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Benefits, status and effectiveness of Continuous Professional Development for teachers in England

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Reported here is one part of the nationally representative, *Schools and Continuing Professional Development in England – State of the Nation* research study which was funded by the Training and Development Agency for Schools (TDA). This paper sets out to understand how teachers and school leaders in England perceive the benefits and effectiveness of CPD activity. The investigation of benefits and effectiveness of CPD presented in the paper focuses on the various impacts that could result from participation, the forms and features of activities, as well as the conditions that make effectiveness more or less likely to occur.

Keywords: teacher professional development; benefits of professional development; effectiveness of professional development; conditions for teacher learning

Introduction

The importance placed on professional development in improving teaching and learning in England requires an understanding of the benefits and effectiveness of the activities in which teachers engage. It is for this purpose that the Training and Development Agency (TDA) commissioned the ‘State of the Nation’ (SoN) study on which we partially report in this piece. However, addressing whether or not Continuous Professional Development (CPD) of teachers has benefits and is effective involves a number of conceptually interrelated questions. It is important to understand not just whether benefits occur, but who benefits and how these benefits accrue, and not just what is effective, but who is defining effective and by what measure. To help conceptualise the SoN study (McCormick et al. 2008; McCormick 2010, in this issue) we conceived of benefits as the impacts of CPD in the sense that it leads to changes. We make a distinction between three types of impacts of the possible benefits of CPD:

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- CPD that leads to changes in pupils', teachers' or school practices seen as desirable by either teachers or head teachers is understood as having *direct impacts*.
- CPD that enhances a teacher's *status* or career prospects, and even salary, is considered as imparting *indirect benefits to teachers*.
- CPD that increases recruitment or retention is considered as imparting *indirect benefits to the school*.

Empirically, what counts as effectiveness in CPD varies by how teachers, head teachers and other investigators conceptualise effectiveness. We distinguished between what we saw as effective features of CPD and effective forms of CPD. Notions of quality are also bound up in 'effectiveness' and could refer to quality of either features, forms or other aspects. Thus, for our purposes, we considered quality to be subsumed under effectiveness. Finally, there is also a value for money judgement that is often made about CPD – is the benefit or impact of the CPD worth the time, disruption and resources committed to the effort? Thus, 'value for money' judgements are partially evaluative. However, because they involve placing a value on the impact and calculating the cost (including opportunity costs of non-participation), these judgements tend to be rather crude assessments. These definitions and distinctions, and their interrelations, are important to keep in mind throughout the following discussion and presentation of findings. In the following sections we elaborate on the literature related to these concepts.

Benefits and impact of CPD

It has been claimed in the literature on CPD that 'well-structured CPD can lead to successful changes in teachers' practice, school improvement and improvements in pupils' achievement' (Bolam and Weindling 2006, 113). An important limitation in all the literature on the benefits and impacts of CPD is that studies rarely isolate particular characteristics of CPD that lead to the impacts being asserted. Part of the difficulty in researching the impacts of CPD are the complicated causal processes at work. At a minimum, teachers must learn something as a result of participation; they may also have to undergo a change in beliefs. They must then engage in new practices in their classroom, but doing so may be dependent on the beliefs, practices and relationships with colleagues or systems of support provided by the school itself. The success, or impact, of implementation on students is similarly complicated by students' own orientations to learning as well as other contextual mediators such as peers, other teachers, school supports, etc. Thus establishing whether participation in a particular CPD activity had an impact on teachers'

practice, school improvement and pupil learning is particularly difficult – despite the claims made in most of the literature.

Unsurprisingly, given the complexity of researching impacts, the most substantial evidence exists for the impact on teacher knowledge. A number of studies have shown that teachers' knowledge improves after participating in CPD (Wilde 2005; McLinden et al. 2006; McNicholl and Noone 2007; Miller and Glover 2007). Further, studies have reported changes in teacher attitudes and beliefs as a result of CPD participation (Cordingley et al. 2005b; Pedder 2006; Wilde 2005). When changes in teaching practice have been shown, these are often accompanied by the identification of mediators of the impact. For example, Boyle et al. (2004) identified changes in 'planning', 'teaching style' and 'assessment practices' as a result of long-term CPD. Similarly, Cordingley et al. (2005b) identified change in teaching practice as a result of collaborative rather than individual CPD. Dalgarno and Colgan (2007) found changes in practice when teachers were allowed to test ideas and take risks during CPD. Thus, impacts on teachers beyond increases in knowledge and understanding are often identified in conjunction with CPD that has specific features or forms associated with effectiveness.

