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### Evaluating the impact of professional development: the need for a student-focused approach

Peter Earley<sup>a</sup> & Vivienne Porritt<sup>a</sup>

<sup>a</sup> London Centre for Leadership in Learning, Institute of Education, University of London, 20 Bedford Way, London, WC1H 0NT, UK

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## Evaluating the impact of professional development: the need for a student-focused approach

Peter Earley\* and Vivienne Porritt

*London Centre for Leadership in Learning, Institute of Education, University of London,  
20 Bedford Way, London, WC1H 0NT, UK*

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This article argues that evaluation of professional development (PD) requires a focus on student learning and an evidential baseline to enable practitioners and school leaders to determine the impact of the PD in which they are engaged. Several models of evaluating PD are briefly considered and it is suggested that most of these enable programme developers or commissioners to evaluate the impact of what they offer. However, many still struggle with evaluating the impact of PD and are looking for practical yet rigorous ways to achieve this. This paper suggests how this can be achieved, thus enabling schools to know and demonstrate that PD has had an impact, whilst also offering a powerful method to raise both the quality of learning – for adults and students – and student outcomes. In so doing, an approach to impact evaluation is presented. The main findings of the Effective Practices in Continuing Professional Development project are drawn upon to illustrate how this approach to impact evaluation can be deployed. The key lessons learned in relation to effective PD and impact evaluation are outlined. The model outlined gives importance to establishing an evidential baseline and impact picture that supports both adult and student learning.

**Keywords:** professional development; continuing professional development; adult learning; evaluation; impact

### Introduction

Currently, much evaluation of professional development (PD) by school leaders, practitioners and policy-makers is still impressionistic, anecdotal and focused on simple measures. Its impact is rarely evaluated against intended aims or outcomes and there is still a focus on completing a post-event evaluation form (a ‘happy sheet’) or discussing performance during the appraisal process (Guskey 2000). The inspection agency Ofsted (2010) notes that school managers often relied on anecdotal evidence and subjective impressions to judge the impact of PD. Amongst the barriers to progress Ofsted discusses is the weakness they found in monitoring and evaluation; even in schools where PD was good, it was identified as a concern (Ofsted 2010, p. 27). They recommend that schools improve their skills in monitoring and evaluating the impact of PD (2010, p. 6). Further emphasis is given in the revised school inspection framework where inspectors should consider ‘analysis of the impact of professional development on teaching, and on specific teachers’ (2010, p. 12) and ‘the coherence and effectiveness of the programme of professional development’ (2012, p. 42).

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\*Corresponding author. Email: p.earley@ioe.ac.uk

Evaluating PD and its effectiveness is an important part of the training and development cycle (Bubb and Earley 2007) or the 'logical chain' (Ofsted 2006) but it is often thought of as a complex and lengthy, resource-intensive process. This article argues that if the principles and approaches of impact evaluation are better understood and established from the outset of a development activity, rather than as an after-thought or an accountability measure, then impact evaluation becomes a powerful tool for making a difference to children's learning. It is important to plan for impact and agree expected outcomes before engaging in a PD opportunity or process. Such planning requires a clear picture of what current practice and learning are like before engaging in PD (the baseline) and a vision of how practice and learning should look after such engagement (the impact). The importance of establishing a baseline and collecting evidence of impact when evaluating PD is the central focus of the approach outlined in this article. It draws upon the main findings of the Effective Practices in Continuing Professional Development project funded by the Training and Development Agency (TDA)<sup>1</sup> to illustrate how this approach to impact evaluation can be deployed. As a result of practitioners involved in this project not being fully able to apply theoretical models of impact evaluation successfully, a model which enabled them to do this for themselves was developed. This model gives importance to establishing an evidential baseline and impact picture that supports learning.

### Theories and models for evaluating impact

Research has consistently shown (for example, Goodall *et al.* 2005, Ofsted 2006, 2010, Bubb and Earley 2007, Bubb *et al.* 2009) that schools lack experience, skills and tools to evaluate the impact of PD. *The logical chain* (Ofsted 2006, p. 2) noted that, 'Few schools evaluated the impact of continuing professional development [CPD] on teaching and learning successfully', a situation that appears not to have improved much according to more recent inspection evidence (Ofsted 2010) and research (Pedder *et al.* 2010). The latter note in their 'State of the Nation' report that evaluation was seen as, 'instinctive and pragmatic with reference to outcomes that are insufficiently specified and insufficiently linked to pupil learning outcomes, school improvement and self evaluation' (Pedder *et al.* 2010, p. 18). The impact of PD on student learning was rarely evaluated by schools, and if done so, was rarely executed very effectively (Porritt 2009a, Ofsted 2010).

