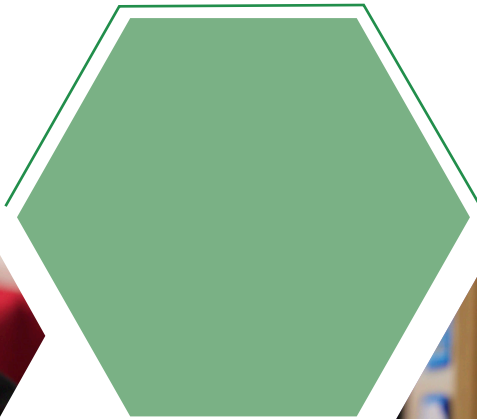


# EFFECTIVE PRIMARY TEACHING PRACTICE 2016



**TSC**

Teaching Schools Council

# EFFECTIVE PRIMARY TEACHING PRACTICE 2016: SUMMARY

This report was commissioned by the Teaching Schools Council and led by Dame Reena Keeble with the support of a group of teachers, school leaders and academics. It considers: a wide range of evidence, visits to schools and discussions with experts. From this it attempts to explain the group's view of the most effective practice for mainstream, state-funded primary schools in England and how these practices are best supported.

In looking at *effective* practice, we considered effective to mean those things which best contribute to pupil outcomes across the curriculum. **Being able to talk, read and write alongside a solid understanding of maths is essential.** But, there is a broader knowledge required to provide the foundation for secondary, and indeed, for later life which needs to be considered in schools. **Our ambition for primary schools should include high expectations of both the appreciation of, and achievement in, art, music, drama and sport too.** We should also not forget the basic literacy with technology and the understanding of our world and our history.

## 1

### EFFECTIVE SCHOOLS HAVE STRONG LEADERSHIP:

- Effective leaders have a clear vision for the school – drawing on evidence – which is understood, owned, and implemented by all staff.
- The best leaders make sure that this vision is driving all the decisions in the school, including:
  - how to teach and develop teaching;
  - how to use resources effectively; and
  - how to organise their school so that teachers and pupils flourish.
- In effective schools, regardless of the school's structure, the most senior leader in a school takes responsibility for leading teaching and learning. This includes decisions and priorities relating to the use of resources.
- Effective leaders have a passionate and relentless drive to continually improve outcomes. They do not allow themselves to be distracted from their core business as leaders of teaching and learning. They delegate the operational aspects of their job to other key staff.

## 2

### EFFECTIVE SCHOOLS PRIORITISE THE ONGOING DEVELOPMENT OF TEACHERS AND TEACHING:

- Strong and effective staff development is structured around clear objectives to improve pupil outcomes; and informed and led by evidence of effective teaching practices.
- Planning is purposeful, focused on learning and has a clear objective:
  - teaching approaches that are backed by evidence and show promising signs of boosting attainment are used and their impact is monitored to ensure positive outcomes for all pupils;
  - mastery teaching approaches are properly understood and used across the curriculum for all

pupils, with greater depth being used to challenge the higher attaining pupils;

- teachers and leaders pay attention to the detail of the approaches they use, avoiding only superficial engagement.
- Subject leaders who oversee planning and teaching across all year groups are an effective resource to improve teaching. A teacher's understanding of a subject, and how children learn that subject, is very important.
- Many schools are using specialist staff in some subjects but at present there is no evidence that subject specialists are more effective at teaching core subjects than generalists.
- Effective schools provide a broad and balanced curriculum, with high expectations for attainment across all subjects.

### 3

#### EFFECTIVE SCHOOLS MAKE THE MOST OF ALL THEIR RESOURCES:

- In effective schools, teachers use their time on those things that make the most significant, direct difference to improving outcomes for all their pupils.
- Teaching assistants (TAs) are used most successfully where careful consideration is given to whether to use them at all and what to use them for: in particular, the types of interventions they support. Effective schools avoid creating dependency with individual pupils and specific TAs – known as the 'velcro' model.
- The teaching should dictate the classroom layout – rather than the layout dictating the learning. Effective classroom environments focus on pupil learning, providing reference points and scaffolds to support this and avoiding distraction and clutter.
- Technology is used to improve teaching – if it has a clear pedagogical purpose – rather than for the sake of using it in and of itself. Leaders consider - before buying - how it will be used, what training will be required, how will it be embedded and how the impact will be monitored.

### 4

#### EFFECTIVE SCHOOLS MAKE CLEAR CHOICES ABOUT HOW THEY ORGANISE, STRUCTURE AND PRIORITISE, BASED ON EVIDENCE:

- They invest in developing a strong reception year with a structured approach to teaching and planning for focused learning rather than aimless activities. They recognise the benefits for pupil attainment as well as for behaviour and well-being, and its impact throughout pupils' time in school.
- They think hard before setting and streaming, recognise that this approach may not help all pupils to achieve.
- They are clear about what, if any, use and purpose homework has in their school. They are clear about what they are trying to achieve and whether homework is the best way to do that. Furthermore, they engage with parents and find ways to minimise the impact of homework on pupil and teacher workloads.

# ENDORSEMENTS

“It is refreshing to read an analysis of primary teaching that is written by practitioners whilst being based on robust research and grounded in the practice that is found in some of our best primary schools. I found it both challenging and encouraging”.

**Steve Munby, CEO, Education Development Trust**

“ATL welcome this report on Effective Primary Teaching Practice and look forward to sharing the key messages with our members. Promoting ethical leadership is a priority for ATL, as is securing a rich broad and balanced curriculum for all pupils. We believe that the strong messages in this report will be helpful and informative for all Primary leaders and professionals at what is a challenging time for the sector.”

**Dr Mary Bousted, General Secretary, ATL**

“This is a timely, thought-provoking and, above all, useful review into effective teaching practice in primary schools. ASCL particularly supports Dame Reena’s recommendation that school leaders prioritise their role as leaders of teaching and learning, invest in effective development of teachers and encourage the use of evidence-informed approaches. We welcome the report’s clear message that effective primary schools have high expectations for children in all subjects, and on the importance of the Reception year in building foundations for future success.

The report’s recommendations outline a clear, profession-led path to ensuring the excellent teaching practice that takes place in many of our primary schools is shared and built upon across the education system. We look forward to working with colleagues to take these recommendations forward.”

**Malcolm Trobe, Interim General Secretary, Association of School and College Leaders**

“This pragmatic report is based on the experiences of primary practitioners. It should build the confidence of leaders to focus on what they can see working, to prioritise the development of teachers’ impact in the classroom, and to question the value of some aspects of received wisdom. ‘Does it promote learning? If not, why are we doing it?’”