The impact of CPD on schools and school improvement has rarely been researched, although Bolam and Weindling (2006) identify this as one of the impacts of professional learning activity. Pedder (2006) provides the only recent evidence of impact of CPD on schools, citing changes in school leadership and management practices as a result of assessment for learning activity. Most of the available literature relating to schools and CPD attends to the supports provided by schools rather than the impacts of CPD on schools. Pedder et al. (2010, in this issue) report on the literature and our findings related to schools' organisation of, and support for, teacher CPD in the SoN study. However, it is important for our purposes here to understand that the ability of CPD to have impacts – at the teacher-, school- or pupil-level – is often dependent upon school conditions that support professional learning. For example, studies of CPD often mention the importance of the culture of the school in successful implementation of professional learning (Keay 2006; Pedder 2006). Space for learning and dialogue is also mentioned as necessary at the school level (Fox 2006; Makopoulou and Armour 2006; McGregor et al. 2006), as are consistency across provision (CUREE 2008) and effective use of development days (Ofsted 2006). Thus, a good portion of research on CPD impact relates to school-level conditions making impact possible rather than to the impacts on the actual school or school improvement.

Despite the difficulties in making all the causal links necessary, there are studies that claim to show an impact of CPD on pupil learning. For example, Cordingley et al. (2007), in their review of available

literature, identified studies that resulted in improvement in specific aspects such as knowledge of scientific concepts, problem-solving, mathematical or literacy skills, and reasoning skills. Lawless and Pellegrino (2007), in a similar review of the United States-focused literature, caution against reaching such conclusions, however, because most studies have failed to include pupil outcome measures tied specifically to CPD effectiveness. Rather, most studies correlate participation in CPD to changes in pupil achievement, leaving the actual causal connection unexplored. Similar evidence exists for impacts on student affect including motivation to learn, better engagement in classroom activities, pupil confidence and self-esteem (Cordingley et al. 2007).

Effective features and forms of CPD

Research on the features and forms of CPD has been the focus of much of the literature on CPD. This research evidence suggests that when CPD does have impact, benefit and value for money, it has certain features and forms. For our purposes, features are understood to be general characteristics of CPD activities that could apply to almost any form. Features most often identified in the literature include that the activity:

- is applicable to school and classroom settings (Warwick et al. 2004; Cordingley et al. 2005b; Makopoulou and Armour 2006; McNicholl and Noone 2007; CUREE 2008);
- has clearly shared aims and objectives (McNicholl and Noone 2007; CUREE 2008);
- is provided by people with expertise (Cordingley et al. 2005b; Makopoulou and Armour 2006; Miller and Glover 2007);
- takes account of prior knowledge and experience (Makopoulou and Armour 2006);
- models effective teaching and learning strategies (Duncombe et al. 2004; Bolam and Weindling 2006; Makopoulou and Armour 2006); and
- promotes enquiry and problem-solving (Cordingley et al. 2005b; Pedder et al. 2005; Bolam and Weindling 2006).

Value for money, as a potential feature of CPD, is rarely taken into account in evaluations of CPD effectiveness (Bolam and Weindling 2006). The difficulty in making a value for money judgement has been identified by Ofsted and most probably accounts for the lack of research on this topic:

Many [school managers] doubted that a value for money assessment was feasible. And yet they were making a considerable investment in CPD

activities, but could not establish convincingly if they were worth the money. (Ofsted 2006, 21)

The literature related to forms of CPD activity takes two avenues – how often a form is experienced and then how well that form results in impacts – although the two avenues are related. Those forms most associated with impact include:

- enquiry (Arthur et al. 2006; MacBeath et al. 2007);
- collaboration (Warwick et al. 2004; Cordingley et al. 2005a, 2005b; Arthur et al. 2006; Makopoulou and Armour 2006; McNicholl and Noone 2007);
- coaching and mentoring (Harrison et al. 2005; Hobson et al. 2007; CUREE 2008);
- observation (Boyle et al. 2004; Cordingley et al. 2005b; Pedder et al. 2005; Dymoke and Harrison 2006; Hodgkinson 2006); and
- networks (Hakkarainen et al. 2004; Veugelers and O’Hair 2005; McGregor et al. 2006; McCormick et al. 2007; CUREE 2008).

The literature is fairly bleak, however, in regard to illustrating how often teachers engage in forms of CPD that have been associated with positive impacts. That is, the activities in which teachers tend to participate rarely have these forms. Most often, teacher CPD is experienced via lectures and one-off, passive learning activities undertaken as individuals (Sykes 1996; Desimone et al. 2002; Opfer et al. 2008a).

This brief overview of available empirical literature on CPD benefits, status and effectiveness thus illustrates that there is much to be learned about the professional learning activities of teachers. As one of the three main foci of the SoN study, we set out to understand how teachers and school leaders perceived the benefits and effectiveness of CPD activity. Consistent with our conceptualisations presented thus far, we focused our investigation of benefits and effectiveness of CPD on the various impacts that could result, the forms and features of activities, as well as the conditions that made effectiveness more or less likely to occur. In the next section, we describe our methods for doing so.

Methods

The SoN study brought together the results of a mixed-method study with insights from a literature review of reports of empirical research into CPD since 2004 (see McCormick et al. 2008 for the full report), qualitative

'snapshots' in nine primary and three secondary schools (see Storey et al. 2008 for the full report), and a survey of a national random sample of primary and secondary teachers in England (see Opfer et al. 2008b for the full report).

Findings related to the benefits, status and effectiveness of CPD in England relied on data from the survey methods. Discussion of our research design, including consideration of our sampling strategy, response rate, and methods and processes of data collection and analysis, is included in the introductory article of this issue of *The Curriculum Journal* (Pedder et al. 2010).