Eun (2011) cites Frechtling *et al.* (1995) in identifying that the literature does not offer much on the impact of PD at the *classroom* level. Despite the existence of a range of models for evaluating impact, it is often not clear which model or approach, if any, is being used in school situations. As O'Brien notes: 'there is clearly a need to follow-up and follow-through CPD interventions so that clear links are established between CPD provision for teachers leading to enhanced teacher quality and the attainment and achievement of students' (2011, p. 106).

There are many models and theories about PD and its evaluation. A useful overview of relevant evaluation literature is given by Coldwell and Simkins (2011), who consider the strengths and weaknesses of various models, including the 'levels' approach which they argue can be used in a number of ways. Bubb and Earley (2007) also provide an account of approaches to evaluation. Both cite Kirkpatrick's (1959) pioneering work on impact evaluation, which identified impact on four levels: reactions; learning; behaviour; and outcomes. Thomas Guskey (2000)

developed this thinking for education and introduced a significant focus on evaluating PD through ‘learning outcomes’ for young people. Guskey’s well-known model sees impact from PD as being achieved at five potential levels:

- participants’ reactions,
- participants’ learning,
- organisation support and change,
- participants’ use of new knowledge and skills, and
- student learning outcomes.

Guskey (2002) suggests that reversing these five levels can be useful in PD planning:

- (1) What impact do you want to have on pupils? How will you know that you have had this impact?
- (2) If that is what you want to accomplish, then what practices do you need to implement?
- (3) What does the organisation need to do to support that; for example, what time/resources do people need?
- (4) What knowledge do people have to have and what skills do they have to develop?
- (5) What activities (e.g. training) do people need to gain those skills or knowledge?

In *London’s learning*, a resource for CPD leaders in London, Porritt (2005) applied Guskey’s (reversed) five levels, stating that to be able to evaluate the impact of PD ‘it is vital that anticipated learning outcomes are explicit from the beginning’. In 2007, the TDA published eight principles for impact evaluation that built on Guskey’s work and other evaluation frameworks, including the Harvard Family Research Project’s Logic Approach (Weiss and Klein 2006). The TDA noted the importance of clarity around the key principles underlying effective evaluation of the impact of PD. The principles include the importance of planning, focusing on what participants learn and agreeing the evidence base and the success criteria for the evaluation of impact (TDA 2007). In the Effective Practices in Continuing Professional Development project, Earley and Porritt (2009) stressed the need for an evidential baseline in the project’s framework for evaluating impact by asking the following two questions:

- What is your current practice/baseline now (at start of project)?
- How do you know this is the case? What evidence can be drawn upon to show this?

Bubb and Earley (2010) build on Guskey’s (2002) five evaluation levels and Porritt’s (2005) earlier work to offer a model of 12 different levels of impact from any development activity, the first of which is establishing a baseline or knowing where you are. Other impact levels are: setting goals (knowing what you want to achieve); plan (planning the best way); the PD experience (initial satisfaction); learning (knowledge, skills, attitudes acquired or enhanced); organisational support (how the school helps or hinders the person using their new learning in their job);

putting new learning into practice (degree and quality of change following from the PD activity); pupils' learning outcomes (impact on experience, attainment and achievement of pupils); other adults in school (sharing learning with other adults and the impact on them); other pupils in school (impact on experience, attainment and achievement of other pupils); adults in other schools (sharing learning with adults in other schools and the impact on them); and pupils in other schools (impact on experience, attainment and achievement of other pupils).

The important difference raised in the above models between pupil learning and staff learning has also been raised by Frost and Durrant (2003), who made a helpful distinction between three sorts of impact on staff: classroom practice, personal capacity and interpersonal capacity. They also discuss the impact of PD on children in terms of distinguishing factors such as their enjoyment in learning, attitudes, participation, pride in and organisation of work, response to questions and tasks, performance and progress and their engagement in a wider range of learning activities.

In her most recent work, Bubb (2013) has developed a model of the PD cycle which has nine stages, not levels. Models of evaluation using levels, such as Kirkpatrick and Guskey's, are limited, she claims, because they portray PD as a linear process. Her model of the PD cycle also avoids thinking in terms of hierarchy, where some parts may be seen as less important than others. All of the stages are important and the neglect of any one will have a detrimental effect on the impact of PD. Drawing on Clarke and Hollingsworth's (2002) notion of domains within their interconnected model of professional growth, the nine stages are organised into three domains:

- Domain of preparation, which includes four stages: identify needs, baseline picture, set a goal and plan how to achieve it.
- Domain of learning, which includes two stages: the development activity and the new learning (skills, knowledge and attitudes) that results.
- Domain of improvement, which includes three stages: putting learning into practice, with impact on pupil learning and improved teacher self-efficacy.

A range of impact evaluation models, theories and frameworks therefore exist, yet research and inspection evidence consistently show that schools and PD leaders are still to employ such tools effectively. Why is this so?