**Russell Hobby, General Secretary, NAHT**

“We welcome the report on Effective Primary Teaching Practice as an informative resource for school leaders and teachers. We particularly welcome the emphasis on teachers’ professional development.”

**Deborah Lawson, General Secretary, VOICE**

“Dame Reena Keeble has produced a report that highlights the importance of confident leadership focused on developing, understanding and improving pedagogy at every level of teaching in a primary school. It is clear in the report that effective practice involves all leaders, teachers and teaching assistants being trained throughout their careers. This report provides a structure for all practitioners to follow, incorporating key research, expert vignettes and commentary; continuing professional development that emphasises improving practice, innovation and creative use of resources, which results in high impact on the progress of all children in every lesson, in every classroom. As a music teacher, I also welcome the call for further research into music and the arts. In sum, this report is to be endorsed and utilised by all leaders, it captures the essence of effective practice in primary schools – learning.”

**Professor Sonia Blandford, CEO Achievement for All ([www.afaeducation.org](http://www.afaeducation.org)), Vice-Chair, Chartered College of Teaching**

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"This report provides clear and practical advice for teachers of all levels. I welcome the ambition for primary schools to include appreciation of, and achievement in the arts – numerous studies show that a cultural education makes young people more inquisitive, persistent, imaginative, disciplined and collaborative. I hope teachers will feel inspired to embrace this and the other recommendations in the report, helping to ensure that children benefit from the strongest possible education."

**Darren Henley OBE, Chief Executive, Arts Council England**

"This report will be immensely useful to leaders at all levels. Those at the start of their leadership journey will particularly benefit from the clarity around what really makes a difference in our schools. The message is simple but powerful: successful schools keep teaching and learning at the heart of everything they do and remain resolutely focused on improving outcomes for children. "

**James Bowen, Director, NAHT Edge**

"I welcome this new review into effective primary teaching practice. In particular, it is great to see such a strong emphasis on well-designed professional development driven by rich teacher assessment and specialist curriculum knowledge."

**David Weston, Chief Executive, Teacher Development Trust**



# BACKGROUND: The Teaching Schools Council

The Teaching Schools Council (TSC) is at the forefront of the drive for excellence in education. It is committed to the continued promotion and support of a school-led system that harnesses the talents and expertise of teachers and leaders to provide good or outstanding schools for every child. The TSC works with the government and other stakeholders to support an educational infrastructure within which teaching is of the highest quality.

A major focus of the TSC is the empowerment of schools to provide outstanding teacher training and career-long development paths which utilise research from within the sector about what works best. In this way the teaching profession can enable ever-higher levels of expertise from within to shape and disseminate excellent practice.

Our contribution to establishing the debate around evidence and effective pedagogy at a national level is through two reports:

- Modern Foreign Languages pedagogy – looking at the evidence around effective teaching of languages at secondary level, led by Ian Bauckham; and
- Effective Primary Teaching Practice – looking at the evidence around effective teaching at the primary phase across the curriculum, led by Dame Reena Keeble.

Primary schools are, as evidenced by Ofsted, improving.<sup>1</sup> By a range of measures, the primary phase is the most important phase of education - gaps that appear in the primary years can grow and can create a weak foundation for future educational development. This may stifle social mobility and can reinforce cycles of disadvantage. And yet, we know that this does not need to be the case.

We hope that this report into the principles around effective primary practice will stimulate discussion, provide challenge and make a valuable contribution to the establishment of a truly school-led system.

*"I am grateful to Dame Reena Keeble and her expert group for this review of effective primary practice. As a primary practitioner myself, I have long had to wrestle with some of the complexities of making sure that this key, informative phase of education is indeed the very best it could be; and this has often been set against the backdrop of many "latest ideas", not all of them based on good, sound evidence. This report pulls no punches. It is clearly grounded in a wide ranging evidence base of what works and reads as good, common sense – the sort that we often crave when facing the challenges of teaching today.*

*Where the evidence is not conclusive on an issue, the report honestly faces up to that but even here, the authors are not afraid of giving a view. I warmly commend this report to you and hope that, like me, it prompts you and your staff teams to ask good questions about what you do and why you do it."*

**Andrew Warren, Chair of the Teaching Schools Council**



# FOREWORD

**Having recently retired from headship and having had the privilege of working across London and beyond to support other schools, I was delighted at the opportunity to lead this important work for the Teaching Schools Council.**

My starting point was that all teachers and heads have the same moral purpose, striving to do the best for their pupils - few, if any, set out to do a bad job. Of course this does not mean that all teaching is good, or that we cannot or should not continue to get better. My hope then is that this report supports teachers and leaders in doing their best for their pupils, and helps teaching as a profession challenge itself.

Good primary teaching does not happen by chance. I wanted to approach the task by drawing on the knowledge of heads and teachers with a strong focus on the evidence from research. To do this I was fortunate to recruit a group of highly able teachers, heads and academics to guide and challenge the work. They reflect a mixture of school types, experience and expertise, but all have a keen interest in evidence and a belief in effective primary teaching. The group was:

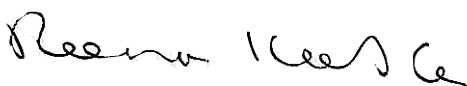
- Barbara Slider (Headteacher, Shiremoor Primary School, North Tyneside)
- Clare Christie (Phase 3 lead, Ashley Down Schools, Bristol)
- Janet Hilary NLE (CEO, Floreat Education)
- Jon Brunskill (Head of Year 2, Reach Academy, Hounslow)
- Llyn Codling (Executive Principal, Portwood Primary Academy Trust & St Mary's C of E Primary School, Hampshire)
- Natalie de Silva (Director, Belgravia Education)
- Professor Rob Coe (School of Education, Durham University)
- Professor Terezinha Nunes (Oxford University)
- Rob Carpenter (Executive Headteacher, Inspire Partnership)
- Sharmee Sissons [nee. Shah] (Year 1 teacher, Cannon Lane Primary, Harrow)

We were additionally able to draw on the advice and support from Lee Owston HMI (Ofsted), James Turner (Education Endowment Foundation) and Sir Andrew Carter (Teaching Schools Council).

The Teaching Schools Council does not have a large central organisation or staff to support this work, and so we were fortunate to be provided administrative and research support from the Department for Education.

