



Mapping of seminal reports on good teaching

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Contents

Introducing The NFER Research Programme	1
Executive summary	2
Key findings	4
1. Introduction	6
2. Review	7
2.1 Key features of effective teaching	8
2.2 Extrinsic factors to the classroom	17
3. Discussion	25
4. Concluding comments	26
References	27
Our thanks	30



Introducing The NFER Research Programme

From Education to Employment

NFER has a worldwide reputation for excellence in research in education and children's services, built up over 65 years of working with a wide range of partners to produce independent evidence to inform change.

As a charity, the Foundation exists to improve the education and life chances of learners through the provision of independent evidence aimed at influencing policy, informing practice in the learning environment and directly impacting learners. To help achieve this, The NFER Research Programme was set up in 2011. Funded by NFER, it is developing partnerships with organisations and individuals who share our commitment to solving unanswered challenges young people face in education. The Programme targets key areas of education, highlighting gaps in existing evidence and conducting new research to provide the evidence to fill the gaps. Current areas of focus are *From Education to Employment*, *Developing the Education Workforce* and Innovation in Education.

Developing the Education Workforce

Over recent years, evidence from a number of major studies has begun to highlight how different education systems are doing in comparison to England and these studies have cast the education debate in this country in a new light. Our school system needs to continually improve to meet the increasing global competition and this reform must be evidence based.

The initial phase of our work in the Developing the Education Workforce strand is a pair of reports which map the current research into:

- what effective teaching looks like
- what causes teachers to change their teaching practice

These reports offer a new perspective on the recent research in this area and identify the gaps for future research. A series of easy-to-use guides for practitioners, school leaders and local authorities based on the findings will also be available.

Sarah Maughan
Research Director, NFER

Executive summary

This report presents the findings of a literature review conducted as part of The NFER Research Programme. It forms part of a pair of reviews that collectively consider creating change in schools through workforce development. The focus of this review is to establish the key features of ‘good teaching’. The report explores what the best available research tells us about what ‘good teaching’ looks like, if there are any contradictions and if there are any gaps in the literature.

A number of recent reports have emphasised effective teaching as a crucial element in securing positive outcomes for young people (Sammons *et al.*, 2008; DfE, 2010; Pollard, 2010; GTCE, 2011). However, what do we understand by the term ‘effective teaching’, or ‘pedagogy’ as it is often described? Alexander (2008) argued that the two terms are not synonymous and that pedagogy is often too narrowly defined as merely what teachers do in the classroom: the action, but without the values, theories and evidence that underpin it. The term ‘pedagogy’ involves ‘acquiring and exercising rather more expertise – intellectual and ethical – than is often understood by the term “teaching”’ (GTCE, 2011, p.88).

The notion of ‘expert professional knowledge’ is said to be central to the concept of effective pedagogy. It is not just about individual teachers’ practices and values but ‘encompasses the domains of curriculum and assessment, together with the social, cultural and policy context of young people’s learning’ (GTCE, 2011, p.88), thus building on Alexander’s (2008) notion of teachers as educators rather than mere technicians. Such expert knowledge needs to include teachers’ subject knowledge, but also how teachers then apply that knowledge to their teaching in order to facilitate their pupils’ knowledge and understanding. One way of contributing to the development of that body of expert professional knowledge is to extract evidence from existing research of the approaches and practices that seem to work (Emery, 2011). The current NFER review, based on 25 reports, seeks to develop a map of significant evidence from the last five years (that is, since 2006) of what good teaching looks like.

The parameters for the review were necessarily strict, given the wealth of possible research that came up after an initial search of the literature. At the same time, the review was not subject or context specific and, as such, cannot claim to be exhaustive. However, it does identify a number of overarching key features and extrinsic factors which impact on the experiences of, and outcomes for, the learner. These are summarised in Figures 1.1 and 1.2. and explained in more detail in the body of the report.

Concluding comments

This review has highlighted particular key features that have been identified in a number of the most influential reports from the last five years. However, listing a repertoire of effective teaching strategies is not in itself enough to ensure effective teaching. Although there are generic features of effectiveness, ‘these features alone cannot illuminate the attitudes, characteristics and skills of effective and more effective teachers in action’ (Day *et al.*, 2008,

p.8). James and Pollard (2006) argued that, as well as being provided with useful strategies, teachers also need to understand the principles that underpin their practice so that teaching does not run the risk of becoming 'ritualised' (p.8). Equally, different schools have different expectations and operate in very different contexts (Mourshed *et al.*, 2010) so each journey towards effectiveness is necessarily different. What is therefore of fundamental importance is that any repertoire of strategies be adapted and refined to suit the particular needs, context and experience of the school, its teachers and its pupils (Emery, 2011).

It is important to note, that while it is valuable to identify features, strategies and principles that enable 'good teaching', they are not enough, in themselves, to change practice.