### **Impact evaluation – concerns and issues**

Inspection evidence (Ofsted 2010) and working with schools suggests that many school leaders struggle to evaluate the impact of PD and are looking for practical and simple ways to achieve this. Evaluation seems to have remained largely at Guskey's first level of participant reactions ('happy sheets') and many organisations and leaders are unsure how to move past this. Other concerns still persist. There continues to be an underlying issue that the extensive literature as to what contributes to effective PD is not sufficiently reflected in the actual practice seen in and across schools. For example, the State of the Nation research found that 'most teachers' approaches to professional development tend not to be collaborative or research informed' (Opfer *et al.* 2010, p. 7) or they participate in 'passive forms of learning' (2010, p. 9). Teachers were found, 'to 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' (2010, p. 16). They note also that most impact tends not to occur beyond the personal level of individual teachers and that there is little indication of PD impacting on raising standards or narrowing the achievement gap (2010, p. 10) (cited in Earley 2010). Also as Timperley (2011, p. 2) notes: 'Much professional development has little meaning for teachers'. Equally, to be able to evaluate the impact of PD, such development does need to have an impact and how impact is understood or defined is underdeveloped.

A further concern is that impact evaluation often focuses on the detail of the PD activity (what has happened) rather than the difference the development activity makes for the participants and the young people with whom they work (the change that has been brought about). There is rarely reference to a baseline – the current practice that indicates PD needs – and impact – what will improve in practice as a result of development activity. It was these questions that were addressed by the Effective Practices in Continuing Professional Development project.

### **Findings from the Effective Practices in Continuing Professional Development project**

The Effective Practices in Continuing Professional Development project lasted 18 months (2007–2009). In phase one, the TDA awarded grants of up to £20,000 to 232 school-based CPD projects throughout England and over 670 schools were involved as well as local authorities and higher education institutions. Of the 232 projects involved in the first phase, just over two-thirds (68%) submitted proposals successfully for phase 2 and were awarded grants of up to £10,000. All of the projects were related to one or more focus areas such as: science, technology, engineering and mathematics subjects; 14–19 provision; schools facing challenging circumstances; early PD; and impact evaluation.

For some institutions their experience of the project was very significant and many participants, both teachers and support staff, felt motivated and valued as a result. The projects helped improve their practice and led to a deepened understanding of effective PD and its impact, and gave rise to many interesting and exciting projects, a selection of which became case studies. The case studies described and analysed the journeys that the projects had made: what were their starting points and baselines; how far had they progressed (and how did they measure that progress); what were important milestones on the way; and what impact had they achieved? A total of 20 were completed for the TDA and a sample of these published (see Earley and Porritt 2009).

Two significant findings emerged from the work of this substantial number of schools. Firstly, that schools were still working towards knowing how to achieve effective PD that had an impact and that there was considerable variation in understanding of what this constituted and how it was achieved. The project highlighted the distance still needed to be covered to achieve systemic understanding and application to practice. Secondly, the project reflected the Ofsted (2010) judgement that schools struggle with how to demonstrate and evidence the impact of PD. They were able to assert that their project had made a difference but were unable to substantiate that or explain how the PD in which participants had engaged had brought about demonstrable improvements in classroom practice and student learning. These two key findings are explored further below.



***Achieving effective professional development***

According to the research syntheses from the Centre for Evidence-Informed Policy and Practice in Education (EPPI), conducted by Cordingley *et al.* (2004, 2005, 2006a, 2006b), PD activity that is effective needs to incorporate, for example, reflection, collaborative approaches and external input and for such activity to be determined by individual needs and sustained over time. In phase 1, many projects were learning or applying these findings almost as if for the first time. It takes time for schools and their leaders to access research findings, and then to apply them effectively by implementing the cultural, structural and procedural changes needed in their own day-to-day practice. In 2012, these same messages were still being promulgated. Russell Hobby, General Secretary of the National Association of Head Teachers, in a webinar for the Teacher Development Trust, suggested:

There's a gap between practitioners and researchers on this [topic], in the sense that I suspect that not all school leaders do know what effective CPD is, or are confident that they know which aspects of CPD will help them deliver their priorities. (Hobby 2012)

In supporting schools to apply the key findings about successful practice to their own structures and processes, by the end of the project's first phase nine factors were identified that underpinned the most successful projects and strongly influenced effective PD practice. These were:

- Establishing clarity of purpose at the outset in PD activity.
- Specifying a focus and goal for PD activity aligned to clear timescales.
- Including a focus on pupil outcomes in PD activity.
- Participants' ownership of PD activity.
- Engagement with a variety of PD opportunities.
- Time for reflection and feedback.
- Collaborative approaches to PD.
- Developing strategic leadership of PD.
- Understanding how to evaluate the impact of PD.

The above were determining factors in PD activity having an impact on colleagues' thinking and practice, the learning of pupils and organisational improvement. Having this impact is the hallmark of effective PD.