Findings

In analysing the results from the survey and our other data sources, we were primarily interested in identifying overall patterns and themes emerging from the data rather than focusing on the analysis of variables in isolation. To aid in this thematic analysis and also to reduce the number of variables involved, exploratory factor analysis was conducted on questions from the first and third sections of the survey. This analysis allowed us to identify sets of common values and practices related to professional learning at both the individual and school levels. It also allowed us to group these practices in ways that were consistent with the forms and features literature described above.

We felt that a thematic analysis of the data had the best chance of identifying cross-cutting issues related to the three study foci that would provide direction for future CPD policy and programme development. The thematic analysis of the data resulted in the identification of five issues related to the benefits, status and effectiveness of CPD in England:

- (1) There is a lack of effective CPD in terms of levels of classroom contextualised practice, collaboration with colleagues, and research-informed professional learning.
- (2) There is a lack of effective CPD practice in terms of both the form and duration of CPD activities.
- (3) There is little indication that current CPD is seen as having an impact on raising standards or narrowing the achievement gap. This is despite the fact that the vast majority of teachers thought that CPD would have a positive impact on pupils' learning and achievement.
- (4) Teachers identify a wide range of benefits of CPD; however, these benefits vary significantly according to school and teacher characteristics.
- (5) School leaders report that school-based and classroom-based CPD with a clear focus on learning processes and improving pedagogy

provides more value for money than CPD that takes place outside schools.

The data supporting the emergence of each of these issues are presented in the following sections.

Issue 1: There is a lack of effective CPD in terms of levels of classroom contextualised practice, collaboration with colleagues, and research-informed professional learning

Our survey data showed that most teachers' approaches to CPD tend not to be collaborative or research-informed approaches. This is despite strong evidence in the literature that these kinds of approaches are effective. Research-informed and collaborative approaches to CPD are characteristics of effective CPD identified by the TDA and the literature review (e.g. Cordingley et al. 2005b; Bolam and Weindling 2006; CUREE 2008). However, with the exception of advanced skills teachers (ASTs), excellent teachers and head teachers, our teachers indicated low levels of practice for the 'Collaborative orientation to professional learning' ('I engage in reflective discussions of working practices with one or more colleagues') (see Table 1). In their survey responses teachers record even lower levels of practice for 'Research orientation' ('I relate what works in my own practice to research findings') and research-informed approaches to CPD. These responses by teachers are irrespective of school characteristics (e.g. location, sector, region and achievement band) and teacher characteristics (e.g. levels of responsibility, career stage, and years of teaching experience).

Teachers place most value on, and record the highest levels of practice for, internally oriented professional learning that involves modifying practice in light of self-reflection and individual experimentation with practice. This is seen in the practice and values scores for the 'Internal orientation to learning' grouping of CPD practices and values (see Table 1). Teachers also place moderately high value, with similar levels of practice, on externally focused learning activities ('I use the web as one source of useful ideas for improving my practice' and 'I draw on good practice, from other schools as a means to further my own professional development') but, again, these tend to be individual practices rather than collaborative ones.

More specifically, when asked to report the types of CPD they had taken part in during the previous 12 months, teachers tended to emphasise types of CPD that were less closely connected to the school and classroom routines and contexts of their professional work, such as workshops and seminars. For example, most teachers said they had taken part in in-school workshops (77%) and out-of-school workshops

Table 1. Patterns of teachers' professional learning practices and values (scale = 100).

	Beliefs			Practices			Difference
	Mean	SD	α	Mean	SD	α	p
<i>Internal orientation to learning</i>	82.96	11.80	.66	80.46	13.72	.69	.000
I modify my practice in the light of evidence from self-evaluations of my classroom practice.							
I experiment with my practice as a conscious strategy for improving classroom teaching and learning.							
I consult pupils about how they learn most effectively.							
I reflect on my practice as a way of identifying professional learning needs.							
<i>External orientation to learning</i>	76.91	13.40	.72	75.69	16.57	.71	.000
I use the web as one source of useful ideas for improving my practice.							
I draw on good practice from other schools as a means to further my own professional development.							
I modify my practice in the light of feedback about classroom practice from managers or other colleagues.							
<i>Research orientation</i>	52.50	22.40	.57	46.00	23.92	.61	.000
I read research reports as one source of useful ideas for improving my practice.							
I relate what works in my own practice to research findings.							
I modify my practice in light of published research evidence.							
<i>Collaborative orientation</i>	63.91	10.27	.40	58.19	12.90	.40	.000
I carry out joint research/evaluation with one or more colleagues as a way of improving my practice.							
I engage in reflective discussions of working practices with one or more colleagues.							
I engage in collaborative teaching and planning as a way of improving practice.							

and seminars (60%) in the previous 12 months. However, levels of participation were considerably lower for types of CPD that more clearly related to specific aspects of teachers' school- and classroom-based professional work. Only about half the teachers (52%) had taken part in mentoring, coaching, lead teaching or observing peers in the last 12 months, less than a quarter in committees or task forces (23%), while a mere 12% took part in teacher study groups (see Table 2).