Key findings

Figure 1.1 The analytical model: a map of the conditions for effective teaching

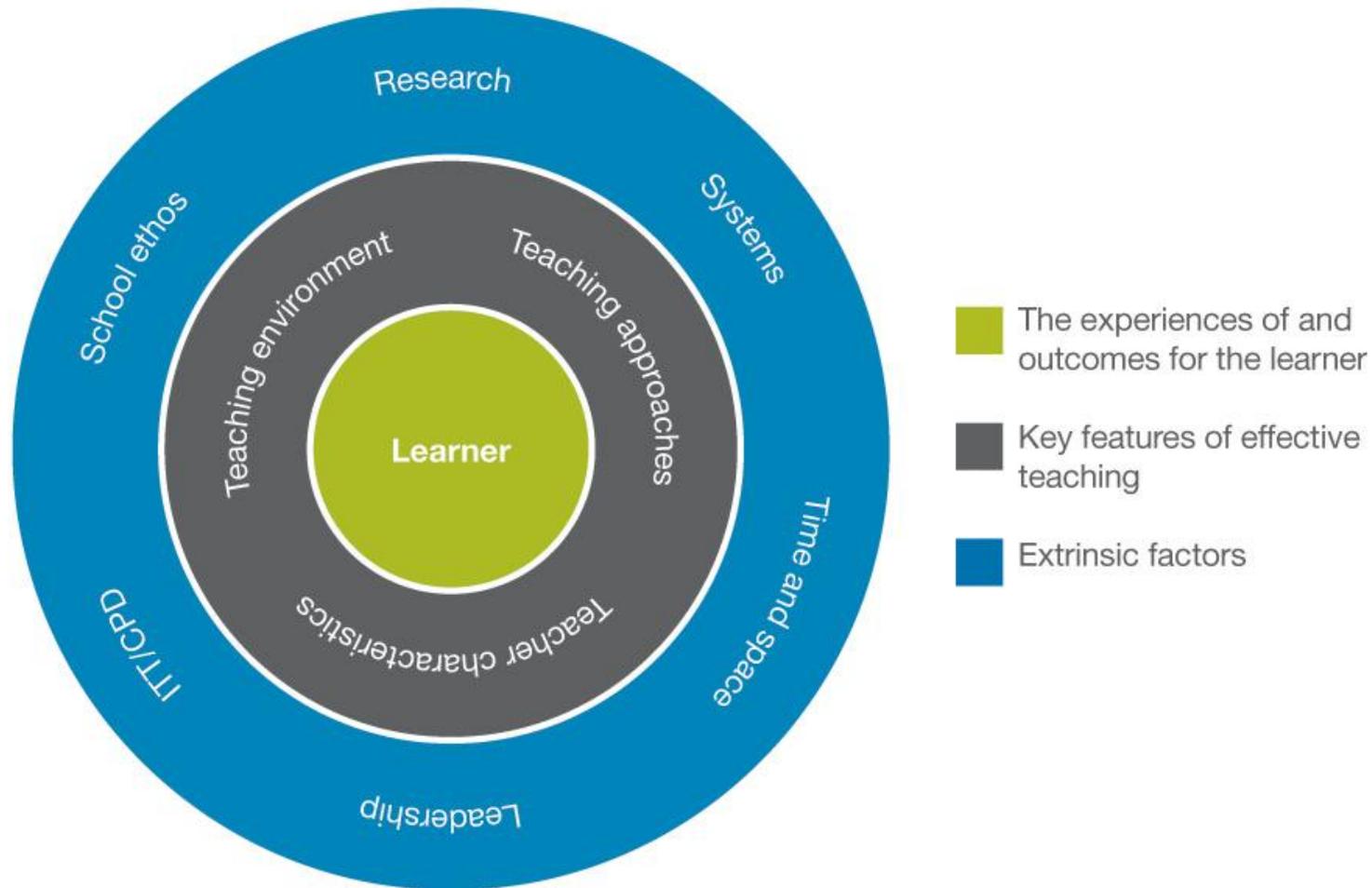


Figure 1.2 The key features of effective teaching

Teaching environment	Teaching approaches	Teacher characteristics
<ul style="list-style-type: none"> • Calm, well-disciplined, orderly • Safe/secure • An ethos of aspiration and achievement for all • Positive emotional climate • Purposeful, stimulating • Bright, attractive and informative displays • Clean, tidy and well organised • New or redesigned buildings/spaces • Lower class sizes 	<ul style="list-style-type: none"> • Interactive (e.g. working and learning together – social constructivism) • Use of teacher-pupil dialogue, questioning • Monitoring pupil progress (including the use of feedback) • Pupil assessment (including AfL) • Pupil agency and voice (active engagement in their learning) • Enquiry-based • Effective planning and organisation • Scaffolding learning • Building on the prior experience and learning of pupils (a constructivist theory of learning) • Personalisation, responding to individual needs • Home-school learning, knowledge exchange • Use of new technology/ICT • Collaborative practice • Good use of teaching assistants (TAs) • Creative use of visits/visiting experts 	<ul style="list-style-type: none"> • Good subject knowledge • Self-efficacy/belief • High expectations • Motivational • Provides challenge • Innovative/proactive • Calm • Caring • Sensitive • Gives praise • Uses humour as a tool • Engenders trust and mutual respect • Flexible (where appropriate) • Builds positive relationships with pupils (relationships for learning) • Self-reflecting

1. Introduction

This report presents the findings of mapping exercise conducted as part of The NFER Research Programme. It forms part of a pair of reviews that collectively consider creating change in schools through workforce development. The focus of this review is to identify and compile a map of the key features of 'good teaching' that are recurrent in a range of seminal reports.

The review aimed to address a number of research questions.

- Which are the key reports that have been published on pedagogy in the last five years?
- Are there any consistent conclusions about what 'good teaching' looks like?
- Are there any significant contradictions about what 'good teaching' looks like?
- Is it possible to develop a map of the features of 'good teaching' that is supported by the majority of the literature?
- Are there any gaps in the research evidence?

There is, and always has been a lot of debate about what 'good teaching' looks like. However, there is an extensive range of evidence already available on the various aspects of 'good teaching'. Essentially, the aim of this review is to use existing evidence to produce one document which brings together the key features of 'good teaching'.

The findings from this review, and the other review in the pair, will support The NFER Research Programme by providing a solid base for future action research into creating change in schools through workforce development.

2. Review

This review is intended to be used internally by NFER to inform its programme of research but it may also be of interest to policy makers and others involved in education.

The review is based on 25 reports from the last five years. The parameters for the review were necessarily strict, given the wealth of possible research that came up after an initial search of the literature. The selection process of the final 25 documents produced a wide range of reports for inclusion, such as inspection reports, research literature and so on. The reason for covering a range of document types was to ensure a variety of perspectives were covered and to select the most relevant documents. None of the documents included were weighted as this is not intended to be a systematic review. The review is general and non-judgemental, and it is not subject or context specific, therefore it cannot claim to be exhaustive. However, it does identify a number of key features of effective teaching which, it is hoped, could be of value.

For the purposes of this review, NFER takes the view that the objective of good teaching is to ensure that all pupils achieve, by developing every individual pupil to the best of their potential and ability. Throughout this review the term ‘good teaching’ is frequently used and is synonymous with ‘effective teaching’, therefore the two terms are used interchangeably.

A number of the reports examined in the course of this review have emphasised effective teaching as a crucial element in securing positive outcomes for young people (Sammons *et al.*, 2008; DfE, 2010; Pollard, 2010; GTCE, 2011). However, what do we understand by the term ‘effective teaching’, or ‘pedagogy’ as it is often described? Alexander (2008) argued that the two terms are not synonymous and that pedagogy is often too narrowly defined as merely what teachers do in the classroom: the action, but without the values, theories and evidence that underpin it. In order to elevate pedagogy from simply technique to an ‘educational act’, he defined pedagogy as:

[...] the act of teaching together with its attendant discourse. It is what one needs to know, and the skills one needs to command, in order to make and justify the many different kinds of decisions of which teaching is constituted.

(p.173)

Therefore, as the GTCE (2011) pointed out in a series of policy papers, pedagogy then involves ‘acquiring and exercising rather more expertise – intellectual and ethical – than is often understood by “teaching”’ (p.88). It argued that effective teaching can be supported, developed and sustained by ‘strengthening the concept and practice of “pedagogy”’ (GTCE, 2011, p.88), a focus noted as lacking in previous literature (Alexander, 2008; Pollard, 2010; GTCE, 2011). Pollard (2010) stressed the need for teaching to be founded on pedagogic discourse arising from ‘teachers sharing and scrutinising the practices and kinds of knowledge which they build, and the values in which these are rooted’ (p.6).

The notion of ‘expert professional knowledge’ is said to be central to the concept of effective pedagogy. It is not just about individual teachers’ values and practices but also ‘encompasses the domains of curriculum and assessment, together with the social, cultural and policy context of young people’s learning’ (GTCE, 2011, p.88), thus building on Alexander’s (2008) notion of teachers as educators rather than technicians. However, although there has been a move towards a broader understanding of the term ‘pedagogy’, as the GTCE (2011) pointed out, this does not mean that understanding is necessarily shared by all, nor that everyone is aware of what constitutes effective teaching. Therefore, what is needed is an expanded, and shared, understanding of pedagogy that encompasses and makes very clear ‘the complex skills, specialist knowledge and shared ethical values that lie behind the professional judgements that every teacher makes’ (p.91). The GTCE believes that this will then lead to improvements in the quality of teaching which will subsequently bring about improvements in pupils’ learning experiences and outcomes.