These nine approaches can be reordered and selected: firstly, those that particularly reflect the EPPI Centre research syntheses and that underpinned successful projects:

- Participants' ownership of PD activity.
- Engagement with a variety of PD opportunities.
- Time for reflection and feedback.
- Collaborative approaches to PD.

There was widespread agreement amongst project leaders that the above aspects or factors had contributed greatly to the positive feelings of participants, and indeed motivated more colleagues to become involved and develop. In one secondary school, the project leader stated the leadership team had seen 'the sense of professional confidence from each individual blossom' (Porritt 2009b, p. 63).

The findings from the TDA project then extended the EPPI Centre evidence. It was clear that another factor – including a focus on pupil outcomes in PD activity – had stretched participants’ thinking and helped them to improve. This was the second highest rated factor, out of the nine, that phase 2 project leaders selected through which to develop the effectiveness of their PD practice following phase 1. For many of the project participants, linking PD activity to desired pupil outcomes was not yet a natural or expected practice. The usual link was between PD activity and what colleagues would know or learn as a result. The projects that tried to focus on pupil outcomes were also clearer in articulating their aims than others. Phase 2 projects learned the value of identifying at the outset the desired change and improvement to pupil outcomes and then determining the nature of the PD activity that would have greatest effect in achieving such improvement. Timperley (2011, p. 5) concurs with the significance of this finding when she states that ‘improvements in student learning and well-being are not a by-product of professional learning but rather its central purpose’.

A one-form entry, inner-city primary school, for example, had clear outcomes for pupils in mind when they agreed the aims at the beginning of their project:

- Raise standards in mathematics through developing a problem-solving approach in lessons.
- Work with staff to develop their understanding of children’s misconceptions and their ability to diagnose errors.

It was also clear that the following aspects had supported the most successful projects:

- Establishing clarity of purpose at the outset in PD activity.
- Specifying a focus and goal for PD activity aligned to clear timescales.

To many project leaders, the two aspects above represented a new way of thinking about development activity and were a significant challenge to their usual practices. They initially found it difficult to be clear about what they wanted to improve before engaging in PD activity; what was possible in a specified time frame; and identifying the appropriate development activity to improve their starting point and so change and improve practice.

Consequently, they therefore struggled with evaluating whether they had achieved their intended outcome through engaging with PD activity. To achieve this powerful link, described by Ofsted (2006) as a ‘logical chain’, it is argued that achieving clarity of purpose for PD activity at the outset needs to be more understood as key to ensuring PD that is effective.

The increasing sharpness of focus and clarity over the project’s two phases demonstrated in the case studies (Earley and Porritt 2009) indicates that clarity of outcomes supports the achievement of specific and demonstrable outcomes to PD activity. This clarity was lacking in one otherwise successful project in which:

The project director was not entirely clear, sometimes settling for ‘I just want people to talk more’ rather than doing action research. ‘Learning leaders’ varied in how clear they were but participants were not entirely clear about what was meant to be achieved through the Action Learning Sets. (Bubb 2009a, p. 46)



This approach was a determining factor in the success highlighted at the end of a secondary school's project to develop coaching skills: 'CPD and coaching has become such an accepted part of the way we do things here' (Porritt 2009b, p. 67).

Two approaches (of the nine) remain, namely:

- Developing strategic leadership of PD.
- Understanding how to evaluate the impact of PD.

Many of the project leaders did not necessarily have responsibility for PD within their organisations: their learning about what constituted effective development practice suggested that there was a great deal of scope to embed such understanding within middle and senior leaders in schools, including head teachers. Even when project leaders did have the lead role for PD, it was clear that the role had not always been seen as having strategic significance. The ability to lead PD strategically is linked to having clarity of purpose, identifying a clear goal such as a focus on pupil outcomes and being able to align this goal to a timescale for achievement. It is also about understanding the importance of evaluating the impact of PD to celebrate success and so determine the next steps in continuing to improve practice. The experience of one project leader helps here. She learned that the purpose of evaluating impact was to improve PD activity; it was not an end in itself. Impact evaluation is thus both the last link in a 'logical chain' or staff development cycle and also the first.

A key finding from the Effective Practices project was that PD activity, to be effective, needed to be underpinned by the nine factors identified above, irrespective of the PD activity, the participants, the context or the setting. This means that any developmental activity (attending a course, lesson observation, joint planning or being coached, etc.) will be more effective and have a greater impact if these nine factors underpin the strategic approach to PD activity in the organisation.

Professional development strategy and guidance over the last few years have encouraged schools in England to adopt development activities that have reflection, peer support and collaboration built into their core activities: this would include coaching and mentoring, and inquiry-based approaches as well as joint practice development (Fielding *et al.* 2005, Hargreaves 2012, Stoll *et al.* 2012). This has also meant an increasing focus on sharing internal expertise and a consequent reduction in the more traditional attendance at courses and conferences. However, this shift still means that PD is seen as activities to be engaged in, albeit with some activities being more effective than others.

