, from the early stages of embarking on the teacher training course and throughout teachers' careers as part of the performance management process and school inspections. Indeed, almost all teachers (97 per cent) gave a view about how useful at least one of the types of observation and feedback listed in a survey question were, indicating the widespread use of at least some forms of observation and feedback amongst the sample.

As outlined above, observation and feedback were among the more highly valued approaches for teachers to improve their teaching practice. Around three quarters of teachers said they found observing other teachers or being observed themselves

'quite' or 'very' useful and, in response to an open-ended question, two-fifths of teachers (39 per cent) said that observation was one of the main factors that supported them in maintaining and improving their teaching quality.

In light of this apparent importance placed on observation by teachers, additional analysis was carried out to explore which types of teachers have a more positive or negative view about the use of observation and feedback. By using factor analysis, a measure of usefulness of observation of feedback was created (see Appendix B). Regression analysis was then used to ascertain the relationship between this measure and the background characteristics of the teachers: the results of the regression are shown in Figure 6.2 below.

Figure 6.2 Differences in teacher characteristics in relation to views about how useful observation and feedback is to improving their teaching

Teachers were more likely to feel that observation and feedback were **useful** ways of improving their teaching if they:

- had experienced a higher number of CPD activities within the last 12 months
- were a senior teacher
- were of BME ethnic background
- had been teaching for less than five years
- defined themselves as having a teaching role not otherwise listed (teachers could specify their role and this included advanced skills teacher, LA advisory teacher, PPA cover teacher, SENCO).

Teachers were more likely to feel that observation and feedback were **not useful** ways of improving their teaching if they:

- were male
- worked in a secondary school
- defined themselves as being disabled (in line with the Disability Discrimination Act)
- said that they preferred not to say what their ethnicity was.

(see Appendix C for more details)

Teachers who had experienced a higher level of professional development activities over the past 12 months were more likely to feel positively about the usefulness of observation and feedback as a way of improving their teaching practice. The reasons why teachers who had been involved in more professional development and learning activities recently were more likely to rate observation and feedback could be related to a greater awareness of the impact of CPD and how to reflect on this. It could also be linked to levels of activity – teachers more involved in development activities are more likely to have the chance to properly explore the benefits of observation and compare it with other approaches.

In terms of the level of experience of the teacher, senior leaders and teachers with a role not otherwise listed (including advanced skills teachers and SENCO) were among those more likely to have a positive view about the usefulness of observation and feedback in terms of improving their teaching practice. However, almost at the opposite end of the teaching spectrum, less experienced teachers – those who had been teaching for less than five years – were also more likely to report that observation and feedback was useful for improving their teaching compared with their more experienced colleagues with more years of teaching behind them. Reasons behind these differences could be related to motivation, access to opportunities to observe and be observed, or to do with the types of training they had received most recently as part of their progression within the teaching profession (for example as part of teacher training, or working towards qualifications such as the National Professional Qualification for Headship (NPQH)).

Secondary school teachers were less likely to report that methods of observation and feedback were useful, compared to their primary and middle school colleagues. This could be related to the differences in teaching between the different phases – in primary and middle schools teachers tend to work with a single class for a whole academic year and as a result perhaps it is easier for these teachers to use feedback and to apply it to their teaching with visible results. In contrast, secondary school teachers tend to teach a number of different classes within the same week and so applying the learning might be more difficult; what applies to the teaching approach for one class is not necessarily the same as what works best when teaching a different group of students.

As described below, a number of differences existed in terms of personal characteristics, however it is interesting to note that none of the school-level variables – including the proportion of pupils with EAL or with SEN and whether a school experienced higher levels or socio-economic or academic challenge - had an effect on teacher views about the usefulness of observation and feedback, either positively or negatively. This indicates that the differences were more at the individual, rather than school level.

One of the differences in personal characteristics was that teachers from BME backgrounds were more likely to find observation and feedback useful than their White colleagues. In addition, male teachers were more likely to say that observation and feedback was not very useful compared to female teachers. Teachers who had defined themselves as being disabled were more likely to find observation and feedback less useful than their colleagues who said they were not disabled. The reasons for these differences were not explored as part of the survey, and there is perhaps scope to explore the difference in this preference in further detail. However schools and providers of support to improve and monitor teaching practice may wish to consider reviewing the preferred approaches of different types of teachers, so that all teachers are supported to develop their teaching practice in the way they find most helpful.