A body of expert professional knowledge, as described above, needs to include teachers’ subject knowledge, but also how teachers then apply that knowledge to their teaching in order to facilitate their pupils’ knowledge and understanding. As Emery (2011) pointed out, one way of contributing to the development of that body of expert professional knowledge is to extract evidence from existing research of the approaches and practices that seem to work. Evidence from the 25 reports selected for the review was analysed thematically in order to draw out insights and examples of effective teaching. The analytical model (Figure 1.1) is a visual representation of the theme-mapping process undertaken which places the learner at the centre of the diagram. In the second concentric circle of the model are the elements or key features of effective teaching (organised within three themes: the teaching environment; particular teaching approaches; and individual teacher characteristics) all of which impact on the experiences of and outcomes for the learner. In the outer concentric circle are a number of extrinsic factors (school ethos; research; systems and policies; time and space; leadership; and professional development, including initial teacher training (ITT) and continuing professional development (CPD)) which interact with the key features. These extrinsic factors can either facilitate or detract from effective teaching and thus positively or negatively impact on the experiences of, and outcomes for, the learner.

2.1 Key features of effective teaching

2.1.1 Teaching environment

A number of reports emphasised the benefits for learners of a **calm, well-disciplined and orderly** classroom environment in which pupils feel **safe and secure** (Dunne *et al.*, 2007; Day *et al.*, 2008; Sammons *et al.*, 2008; OECD, 2009; Siraj-Blatchford *et al.*, 2011). The establishment of clear boundaries and behavioural expectations within a culture of mutual respect was reported to encourage pupils’ confidence and facilitate their learning (Day *et al.*, 2008; Siraj-Blatchford *et al.*, 2011). Dunne *et al.* (2007), in a report on effective teaching and learning for low-attaining groups, noted that an ‘explicit disciplinary context’ was particularly appreciated by low attainers as it enabled them to avoid ‘distraction and disruption’ and allowed a greater focus on learning (p.5).

In its 2010 Schools White Paper, the Department for Education (DfE, 2010) stressed the importance of creating an environment that encourages **a culture of aspiration and achievement for all pupils**. Alexander (2008) and Siraj-Blatchford *et al.*, (2011) echoed the need to ensure that every child is given the opportunity to succeed. Closely linked to this was the provision of a **positive emotional climate** where pupils were happy and felt well supported in their learning (Dunne *et al.*, 2007; Day *et al.*, 2008; Sammons *et al.*, 2008; Siraj-Blatchford *et al.*, 2011). Siraj-Blatchford *et al.* (2011) argued that a positive emotional climate built on mutual trust could encourage pupils to take on 'new learning challenges' (p.74) as they would not be afraid of making mistakes. The authors also noted that pupils in classrooms with positive emotional climates demonstrated 'high levels of liking and respect' for their peers (Siraj-Blatchford *et al.*, 2011, p.71).

Several reports referred to the need to create **purposeful and stimulating** teaching environments (Alexander, 2008; Sammons *et al.*, 2008; Ofsted, 2009b; Siraj-Blatchford *et al.*, 2011), which would make learning a richer and more enjoyable experience thus motivating pupils to achieve. Where this was done particularly well, resulting in a 'buzz of productive activity' (p.77), Siraj-Blatchford *et al.* identified the provision of 'well-organised and fit-for-purpose' (p.73) teaching resources, the productive use of time and greater self-reliance among pupils.

A number of environmental factors identified related to changing the physical appearance of, and improving the facilities in, classrooms. Day *et al.* (2009) reported that attention to these factors not only made the classroom a more welcoming place in which to spend time, but also signalled the level of importance afforded to 'associations between high quality conditions for teaching and learning and staff and pupil well being and achievements' (p.113). A number of ways of achieving these physical improvements were noted in the literature. Creating **bright, attractive and informative displays** (Muijs and Reynolds, 2010; Day *et al.*, 2008; Day *et al.*, 2009) not only made the environment more pleasant, but as Muijs and Reynolds (2010) pointed out, allowed 'peripheral learning' (p.111) to take place, for example, when pupils' attention is drawn to the educational material on display, messages are absorbed subliminally. At the same time, displays of pupils' own work can be very attractive but can also encourage and motivate pupils by engendering a sense of pride in their work (Muijs and Reynolds, 2010).

The right atmosphere for learning could also be enhanced by ensuring that the physical environment is kept **clean, tidy and well organised** (Muijs and Reynolds, 2010; Day *et al.*, 2008). These positive changes to the physical environment were said to result in pupils having more respect for their classrooms and thus appeared to lead to positive changes in their attitudes and behaviour (Day *et al.*, 2009).

Two reports focusing on innovation (OPM, 2008; Leadbeater, 2008) identified the creation of **new or redesigned buildings and spaces** as a way of improving the teaching and learning environment. More innovative ideas put forward included creating 'break-out rooms' to facilitate group work or involving pupils in the design and development of physical spaces (OPM, 2008, p.14).

Some reports also identified the effect that **lower class sizes** could have on the creation of a more positive, supportive atmosphere (Muijs and Reynolds, 2010; Dunne *et al.*, 2007; Day *et al.*, 2008). Dunne *et al.* particularly noted the benefits of lower class sizes for low attainment groups to facilitate ‘the concentration of resources and more individualised teaching and learning’ (p.70).

2.1.2 Teaching approaches

A large number of the reports summarised for this review offered teachers advice on particular strategies or approaches that can support them in their teaching.

The use of **interactive** approaches to teaching, such as those afforded through group work, was reported to have a number of benefits (Muijs and Reynolds, 2010; James and Pollard, 2006; Day *et al.*, 2008; Leadbeater, 2008; Siraj-Blatchford *et al.*, 2011). Chief amongst these was the sense of cooperation and collaboration it fostered (Muijs and Reynolds, 2010; Leadbeater, 2008) which led to developments in social skills, empathy and problem solving skills. Pupils’ learning within a group situation was said to be greater than that afforded to pupils working individually as a result of their interactions in that group (Muijs and Reynolds, 2010) – a social constructivist approach where groups construct shared meaning and knowledge.

Closely linked to this, and extending the concept of social constructivism, was reported to be the use of **teacher-pupil dialogue** (Muijs and Reynolds, 2010; James and Pollard, 2006; Day *et al.*, 2008; Kyriacou and Issett, 2008; Alexander, 2008; OPM, 2008; Ofsted, 2009a, 2010; Pollard, 2010; Siraj-Blatchford *et al.*, 2011). A dialogic approach, which enables teachers and their pupils to participate in interactive dialogue about the learning, characterised by skilful open-ended questioning from the teacher, was reported to foster independent thinking and enhance understanding (Ofsted, 2010; Siraj-Blatchford *et al.*, 2011). Alexander (2008) argued that ‘talk’ is a powerful pedagogical tool which:

[...] mediates the cognitive and cultural spaces between adult and child, among children themselves, between what the child knows and understands and what he or she has yet to know and understand.

(p.92)

Therefore a key role for the teacher would appear to be the promotion of opportunities for dialogue and discussion. In spite of this, and given the potential already noted for it to shape pupils’ thinking and learning, it is surprising that, until recently, a dialogic approach has not been more widely used. Kyriacou and Issett (2008) in a report on effective teacher-initiated teacher-pupil dialogue in mathematics lessons found that ‘traditional initiation-response-feedback (IRF) discourse’ (p.1), where pupils are engaged in short interactions usually to elicit an answer to a closed question and followed by evaluative feedback such as ‘well done’, predominated in mathematics lessons. Similarly, Alexander (2008) reported that most teachers tend to use three types of classroom talk:

- *Rote: the drilling of facts, ideas and routines through repetition*
 - *Recitation: the accumulation of knowledge and understanding through questions designed to test or stimulate recall of what has been previously encountered, or to cue pupils to work out the answer from clues provided in the question*
 - *Instruction/exposition: telling the pupil what to do, and/or imparting information and/or explaining facts, principles or procedures*
- (p.186)**

Less commonly, teachers were reported to use:

- *Discussion: the exchange of ideas with a view to sharing information and solving problems*
 - *Dialogue: achieving common understanding through structured and cumulative questioning and discussion which guide and prompt, reduce choices, minimise risk and error, and expedite 'handover' of concepts and principles*
- (p.186).**

A dialogic approach, encompassing these less common types of talk, was reported to be a particularly effective teaching strategy, allowing pupils to demonstrate independent thinking in a supportive environment, without any feeling of embarrassment over giving a wrong answer, and enable them *'to build on their own and each other's ideas and chain them into coherent lines of thinking and enquiry'* (p.185).