It appears that a further step change in supporting schools is now needed to ensure PD has the effect of supporting and influencing improvement for colleagues, for pupils and for organisations. As noted earlier, for PD to be effective and so bring about improvement, it needs to be seen in terms of the consequent development of knowledge and expertise, which may (or may not) result from participation in a wide range of activities. The goal is the change effected in the thinking and practice of staff so that such change improves the experience and learning for pupils. Of the three words within continuing professional development, a stronger focus on the subsequent development process that comes from engaging in professional learning is needed: the rigour and quality of the follow-up development process needs to complement the quality of the learning opportunity.

The effect of professional development activity is maximised if its leadership:

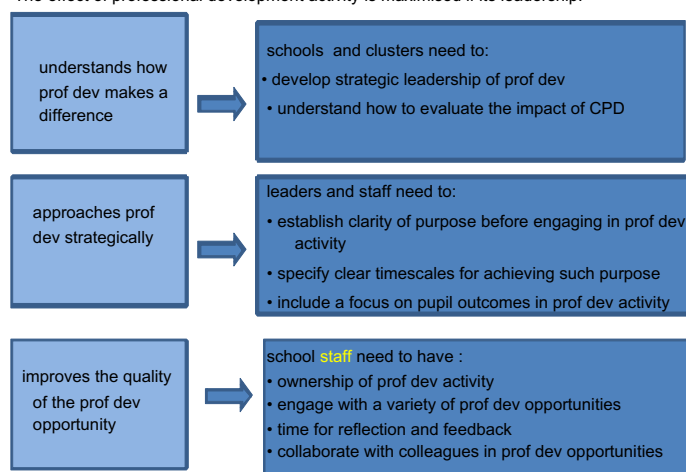


Figure 1. Maximising the impact of professional development.

To achieve this, the interrelation of the nine factors that supported the most successful projects, and explored in detailed case studies (Earley and Porritt 2009), needs to be better understood by schools and their PD leaders as strategic ways in which the quality of any development activity and its subsequent impact can be improved.

Another way of looking at this is to consider the nine approaches or factors in relation to the leadership of PD and learning. It is essential that this leadership understands how PD makes a difference, approaches it strategically and makes efforts to improve the quality of the PD opportunity. How the impact of PD can be maximised through effective leadership is shown in Figure 1.

### ***Understanding impact evaluation***

The second key finding from the project referred to understanding impact evaluation. As Thompson and Wiliam note: 'Knowing that teachers make a difference is not the same as knowing how teachers make a difference' (2008, p. 3; see also Wiliam 2007). School leaders are searching for practical ways to know what has worked and what does not work to make the most effective use of their greatest resource, human capital or people. In their conference paper, Thompson and Wiliam expound further:

we need to be able to identify *causes*, rather than *correlates* of effective teaching. This is effectively a counterfactual claim. We need to identify features of practice that when teachers engage in these practices, more learning takes place, and when they do not, less learning takes place. Second, we must identify features of teaching that are malleable – in other words, we need to identify things that we can change. For example, to be an effective Center in basketball, you need to be tall, but as one basketball coach famously remarked, 'You can't teach height'. (2008, p. 3)

Whilst Thompson and Wiliam focus on a framework to scale up assessment for learning practices, the same issues apply to a conceptual framework for impact evaluation that school leaders can apply to everyday practice.

One of the reasons school leaders often give as to why it is so difficult to evaluate impact is because they believe it will take several years to be able to see results. This expectation is based on a traditional view of impact evaluation. The approach to impact evaluation that was used to underpin the Effective Practices project was a very practical one that is simple in concept yet rigorous in the difference it can make. The initial thinking behind this approach was first highlighted in *London's learning* (Porritt 2005, Porritt *et al.* 2006). This resource explored Guskey's key concept that evaluation issues should be:

an integral part of discussions during the earliest stages of professional development planning when ... goals are defined and activities specified. (2000, p. 250)

Traditional impact evaluation tends to be at the end of a development activity, yet 'all initial planning as to the potential impact of CPD should be undertaken *before* CPD activity starts' (Porritt 2009a, p. 8). By impact is meant, for example, stating specific changes in a teacher's classroom strategies or clarity about a changed approach from a lunch-time supervisor to children in the playground. In terms of learning outcomes, it should be agreed at the outset what will be the differences in how children learn as a result of proposed development activity – for example, pupils will move from using closed questions to the use of higher-order questioning. This is a simple concept to agree yet requires a significant change in the PD practice of many organisations.

It is important to know what sort of impact is being sought and the Effective Practices projects were encouraged to look at impact evaluation in terms of three separate yet progressive areas – products, processes and outcomes. Products might include policies or resources. Processes are new or improved systems. Products and processes do not necessarily make a difference to colleagues and children and young people, yet many project participants only saw impact in terms of these two aspects. They struggled with articulating improved outcomes on their own learning, their practice or the learning of children and young people. The key was to plan the expected specific impact at the outset, and this involved having a clear picture of what things were like before engaging in any PD activity so that there was a baseline against which to evaluate progress.