6.2 What types of approaches to practice improvement do teachers find most useful?

It appears that less formal processes, which can easily be tailored by the individual to meet their needs (for example self reflection), are preferred by teachers when considering ways to improve their teaching. Similarly, more teachers said that peer support (such as observation of and by their peers) was useful in helping them to improve their teaching, rather than the more formal feedback provided by LA advisors and SIPs or external inspections. Indeed, almost half of the teachers (45 per cent) mentioned collaboration with colleagues (including discussions with colleagues, planning and teaching as a team) as one of the main factors that had helped them to improve their teaching in response to an open question. Although the reasons *why* certain methods were perceived as more useful were not explored as part of the survey, it is possible that the more informal approaches which are not part of an assessment are perceived as less intimidating than approaches where they are observed by external bodies – perhaps ways of improving on their own terms.

It is interesting to consider that although self reflection on their own teaching is likely to be done in a slightly different way by each teacher, it is perhaps the flexibility and potential to adapt to each individual that is the key strength of this approach to practice improvement. Furthermore it can be done reasonably regularly and is not constrained by the availability of resources or other people, and is therefore accessible to *all* teachers. It is clearly important that teachers should have the time and opportunity to adequately reflect on lessons they have taught in order to identify ways to improve in the future, as well as the skills, guidance and motivation to improve their practice using this approach.

7. Conclusions

The GTC Annual Survey of Teachers 2010 was designed to explore the key questions of how teachers improve their practice and what supports them to do so, based on a large, nationally representative sample of teachers. The aim of the survey was to look at how teachers improve their practice 'in the round' by exploring teachers' experiences of possible sources of support to improve, including CPD activities, the professional standards and performance management. In doing so, we attempted to capture the bigger picture of practice improvement. In this chapter we summarise the ten key messages arising from the survey findings.

1. On the whole, teachers had a positive attitude towards practice improvement and almost all felt that they had a professional responsibility to maintain and improve their practice. Although teachers felt that they had this responsibility, they also felt strongly that they should have an entitlement to time and support in order to meet this responsibility.

2. About two-thirds of teachers were also positive about the impact of professional development and learning activities on their teaching, and on the learning of their pupils. This suggests that most CPD activities are relevant and do indeed have an impact upon teachers' practice.

3. The survey findings suggest that there may be a 'gap', however, in terms of desired professional development and access to CPD activities and experience. Personal motivation to improve teaching appears to be widespread, however many teachers felt that they did not have enough time, or did not have sufficient access or opportunities to participate in professional development and learning activities as part of improving their practice.

4. Part of the gap between what teachers would like to do and what they actually experience in terms of professional development may be explained by the presence of what might be called a weak 'culture of research' at some schools: it was clear that some teachers felt that schools could do more to support and encourage their use of research and other self-improvement activities.

5. In terms of the type of professional development and learning activities experienced, it seems that collaborative and peer-to-peer support activities predominate. More 'traditional' forms of CPD, such as attending courses, still have their place, but coaching, mentoring, and observation are also valued by teachers. Self-reflection is seen as being particularly useful and teacher trainers and others should not underestimate teachers' assessment of the importance of this for practice improvement.

6.   Teachers newer to the profession were among those more positive about the role of professional development activities, and also about the role of observation and feedback in improving their teaching.

7.   The modelling indicated that *recent* experience (i.e. within the previous 12 months) of participating in professional development activities helps to instil a positive view of the impact of such activities. In this respect it is important that professional development takes place throughout teachers' careers, not only at the early stages or when teachers hope to progress in their career. The evidence indicates that CPD should be an ongoing process: the word 'Continuing' in the phrase Continuing Professional Development is important.

8.   On the whole, teachers held mixed views about how performance management and the professional standards helped them to improve their teaching. Most teachers said that working towards identified objectives was useful, although the performance management process as a whole was not viewed as a key factor in practice improvement.