A number of reports emphasised the importance for effective practice of continuous **monitoring of pupil progress** in order to target support effectively, guide future planning and enhance learning outcomes (Sammons *et al.*, 2008; Ofsted, 2009b; Ofsted, 2009c; Day *et al.*, 2009; Sharples *et al.*, 2011). Inherent in this was the need to provide pupils with regular feedback on their progress which was said to move pupils' thinking forward and encourage motivation and engagement (Dunne *et al.*, 2007; Sammons *et al.*, 2008; Ofsted, 2009b; Ofsted, 2009c; Pollard, 2010).

The contribution that **pupil assessment** can make to effective teaching and learning was highlighted in several reports (Muijs and Reynolds, 2010; James and Pollard, 2006; Ofsted, 2009a; Mourshed *et al.*, 2010; Pollard, 2010; DfE, 2010; GTCE, 2011). James and Pollard (2006) and the GTCE (2011) both made the case for the primacy of the teacher in the assessment process rather than using external tests. The data then produced can be used by teachers, pupils and their parents to inform future teaching and learning (GTCE, 2011). Assessment for Learning (AfL), an extension of dialogic teaching and learning (Siraj-Blatchford *et al.*, 2011), uses assessment in the classroom in order to raise levels of achievement and makes pupils partners in their learning (Alexander, 2008; Siraj-Blatchford *et al.*, 2011). Pollard (2010) found that when pupils were involved in discussing and setting their own targets, this enhanced aspirations and motivated them to be more confident about reaching for higher goals (p.18). The GTCE (2011) noted that AfL is 'underpinned by:

[...] the proposition that pupils will improve most if they understand the aim of their learning, where they are in relation to this aim and how they can achieve the aim or reduce the gap
(p.131)

However, the GTCE (2011) went on to report that, in spite of an emphasis nationally on AfL as a contribution to teaching and learning, evidence from Ofsted inspections shows that it is 'still not consistently embedded in teaching across phases and subjects' (p.132) which, it is argued, is a weakness in provision. Criticisms of AfL centred on: 'unfair or biased marking; variations in standards applied by different teachers; questions over the quality of assessment instruments' (GTCE, 2011, p.134). Although the GTCE (2011) noted its belief that such weaknesses can be 'sufficiently mitigated at system level to ensure quality, accuracy and robustness', it also acknowledged that more work is required in order to 'to improve the capacity and capability of the teacher workforce in relation to assessment practice' (p.129).

Another strategy gaining prominence in the literature is **the use of pupil agency and voice**; actively engaging pupils as partners in their learning (James and Pollard, 2006; Dunne *et al.*, 2007; Alexander, 2008; Sammons *et al.*, 2008; OPM, 2008; Ofsted, 2009a; OECD, 2009; Pollard, 2010). The OECD (2009), in its report on the first results from the Teaching and Learning International Survey (TALIS), referred to this approach as being underpinned by 'constructivist beliefs' (p.220), i.e. that knowledge is not something that can just be delivered to pupils via direct instruction from the teacher, but requires active involvement and participation from pupils. However, the report noted that, in all 23 TALIS countries, teachers were more likely to use the approaches of structuring lessons, followed by student-oriented practices (e.g. small group work) and finally enhanced learning activities, for example, project work. Given its constructivist emphasis on the active construction of knowledge, the report argued that more could be made of the last two of these approaches (OECD, 2009). In James and Pollard (2006) and Pollard (2010), the authors reported that promoting the active engagement of pupils encouraged independence and autonomy by providing a 'repertoire' of learning strategies (for example collaborative group work and school-home activities) for pupils to use and thus become 'agents in their own learning' (p.8). An OPM (2008) report on teachers as innovative professionals identified a strong pupil voice as one of the 'building blocks' (p.24) of innovation and referred to case-study schools where pupils were involved in designing and evaluating lessons, in the recruitment of staff and in the performance management of staff. However, Sammons *et al.* (2008), in a report on the effect of school and teaching quality on the progress of pupils in primary schools, found that there was an optimum amount of autonomy beyond which the response of pupils at this age may not be positive. The authors reported that in this case, the approach may 'adversely affect the disciplinary climate' (p.v).

An effective way of promoting the active involvement of pupils and fostering independent learning was a focus on developing an **enquiry-based** approach (Leadbeater, 2008; Ofsted, 2009a, 2010). This approach encouraged pupils to develop their questioning and investigative skills (and thus links to dialogic and constructivist approaches), to make

connections, challenge their assumptions and then 'reflect critically' on their ideas and results (Ofsted, 2010, p.5).

Effective planning and organisation, with clear objectives and appropriate pace so as to provide a broad, balanced, relevant and stimulating curriculum, was identified as an effective teaching strategy (Ofsted, 2009a and b, 2010; Siraj-Blatchford *et al.*, 2011). Effective planning was highlighted as an important factor in '**scaffolding**' – a process which enables the learner to build on their own learning and thus move forward (Muijs and Reynolds, 2010; James and Pollard, 2006; Dunne *et al.*, 2007; Kyriacou and Issett, 2008; Pollard, 2010). The term 'scaffolding' was defined by Muijs and Reynolds (2010) as the act of providing assistance to pupils 'to achieve tasks they cannot yet master on their own' (p.64) followed by the gradual withdrawal of that support. Involving a mixture of questions, prompts, suggestions and challenges, it was reported to focus on supporting pupils' growth rather than directing them towards a well-defined objective (Muijs and Reynolds, 2010). James and Pollard (2006) and Kyriacou and Issett (2008) referred to the use of dialogue and discussion in scaffolding to build pupils' thinking and understanding. Kyriacou and Issett (2008), in their review of 15 research studies, also identified 'reflective scaffolding' (p.12), a technique described as particularly effective, where teachers enabled pupils to reflect on the task they were undertaking but also allowed the pupils to direct the development of the dialogue.

Another constructivist approach identified was **building on the prior experience and learning of pupils** (Muijs and Reynolds, 2010; James and Pollard, 2006; Alexander, 2008; Pollard, 2010). Identifying and taking into account prior experience and knowledge enabled effective planning for progression and helped teachers to identify learning difficulties in order to inform that planning. James and Pollard (2006) noted that this should also include taking account of 'the personal and cultural experiences of different groups of learners' and referred to a Teaching and Learning Research Programme (TLRP) project where acknowledging pupils' perspectives on their experience had produced 'interruptions' in teachers' thinking that had allowed change to take place (p.43).

Our analytical model (Figure 1.1) places the learner at its centre and a number of reports examined for this review emphasised **personalisation** – the importance for teachers of gearing approaches and resources to the needs of each individual child – thus placing the child at the heart of what they do (Muijs and Reynolds, 2010; Dunne *et al.*, 2007; Leadbeater, 2008; Siraj-Blatchford *et al.*, 2011; Day *et al.*, 2008, 2009; Ofsted, 2009b; Pollard, 2010). Siraj-Blatchford *et al.* (2011) noted that prior knowledge of pupils' experience and learning facilitated personalisation, in that teachers were then in a better position to 'adapt their teaching to the specific interests and needs of their students' (p.75).