This difference can best be expressed as impact. It is often harder to quantify this difference, yet it is important to be able to say how the school knows it is making/has made a difference. Therefore the next key questions for impact evaluation were as follows:

- What has been achieved (as a result of engaging in PD activity) that is making a difference for the practice of the staff, the school and to the learning of the children/students?
- What evidence is telling the school that it is making this difference?

Impact is the difference in staff behaviours, attitudes, skills and practice as a result of the PD in which staff have engaged. Ultimately, impact is also the difference in the learning and experience of the children as a result of the change in staff practice and the latter becomes possible once there has been impact from PD. As Thompson and Wiliam state:

Learning – at least the learning that is the focus of the formal educational enterprise – does not take place in schools. It takes place in classrooms, as a result of the daily, minute-to-minute interactions that take place between teachers and students and the subjects they study. (2008, p. 1)

Bringing about an improved outcome in the learning and experience of the children is what enables a school to say that PD has been effective.

In the second phase of the project, the work of Frost and Durrant (2003) and the TDA (2008) was drawn upon to better understand the impact the project was having on staff and pupil outcomes. The earlier noted distinction between the three sorts of impact on staff – classroom practice, personal capacity and interpersonal capacity – was used. Project leaders were asked to identify any differences in staff knowledge, behaviours, attitudes, skills and capacity as a result of development activities.

To ascertain any differences in the learning and experience of the children and therefore to enable the school project leaders to say that development of their staff had been effective, again following Frost and Durrant (2003), evidence in relation to the following impact on children was sought: enjoyment in learning; attitudes; participation; pride in and organisation of work; response to questions and tasks; performance and progress; and engagement in a wider range of learning activities.

It was important for projects to be very clear on the original practice they wished to improve so that they were then able to articulate the difference that had been achieved as a result of engagement in development. A clear gain from the project had been learning around successes and challenges in evaluating the impact of PD, both for project participants and for the funder. The clear and rigorous evaluative framework provided had supported and challenged projects to develop their thinking and practice about what effective PD was, how to achieve this and how to evaluate the impact of any activity. The monitoring and evaluative framework and the need to think through the project for external scrutiny had been helpful for the focus of many of the project leads. Greater use was being made of a variety of methods to gather impact data, and increasing numbers of projects were able to identify what they were learning from that evidence and demonstrate greater clarity about improvements they wanted to achieve. In the later phase of the project there was more use of evidence from pupils, showing a greater awareness of impact on learning. Many school projects sought and used evaluation evidence to track progress rather than regarding impact evaluation as an end-of-project process.

Project leaders were enthusiastic about what had been achieved and most were planning to continue to build on the progress already made, to embed and consolidate by formalising processes, and many were expanding to involve more staff or other schools or to extend the professional learning to other environments, locations and contexts. There was recognition that they had been given a unique opportunity and that the funding and involvement in the national project had enabled them to make a significant shift in their practices and in some cases in the whole school culture as a result. There was strong evidence to suggest that real change in thinking, practice and culture relating to PD had been achieved through their involvement in testing, trialling, exploring and evaluating approaches to people development.

### Impact evaluation: principles and approaches

It has been argued that PD is only effective when it makes a tangible difference to the attitudes, thinking and practice of colleagues and has the potential to make a difference for the organisation and for pupils. The key question, therefore, is to know whether PD has made a difference and the ways in which it has brought about improvement. Many schools still struggle with this aspect and this was clear in all of the project's case studies. Many made significant progress over the course of their projects, especially in understanding that impact evaluation is not an end in itself but is a way to improve the quality of the intended outcomes. Project leaders were able to make greater use of a variety of methods to gather impact data, to identify what they were learning from that evidence and to demonstrate greater clarity about the improvements they wanted to achieve.

Initial planning and thinking about the impact of PD leads naturally to some rigorous questions, the answers to which help an organisation, team or individual design an approach that offers some practical solutions. In particular, 'establishing the current practice or *baseline* is vital to help colleagues articulate the quality and depth of the subsequent *impact* on adult practice and young people's learning' (Porritt 2009a, p. 8).

The questions projects were encouraged to explore included the following:

- What is impact evaluation? Why should we do it?
- What is your current practice, your baseline? What is the evidence to show this?
- For whom do you want PD to make a difference?
- By when?
- Does it make a positive difference? How much of a difference?
- How do we know? What is the evidence of impact?
- How can we evaluate impact simply and practically?

Working on such questions with schools, local authorities and PD leaders has led to the evolution of this simple yet innovative approach to impact evaluation. The approach to impact evaluation enabled the school projects to design more effective improvement and development processes that had greater potential to ensure impact was achieved. Evaluating the impact of PD in this way is a powerful method to raise the quality of learning and standards with value for money and accountability being helpful additions.