9   A number of common findings emerged from the analysis that looked at the differences in teacher views about the various aspects of practice improvement by their characteristics. For example, in Chapters 2 to 6, it was found that senior teachers were positive about *all* the aspects of practice improvement featured in this report. Similarly, it was found that male teachers were less positive about all the aspects of practice improvement discussed (except one – the exception was 'using research', as discussed in Chapter 3). Although it was not possible to explore the reasons behind these differences through the survey, schools and policy makers may wish to consider these findings in the context of the support and opportunities they provide for different teachers.

10.   On the whole, differences in teacher views about improving their teaching were related to personal characteristics; school-level factors (such as EAL, FSM, SEN, achievement) generally had little or no effect on teacher attitudes, although phase of school (primary, middle or secondary) tended to have an effect.

In terms of where teachers turn for support to improve their practice, teachers tended to draw support from those closest to them, most commonly their colleagues, or self-directed activities such as reflection or their own research. Furthermore it was apparent that teachers found the performance management process and the professional standards less helpful, in practical terms, in relation to directing their development as a teacher. For example, although the professional standards were constructed to provide a benchmark in the performance management process it appeared that, for many teachers, the professional standards framework was not being referred to regularly, even though most teachers said they had a good understanding of the professional standards.

Teaching and learning, of course, are complex activities and the sources of support that teachers turn to can be many and varied. It should also be stressed that some sources of support are perceived as direct and some are indirect; some personal and some external; some formal and some informal. This means that the inter-relationships between forms of support can be very important. For example, a teacher could identify areas for improvement in their lessons using self reflection, and could then discuss this informally with close colleagues and/or their line manager (in some cases via the performance management process) leading to participation in a relevant CPD activity. Similarly, there are inter-relationships between personal motivation or individual drive, and the structure of external factors, such as the school culture, time available for CPD, and formal processes such as performance management. Inherent individual motivation could trigger the use of external sources of support and vice versa. The key finding from this survey is that individual motivation to improve is definitely present, and informal support from colleagues is of crucial importance: perhaps the next step is to look more closely at how the formal processes of performance management and use of the professional standards support individual motivations to improve teaching quality.

Appendix A: GTC survey of teachers 2010 main sample – frequencies

Table Q1

Current professional role	%
Local authority supply teacher	6
Agency supply teacher	3
Class or subject teacher	35
Teacher with additional responsibilities	20
Head of Department, year or key stage	14
Advanced skills teacher	1
Assistant Head	4
Deputy Head	4
Headteacher	4
Local authority advisory teacher	1
Other	6
No response	1
N =	4392

Due to rounding, percentages may not sum to 100.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q1 - Other specified roles

Current professional role	%
Specialist Support teacher	20
Teacher in charge of specific provision	15
Teaching assistant/HLTA	11
Private/home tutor	8
Senior Teacher	5
Excellent Teacher	4
Educational Support/Advisor	3
Early Years teacher/manager	2
Exam invigilator/examiner	1
Other	26
More than one role specified	5
Total	250

Due to rounding, percentages may not sum to 100.
A filter question: all those who answered 'Other' to Q1.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q2

Current working status	%
Full time	71
Part time	28
No response	1
N =	4392

Due to rounding, percentages may not sum to 100.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q3

Key stages worked in	%
Early Years Foundation Stage	21
Key Stage 1	28
Key Stage 2	38
Key Stage 3	41
Key Stage 4	39
Post16/Key Stage 5	22
No response	1
N =	4392

More than one answer could be given so percentages may sum to more than 100.
A total of 4362 respondents answered at least one item in this question.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q4

Professional development activities experienced in last 12 months	Frequently/ongoing basis	Occasionally	Not in the last 12 months	No response	Total
	%	%	%	%	%
Being assigned to mentor or coach someone	27	23	45	5	100
Having a mentor or coach assigned to me	11	12	67	10	100
Collaborative learning with colleagues in my school	40	37	19	4	100
Collaborative learning with external partnerships/networks	20	41	33	5	100
Engaging with subject or specialist associations	18	37	39	5	100
Participating in the Teacher Learning Academy	1	4	85	10	100
Studying for a postgraduate qualification (e.g. Masters)	6	2	83	9	100
Participating in an external course(s)	18	41	36	4	100
Undertaking action research (e.g. a school-based enquiry project)	8	14	70	8	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4371 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table level of activity (Q4)