Several reports focused on the importance of **home-school learning and knowledge exchange** (Muijs and Reynolds, 2010; James and Pollard, 2006; Dunne *et al.*, 2007; Leadbeater, 2008; Sammons *et al.*, 2008; Alexander, 2008; Day *et al.*, 2009; Ofsted, 2009b; Pollard, 2010; Sharples *et al.*, 2011; Siraj-Blatchford *et al.*, 2011). Some of these reports focused on the importance of well-planned and managed homework based on meaningful tasks, directly linked to what pupils were learning in the classroom and carefully communicated to parents (for example, Muijs and Reynolds, 2010; Siraj-Blatchford *et al.*,

2011; Ofsted, 2009b). Others referred to more of a mutual partnership approach based on building good relationships and communication with parents (Alexander, 2008; Sammons *et al.*, 2008; Day *et al.*, 2009; Ofsted, 2009b) or by involving them directly in the life of the school, for example by drawing on their expertise or through hosting adult education classes (Dunne *et al.*, 2007; Leadbeater, 2008). The TLRP Commentaries examined for this review (James and Pollard, 2006; Pollard, 2010) recognised the importance of the informal learning opportunities afforded. The TLRP Projects focused on home-school knowledge exchange found that pupils tended to 'draw on school experience, and develop it at home, and bring home experiences into school' (James and Pollard, 2006, p.10). Pollard (2010) reported that changing circumstances in a pupil's life may mitigate against effective assessment of that pupil's ability. Contextual understanding could therefore help in the interpretation of their performance.

More innovative use of **new technologies and ICT** as a means of improving teaching and learning was identified in a number of reports (OPM, 2008; Leadbeater, 2008; Day *et al.*, 2009; Ofsted, 2010; Sharples *et al.*, 2011; GTCE, 2011). Examples given included the use of interactive whiteboards, DVDs and PowerPoint presentations, as well as using computers to access 'virtual learning platforms, from home and in class, and encourage the use of bulletin boards, message groups and wikis' (Leadbeater, 2008, p.12). Such technology can be used 'to gather information, to model possible solutions to complex questions, to construct presentations and to communicate in an engaging and provocative way' (Ofsted, 2010, p.23). Emery (2011) highlighted the ASE/Royal Society's LabSkills project which is an interactive software resource linked to A-level chemistry courses. This resource enables pupils to conduct virtual experiments and provides them with knowledge reviews via quizzes and self-managed tests (p.14). The OPM report on teachers as innovative professionals (OPM, 2008) identified ICT as a valuable way to engage pupils and keep them 'up-to-date with the way they interact with the world' (p.12). This report noted that school intranet could be used as a means of exchanging information and ideas, while ICT was also employed as a method of transmitting information about meeting times and locations in order to encourage attendance. A C4EO report on effective classroom strategies with young people living in poverty (Sharples *et al.*, 2011) found that more traditional use of ICT, based on self-instruction to supplement teaching, had 'minimal impact for children living in poverty' (p.2). However, the use of whole-class technology such as interactive whiteboards and 'embedded multimedia' were reported to 'show greater promise' (p.2).

Collaborative practice – working together and learning from each other – was identified as a particularly effective strategy (OECD, 2009; Ofsted, 2009a and b; Poet *et al.*, 2010a and b; Mourshed *et al.*, 2010; DfE, 2010).

Collaborative practice is about teachers and school leaders working together to develop effective instructional practices, studying what actually works in the classroom, and doing so with rigorous attention to detail and with a commitment to not only improving one's own practice but that of others as well.

(Mourshed *et al.*, 2010, p.75)

In the 2010 Schools White Paper (DfE, 2010), the DfE referred to the value of teachers learning from others by observing and being observed, as well as being provided with opportunities to 'plan, reflect and teach with other teachers' (p.19). However, the OECD (2009) found that in all 23 participating Teaching and Learning International Survey (TALIS) countries, collaborative practice usually involved sharing ideas and information as opposed to more direct action such as team teaching. Poet *et al.* (2010b) identified collaboration with colleagues as a means of improving teaching practice. This was reported to include: 'reflection, discussion with peers, team teaching, mentoring and coaching' (p.14). This type of activity, characterised by peer support and mutual learning, was described by the GTCE (2011) as facilitating the development of the 'self-sustaining professional learning community' (p.79).

Several reports noted that teaching and learning could be improved through making **good use of TAs** (Dunne *et al.*, 2007; Day *et al.*, 2008; Leadbeater, 2008; Ofsted, 2009a and b; Sharples *et al.*, 2011). Their contribution to learning outcomes, however, was reported to be much stronger when they are well trained and supervised (Ofsted, 2009b; Sharples *et al.*, 2011) and when the teacher and the TA work together as a team (Dunne *et al.*, 2007). Blatchford *et al.* (2009) found that TAs reduce teachers' stress levels and improve classroom discipline but do not boost pupils' progress. Blatchford *et al.* (2009) also suggested that low-attaining pupils did less well with a TA.

Finally, an effective teaching strategy identified in a small number of studies was making **creative use of visits and visiting experts**, ensuring that pupils got the best out of the experience through good planning and effective follow-up (OPM, 2008; Ofsted, 2009a). Examples of external experts that had been brought into schools included MPs, councillors, faith or community representatives contributing to citizenship lessons (Ofsted, 2009a), a voluntary organisation delivering drugs education, and professional dancers or photographers coming in to work with design students (OPM, 2008, p.36).

2.1.3 Teacher characteristics

Within the literature, a number of intrinsic characteristics of individual teachers were identified as being influential factors in pupils' learning experiences and outcomes. Of prime importance was the requirement for both primary and secondary teachers to have **good subject knowledge** (James and Pollard, 2006; Day *et al.*, 2008; Ofsted, 2009a; DfE, 2010), as well as a good understanding of how to teach the subject, termed 'pedagogical content knowledge' (James and Pollard, 2006, p.8), combined with a strong sense of professional values (Day *et al.*, 2009). However, Ofsted (2009a), in a report on improving primary teachers' subject knowledge, found that 'the range and quality of teachers' subject knowledge' could differ substantially in any one school and where teaching in a lesson was judged to be good, this was often because teachers' general teaching skills 'more than made up for any weaknesses in their knowledge of the subject they were teaching' (p.7). The report argued for opportunities for subject-specific CPD, taking account of the varying demands that different subjects will place on teachers. In the more effective primary schools, any deficit in teachers' subject knowledge was minimised through 'links with partner schools,

using advanced skills teachers or other experts, or securing focused professional development' (Ofsted, 2009a, p.5).

The OECD (2009) identified teachers' **self-efficacy**, a belief in their own capabilities, as a key feature of effective teaching. It is reported to be an indicator of aspects of productivity, but also of the manner in which teachers act in the classroom. The report suggested that teachers with higher levels of self-efficacy might be 'more likely to adapt to and moderate dynamics' in schools with pupils from different backgrounds or those that 'present particular challenges' (OECD, 2009, p.223).