Two particular aspects are worth further consideration:

- The importance of establishing baseline and impact pictures with supportive evidence;
- Understanding evidence sources and asserted or substantiated evidence.

### *Establishing baseline and impact pictures*

It is crucial to evaluating impact to take the time to be clear about current practice and pupil learning (baseline) and the impact on practice and learning that the school wants to achieve within a desired timescale before engaging in sustained PD activity. The most significant benefit to such clarity is to enable an effective match

between the need for improvement and the type of PD activity that will best effect such change.

This can be exemplified through the coaching case studies from the project (see Bubb 2009b, Illingworth 2009, Porritt 2009b). An initial decision to develop a group of coaches can have impact through improved skills in colleagues. Developing coaches because this will improve the relationships between groups of staff and pupils opens the possibility of a link between PD activity and pupil outcomes. The starting point (baseline) would, in this case, be strained relationships between staff and pupils, and a picture of the ways in which improved relationships would support the emotional and social development of pupils can then be painted. It is at this point that the most appropriate PD activity – coaching – can then be selected. An example of how this can be applied is given in Figure 2.

Lloyd (2009) offers a further example of this in another of the project's case studies. A focus on pupil outcomes was implicit throughout the specific project, with improvements to pupil learning expected to result from the findings of the enquiry walks. Enhancing pupil learning was always a core aim for the participating head teachers who felt that this project was about enabling and equipping them to do so more effectively. However, it was difficult for the participants to evaluate the specific impact of the enquiry walks on pupil outcomes: the latter needed to be more explicit in the project design from the outset for participants to be able to capture evidence as the project progressed and at the end of the project. The next stage for this case study would be to identify the intended gains in pupil learning to which the specific leadership and learning behaviours gained in this project would now lead.

This is a simple concept, yet the implications for practice are far reaching. This approach requires greater levels of understanding as to the intended purpose of PD activity for both individual colleagues and their team leaders. It requires higher levels of professional dialogue, especially in the performance management process, before the most effective PD activity can be determined. Another hurdle is that the purpose of PD tends to be explicit only in terms of the needs of adults. It is rare that improvements to the learning of pupils are articulated at the outset as the true purpose of PD. If this link is made, it tends to be only at the level of a whole

	<i>Before coaching</i>	<i>After coaching</i>
<i>Impact on performance of pupils</i>	Pupils were writing in paragraphs which linked sentences on the same topics, but with little overall structure or use of signposting.	Focus on openings and connectives has helped pupils to produce more rounded paragraphs.

Figure 2. Coaching's impact on pupils.  
Source: Illingworth (2009, p. 77).



school attainment target expressed in terms of levels or sub-levels to be achieved. The development of individuals and teams brings about improvement in the learning of separate groups of pupils in separate classrooms at first, and it is at this level where impact on pupils' learning needs to be sought. Only then can such improvements be aggregated to the whole school level.

### *Understanding evidence sources and asserted or substantiated evidence*

This second aspect caused the greatest confusion for the project participants. In most of the case studies, for example, the evidence cited for both the baseline picture and impact achieved was the source of the evidence only. This included line management meetings, lesson observations, interviews with staff, coaching conversations and reports from external coaches. It was rare for actual evidence to be offered from these sources as to what, for example, 'inconsistencies in practice' actually were, what 'more collaboratively' looked and sounded like in changed practice or what the 'effective systems and processes' were – for either the practitioners or the pupils. In one case, for example, the following was offered: use of questionnaires to ascertain what pupils like about the club. What is really interesting is what the pupils actually liked – what does the analysis of the questionnaires say? This then offers either a baseline from which to improve practice or a repeated questionnaire indicates changed levels of satisfaction.

The need to investigate the evidence source and interrogate the evidence to interpret what it suggests about impact was especially marked when impact on adult practice or pupils' learning was cited. In the vast majority of cases in phase 2, this evidence was asserted:

- The outcomes for teachers included improvements in planning and pedagogy – *such as?*
- Incremental improvement in reading ages – *from what to what?*
- Teaching and learning in this school had clearly improved overall as seen by more personalised learning and improvements in the questioning skills of teachers – *such as?*
- The speaking module for GCSE shows improved results – *from what to what?*
- The quality of teaching in the sixth form improved – *from what to what?*

Project leaders were mostly reliant on asserting gains they had achieved at the conclusion of their project and found it difficult to use qualitative and quantitative data as evidence to substantiate such gains. Schools are awash with data yet the project's case-study schools shied away from highlighting the precise data that would have highlighted links between the PD activity and improved outcomes for colleagues and pupils. A key question is why is this so?

It was clear that schools felt the evidence was available and they were proud of their achievements yet they had not seen the value of offering this to the case-study researchers, and the data were often inaccessible except by, for example, further mining of the spreadsheets. Evidence from nearly all of the case-study schools suggests a reluctance to do this and yet there is immense value in being able to celebrate the impact of PD on specified improvements to colleagues' practice and substantiated improvements in the quality of learning as well as attainment.