It is at this point that I must stress that any failings in this report are mine. The views and findings, whilst distilled and built upon the expertise of the group, are all mine. To avoid any doubt, they are not the views of Ministers or Government.

Teaching is a noble profession and one which as professionals we should and do take seriously. I hope this report helps everyone in developing their, and others', teaching as part of our professional duty to ensure we are doing the best we can for all pupils.



**Dame Reena Keeble, EdD**



# INTRODUCTION

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The Teaching Schools Council provided the terms of reference for this work (Annex A). They asked for a report which drew on evidence to identify the most effective practices for mainstream, maintained primary schools in England and how they can be best supported. Nursery teaching, although a growing part of many primary schools, was not within our scope. Neither was primary assessment or the role of governors.

In looking at *effective* practice, we considered effective to mean those things which best contributed to pupil outcomes across the curriculum. **Being able to talk, read and write alongside a solid understanding of maths is essential.** But, there is a broader knowledge required to provide the foundation for secondary and, indeed, for later life, which needs to be considered in school. **Our ambition for primary should include high expectations of both the appreciation of, and achievement in, art, music, drama and of sport too.** We should not forget the basic literacy with technology and an understanding of both our world and our history. There was strong consensus in the group that primary education is valuable for its own sake as much as for future success; joyful learning is something worth celebrating.

We wanted our conclusions to be robust, realistic and replicable and, therefore, underpinned by strong, reliable evidence. Alongside this we were keen to engage with teachers, leaders and academics. We did this through a four-pronged approach: engaging with the academic and research literature; visiting schools; talking to academics, leaders and other experts; and a range of mini-surveys and other softer ways to understand and get a sense of wider views on particular aspects. Our conclusions come from this and draw on the expertise of group members to contextualise findings. In some places - where the evidence is less conclusive or mixed - we have offered our opinion on effective approaches. When doing so, we have tried to make this clear.

It is somewhat of a truism in education that every school is unique, and many schools do have varied and often challenging circumstances. However, we believe that the conclusions in this report should **be useful for all mainstream primary schools, teaching all pupils, with and without additional needs** (such as SEND).

Schools are busy places. Teachers are busy people. Rather than add to this burden, we believe this report should **help schools and teachers focus on what is effective, helping make the most of teachers' time.** We are clear though, that reflecting on, and actively developing, teaching practice should be a core part of teachers' role and the business of schools.

We hope that this report **challenges leaders, teachers and schools to reflect on their current practice, to think hard about the teaching approaches they are using and what impact they are having, and perhaps to help the profession to use evidence to take back ownership of, and responsibility for, developing teaching practice.**

To help this, this report includes:

- short headings of the key points;
- questions for leaders and teachers;
- signposts to other resources;
- accompanying posters and slides to support discussions and use in schools;
- examples from schools who already use some of these approaches.

Finally, it is hard to maintain performance whilst striving to improve performance. Trying too much is a recipe for problems. Our suggestion is to be focused and purposeful: identify the priority areas and focus on each area in turn. Trial changes, monitor the impact, make further changes, and then if necessary implement them more widely. Be mindful of the impact on workload, as well as the experience of your pupils.



# CHAPTER 1: LEADERSHIP

**In effective schools, leaders lead teaching and learning. They have a clear vision for the school – informed by evidence – which is understood, owned, and implemented by all staff, and drives all decisions in schools. Leaders do not allow themselves to be distracted from the core business of teaching and learning.**

## QUESTIONS FOR LEADERS

- How do you act as a leader of learning? Do all your staff see you as one?
- How do you support all of your staff to share and understand the vision for teaching and how it affects pupils' learning and outcomes?
- How do you enable staff to take risks and evaluate the impact of their teaching?
- How are you developing your staff into future school leaders and ensuring effective succession planning is in place?

## QUESTIONS FOR MIDDLE LEADERS

- How do you understand your role and remit as a leader and are you able to quantify your impact on others?

## QUESTIONS FOR TEACHERS

- How do you contribute to a culture of development by making changes and evaluating the impact, or supporting others to, to improve pupil outcomes?



**John Camp (Executive Headteacher), Deansfield Primary School**

*"I firmly believe that great leadership is, in essence, concerned with learning. Shaping pedagogy that is informed by evidence-based research is our core purpose – in keeping this at the centre, we are able to secure better outcomes for all our children."*



Effective leaders have a clear vision and ethos for the school that is focused on excellent teaching and learning and is shared by teachers, staff and governors. This vision drives all decisions and priorities across the school, including: how to teach and develop teaching; how to use their resources; and how to organise their school to do this.

Where teaching was most effective in our visits to schools, the leadership had ensured:

- **A consistent understanding about what they were trying to achieve in terms of the outcomes and experiences for pupils.** All staff had a shared understanding of the expectations of teaching, attainment, progression and assessment. This was evident through their words and their actions, and meant all staff worked towards priority areas for improvement to support these outcomes.

- **Consistent (but not identical) teaching practice across the school** that drives pupil progress, which required:
- **A considered balance between flexibility and autonomy.** Frameworks such as guidelines, schemes or even regular discussions can help ensure consistency of delivery and monitoring. Learning flourishes when teachers are given autonomy and are encouraged to be creative within this framework.
- **A focus on outcomes, not process,** actively driven by leaders.
- **A culture of ongoing development.** Leaders had created a professional community within schools built around investing in development of teaching. This meant: teachers were able to take thoughtful risks and learn from the outcomes; the school was able to change approach if existing or new approaches did not work, and both teachers and leaders consistently looked outside their school to find evidence and best practice to learn from.<sup>2</sup>

**Rebecca Dunne (Associate Headteacher), Prestolee Primary School**

*“For every decision we make across school, be it funding, deployment, resourcing, staff development or parental engagement, we ask how our work aligns to our mission statement. If the action delivers on them with clear outcomes, in the order of importance set, then great. If not, it is discarded or placed as a low priority. There are millions of things you can do, lots you should do and a few you must do. Our clear mission ensures we action the must do activity first, always.”*



**In effective schools, regardless of the school's structure, the most senior leader in a school takes responsibility for leading teaching and learning.<sup>3</sup> This meant:**

- **Leaders were visible and knew what was going on in their classrooms.** This was not about draconian micro-management or lots of formal high stakes lesson observation. Rather, this was part of collaborative discussion about improving pupil outcomes between teachers and leaders through informal, frequent drop-ins.
- **Leaders focused on teaching and learning by effectively delegating the other business of managing a school to others.** In some cases this is difficult – especially as pressures on schools increase – so we believe the following options are best to help manage this:
  - using a school business manager (or part of one shared between schools) for school management issues;
  - separating out the roles focused on learning (e.g. 'Head of School') and those focused on strategic administration, structural change etc. (e.g. 'CEO' or 'Chief Operating Officer'); and
  - defining clear roles for senior and middle leaders, aligned closely with a focus on improving outcomes.