Issue 2: There is a lack of effective CPD practice in terms of both the form and duration of CPD activities

The CPD in which teachers take part most frequently reflects more passive forms of learning and participation, such as listening to a lecture or presentation (67%). Few teachers were involved in more active forms of CPD such as practising the use of pupil materials (17%), extended problem-solving (9%), or demonstrating a lesson, unit or skill (6%) (see Table 3).

In their survey responses teachers also reported that CPD activities were not sustained or embedded over time. While 45% of teachers overall engaged in sustained learning of one month or more, another 46% of teachers engaged in short-term activities of one week or less. However, in the literature review we reported Boyle et al.'s (2004) research that found positive correlation between sustained long-term CPD and changes in teaching practice. Characteristics of effective CPD listed on the TDA website and supported by Hopkins et al. (2001), Hargreaves (2003), Cordingley et al. (2005a, 2005b, 2007), and Ofsted (2006), emphasise the importance of long-term, continuous CPD that is research-informed, collaborative and embedded in the contexts of teachers' work.

Table 2. Percentage of teachers who took part in CPD type in the previous 12 months.

Types of CPD	Percentage (out of 1123)
In-school workshop or seminar	77%
Non-university accredited courses	14%
University courses	7%
Out-of-school workshops or seminars	60%
Teacher networks or collaboratives	45%
Conferences	32%
Mentoring, coaching, lead teaching or observing peers	52%
Committees or task forces	23%
Teacher study groups	12%
Independent study	21%

Table 3. Percentage of teachers taking part in forms of learning in CPD activities.

Forms of CPD activity	Percentage of teachers taking part
Listened to a lecture or presentation	67%
Took part in a small group discussion	58%
Collaborated as a colleague with other teachers	47%
Took part in a whole-group discussion	44%
Assessed pupil work	30%
Developed or reviewed materials	23%
Used technology (computers, calculators, whiteboards, etc.)	22%
Reviewed pupil work	21%
Observed a demonstration of a lesson or unit	21%
Practised using pupil materials	17%
Produced a paper, report or plan	16%
Formal post-activity evaluation of the learning	11%
Led a small group discussion	9%
Engaged in extended problem-solving	9%
Completed paper-and-pencil problems or exercises	8%
Gave a lecture or presentation	8%
Led a whole-group discussion	6%
Conducted a demonstration lesson, unit or skill	6%
Assessed fellow participants' knowledge or skills	6%

Issue 3: There is little indication that current CPD is seen as having an impact on raising standards or narrowing the achievement gap. This is despite the fact that the vast majority of teachers thought that CPD would have a positive impact on pupils' learning and achievement

CPD activities engaged in by teachers tended to centre around personal development rather than the impact on the school or learners. The impacts that most teachers identify as a result of taking part in CPD are developing their individual professional skills and knowledge (77%) and increased awareness of teaching and learning issues (71%). However, although 63% of teachers indicated that CPD activities improve pupil performance and 59% reported an impact of CPD on pupils' learning practices, far fewer teachers reported an impact on pupil behaviour (22%) and classroom climate (39%).

These survey findings are consistent with the ambivalent nature of research evidence related to links between CPD and pupils' learning achievements and discussed in the literature review (e.g. Wilson and Berne 1999; Lawless and Pellegrino 2007). Consistent with conclusions reached in the literature review, there is no strong indication from teachers' survey responses to suggest that current CPD is seen as having an impact at the school level. Although 53% of teachers reported an impact of CPD on improved school-level practices, far fewer reported that CPD led to change in school-level organisation or structures (28%) or to changes in school policy (25%). The survey data indicate that most

of the identified impacts tend not to occur beyond the personal level of individual teachers (see Table 4).

School-level impacts or impacts on beliefs and practices of others – such as teachers or pupils – are rarely identified by teachers. Thus there is little indication that current CPD is seen as having an impact on raising standards or narrowing the achievement gap. This is despite the fact that for 94% of teachers, the possibility that CPD would have a positive impact on pupils' learning was a motive for deciding on a CPD activity, and for 91% this decision was based on a belief that the CPD would have a positive impact on achievement. Given that the research literature suggests that CPD is most effective in schools where senior leaders understand its potential for raising standards and school improvement, the personal focus on CPD in England further illustrates a lack of effective professional development practice.

Issue 4: Teachers identify a wide range of benefits of CPD; however, these benefits vary significantly by school and teacher characteristics

Teachers' reasons for taking part in CPD reflect their perceptions of a wide range of benefits, but gaining accreditation is not seen by most as an important benefit. The wide range of benefits that teachers report in survey responses is consistent with the range of benefits identified in the literature review. Reasons teachers identified as crucial or important for deciding to take part in CPD included:

- to work with other colleagues;
- to improve their professional abilities;

Table 4. Percentage of teachers identifying CPD impacts.