Teachers identified as more effective were said to have **high expectations** that were clear, consistent and understood (Dunne *et al.*, 2007; Day *et al.*, 2008; Alexander, 2008; Ofsted, 2009b and c), and to be able to **motivate** their pupils through a variety of teaching approaches such as pupil-led or interactive lessons (Day *et al.*, 2008; Ofsted, 2009a and b). Another feature identified was **providing challenge** (Dunne *et al.*, 2007; Sammons *et al.*, 2008; Ofsted 2009a), although Dunne *et al.* (2007) noted the need to balance providing challenge with maintaining high expectations and the provision of opportunities for success.

A number of reports examined discussed the role of innovation in effective teaching (Leadbeater, 2008; OPM, 2008; GTCE, 2011), going beyond traditional approaches (Day *et al.*, 2009; Galanouli, 2010). 'It's about breaking down the barriers between traditional teaching methods and new exciting ways of looking at things' (OPM, 2008, p.12). Research has shown that teachers generally regard being **innovative** in two ways: either as a response to events, or to pupils' needs, in the classroom; or in terms of 'trying something new and taking risks in the execution and planning of lessons' (GTCE, 2011, p.119). Leadbeater (2008) referred to altering the timing and pacing of, and settings for, learning as an innovative approach to greater personalisation. The OPM (2008) argued that teachers are often more comfortable with the first of these approaches to innovation and that, in order to go beyond 'opportunistic' approaches, teachers need to be able to 'discuss, share and promote examples of innovation – at the individual, as well as the systemic, or school level (p.2). Where innovation was part of a whole-school ethos, teachers were more likely to see it as a process of continuous improvement and change (OPM, 2008). The risks of being innovative, such as the lack of 'hard' evidence on effectiveness and not being supported by an official policy, were reported to be mitigated through 'good project design; sound professional knowledge; awareness of context; and sensitivity to the reactions of "stakeholders" and users' (GTCE, 2011, p.120). Teacher-led innovation, it was argued, could increase teacher morale and motivation, as well as improving pupils' performance and their ability to experience learning more positively (GTCE, 2011). However, as the Teachers' Code of Conduct asserts, innovation should always be 'circumscribed by the priority that must be given to the best interests of children and young people' (GTCE, 2011, p.120). The report stressed the need to support teachers to be innovative through appropriate and effective CPD, and to find a way of 'framing the conditions for innovation whilst maintaining standards and processes to ensure teaching quality' (p.124).

A number of affective characteristics were highlighted in the literature. Day *et al.* (2008) referred to the need for teachers to be **calm and caring** during lessons and display

sensitivity to pupils' personal and learning needs. Pollard (2010) argued that with sensitive teachers, even those pupils who may have had a negative experience of formal schooling could 'enjoy learning, gain new skills and contribute to society' (p.28). Ofsted (2009b) found that outstanding primary schools were characterised by such teachers, who provided affection and stability. Effective teachers gave **praise** frequently, and for a variety of purposes (Day *et al.*, 2008; Ofsted, 2009b) and often used **humour as a tool** to make the topic or subject seem more relevant to pupils' own experiences (Day *et al.*, 2008). They were also able to **engender trust and mutual respect** and made every effort to be **flexible** in order to provide a learning environment that encouraged pupil participation (Dunne *et al.*, 2007; Day *et al.*, 2008).

The ability to create and develop **positive relationships with pupils** was reported to be very important in terms of building rapport, facilitating interaction and communication, and nurturing mutual wellbeing, thus leading to more positive behaviour and higher standards (Dunne *et al.*, 2007; Day *et al.*, 2008; Leadbeater, 2008; OECD, 2009; Pollard, 2010; DfE, 2010; Siraj-Blatchford *et al.*, 2011). Leadbeater (2008) introduced the term 'relationships for learning' to describe effective teacher-pupil relationships predicated on the following four key aspects:

- *they are relationships that build participation*
 - *children need relationships that provide them with recognition*
 - *children need relationships that make them feel cared for, safe and secure*
 - *and most importantly, children need relationships that will motivate them to learn*
- (p.19)

Self-reflection was identified as an effective approach to improving teachers' practice (James and Pollard, 2006; Pollard, 2010; Poet *et al.*, 2010b). Pollard (2010) reported that critical self-reflection is based on 'open-minded enquiry' (p.27) together with a willingness to adapt one's teaching practice in the light of evidence arising from that enquiry. Evidence used might be related to school or pupil performance, drawn from research findings, or based 'on small-scale personal enquiries or observations, on discussion or collaborative activities with colleagues' (p.27). Pollard noted that this enables assumptions, or 'taken-for-granted thinking' (p.27), to be challenged, re-appraised, and thus practice adapted and refined.

2.2 Extrinsic factors to the classroom

Our search of the literature identified a number of extrinsic factors (in the outer circle of Figure 1.1) which interact with the key features outlined in section 2.1 and can either facilitate or detract from effective teaching, and thus positively or negatively impact on the experiences of and outcomes for the learner. These factors are:

- school ethos
- leadership
- research

- systems and policies
- time and space
- professional development, including ITT and CPD.

2.2.1 School ethos

A positive whole-school ethos was reported to be of paramount importance in securing a successful learning experience for pupils (OPM, 2008; Day *et al.*, 2009; Ofsted, 2009a; Pollard, 2010). Although essentially a fairly nebulous concept, put simply, school ethos is about the culture and values of the school and the way in which the people in the school treat each other. It was said to be characterised by open, positive, supportive relationships where children and young people feel that their views are listened to, where they feel safe and secure and that any problems or difficulties will be dealt with sensitively and appropriately (Day *et al.*, 2009). Other features of a positive school ethos included the encouragement of pupil voice and providing opportunities for pupils to take responsibility for their own learning, to contribute to decision making and, most importantly, to achieve (OPM, 2008; Ofsted 2009a). Implementing particular teaching approaches or making changes to the teaching environment was reported to be easier when supported by a whole-school ethos which enabled those changes to become embedded in the culture of the school, rather than ‘bolt-on’ activities implemented by particular teachers. For example, as noted earlier, if innovation was part of a whole-school ethos, it was far more likely that teachers would see it as part of a continuous process of change (OPM, 2008).

2.2.2 Institutional leadership

High-quality leadership is a fundamental element of a positive whole-school ethos that is focused on raising the standard of teaching in the school and on achieving positive outcomes for its pupils (Day *et al.*, 2008, 2009; OPM, 2008; Alexander, 2008; Sammons *et al.*, 2008; OECD, 2009; Ofsted, 2009b and c; DfE, 2010; Emery, 2011). The DfE (2010) in its Schools White Paper cited evidence asserting that the quality of school leadership was second only to the quality of teaching as ‘the most important determinant of pupils’ success’ (p.26). As a result, the DfE stressed its mission to ensure the future supply of headteachers and to provide them with the training and support they need in order to be effective. A study of leadership by Day *et al.* (2009) found that:

[...] heads in more effective schools are successful in improving pupil outcomes through who they are – their values, virtues, dispositions, attributes and competencies – the strategies they use, and the specific combination and timely implementation and management of these strategies in response to the unique contexts in which they work.
(p.1)

The OPM report (2008) identified strong and reflective leadership, demonstrated through a clear, well-communicated vision of what the school is trying to achieve, as ‘the most fundamental building block’ in creating the most conducive conditions for innovations in

teaching (p.4). Clearly, the quality of institutional leadership can be said to either facilitate or restrict opportunities for the development of more innovative practices. In its report on primary schools in challenging circumstances, Ofsted (2009b) noted that high-quality leadership was crucial in the development and sustainability of 'the drive to perfect teaching and maximise learning' in challenging schools (p.2).