**Ian Clennan (Headteacher), Selby Community Primary School**

*“For me, children's progress has always been at the heart of my teaching and learning philosophy, not only as a teacher but as a headteacher. You need to be visible to both adults and children, believing and understanding how all learning is happening across school. Through taking the lead and sharing our rationale [as leaders] with staff, we are leading teaching and learning developments through constant coaching and supporting one another to be the best that we can be. This means that the outcomes for the children place no ceiling on our or their expectations.”*



## In the most effective schools:

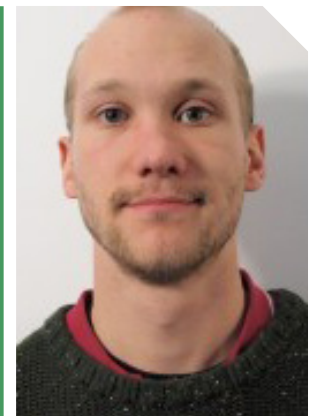
- **The vision for teaching helps pupils foster a love of learning that is connected to the wider context.** This might mean, for example, developing reading for pleasure through exposing all pupils to a breadth of challenging and high quality children's literature across the curriculum. In practice this might mean regular reading aloud in, and to, classes and planning for story time, alongside targeted vocabulary introduction and explanation. This can develop pupil vocabulary, including the technical vocabulary required to understand subjects like history, geography and science; and help build their interest across subjects too.<sup>4</sup>
- **Responsibility for teaching and learning runs throughout the staff team.** This means strong middle and subject leaders who are leading teaching and learning across their areas at the right level (e.g. quality assuring medium-term planning, rather than checking weekly plans).
- **Performance management and appraisal systems are used to reinforce expectations** and the vision for the school, through shared targets and links to the school development plan.

## The most effective schools contribute to the development of the school system by:<sup>5</sup>

- training and developing new and early career teachers, ensuring that the overall approach to teaching and developing teaching, including the use of evidence, is at the centre of this;
- developing future leaders, with clear succession planning and development at each level of leadership;
- supporting capacity building and school improvement through Teaching School Alliances, multi-academy trusts and National Leaders in Education; and
- taking part in research trials and projects, such as with the EEF, to help contribute to the development of a robust evidence base for teaching practice.

### Jon Brunskill (group member)

*"To me, teaching children to read is the most important thing that primary schools do. So during my visits it was a delight to see schools using research-based approaches to help all children become great readers, such as strong phonics instruction in early years and beyond, thoughtful selection of challenging texts, close reading and analysis guided by the teacher, and of course a gripping class story planned for every day! In one school I could hardly resist joining in during a year one phonics session, so skilfully was it taught."*



## Examples of helpful resources for considering a breadth of high-quality challenging texts:



[Times Educational Supplement - 100 fiction books all children should read before leaving primary school - according to teachers](#)

[Centre for Literacy in Primary Education – Core Books](#)



[Book Trust - 100 best children's books from the past 100 years](#)



# CHAPTER 2: EFFECTIVE TEACHING

To create effective teaching throughout a school requires:

- 2A. ongoing investment in developing teachers and teaching within a school;
- 2B. an evidence-informed approach to teaching and planning, teaching and review; and
- 2B. focused development of subject teaching.

## 2A. DEVELOPING TEACHERS AND TEACHING

**The ongoing development of teachers and teaching within a school is critical. Strong staff development is structured around clear objectives to improve pupil outcomes, and is informed and led by the evidence of effective teaching practices.**

### QUESTIONS FOR LEADERS

- How well do you use professional development time, including staff meetings, to ensure that your staff have the necessary subject knowledge and understanding of how children learn those subjects to best teach and assess pupils?
- What evidence do you use to create your professional development approach for the whole school?

### QUESTIONS FOR MIDDLE LEADERS

- How do you support the development and improvement of others' teaching practice to ensure quality of teaching across the school in your subject/phase?

### QUESTIONS FOR TEACHERS

- How do you actively seek development opportunities and ways of improving your practice (both formal and informal)?
- How do you contribute to your colleagues' understanding and knowledge of the curriculum?
- How confident do you feel in sourcing high-quality resources, robust evidence or external expertise to enhance your teaching of different subjects?
- How often do you observe and evaluate your own and others' practice?

A culture of ongoing development of teachers and teaching takes time and focus. There are four interlinked parts to doing this well:

- i. **Building and maintaining knowledge**
- ii. **Developing teaching practice**
- iii. **Drawing on evidence and practice from other places**
- iv. **Reviewing effectiveness and impact**



**Jan Knox (Headteacher), Houghton on the Hill Primary School**

*“The growth of our vision for pedagogy can best be described as organic; it has grown over time as teachers’ growth mindset has developed. Teachers have been trusted to experiment and to share from their experiences... they question each other out of professional curiosity, and gradually the belief in a consistent mastery approach across the curriculum has grown within the staff team.”*



### **i. Building and maintaining knowledge**

In effective schools, teachers (and others involved in supporting teaching) have a good understanding of a) how children learn; b) the subjects and how children learn those subjects; c) effective and ineffective teaching practices; and d) what learning is and how to assess understanding and knowledge.

**a. How children learn.** There is a growing body of evidence, in particular from cognitive developmental psychology, about how children learn. This should be at the heart of a teacher’s understanding of their professional role.

Whilst effective planning and teaching should support all children to learn and achieve, the breadth of pupil needs means that effective schools consider specific training for teachers and staff in supporting pupils with more complex SEND.

#### **HOW CHILDREN LEARN...**

This box attempts to summarise some of the key points from cognitive developmental psychology research. The potential implications for teachers are included in the next section. It is necessarily a simplification but there are accessible resources to provide further detail.<sup>6</sup>

Children, like all people, are naturally curious. However, thinking and reasoning are difficult. We rely on our (long-term) memory to help and speed-up thinking. This is memory of how to do things, as well as specific facts, contexts and the relationship between things.

Our in-built curiosity means we get satisfaction from successful thinking: that is, solving a problem or understanding a new concept. But we get put off if something is too difficult (or we perceive it as being).