In one of the project's case studies (Mulholland 2009), data were offered as evidence of PD activity leading to improved attainment:

There was a marked improvement in terms of children's achievement in maths at all three key stages:

- 10 percent increase in pupils achieving level 4 or above in the KS2 SATs
- 24 percent increase in pupils achieving level 2 or above in KS1 SATs
- 23 percent increase in pupils achieving six points or more in the aspect of Calculations in the Foundation Stage Profiles. (Mulholland 2009, p. 98)

This was a very helpful step forward and the participants were rightly proud of these achievements: this is something to celebrate. To build on this achievement, the information can be further supported by referencing the particular baseline and the period of time over which improvement was achieved. In terms of the baseline, are the figures given based on last year's cohort or the prior attainment of the particular pupils involved in the project? The difference is important as it highlights the starting point for the improved attainment of the pupils. It is also valuable to reference the time scale so the size of the accomplishment is also noted.

A key lesson to learn, then, is why schools shy away from using the data they have gathered to highlight successful outcomes from PD activity. One reason may be that the type of baseline data has not been identified or then gathered and so it is then difficult to capture interim and final data because there is a lack of clarity as to what impact will look like. Also, possibly the language involved in capturing and analysing data for impact evaluation is unhelpful. Terms such as qualitative or quantitative data or evidence can be off-putting; alternatives such as 'hard' (numbers) and 'soft' (attitudes, perceptions, feelings, images, words) may be more useful. In all cases it is important for the evidence to be substantiated rather than asserted.

A third reason why schools eschew existing data may be that they are not yet experienced enough in seeing the link between PD activity and improvements in practice and pupils' learning. This can be explained by the current focus in most schools on the range and quality of PD activity rather than a balanced focus on both quality of provision and impact on practice. If PD is to effect change and improve practice in the classroom, and so pupils' learning and experience, there is also a need for a strong focus on evaluating impact through the concepts outlined here. This is important to motivate and value the school workforce.

This would indicate that further development is needed in supporting schools and PD leaders to interpret and analyse what the evidence source is highlighting in terms of the changes to practice and learning to be achieved through engaging in development. This would offer a coherent understanding of the current situation and practice at the beginning of the proposed development, an improved ability to select appropriate evidence and increasing efforts to interpret and analyse this evidence. Case-study projects found it hard to use *actual* qualitative or quantitative evidence from these sources to illustrate and substantiate their starting position. This ability is crucial in being able to identify appropriate PD activity to bring about the

consequent change and improvement and then to evaluate the impact of such activity. Further work should continue in this respect: in particular, schools would benefit from seeing data used positively to determine a subsequent course of action and to demonstrate success and achievement.

What is clear is that all the case-study schools in the Effective Practices project had worked hard to evaluate the impact of their PD practice and that they were much more successful in doing this in the second phase of the project than the first. It would be valuable to follow up the case-study schools in subsequent years to see where their new-found skills had taken them.

## Conclusion

The experiences of the case-study schools highlight the significance of the project. They highlight the real change in thinking, practice and culture that has been achieved through involving schools and other organisations in testing, trialling, exploring and evaluating approaches to PD. The project case studies also document the lessons they have learned, and these lessons are valuable for all schools and other support organisations in moving PD practice forward. The case-study schools can be seen to have explored interesting and effective ways to involve and support all colleagues.

Initiatives, such as the Effective Practices in Continuing Professional Development project, have enabled schools and their partners to develop, test out and implement PD activities and approaches so that practitioners bring about cultural and strategic change and influence the development of national strategy. However, perhaps the most valuable lesson learned from the TDA-funded project, especially from the case-study schools, is that the strategic implications of the nine development approaches identified can improve the overall quality and impact of PD, and so improve the learning for all children and young people. The approach to impact evaluation advocated here, with its emphasis on staff and pupil learning, may be interpreted as overly responsive to the current policy emphasis on 'raising standards'. The purpose of PD has tended to be explicit only in terms of the needs of adults, and the recent emphasis on the importance of teacher quality for school improvement may reinforce this tendency (Barber and Mourshed 2007, Department for Education 2010). Professional development for improving the organisation's human resources is key (Bubb and Earley 2010) but it is still relatively uncommon that improvements to the learning of pupils are articulated at the outset as the true purpose of any development activity. This paper has attempted to provide a means to achieve such a goal by discussing the nature of effective PD and the importance of impact evaluation.

## Note

1. The Training and Development Agency for Schools was an agency of the UK Government responsible for the training and development of the school workforce in England, administering funding, developing policy and monitoring initial teacher education and CPD of teachers and other school staff. In 2010 it became the Teaching Agency, and in February 2013 it was merged with the National College for School Leadership to become the National College for Teaching and Leadership.

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