Q4. Professional development activities	%
Not active	8
Active	79
Very active	13
Total	4392

Due to rounding, percentages may not sum to 100.
Not active: respondent ticked 'not in the last 12 months' to all activities in Q4
Active: respondent ticked at least one activity as 'occasionally' but fewer than 4 'frequently' in Q4
Very active: respondent ticked 'frequently' for 4 or more activities listed in Q4
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q4

Professional development activities experienced in last 12 months	Frequently/ ongoing basis %	Occasionally %	Not in the last 12 months %	No response %	Total %
Being assigned to mentor or coach someone	27	23	45	5	100
Having a mentor or coach assigned to me	11	12	67	10	100
Collaborative learning with colleagues in my school	40	37	19	4	100
Collaborative learning with external partnerships/ networks	20	41	33	5	100
Engaging with subject or specialist associations	18	37	39	5	100
Participating in the Teacher Learning Academy	1	4	85	10	100
Studying for a postgraduate qualification (e.g. Masters)	6	2	83	9	100
Participating in an external course(s)	18	41	36	4	100
Undertaking action research (e.g. a school-based enquiry project)	8	14	70	8	100

N = 4392

Table Q5

Professional development	Strongly Agree %	Agree %	Neither agree nor disagree %	Disagree %	Strongly Disagree %	Don't know %	N/A %	No response %	Total %
My professional development needs have been identified by my school/employer in the last 12 months	19	40	15	12	9	1	4	1	100
I need more time to engage in professional development activities	22	43	17	11	2	0	4	1	100

Table Q4

Professional development activities experienced in last 12 months	Frequently/ongoing basis %	Occasionally %	Not in the last 12 months %	No response %	Total %
Being assigned to mentor or coach someone	27	23	45	5	100
Having a mentor or coach assigned to me	11	12	67	10	100
Collaborative learning with colleagues in my school	40	37	19	4	100
Collaborative learning with external partnerships/ networks	20	41	33	5	100
Engaging with subject or specialist associations	18	37	39	5	100
Participating in the Teacher Learning Academy	1	4	85	10	100
Studying for a postgraduate qualification (e.g. Masters)	6	2	83	9	100
Participating in an external course(s)	18	41	36	4	100
Undertaking action research (e.g. a school-based enquiry project)	8	14	70	8	100

N = 4392

I have had access to adequate professional development opportunities in the last 12 months	13	35	17	20	10	0	3	1	100
Teachers should have an entitlement to time and support for their professional development	59	37	2	0	0	0	1	1	100
I have a professional responsibility to maintain and improve my practice	57	38	2	0	0	0	1	1	100

N = 4392

Table Q4

Professional development activities experienced in last 12 months	Frequently/ ongoing basis %	Occasionally %	Not in the last 12 months %	No response %	Total %
Being assigned to mentor or coach someone	27	23	45	5	100
Having a mentor or coach assigned to me	11	12	67	10	100
Collaborative learning with colleagues in my school	40	37	19	4	100
Collaborative learning with external partnerships/ networks	20	41	33	5	100
Engaging with subject or specialist associations	18	37	39	5	100
Participating in the Teacher Learning Academy	1	4	85	10	100
Studying for a postgraduate qualification (e.g. Masters)	6	2	83	9	100
Participating in an external course(s)	18	41	36	4	100
Undertaking action research (e.g. a school-based enquiry project)	8	14	70	8	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4379 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q6

Professional development	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know	N/A	No response	Total
	%	%	%	%	%	%	%	%	%
Participation in professional learning and development activities has had a positive impact on my teaching practice in the last 12 months	21	46	16	7	2	1	8	1	100
I have seen a positive impact on my pupils' learning as a result of my professional and learning and development activities in the last 12 months	16	44	21	7	2	1	9	1	100
My school/employer evaluates the impact of professional learning and development activities on teachers' practice	11	36	22	15	5	5	5	1	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4372 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q7