Thinking and memory are interlinked. One way of describing “thinking” is that it is about combining information in new ways in working memory (the bit of your mind you are aware of). This information can come from your environment (what you see/hear/smell/touch) and from your long-term memory (what you already know).

Thinking is also the basis for memory and recall. We have to think about something to remember it. When you think about something new, you use your existing knowledge (of discrete facts, connections and techniques) to help you understand and make sense of it. Your existing knowledge also informs how you remember it. In short, we learn new things in relation to things we already know and new understanding is built on prior knowledge and understanding. Finally, we remember things better when we give things meaning.

**b. The subjects they teach and in particular how children learn and understand those subjects.** This is about: the breadth and depth of a teacher’s knowledge and understanding of a subject; the understanding of how children learn that subject; and how to know when pupils know and understand that subject.

It is clear to us that good subject knowledge is central to effective teaching. This does not mean all teachers’ subject knowledge needs to be, for example, equal to degree level in every subject,<sup>7</sup> but it does mean teachers



actively developing and maintaining a deep understanding of subjects is important. Understanding how children learn and develop their understanding of a subject is a critical component of this subject knowledge as experts think about and conceive of their subjects in a different way to novices.<sup>8</sup> Effective teachers review the impact of their subject teaching (through, for example, question analysis) to help them build their understanding of how children learn that subject, and in doing so potentially review their understanding of the subject too.

### MORE THAN JUST SUBJECT KNOWLEDGE...

In writing this report, the role and definition of teachers' subject knowledge and the evidence around its importance in helping pupils achieve in particular subjects, has been a thorny issue.<sup>9</sup> The evidence base is not easy to comprehend and there are conflicting opinions about both the difficulties in describing teaching's components parts, and the merit in trying to make sense of this complex job of teaching. To us though, it is something that as a profession we need to grapple with further. Our view is that:

- Teachers require a level of subject knowledge - that is, their own knowledge and understanding of the content to be taught. **This alone, however, is not enough to effectively teach a subject.**<sup>10</sup>
- Teachers need to understand how children learn a subject (sometimes called pedagogical content knowledge):<sup>11</sup>
  - key starting points (of knowledge and understanding);
  - the key concepts within a subject, especially those that are required for further progression;
  - **typical misconceptions and difficulties;**<sup>12</sup>
  - the typical path(s) of how pupils' knowledge and understanding of a subject develops through teaching; and
  - the most compelling routes/ways to explain and teach.

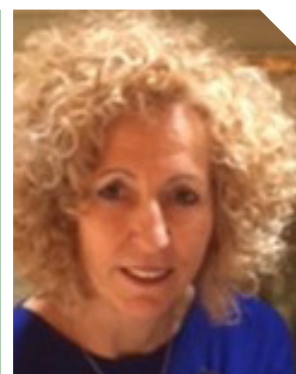
At the most basic level, being able to read yourself does not necessarily mean you will be able to effectively teach someone else to read. A detailed understanding of the English language, a broad vocabulary and an understanding of phonemes and morphemes is not enough. To teach most effectively, a corresponding understanding of the role and the relationships between phonological awareness, morphology and vocabulary in children learning to read is required.<sup>13</sup>

This may not mean that every teacher requires all of this knowledge themselves. The support of a subject leader or expert, using a scheme or textbook can potentially help support and supplement the professional teacher.

It may be that within the primary curriculum, much teacher knowledge - particularly in core subjects - is implicit. Most adults use "-ed" to represent the past tense when spelling even where the ending sounds like a "t". They do this without explicit thought or linking to a conceptual basis (in this example, a morphological one). Effective teaching, though, might require the conceptual knowledge to be explicit to the teacher and explicit in the teaching

### Hazel Pulley (Headteacher), Parkfield Community School

*"If pupils are to make rapid progress they need teachers with excellent up-to-date subject knowledge and an understanding of the teaching quality required. We have totally moved away from formal lesson observations. Instead, coaching partnerships have been developed using video technology, regular pop-in opportunities in classrooms and focused work scrutiny to provide bespoke professional development. Evaluation is a key aspect of all our CPD; checking for impact is seen as an imperative."*



c. **Effective and ineffective teaching practices.** Effective teachers understand and are able to use evidence-based approaches to teaching. It is an unrealistic expectation for every teacher to keep up with all of the academic evidence about teaching. Indeed, it may not always be helpful.<sup>14</sup> However, great schools ensure teachers have access to resources that help maintain and develop this knowledge, including succinct summaries of evidence relating it to classroom practice. This might include the Education Endowment Foundation's (EEF's) teaching and learning toolkit, reviews by specialist organisations, books by educationalists and blogs by experts.

Effective schools actively consider both:

- how they develop and maintain their teachers' understanding of how to assess research and evidence and how to use it; and
- how they maintain teachers' understanding of effective and ineffective teaching practices in a systematic and regular way.

d. **Understand what learning is and how to assess pupils' knowledge and understanding.** Effective teachers understand the difference between "surface/shallow" and "deep" learning. This is not about a pupil's disposition or approach to learning, but rather it is a reflection of the depth of understanding a pupil gains through teaching. More superficial or surface learning is often associated with factual recall or specific application of a technique in response to a specific problem or challenge, and sometimes to being briefly able to regurgitate a stock answer and promptly forget it when asked two weeks later. In contrast, deep learning is associated with pupils' understanding of the underlying concepts: they are able to distinguish principles from examples and to apply their knowledge and understanding to different problems or contexts. It isn't fleeting memorisation, rather it is creating lasting memories.

Effective schools support teachers to have:

- an understanding of how ongoing assessment of pupil learning (including listening to pupils talk about a subject and what they know) links to the assessment cycle in schools and the wider assessment and accountability system;
- an understanding of the technical aspects of assessment, for example, validity, reliability, norm referencing and criterion referencing.

#### Resource link

[Education Endowment Foundation - Teaching & Learning Toolkit](#)



#### Resource link

[Commission on Assessment Without Levels](#)



## **ii. Developing teaching practice**

At the heart of a culture of development are the structures, processes and practices to develop effective teaching. It is important to have a clear focus and priorities for these, tied in to the school's vision for learning, pupil outcomes and the overall priorities for improvement.

Effective schools **plan professional dialogue and discussion between staff** around the expectations of pupil attainment, progression and teaching within the school – tying this back into a robust assessment and evaluation of learning.