The TALIS survey (OECD, 2009) found that in each of the 23 countries involved, some school leaders had taken what was called an 'instructional leadership' approach (where leaders work with teachers to address pedagogical difficulties), as opposed to an administrative one. The former was reported to be 'central to today's paradigm of effective school leadership' (p.190). However, it was also noted that the prevalence of instructional leadership varied by country and that in a significant number of countries, both instructional and administrative models of leadership were operating. Those school leaders who adopted an instructional leadership approach were found to be more likely to take innovative approaches to appraisal, to introduce professional development for weaker teachers, and to engage in collaborative activities with their colleagues (OECD, 2009). In a similar vein, Emery (2011) argued that school leaders needed 'to prioritise teaching and learning and show a strong commitment to educational leadership' (p.12), quoting the DCSF's 2010/11 remit to the National College which asked for school leaders:

[...] to showcase to teaching staff, especially their senior leadership team, effective pedagogical repertoires and exemplary teaching and learning practice to support a self improving system, to drive up teaching standards and school improvement.

Ofsted (2009b) identified 'transformational leadership', an approach that leads to change in individuals and organisations, citing examples of primary schools in which transformational leaders have turned a school around by modelling behaviour and leading by example, thus enhancing motivation and morale, and ultimately performance. The approach is said to be founded on the following principles:

- *All pupils can achieve high standards, given sufficient time and high-quality support.*
- *All teachers can teach to high standards, with the right example, conditions and help.*
- *High expectations and early intervention are essential.*
- *Teachers need to learn all the time, and they need to be able to articulate what they do, why they do it and how effective it was.*

(p.21)

The OPM report (2008), whilst recognising the crucial role of the headteacher in leading innovation in teaching, argued that ownership of innovative practices needed to be much wider. The report identified two different models of leadership: a 'distributive' or shared model; and a 'collegiate' model (p.27), where the management style is non-hierarchical and often based around subject specialisms. Day *et al.* (2009) reported evidence that a distributive, or shared, leadership approach was common in schools and that a number of factors influenced the extent of distribution, including:

- *the extent of both leader and staff members' expertise*

- *the prevalence of policies and regulations that influence the direction of work in the school*
 - *the leadership function(s) to be performed*
 - *the scope of the goals to be accomplished.*
- (p.14)**

Their report concluded by introducing what the authors termed ‘the next leadership horizon’ – ‘system leadership’ (Day *et al.*, 2009). This focuses on collaboration and engagement with other schools to bring about improvements. A system leader is defined as someone:

[...] who is willing and able to shoulder wider system roles and in doing so is almost as concerned with the success and attainment of students in other schools as they are with their own.

(p.195)

2.2.3 Research

A number of reports identified the role that research can play in informing decision making and improving the quality of teaching (James and Pollard, 2006; Pollard, 2010; Poet *et al.*, 2010b; GTCE, 2011; Emery, 2011). The GTCE (2011) noted, in a series of policy papers on teaching quality, that research is important because effective teaching is not simply about delivering the curriculum, but requires knowledge and skills in order to be able to exercise professional judgement in the decisions teachers make. The report suggested that research-informed practice involves a broad range of teacher activity, from ‘using a piece of research to stimulate reflection on practice’ (p.98) to undertaking research of one’s own. Involvement with, or in, research can be both formal (for example, undertaking or being involved in research studies) and informal (for example, discussion with peers). However, in their survey of teachers, Poet *et al.* (2010b) found that conducting research was not particularly widespread amongst their sample of teachers, although many indicated that they would like the opportunity to be more involved in research.

There was reported to be evidence that research-informed practice improves pedagogical skills and knowledge, subject knowledge, teacher confidence and motivation and ‘professional growth’ (GTCE, 2011, p.99). Research was said to be able to guide teachers in examining and strengthening their professional practice by offering them:

[...] a systematic approach to thinking about a problem, or evaluations of interventions that have been shown to be effective in similar contexts, or the tools for effective reflective practice.

(p.100)

Challenges to the use of research as a teacher resource were reported to be:

- inaccessibility (knowledge is not always in the public domain)
- lack of time or opportunity

- competing priorities
- activating the research in one's practice
- a lack of skill and/or confidence in one's skill to undertake or become involved in research
- lack of senior management-level support
- a lack of perceived status of teacher-led research.

In order to overcome these challenges, the GTCE suggested that research for teachers should be: relevant; concise; clearly structured and signposted; contain illustrative case studies; and be seen as a core principle of teaching (p.105). Research-informed practice was also reported to be valuable in developing the approaches necessary to address more recently identified problems amongst children such as refugee status, casualties of war etc. The GTCE report suggested that school leaders are responsible for developing a research culture within the school in order to place research activity at its heart. The paper concluded by stating that:

The challenge now is to create a system-wide approach to research-informed practice as a core professional entitlement and responsibility.
(p.112)

Meeting this challenge is said to require support at government and school leadership level and a strengthening of the relationships between teachers and researchers.

2.2.4 Systems and policies

The need for systems and policies that can underpin and facilitate improvements in teaching practice was noted in a number of reports (James and Pollard, 2006; OPM, 2008; Day *et al.*, 2009; Mourshed *et al.*, 2010). At a micro level, Day *et al.* (2009) called for the development of school-wide policies (for example, in relation to behaviour and attendance), based on 'clear procedures and high expectations (p.114) as a necessary condition of securing improvements in learning. At a macro level, Mourshed *et al.* (2010) referred to the need for policy documents and education laws to facilitate 'the improvement journey' (p.52), while James and Pollard (2006) noted in the TLRP's ten principles for effective teaching and learning, a requirement for 'consistent policy frameworks with support for teaching and learning':

If effective teaching and learning are the core functions of schools, they should be the focus of policy at institutional and system level. This would give other policies coherence and consistency.
(p.10)

However, a number of headteachers in schools where the TLRP projects were running identified a level of concern about leading learning in their school within the context of what they viewed as 'restrictive' government policy. James and Pollard (2006) reported that there

was sometimes a view that 'progress was being made despite government policy rather than because of it' (p.10).

2.2.5 Time and space

In order to enable teachers to innovate and improve their own practice, for example through professional development, self-reflection, better planning, collaborative practice and greater personalisation, they need to be afforded the time and the space to be able to participate (OPM, 2008; Galanouli, 2010; DfE, 2010). The Schools White Paper (DfE, 2010) argued that 'in order to bring the curriculum to life, teachers need the space to create lessons which engage pupils' (p.41). The OPM (2008) highlighted lack of time as a factor inhibiting teacher-led innovation and stressed the need to provide time, so that teachers were not trying to fit more innovative practice into existing demands or responsibilities. In one of the case-study schools involved, pupils had been allowed to go home earlier, or to carry on with independent study facilitated by TAs to allow teachers the time and space to collaborate with their peers and share practice (OPM, 2008). In the 2010 Schools White Paper, the DfE outlined its plans to reduce bureaucracy to leave schools free to concentrate on improving outcomes for pupils.