Usefulness of ways to improve teaching	Very useful	Fairly useful	Not very useful	Not at all useful	No experience of this	No response	Total
	%	%	%	%	%	%	%
Reflecting on my own practice	68	29	1	0	1	1	100
Reviewing my practice as part of school self-evaluation	29	43	12	2	13	1	100
Working towards my performance management objectives	20	44	20	5	10	1	100
Doing my own enquiry or research	27	34	7	2	29	1	100
Using the findings of other people's research	13	45	15	3	24	1	100
Using teacher assessment data	28	43	15	3	10	1	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4368 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q8

Usefulness of observation and feedback to improve teaching	Very useful	Fairly useful	Not very useful	Not at all useful	No experience of this	No response	Total
	%	%	%	%	%	%	%
Observing my peers' teaching	45	31	3	1	19	1	100
Peers observing my teaching and giving me feedback	33	39	7	2	18	1	100
Discussions about teaching with an LA advisor or School Improvement Partner (SIP)	14	25	11	3	45	1	100
Observation and feedback related to external inspection/ school improvement processes	14	33	17	8	27	1	100
Feedback from pupils	36	40	6	2	15	1	100
Feedback from parents	18	39	15	3	25	1	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4363 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q9

Use of research by other people	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know	No response	Total
	%	%	%	%	%	%	%	%
I know where I can find relevant research that may help to inform my teaching	13	48	19	12	2	6	1	100
The research I have found I have been able to understand and use	9	40	28	6	1	14	1	100
My school encourages me to use research findings to improve my practice	5	19	33	24	9	9	1	100
I have frequent opportunities (at least termly) to discuss relevant research findings with my colleagues	3	13	21	32	22	7	1	100
I do not have time to use research findings	14	28	31	18	4	4	1	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4364 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q10

Conducting research and enquiry to develop teaching	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know	No response	Total
	%	%	%	%	%	%	%	%
In the last 12 months, I have undertaken my own research and enquiry to improve my practice	9	24	13	31	18	4	1	100
My school encourages me to undertake my own enquiry	5	18	29	25	14	7	2	100
I do not have time to conduct my own research	24	34	22	14	3	2	1	100
I feel confident in my research skills to conduct my own enquiry	13	39	25	14	4	4	1	100
I would like more opportunities to do my own research to improve my teaching	18	42	25	9	2	3	1	100
I would like more opportunities to collaborate with colleagues on a piece of research	20	45	21	8	2	3	1	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4350 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q11

Performance management	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know	N/A	No response	Total
	%	%	%	%	%	%	%	%	%
The evidence used in my performance management provides a fair picture of my performance	12	44	15	14	5	1	9	1	100
I have been given the support I need to meet my performance management objectives	11	35	19	18	7	0	9	1	100
I have access to relevant CPD activities to help meet my objectives	11	34	20	18	8	1	8	1	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4369 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q12

Performance management	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know	N/A	No response	Total
	%	%	%	%	%	%	%	%	%
Performance management is effective in identifying my strengths	8	41	19	18	6	1	7	1	100
Performance management helps me to identify areas in my practice where I need support	8	45	19	16	5	1	7	1	100
Performance management is a key factor in helping me to improve my teaching	5	23	26	27	10	1	7	1	100
Performance management supports me to help pupils achieve their potential	6	29	24	24	9	1	7	1	100
Performance management provides an opportunity for dialogue about teaching/ pedagogy	7	40	18	18	7	1	7	1	100
Performance management is an effective way of holding me to account for the quality of my teaching	8	33	20	20	9	1	7	1	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4370 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q13

The professional standards framework	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know	No response	Total
	%	%	%	%	%	%	%	%
I have a good understanding of the professional standards for teachers	27	52	12	5	1	3	1	100
The professional standards provide a good definition of teacher competence	13	50	23	5	1	6	1	100
I use the professional standards to help me identify where I want to improve my teaching	7	28	32	24	4	4	1	100
I use the professional standards to identify CPD objectives to help me improve my teaching	6	23	33	27	5	4	2	100
My use of the professional standards has already helped me to improve my teaching	6	24	35	24	5	4	2	100
The professional standards support me to achieve better outcomes for my pupils	5	24	37	21	5	5	2	100
In practice, the professional standards do not make any difference to the way that I teach	11	30	29	20	4	5	2	100