Effective schools and leaders **create opportunities to observe, reflect on and develop practice between teachers and staff, both within and outside the school.**<sup>15</sup> This works best when it has the appropriate focus, structure and support. This includes:

- coaching to support and develop specific teachers or for teachers with less experience;
- actively developing more experienced or “expert” teachers, not just the weakest;
- grouping teachers according to their strengths and areas for development to maximise opportunities for learning from each other;
- using appraisal and performance management to ensure individual teachers have this clear focus and support for their development; and
- effective use of INSET days, with tailoring to avoid one size fits all, and a clear link to actions which will improve pupil outcomes as per the school’s action plan.

**Professional development requires sustained programmes of different types of support and training** (which are likely to include a combination of formal and informal training) to ensure that all teachers continue to develop and that teaching practice continually improves. **The quality of professional development is key.** It is best when it reflects the evidence of what makes development effective.

#### EFFECTIVE PROFESSIONAL DEVELOPMENT IS:<sup>16</sup>

- **Focused on improving and evaluating pupil outcomes:** with explicit relevance to participants, linking activities to the intended outcomes and including ongoing evaluation of how changes impact those outcomes.
- **Underpinned by robust evidence and expertise:** developing practice and theory together to enhance teachers’ subject knowledge and challenge their understanding of teaching and how children learn.
- **Collaborative and challenged by experts:** supported by external feedback, peer support and networks to improve programmes.
- **Sustained over time:** with opportunities for experimentation, reflection, feedback and evaluation. One source suggested a rule of thumb of at least 15 hours (and preferably 50) over a minimum of two terms.<sup>17</sup>
- **Prioritised by school leadership:** with leaders modelling and championing effective professional development as an expectation for all, and ensuring that the necessary time and resource is available to implement it.



[Resource link](#)

[Standard for Teachers' Professional Development](#)

### **iii. Drawing on evidence and practice from other places**

Effective schools draw on evidence and practice from both within and outside their school. Doing this effectively requires a planned approach and a clear sense of the overall priority of the school - a focus on looking at evidence around the school’s key priorities for improvement, rather than a scattergun approach.

**Being able to identify high quality and well-evidenced practice is a big challenge.** Schools that do this effectively are sceptical, being wary of potential fads, and ask some basic questions:<sup>18</sup>

- How clear is the description of the specific change or practice?
- What outcome is promised and how does that relate to the change?
- What is the probability that the promised outcome will actually happen from the evidence?
- How did the school (and how could your school) understand if the desired outcome did in fact materialise?

Getting evidence and practice from other places to influence practice in the classroom is not easy. For example, **simply sharing some research or a case study, no matter how strong the evidence base or how compelling the outcome, will not change teacher behaviour or teaching practice by itself.**

Good evidence sharing includes:

- choosing research that is relevant, and sharing it in a way that is clear and actionable;
- a discussion around how it fits with current practice;
- supporting it through robustly monitored and evaluated professional development (see above); and
- ensuring everyone knows the intended impact and how it will be evaluated.

Making evidence and practice from other places change practice relies on getting an understanding of a practice beyond the headlines.<sup>19</sup> Superficially “doing mastery” or “doing growth mindsets” is unlikely to improve outcomes. This might be the reason that approaches with evidence of positive effectiveness often have strong and clear protocols which encapsulate the key ingredients for an approach or intervention to be effective, such as schemes and programmes.<sup>20</sup> These can provide an important framework and aid the implementation of new practice. This is, however, not the same as saying that all schemes/programmes are effective.

Some schools identify someone with a role to look outside for evidence and bring back practices which are then supported with resources and training to drive improvement within schools. Early evaluations of such approaches suggest all these components are important.<sup>21</sup> As above, **focusing on just identifying research evidence is not enough - the desired change needs to be well defined, well understood, and well supported into practice.**

When looking at research evidence, effective schools consider in particular:<sup>22</sup>

- consistency of findings;
- possible conflicts of interest;
- the trustworthiness of the source – using existing links and building new ones with credible schools and organisations (like the new research schools supported by the Institute of Effective Education and the EEF) and look at national bodies (e.g. EEF); and,
- seeking out contrasting evidence to gauge how reliable a specific piece of evidence really is.

#### **iv. Reviewing effectiveness and impact**

Even well-considered changes will not always have the desired impact. The approach may not work for that school, or the implementation might not replicate all the right ingredients. **Effective schools allow the freedom to take some risks where there is a clear rationale**, the change itself is clear, the intended impact is clear and consideration has been given to how measurable it is. Some changes and approaches will fail to work or have the intended impact - the best schools are able to identify this, and ensure that everyone learns from these instances.

It is clear then that effective schools think **it is necessary to evaluate and review the effect of any changes implemented, as well as how they went about implementing it.** Evaluation is not always easy or straightforward to do well, but there are some simple things that can help schools to do it better and a number of useful resources:

#### **Resource link**

[Education Endowment Foundation - DIY evaluation guide](#)



## 2B. TEACHING: PLANNING, TEACHING AND REVIEW

**Planning should be purposeful, focusing on learning and have an end goal in mind. Teaching approaches that are backed by evidence, such as mastery and catch up interventions, show promising signs of boosting pupil attainment.**

### QUESTIONS FOR LEADERS

- How do you characterise pedagogy in your school and how does it align with proven effective teaching approaches and your school vision and ethos?
- If your school does not follow a mastery approach, how can you develop staff to use this approach? If you believe your school does, how do you know that your teachers are actually teaching with a 'mastery' approach and are you using it in subjects other than maths?
- How do you ensure consistency of understanding about what sufficient progress looks like for specific pupil groups, years and subjects?
- How do you ensure that all staff use effective teaching sequences to ensure all pupils make excellent progress?

### QUESTIONS FOR MIDDLE LEADERS

- How do you use evidence, evidenced-based resources and other expertise to ensure that your teachers plan, teach and assess pupils effectively in your subject/phase?

### QUESTIONS FOR TEACHERS

- How can you work with your colleagues to improve your planning – including focusing on learning and ensuring progression for pupils as they move up the school?
- How much time do you spend in lessons engaging in whole class interactive teaching as described below? Can you identify ways to make more use of this approach?
- How well do you understand where each of your pupils is currently at in their learning and what they need to do in order to progress? How often do you discuss expectations and progress with your pupils?

Teaching is the core of what schools are about – and continuing to develop teaching is at the heart of effective schools. Unhelpfully, this is the area where there are the strongest beliefs, contested philosophies and even political discussions. The most effective schools seem to **cut through this with a clear focus on the teaching that helps children learn, looking at evidence and evidence-based practices, a culture of professional development and discussion, and forensic understanding of pupil progress which allows effective evaluation.**

In sum, effective teaching is about:

- i. planning what pupils should learn;
- ii. using approaches that help them to do this, which include: review, explanation, model, practice, feedback, and further review; and,
- iii. understanding what pupils have learnt and in particular who needs any additional support or practice.