Impacts of CPD	Percentage of teachers indicating 'quite a lot' or 'a lot' of impact
Improved pupil performance/outcomes	63%
Changed pupil learning practices	59%
Changed pupil behaviour	22%
Changed the climate in my classroom	39%
Improved my knowledge and skills	77%
Prompted me to use new curriculum materials	66%
Made me more aware of teaching and learning issues	71%
Changed the way I think about teaching and learning	47%
Changed my beliefs about teaching	18%
Caused me to seek further information or training	35%
Changed my beliefs about pupil learning	26%
Improved school-level practices	53%
Led to a change in school-level organisation or structures	28%
Led to changes in school policy	25%

- to address immediate school needs;
- to gain more information;
- to have a positive impact on pupil learning;
- to improve academic achievement;
- to follow up previous CPD activities;
- to address immediate classroom needs; and
- to gain a better understanding of National Curriculum requirements.

However, most teachers do not see gaining accreditation as an important benefit: 75% of surveyed teachers said that accreditation was ‘not important’ or ‘of limited importance’ in their decisions to take part in CPD (see Table 5).

Teachers’ perceptions of the benefits of CPD do, however, vary significantly by school and teacher characteristics. Teachers differ especially by school sector and by career stage, level of responsibility and experience. Primary teachers tend to identify wider benefits of CPD that go beyond their personal learning, such as addressing immediate school needs, working with colleagues and impact on pupil learning, as

Table 5. Teachers’ reasons for deciding to take part in CPD.

Reasons for CPD decision	Percentage of teachers responding to importance of reasons for CPD decision			
	Not important	Of limited importance	Important	Crucial
Provided accreditation	41%	34%	22%	4%
Allowed me to work with colleagues	6%	17%	67%	10%
Improved my professional abilities	<1%	4%	54%	41%
Allowed me to meet long-term career goals	13%	27%	44%	16%
Addressed immediate school needs	2%	10%	64%	24%
Provided information that was new to me	2%	8%	63%	26%
Changed my views on teaching	13%	38%	43%	6%
Prompted me to seek further information/training	11%	34%	49%	6%
Had a positive impact on pupils’ learning	2%	5%	54%	40%
Resulted in improved achievement for pupils	1%	7%	55%	36%
Followed up previous professional learning activities	5%	25%	62%	8%
Addressed immediate classroom needs and improved my understanding of the National Curriculum	5%	17%	61%	18%
Improved my understanding of National Curriculum requirements	7%	19%	55%	19%

more important than teachers at secondary schools do. As Table 6 shows, new teachers tend to favour accreditation as a tool for career development while more experienced teachers appear to be less interested in CPD for career development. Survey findings thus suggest that among

Table 6. Significant relationships between teacher characteristics and reasons for deciding to take part in CPD.

Gender (Mann-Whitney U, $p < .05$)

There are no significant differences by gender in decisions about CPD.

Career stage (Kruskal-Wallis Test, $p < .05$)

Accreditation is of less importance in the CPD decisions of AST/excellent teachers and qualified head teachers than for teachers at other career stages.

Working with colleagues is more important in the CPD decisions of AST/excellent teachers than for teachers at other career stages.

Improving professional ability is more important in the CPD decisions of newly qualified teachers, AST/excellent teachers and qualified teachers than for teachers at other career stages.

Long-term career goals are more important in the CPD decisions of newly qualified teachers than for teachers at other career stages.

Acquiring new information is more important in the CPD decisions of qualified head teachers than for teachers at other career stages.

Following up previous CPD is more important in the CPD decisions of AST/excellent teachers and qualified head teachers than for teachers at other career stages.

Addressing immediate classroom needs is more important in the CPD decisions of newly qualified teachers than for teachers at other career stages.

Years of teaching experience (Kruskal-Wallis Test, $p < .05$)

Accreditation decreases in importance in CPD decisions as years of teaching experience increase.

Improving professional abilities decreases in importance in CPD decisions as years of teaching experience increase.

Long-term career goals are less important in the CPD decisions made by teachers with 20+ years' experience.

Addressing immediate school needs is less important in the CPD decisions made by teachers with less than five years' experience.

Gaining new information is more important in the CPD decisions made by teachers with 1–2 years' experience than for other teachers.

Changing views of teaching decreases in importance in CPD decisions as years of teaching experience increase.

Seeking new information decreases in importance in CPD decisions as years of teaching experience increase.

Improving student achievement is less important in the CPD decisions of teachers with 20+ years' experience than for other teachers.

Improving understanding of National Curriculum requirements is more important in the CPD decisions of teachers with 1–2 years' experience than for other teachers.

Leadership responsibility (Kruskal-Wallis Test, $p < .05$)

Accreditation is less important in CPD decisions as leadership responsibility increases.

Working with colleagues is less important in the CPD decisions of teachers with little to no responsibility and of middle leaders than in the CPD decisions of senior leaders and head teachers.

Addressing immediate school needs is more important in CPD decisions as leadership responsibility increases.

different groups of teachers, perceived benefits of CPD are not universal; benefits are more strongly associated with individual contexts.