N = 4392

A series of single response questions.
Due to rounding percentages may not sum to 100.
A total of 4356 respondents gave at least one response to these questions.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q14

The main factors that support teachers in maintaining and improving teaching quality	%
Collaboration with others	45
Courses/training/mentoring	41
Observation (of teacher and by teacher)	39
Self led factors	26
External resources/groups	23
Resources/funding	15
Supportive department/SMT	13
Effective planning/preparation	12
Research	11
Use of assessment information	11
Pupils motivate me	7
School-level motivator	6
Performance management/ review	5
Negative-things that do not support improving teaching/that get in the way	4
Initiatives/programmes	3
Other	12
No response	14
Total =	4392

More than one answer could be put forward so percentages may sum to more than 100.
A total of 3784 respondents gave at least one response to this question.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q15

Ethnic/cultural background	%
White British	89
White Irish	1
Other White background	3
Black/Black British Caribbean	1
Black/Black British African	1
Other Black/Black British background	0
Asian/Asian British Indian	1
Asian/Asian British Pakistani	0
Asian/Asian British Bangladeshi	0
Other Asian/Asian British background	0
Chinese/Chinese British	0
Mixed White and Black Caribbean	0
Mixed White and Black African	0
Mixed White and Asian	0
Other mixed background	0
Any other background	0
Prefer not to say	1
more than one box ticked	0
No response	1
N =	4392

Due to rounding, percentages may not sum to 100.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Table Q16

Self defined as disabled in line with DDA?	%
Yes	3
No	94
Prefer not to say	2
No response	1
N =	4392

Due to rounding, percentages may not sum to 100.
Source: NFER Survey of Teachers for the GTC 2010, main sample.

Appendix B: Factor analysis

Factor analysis is a statistical technique for identifying patterns in responses. In the present work, it was used to identify groups of questions which have been answered in a related way. The 'factors' (otherwise known as groups of related questions) which were identified as a result were then used as the outcomes, or dependent variables in further analysis (regression modelling – see Appendix C). Factor analysis was done on the questions that provided an indication about teacher attitudes towards things that could influence teaching practice. Using factors as the outcomes for the a models, rather than individual questions, is often preferable because the factor provides a better indicator of attitude towards that aspect, because it takes into account their attitude towards a number of different facets related to that item of focus.

Factor Analysis can be done in a number of ways. We decide to restrict the number of factors to 4 and did the Factor Analysis using the Oblimin rotation; we chose an oblique solution as this allows the resulting factors to be correlated. Reliability analysis was run after completing the factor analysis and the questions that went into the factors were reviewed to check for sense. The factors that results at this stage were performance management, professional standards, professional learning and development and research. All of these factors resulted in an alpha greater than .7; we then constructed another factor to look at the use of observation and feedback which had an alpha of .68.

One factor analyses was run and the results are summarised in Tables B1a and B1b. Factors are listed along the top and their constituent questions below. Before the factor analysis was carried out, the responses to negative statements were re-coded so that the scale was consistent with the other statements.

Table B1a: Factors

Performance management	Professional standards	Professional learning and development
Reviewing my practice as part of School Self-Evaluation	I have a good understanding of the professional standards for teachers	Being assigned to mentor or coach someone
Working towards my performance management objectives	The professional standards provide a good definition of teacher competence	Having a mentor or coach assigned to me
Observation and feedback related to external inspection/ school improvement processes	I use the professional standards to help me identify where I want to improve my teaching	Collaborative learning with colleagues in my school

Table B1a: Factors (continued)