On our visits, all schools suggested **strong and constructive pupil-teacher relationships as a key aspect in effective teaching.** The research evidence is less clear about what these strong relationships look like, but suggests some elements might be helpful. For example, setting clear and high expectations, and expecting all pupils to attempt to have a go and persevere,<sup>24</sup> with an emphasis on rewarding effort.<sup>25</sup>



## i. Planning

To make lessons more effective, strong schools consider in their planning:

- **What it is that pupils are to learn, and the medium-term goal.** Effective schools are clear about the progression of learning within a subject, working backwards from the point that pupils should reach at the end of each half-term, term and the academic year, to create careful sequences of teaching. This approach extends across the school, planning backwards from what pupils should be able to do by the end of year 6, so that they have the right skills and knowledge early on to reach these goals.
- **Addressing misconceptions.** Planning to help all pupils avoid or confront typical misconceptions and any potential difficulties about a subject.
- **Setting high, realistic expectations for all pupils in terms of both outcomes and behaviour.** In particular, effective teachers recognise both that pupils are more the same than different in the way they learn and think<sup>26</sup> and a pupil's ability or potential should not be confused with a pupil's attainment to date. There needs to be a clear understanding of exactly how the pupil will make the necessary progress to achieve their learning goals.
- **Opportunity for mistakes.** Helping pupils not to fear mistakes and rather show how they can help pupils learn. In particular, effective schools encourage an approach to learning that prioritises effort,<sup>27</sup> where all pupils think that achievement is possible through hard work, and mistakes and failures are part of the route to understanding and learning.

## ii. Teaching

**Amongst the debate and noise about effective teaching and the breadth of the evidence base, there appear to be some sensible principles that make for effective teaching:<sup>28</sup>**

- review previous learning;
- explain and introduce new content in small chunks;
- model skills;
- provide opportunity to practise;
- review.

### **PRACTICE:**

Practice is important for learning, but not all practice is the same.

- Practising different instances of the same principles, rather than practising the same thing can help encourage a deeper understanding.<sup>29</sup>
- Spacing practice out over time is more effective than cramming or just practising everything in a single block.<sup>30</sup>
- Practising remembering/recalling things, through things like regular quizzes, can help learning last longer.<sup>31</sup>

Practice can take many forms. Practice can be part of more advanced skills that require earlier knowledge or techniques. Often practising key concepts, skills or knowledge is a key part of planning and there are a range of approaches. For example, dictation can help in practising spelling and technical aspects of writing following up earlier teaching of phonemes.

There are some important potential implications for teaching from the way memory and thinking are linked (as described in the summary of how children learn in the previous section).

### **Creating the right level of difficulty or challenge.**

- If a lesson is too easy or teachers jump straight to an answer without encouraging pupils to think about a question, then teachers fail to pique a pupil's interest and do not require pupils to think about something. This therefore means pupils do not learn. If a lesson is too difficult, pupils do not engage or quickly cease to.
- The level of difficulty can be due to a number of things. One is that we have *limited working memory capacities that can be overwhelmed by tasks that are cognitively too demanding* – presenting pupils with too much information at once can impede their understanding of new ideas.
- The goal then is a level of challenge that gets pupils to engage and think about a subject, and then get a feeling of satisfaction when they understand something or have solved a problem.<sup>32</sup>

### **Help pupils think about what you want them to think about** (not just what you hope they will).

- If people remember the things they think about, it makes sense then that if you want pupils to learn something you have to help them think about it and the right aspect of it. This can be harder than it sounds: performing a play may make pupils think mainly about the performance aspects - standing up in front of people, controlling their speech etc - rather than the meaning of the words it contains, depending on how it is done. The intention might have been to help pupils learn about performance, but it may have been to better understand the words.

### **Knowledge is important.**

- Pupil's prior knowledge, understanding and skill matters.<sup>33</sup> If pupils already have some existing knowledge (factual or how to do something) in their long-term memory, it reduces the cognitive load and difficulty in thinking about new material.
- Having more existing knowledge means pupils learn more from exposure to the same material. Prior knowledge also affects comprehension and understanding. Full understanding of a text requires pupils to know something about its background and context. For example knowing about the geography of Europe will help pupils understand texts about historical events in Europe; this becomes more than just reading the words. Indeed this knowledge can be more significant than reading ability in comprehension.<sup>34</sup>
- Teachers explicitly referring back to prior learning, or supporting particular pupils through pre-teaching, can help pupils.

### **Sequence teaching purposefully.**

- In part this is about the role of prior knowledge in terms of understanding and difficulty<sup>35</sup> and in part about the ways concepts are learned as children develop.
- Our understanding of underlying concepts (the abstract) is built on understanding specific examples or concrete problems.<sup>36</sup> Even then seeing the underlying concepts can be difficult. Being explicit in drawing attention to the underlying concept and comparing different examples can be effective ways of doing this.<sup>37</sup>
- Novices think differently to experts.<sup>38</sup> When learning about something new, or how to do something new, we do not yet have the schemas or maps that come with practice and expertise. Helping pupils master concepts often requires restructuring the way children think about a concept.

### **Extended practice helps learning.**

- It can help build automaticity where patterns, relationships and approaches are stored in long-term memory reducing the "difficulty" or the working memory load. For example, remembering timetables can enable pupils to do larger calculations because they do not have to think afresh about all the parts of the calculation - they can rely on memory for parts instead. This applies to ways to approach solving a problem and wider skills as well as "factual recall".
- Practice can also deepen understanding of a skill or area and helps embed concepts and skills in our memory. For example by practising different applications of the same underlying principle can help make the underlying principle clearer and better understood.<sup>39</sup>

## Resource links

[Deans for Impact – The Science of Learning](#)



[National Centre for Excellence in the Teaching of Mathematics – Mastery videos](#)



[The Learning Scientists – Six Strategies for Effective Learning](#)



[Barak Rosenshine – Principles of Instruction: Research-Based Strategies That All Teachers Should Know](#)



## Teaching approaches

There are a number of programmes and approaches for which there is strong evidence of effectiveness.<sup>40</sup>

**1. Mastery teaching approaches.** In recent years this approach has become more common for teaching maths, where it has been shown to improve pupil outcomes.<sup>41</sup> There is no reason why mastery principles could not apply in other subjects too - and some of the most impressive schools we visited were working towards doing just this. It does require careful thought, in particular to the careful sequencing of the development of knowledge and skills with a subject, and potentially consideration of the resources available to support it.