Issue 5: School leaders report that school-based and classroom-based CPD with a clear focus on learning processes and improving pedagogy provides more value for money than CPD that takes place outside schools

Generally, school leaders see school-based and classroom-based CPD as providing more value for money and benefit than CPD taking place outside schools. For example, in-school workshops, mentoring, coaching, observation and teacher networks were rated highly, while university courses and non-university accredited courses were seen to provide less value for money (see Table 7). These survey responses are consistent with the relatively strong evidence in the literature of the effectiveness of collaborative CPD such as coaching and mentoring, observation and feedback, joint enquiry and evaluation.

In terms of the focus of CPD, school leaders highly rated CPD that deals directly with learning processes and improving pedagogy as providing good value for money. CPD that addresses behaviour management, thinking skills and pupil consultation tended to be rated less highly (see Table 8). However, there is a growing body of research evidence that consulting pupils can enhance the effectiveness of CPD because pupils tend to provide feedback that is practical, lesson specific and considered by teachers to be useful and insightful (e.g. McIntyre et al. 2005).

Most school leaders considered CPD that addresses immediate school needs, allows colleagues to work together and generates new information provides good value for money, benefit and impact (see Table 9). They felt that CPD that results in accreditation had less value for money and

Table 7. Overall school leader perceptions of value for money of types of CPD.

(Out of 247) Types of CPD	Percentage of school leaders			
	Not at all	Not a lot	Quite a lot	A lot
In-school workshop or seminar	< 1%	6%	49%	45%
Non-university accredited courses	15%	54%	29%	3%
University courses	19%	54%	22%	4%
Out-of-school workshops or seminars	1%	17%	70%	14%
Teacher networks or collaboratives	< 1%	21%	57%	22%
Conferences	4%	39%	49%	9%
Mentoring, coaching, lead teaching or observing peers	2%	16%	46%	37%
Committees or task forces	9%	35%	49%	9%
Teacher study groups	16%	43%	37%	6%
Independent study	15%	45%	33%	8%

Table 8. Overall school leader perceptions of value for money of foci of CPD.

(Out of 247) Foci of CPD	Percentage of school leaders			
	Not at all	Not a lot	Quite a lot	A lot
Curriculum	0%	7%	66%	27%
Teaching and learning	0%	7%	63%	31%
Approaches to assessment	<1%	12%	55%	33%
Pupil behaviour management	3%	41%	43%	14%
Use of ICT in learning	0%	14%	62%	25%
Catering to the needs of different pupil groups	<1%	21%	60%	19%
Deepening knowledge in subject areas	0%	22%	66%	13%
Deepening subject pedagogical knowledge	<1%	26%	64%	10%
Leadership development	<1%	17%	63%	20%
Thinking skills	3%	33%	52%	13%
Pupil consultation	2%	39%	53%	7%
Learning to learn	2%	31%	55%	12%
Numeracy	3%	15%	51%	36%
Literacy	3%	13%	51%	36%
Evaluation of learning	<1%	17%	65%	19%

Table 9. School leaders' perceptions of value for money of CPD impacts.

(Out of 250) Impacts of CPD	Percentage of school leaders			
	Not at all	Not a lot	Quite a lot	A lot
Provides accreditation for staff	7%	47%	41%	6%
Allows colleagues to work together	0%	9%	57%	34%
Improves the professional abilities of teachers	0%	2%	51%	47%
Allows teachers to meet long-term career goals	0%	25%	57%	18%
Addresses immediate school needs	0%	3%	47%	50%
Provides new information to staff	0%	4%	61%	35%
Changes beliefs about teaching	2%	49%	44%	5%
Prompts staff to seek further information or training	2%	34%	59%	6%
Positively impacts on pupils' learning	0%	4%	58%	38%
Results in improved pupil achievement	<1%	10%	61%	29%
Changes beliefs about pupils' learning	0%	30%	56%	13%
Follows up previous professional learning activities	0%	17%	71%	12%
Changes teaching practices	0%	13%	77%	10%
Supports assessment for learning	<1%	8%	70%	22%
Supports the National Curriculum	<1%	12%	64%	23%
Prompts changes in school systems	<1%	24%	64%	12%

less benefit. While there were significant differences in perceptions of value for money of CPD by school characteristics, these general patterns of value for money are maintained at each level of analysis.

Conclusions and recommendations: CPD benefits, status and effectiveness

Teachers spend the majority of their professional development time in workshops and seminars that do not have many of the forms and features associated with positive impact. CPD in England tends to occur via passive means such as lectures, is often decontextualised and rarely occurs in collaboration with colleagues. Unsurprisingly, then, teachers report few impacts at the pupil and school levels. Impacts reported by teachers are primarily related to increases in personal knowledge. In spite of this, teachers report a number of benefits from participation, including the ability to work with colleagues, gaining new information and following up previous learning. However, these benefits tend to vary significantly by individual and school context. Unsurprisingly, school leaders identified school- and classroom-based CPD as having most value for money. Activities that address immediate school needs, allow colleagues to work together and generate new information provide the most value in terms of form and features. As with other studies, however, value for money in this study relied on judgements by school leaders without the benefit of any specific cost–benefit analysis and should be considered cautiously.