2.2.6 Professional development (including ITT and CPD)

Appropriate and relevant professional development was reported to be one of the key ways of improving teachers' practice, and thus impacting positively on the learning outcomes for pupils (James and Pollard, 2006; OPM, 2008; Ofsted, 2009b; OECD, 2009; Day *et al.*, 2009; Mourshed *et al.*, 2010; DfE, 2010; Sharples *et al.*, 2011; Poet *et al.*, 2010a; Pollard, 2010; Galanouli, 2010; GTCE, 2011). Effective professional learning and development was said to help teachers to develop the standard of their practice after ITT stage, but also to continue deepening their professional knowledge (GTCE, 2011). James and Pollard (2006) identified the need for teachers to take up opportunities to develop their own knowledge, skills, values and beliefs through critical inquiry with other colleagues, through reflection on their practice and through visits from teachers in other schools. Targeted professional development courses and materials, such as strategies for managing and improving group work with pupils, were particularly valued. Day *et al.*, (2009), in their report on the impact of school leadership on pupil outcomes, found that CPD was regarded as an entitlement and usually comprised a mix of external and internal input in order to 'maximise potential and to develop staff in diverse areas' (p.121). Galanouli (2010) identified effective CPD as 'learning, co-constructing, internal, interactive, challenging, optional, ongoing, individual/group needs-based (p.11). The GTCE (2011) quoted evidence that good, strong CPD:

[...] improves teachers' attitudes, knowledge and skills; improves pupils' learning, confidence, attitude and achievements; enhances teachers' motivation and morale; and is central to school improvement.

(p.76).

Collaborative CPD, where professional development activities are undertaken in conjunction with colleagues, was reported to be particularly effective. Such activities should be 'personalised, relevant, sustained and supported' (p.76). One of the consequences of collaborative CPD was identified as the 'self-sustaining professional learning community' which, it was argued, could play a key role in 'supporting teachers' learning and developing practice' (p.79). Furthermore, the GTCE stressed that teachers need to take responsibility for ensuring that their practice remains informed and current by undertaking learning and professional development activities, as well as contributing to the development of others.

The process of coaching and mentoring was identified as a 'highly productive way of working with and learning from peers' (p.79). Coaching was described as 'a narrower concept' than mentoring as it usually involved 'skills development or job specific tasks rather than the broader career development' (Galanouli, 2010, p.12). Mentoring was said to be more of a nurturing process which could provide support to a less skilled teacher by promoting their 'professional and/or personal development' (Galanouli, 2010, p.13). Another form of school-based professional development identified was modelling, where an inexperienced teacher is provided with the opportunity to observe a more experienced teacher in their classroom. A further model, co-teaching, involves two teachers delivering a lesson jointly as a way of improving each other's practice (Galanouli, 2010).

Galanouli (2010) also introduced the Research Lesson Study (RLS), described as a 'bottom-up' approach where teachers are directly involved in designing, planning and delivering their own CPD. It was reported to focus on the concept of 'a collaborative learning community' (p.20) where teachers could learn from each other and continually improve their practice through self-reflection and collaborative enquiry. In RLS, teachers are all similarly experienced, working together, providing peer support and sharing 'ownership and responsibility for the process and the end result' as well as any associated risks (p.22). Therefore, the author maintained, RLS can be said to include the elements that constitute a 'powerful' model of effective CPD,

where partnerships of teachers:

- *take the initiative and the responsibility for their professional development*
 - *are involved in the planning, development and implementation of the activity*
 - *ensure relevance to their teaching and their pupils through a classroom-based focus*
 - *provide good support through networks of learning*
 - *promote sustainable practice through dissemination within and across schools.*
- (p.26).**

In its Schools White Paper, the DfE (2010) noted that teachers should be drawn from the best graduates, be trained 'rigorously and effectively', and then continue to receive effective professional development on an ongoing basis. As a result, the DfE set out its plans to:

- *continue to raise the quality of new entrants to the teaching profession*
- *reform initial teacher training so that more training is on the job, and it focuses on key teaching skills*

- *create a new national network of Teaching Schools, on the model of teaching hospitals, giving outstanding schools the role of leading the training and professional development of teachers and head teachers.*
(p.9).

The GTCE (2011) noted that, in order to be able to fully assess the impact and effectiveness of CPD, evaluation of it needs to involve 'reflection on its impact on teachers' practice and pupils' learning over time' (p.81). Changes suggested by GTCE to the current system of CPD included:

- equal access to effective CPD for all teachers
- performance management to identify and effectively meet teachers' needs
- capacity to facilitate coaching and mentoring
- encouragement of a culture of collaborative enquiry-led professional learning
- clarification of teachers' responsibility for (and entitlement to) CPD.

In light of this, GTCE proposed 'a mutual CPD compact' that would be between each teacher and their employer to bring together 'entitlement, responsibility and requirement' (p.84). The GTCE believes that this will lead to 'a significant improvement in the quality of teaching and learning' (p. 84) as well as, by extension, benefiting the learning and achievement of young people.

3. Discussion

This review, based on 25 reports, has attempted to develop a map of what good teaching looks like. The review has covered what we have selected to be the key reports on pedagogy published during the last five years (that is, from 2006). Whilst we appreciate that it only covers a small number of reports, it would have been a huge task to conduct a more systematic review, given the large number of possible sources identified after an initial search. We opted, as an alternative, to conduct a mapping exercise in which we selected the key reports across the domain, reflecting different perspectives to be representative of the available literature. The review was focused on schools rather than trying to cover all educational settings and was generic, rather than subject-specific.

Even such a brief review of recent reports has identified many areas in which there is consistent evidence of what constitutes good teaching, with no contradictions. Despite the fact that the review was not subject- or context-specific, several of the features of effective teaching could be transferable to other education settings and for work with particular groups. For example, personalised approaches, having high expectations, flexibility and positive relationships built on mutual respect and trust, have all been shown to be effective with vulnerable groups, such as those in alternative provision, with learning difficulties or from particular ethnic minority groups (such as Gypsy, Roma and Traveller pupils) (Wilkin *et al.*, 2009; Kendall *et al.*, 2007).

Although this review cannot be considered exhaustive, it does highlight a number of useful strategies for improving teaching and learning that have appeared consistently in recent research. Given that the review only covers the last five years, we recognise that many of the teaching strategies identified are not new. However, they would appear to have been adapted, developed and refined to suit evolving circumstances and changing policy contexts.

The purpose of the review was to consider a wide variety of reports published since 2006 which were relevant to the production of a map of what good teaching looks like. From the 25 reports selected to be used within this review there were no gaps found within the research evidence.

4. Concluding comments

We have highlighted particular key features that have been identified in a number of the most influential reports from the last five years, represented visually in Figure 1.1. These key features have been organised according to the following themes which impact on the learning experiences of, and outcomes for, pupils: the teaching environment; teaching approaches; and individual teacher characteristics. A series of extrinsic factors (school ethos, leadership, research, systems and policies, time and space; and professional development) then interact with these key features and can either facilitate or hinder effective teaching and so impact positively or negatively on learners' experiences and outcomes.

The review has identified a repertoire of effective strategies (and indeed Figure 1.2 shows the prevalence of these in the literature – teaching approaches is one of the more detailed themes. However, such a repertoire cannot in itself ensure effective teaching. As Day *et al.*, (2008) pointed out, although there are generic features of effectiveness, 'these features alone cannot illuminate the attitudes, characteristics and skills of effective and more effective teachers in action' (p.8). James and Pollard (2006) argued that, as well as being provided with useful strategies, teachers also need to understand the principles that underpin their practice so that teaching does not run the risk of becoming 'ritualised' (p.8). Equally, different schools have different expectations and operate in very different contexts (Mourshed *et al.*, 2010) so each journey towards effectiveness is necessarily different. What is therefore of fundamental importance is that any repertoire of strategies be adapted and refined to suit the particular needs, context and experience of the school, its teachers and its pupils (Emery, 2011).

It is important to note, that while it is valuable to identify features, strategies and principles that enable 'good teaching', they are not enough, in themselves, to change practice.

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