Performance management	Professional standards	Professional learning and development
The evidence used in my performance management provides a fair picture of my performance	I use the professional standards to identify CPD objectives to help me improve my teaching	Collaborative learning with external partnerships/ networks
I have been given the support I need to meet my performance management objectives	My use of the professional standards has already helped me to improve my teaching	Engaging with subject or specialist associations
I have access to relevant CPD activities to help meet my objectives	The professional standards support me to achieve better outcomes for my pupils	Participating in an external course(s)
Performance management is effective in identifying my strengths	In practice, the professional standards do not make any difference to the way that I teach	Undertaking action research (e.g. a school-based enquiry project)
Performance management helps me to identify areas in my practice where I need support		My professional development needs have been identified by my school/employer in the last 12 months
Performance management is a key factor in helping me to improve my teaching		I have had access to adequate professional development opportunities in the last 12 months
Performance management supports me to help pupils achieve their potential		I have a professional responsibility to maintain and improve my practice
Performance management provides an opportunity for dialogue about teaching/ pedagogy		Participation in professional learning and development activities has had a positive impact on my teaching practice in the last 12 months
Performance management is an effective way of holding me to account for the quality of my teaching		I have seen a positive impact on my pupils' learning as a result of my professional and learning and development activities in the last 12 months
		My school/employer evaluates the impact of professional learning and development activities on teachers' practice

Table B1b: Factors

Research	Observation and feedback
Doing my own enquiry or research	Observing my peers' teaching
Using the findings of other people's research	Peers observing my teaching and giving me feedback
I know where I can find relevant research that may help to inform my teaching	Discussions about teaching with an LA advisor or School Improvement Partner (SIP)
The research I have found I have been able to understand and use	Observation and feedback related to external inspection/ school improvement processes
My school encourages me to use research findings to improve my practice	Feedback from pupils
I have frequent opportunities (at least termly) to discuss relevant research findings with my colleagues	Feedback from parents
I do not have time to use research findings	
In the last 12 months, I have undertaken my own research and enquiry to improve my practice	
My school encourages me to undertake my own enquiry	
I do not have time to conduct my own research	
I feel confident in my research skills to conduct my own enquiry	

Appendix C: Regression models

Regression modelling was carried out in this report in order to provide a more robust analysis of how teacher characteristics interact with attitudes towards six areas that potentially have an impact on teaching practice.

Regression analysis was used instead of cross-tabs because it allows us to check whether apparent relationships between variables are altered by considering other information (because we can control for other variables). We can be more confident in the findings because the relationships present already take account of a number of other variables.

All of the models used in this report are of continuous outcome variables; the factors described in Tables B1a and B1b were scaled so that they could take any value from 0 to 10.

Question 4 of the survey was converted into a continuous variable to provide an indication of the level of professional development activities teachers were involved in. This was done because continuous variables are much more powerful than dichotomous (for example whether they were 'active' or not – see 'Table level of activity (Q4)' in Appendix A).

Table C.1 lists the variables used in the five models presented in this report. All of the variables listed went into all of the models apart from the continuous measure of '*Level of activity in professional development activities*' which did not go into the professional learning due to colinearity issues[8].

Any significant relationships as seen from the models are associations and do not necessarily imply a causal relationship.

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[8] Some variables that make up the professional learning and development factor were also used to construct the 'Level of activity in professional development activities' measure.

Table C1:   Variables included in the models

Variable Name:	Type of variable
Supply Teachers	Dichotomous
Teacher with Additional Responsibilities	Dichotomous
Head of Department	Dichotomous
Other teacher role	Dichotomous
Senior Teacher	Dichotomous
part time	Dichotomous
Middle school	Dichotomous
Secondary school	Dichotomous
Disabled (self defined)	Dichotomous
male	Dichotomous
economically challenged	Dichotomous
academically challenged	Dichotomous
% of EAL students(2008)	Continuous
% SEN students (2008)	Continuous
BME (self defined)	Dichotomous
Ethnicity - Prefer not to say	Dichotomous
age - between under 25 and 34	Dichotomous
age - between 50 and 65	Dichotomous
length of service - less than 5 years	Dichotomous
length of service - between 5 and 9 years	Dichotomous
length of service - between 20 and 29 years	Dichotomous
length of service - more than 30 years	Dichotomous
Level of activity in professional development activities	Continuous