As a result of the identification of these issues related to the benefits, status and effectiveness of teacher CPD in England, we make a number of recommendations for policy and practice. First, teachers need to be supported at school in developing more collaborative and research-informed approaches to their CPD. CPD provision needs to involve teachers in more active forms of learning with a clear link to classroom teaching and learning. It also needs to emphasise continuous, long-term, sustained professional learning. Teachers need to be supported in developing practices for collaborative, classroom-based and research-informed approaches to their professional development. In order for this to occur, though, schools need to be supported in seeing the value and potential of research-informed approaches to CPD. Schools also need to be supported in developing strategies to help different groups of teachers across the school organisation develop and embed appropriate collaborative and research-informed approaches to classroom-based CPD. Advanced skills teachers (ASTs) and excellent teachers were the exception to the general pattern of low practices and values for collaborative approaches to classroom-based CPD. They are therefore particularly well placed to take CPD leadership roles working with teachers to encourage more collaborative and research-informed approaches to classroom-based CPD.

At a planning and structural level, systems of support need to be developed to help senior leaders understand the potential of CPD for raising standards and school improvement. Teachers need to be supported in developing more strategic perspectives in relation to CPD. They need to be helped to develop their understanding of how CPD can promote school development and improvements in students' learning. Greater coherence in schools' CPD programmes is also needed by tying CPD to professional development plans and collective decision-making. CPD practices should be mainly based in school and focused on learning processes and improving pedagogy. Programmes of out-of-school CPD should be limited to ones explicitly geared to supporting improvements in the learning and learning conditions of leaders, teachers and pupils.

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References

- Arthur, L., H. Marland, A. Pill, and T. Rea. 2006. Postgraduate professional development for teachers: Motivational and inhibiting factors affecting the completion of awards. *Journal of In-service Education* 32, no. 2: 201–19.
- Bolam, R., and D. Weindling. 2006. *Synthesis of research and evaluation projects concerned with capacity-building through teachers' professional development*. London: General Teaching Council for England.
- Boyle, B., D. While, and T. Boyle. 2004. A longitudinal study of teacher change: What makes professional development effective? *The Curriculum Journal* 15, no. 1: 45–68.
- Centre for the Use of Research and Evidence in Education (CUREE). 2008. *Qualitative study of school-level strategies for teachers' CPD*. London: General Teaching Council for England.
- Cordingley, P., M. Bell, D. Evans, and A. Firth (CPD Review Group). 2005a. *The impact of collaborative CPD on classroom teaching and learning. Review: What do teacher impact data tell us about collaborative CPD?* London: EPPI-Centre.
- Cordingley, P., M. Bell, C. Isham, D. Evans, and A. Firth. 2007. *What do specialists do in CPD programmes for which there is evidence of positive outcomes for pupils and teachers?* London: EPPI-Centre.
- Cordingley, P., M. Bell, S. Thomason, and A. Firth (CPD Review Group). 2005b. *The impact of collaborative continuing professional development (CPD) on classroom teaching and learning. Review: How do collaborative and sustained CPD and sustained but not collaborative CPD affect teaching and learning?* London: EPPI-Centre.

- Dalgarno, N., and L. Colgan. 2007. Supporting novice elementary mathematics teachers' induction in professional communities and providing innovative forms of pedagogical content knowledge development through information and communication technology. *Teaching and Teacher Education* 23, no. 7: 1051–65.
- Desimone, L., A.C. Porter, M.S. Garet, K.S. Yoon, and B.F. Birman. 2002. Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis* 24, no. 2: 81–112.
- Duncombe, R., K.M. Armour, and S.E. Fraser. 2004. Primary school teachers and the National PE-CPD programme for England. Presentation given to the British Educational Research Association Annual Conference, September 16–18, at the University of Manchester, Manchester, UK.
- Dymoke, S., and J.K. Harrison. 2006. Professional development and the beginning teacher: Issues of teacher autonomy and institutional conformity in the performance review process. *Journal of Education for Teaching* 32, no. 1: 71–92.
- Fox, A. 2006. A spatial dimension to networking in educational settings. A 'Learning How to Learn' project paper (unpublished).
- Hakkarainen, K., T. Palonen, S. Paavola, and E. Lehtinen. 2004. *Communities of networked expertise: Professional and educational perspectives*. Amsterdam: Elsevier.
- Hargreaves, A. 2003. *Teaching in the knowledge society*. New York: Teachers College Press.
- Harrison, J., T. Lawson, and A. Wortley. 2005. Facilitating the professional learning of new teachers through critical reflection on practice during mentoring meetings. *European Journal of Teacher Education* 28, no. 3: 267–92.
- Hobson, A.J., A. Malderez, L. Tracey, M. Homer, N. Mitchell, M. Biddulph, M.S. Giannakaki, et al. 2007. *Newly qualified teachers' experiences of their first year of teaching. Findings from Phase III of the 'Becoming a Teacher' project*. London: Department for Children, Schools and Families.
- Hodkinson, A. 2006. Career entry development profiles and the statutory induction arrangements in England: A model of effective practice for the professional development of newly qualified teachers? *Journal of In-service Education* 32, no. 3: 287–300.
- Keay, J.K. 2006. Collaborative learning in physical education teachers' early-career professional development. *Physical Education and Sport Pedagogy* 11, no. 3: 285–305.
- Lawless, K.A., and J.W. Pellegrino. 2007. Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. *Review of Educational Research* 71, no. 4: 575–614.
- MacBeath, J., D. Pedder, and S. Swaffield. 2007. Schools learning how to learn. In *Improving learning how to learn*, ed. M. James, R. McCormick, P. Black, P. Carmichael, M.-J. Drummond, A. Fox, J. MacBeath, et al., 64–88. London: Routledge.
- Makopoulou, K., and K.M. Armour. 2006. Evaluating the National PE-CPD programme in England: Evidence from schools and teachers. Paper presented at the British Educational Research Association Annual Conference, September 6–9, at the University of Warwick, UK.
- McCormick, R. 2010. The state of the nation in CPD: A literature review. *The Curriculum Journal* 21, no. 4: 395–412.
- McCormick, R., F. Banks, B. Morgan, V.D. Opfer, D. Pedder, A. Storey, and F. Wolfenden. 2008. *Schools and Continuing Professional Development (CPD) in England – State of the Nation research project (T34718): Literature review report*. London: Training and Development Agency for Schools.
- McCormick, R., A. Fox, R. Procter, and P. Carmichael. 2007. Learning through networking. In *Improving learning how to learn*, ed. M. James, R. McCormick, P. Black, P. Carmichael, M.-J. Drummond, A. Fox, J. MacBeath, et al., 89–113. London: Routledge.
- McGregor, J., C. Robinson, and M. Fielding. 2006. Tracing the footprints of practice. Paper presented at the British Educational Research Association Annual Conference, September 6–9, at the University of Warwick, UK.

- McIntyre, D., D. Pedder, and J. Rudduck. 2005. Pupil voice: Comfortable and uncomfortable learnings for teachers. *Research Papers in Education* 20, no. 2: 149–68.
- McLinden, M.T., S. McCall, D. Hinton, and A. Weston. 2006. Developing online problem-based resources for the professional development of teachers of children with visual impairment. *Open Learning* 21, no. 3: 237–51.
- McNicholl, J., and M. Noone. 2007. Teaching and learning at A level within a modular context: A collaborative project with biology teachers. Paper presented at the British Educational Research Association Annual Conference, September 5–8, at the Institute of Education, University of London, UK.
- Miller, D., and D. Glover. 2007. Into the unknown: The professional development induction experience of secondary mathematics teachers using interactive whiteboard technology. *Learning, Media and Technology* 32, no. 3: 319–31.
- Ofsted. 2006. *The logical chain: Continuing Professional Development in effective schools*. London: Ofsted.
- Opfer, V.D., G.T. Henry, and A.J. Mashburn. 2008a. The district effect: Systemic responses to high stakes accountability. *American Journal of Education* 114, no. 2: 299–332.
- Opfer, V.D., and D. Pedder. 2010. Access to Continuous Professional Development by teachers in England. *The Curriculum Journal* 21, no. 4: 453–71.
- Opfer, V.D., D. Pedder, and Z. Lavicza. 2008b. *Schools and Continuing Professional Development (CPD) in England – State of the Nation research project (T34718): Survey report*. London: Training and Development Agency for Schools.
- Pedder, D. 2006. Organisational conditions that foster successful classroom promotion of learning how to learn. *Research Papers in Education* 21, no. 2: 171–200.
- Pedder, D., M. James, and J. MacBeath. 2005. How teachers value and practise professional learning. *Research Papers in Education* 20, no. 3: 209–43.
- Pedder, D., and V.D. Opfer. 2010. Planning and organisation of teachers' Continuous Professional Development in Schools. *The Curriculum Journal* 21, no. 4: 433–52.
- Pedder, D., V.D. Opfer, R. McCormick, and A. Storey. 2010. 'Schools and Continuing Professional Development in England – State of the Nation' research study: Policy context, aims and design. *The Curriculum Journal* 21, no. 4: 365–94.
- Storey, A., F. Banks, D. Cooper, P. Cunningham, D. Ebbutt, A. Fox, B. Morgan, D. Pedder, and F. Wolfenden. 2008. *Schools and Continuing Professional Development (CPD) in England – State of the Nation research project (T34718): Qualitative research summary*. London: Training and Development Agency for Schools.
- Sykes, G. 1996. Reform of and as professional development. *Phi Delta Kappan* 77, no. 7: 465–89.
- Veugelers, W., and M.J. O'Hair, eds. 2005. *Network learning for educational change*. Maidenhead: Open University Press.
- Warwick, I., K. Rivers, and P. Aggleton. 2004. *Developing a programme of Continuing Professional Development (CPD) in citizenship*. Research briefing. London: Department for Education and Skills.
- Wilde, J. 2005. 'Doing the undoable'. *Professional development in schools in Special Measures*. NCSL work in progress. Nottingham: National College of School Leadership.
- Wilson, S.M., and J. Berne. 1999. Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. In *Review of research in education*, 24, ed. A. Iran-Nejad and P.D. Pearson, 173–209. Washington, DC: American Educational Research Association.