Successful schools give thought to what pupils need to have achieved by the end of the school year and then plan backwards to teach the relevant skills and knowledge. This can be done without using a mastery curriculum, but taking a mastery approach leads to a more deliberately crafted 'learning journey' across the academic year.

The term 'mastery' had no consistent definition in the schools we visited, which affected its implementation in teaching practice. When we use it, we mean that:

### MASTERY TEACHING IS:

- an expectation that all pupils reach a minimum (but high) level of knowledge of the same content - i.e. that all pupils have mastery of content. Extension for the highest attainers comes through greater depth rather than breadth or acceleration;
- carefully sequenced teaching that progresses a subject;
- teaching that plans for and challenges any misconceptions students may have;
- corrective teaching and interventions to help all achieve the minimum level;
- ongoing deliberate practice of core skills to embed knowledge, resulting in pupils being able to recall and demonstrate their knowledge in different contexts (including reasoning and problem-solving) over time; and
- regular informal assessment to ensure accurate teacher understanding of pupils' knowledge, understanding and skill.

**Mythbuster:** Mastery teaching is not about ticking each national curriculum objective and sub-point as you go along, using them as a proxy for your teaching sequence.



In successful schools, **taught skills, processes and sequences have a clear structure**, and children are encouraged and supported to develop an awareness and understanding of their own learning and **explicit approaches to reasoning**.

### Clare Christie (group member)

*“In one school I saw a maths lesson and a grammar lesson which both took the same mastery approach. The teachers had carefully planned the small steps which led to the children working confidently with the concepts. The teachers’ solid pedagogical subject knowledge meant that they were able to challenge the higher attainers within the same content, and outcomes were impressive across the board.*

*Teachers marked work quickly at the end of the lesson, without written comments. Children who had gaps in their understanding were then picked up for 15 minutes later that day. The use of quick marking meant that children could get immediate feedback and re-teaching, and teacher time after school was freed up to spend planning great lessons, meaning in turn that fewer children ‘didn’t get it’. A virtuous circle!”*



**2. Using whole class approaches.** Effective schools often organise students as a whole class. This can help maximise pupil-teacher contact so that every pupil benefits from teaching and interaction for a sustained period of time. These schools continue to provide opportunities for practice, and structured working with peers (see next point) alongside whole class teaching, but the individual practice does not take up the majority of the lesson time. To be effective, this is not about teachers talking at pupils. Rather it is about interactions between teachers and pupils which explain and model, then encourage pupils to think and grapple with a subject as their understanding develops. At the same time, it gives teachers opportunity to listen to responses and understand how all pupils are learning and understanding.<sup>42</sup>

**3. Effective use of small group work.** Pupils can and do learn from summarising, communicating and reasoning with peers. This works best with structure and support so that pupils learn and progress as intended. Small group work can also be an effective approach for corrective teaching or targeted pre-teaching - helping ensure all pupils can access the content in whole class teaching.

#### PRE-TEACHING:

- is teaching pupils skills or knowledge that they need to know, before a lesson where the skills or knowledge will be applied;
- it requires accurate assessment to diagnose where pre-teaching is required or most helpful;
- can be used to deliver content to the whole class, groups of learners or individual pupils;
- can be used with small groups to enable them to take part in the whole class teaching. For example, a teacher may pre-teach three or four pupils the component skills of a process (e.g. the value of different coins) before they are asked to solve problems using those components (adding up money).

**4. Corrective teaching and interventions** using the most appropriate adult (teacher, teaching assistant, or someone else who understands the outcomes required and how to assess progress towards this). Effective schools purposefully address pupils’ misconceptions and knowledge gaps, considering how best to use their staff to provide this. For example, they may take a multi-tiered approach to maximise the impact:

- screening pupils using informal assessment;
- setting up tailored interventions on different topics and with different levels of intensity based on this with reference to the evidence about effective interventions;
- carefully monitoring their impact to ensure they are having the desired effect. These schools regularly ask themselves whether they are genuinely helping pupils to catch up, or stretching the higher attaining pupils; and whether it is the best use of pupils’ and staff time.

Effective schools consider the evidence for particular interventions, and the likely outcomes compared to the investment (time, money, staff) for the number of pupils involved. A well-evidenced intervention poorly implemented may be a worse option than a less effective option where training and expertise is in place to deliver well. There is good evidence that some interventions are not effective. One review of the evidence suggests, for example, that Accelerated Reader and Reading Recovery are effective, but READ180, Project CRISS, and Writing Wings are not.<sup>43</sup>

#### Sources of information to support schools:



[Education Endowment Foundation - Teaching & Learning Toolkit](#)

[Best Evidence Encyclopedia](#)



[Institute of Education Sciences - What Works Clearinghouse](#)



**5. Using phonics** with all early readers to secure decoding ability, and as an intervention approach for struggling readers. Done well this requires all teachers in a school to have a secure understanding of phonics and phonics teaching, including key stage 2. Many schools have pupils entering throughout the key stages without any English which further emphasises this need.

**Mythbuster: Phonics is not just for pupils in reception and key stage 1. Good phonic knowledge is required all through key stage 2, not least in tackling multi-syllabic spelling.**



There are some teaching approaches which are **less likely to be worth pursuing**, according to the evidence we reviewed.<sup>44</sup> Schools should think very carefully before committing to them – and at least initially trial on a small scale, with regular reviews, if they do decide to do so. These include:

- **Aiming to directly increase pupil motivations and attitudes.** Intervening to increase children’s motivation to attain, their aspiration to succeed or attitudes related to education does not, in itself, improve attainment. Attitudinal change either needs to be tied to specific behaviour changes that may then be rewarded and build towards better attainment (such as attendance in class) or accompanied by tuition to improve competence as well (which may then be sufficient in its own right). Motivation is more about whether teaching is effective rather than being the basis for an appropriate intervention in its own right.<sup>45</sup>
- **Mindfulness.** Where the evidence of impact at primary is sparse and weak.
- **Behavioural interventions as a means to directly improve pupil outcomes.** Whilst behaviour management is undoubtedly important in schools and effective teaching, there are relatively few studies of behavioural, social and emotional interventions and those suggest they these approaches are not promising in terms of directly improving pupils’ attainment, in general. It may be that as one report<sup>46</sup> put it, effective “behaviour management is necessary but not sufficient” for pupils to learn.

There were other areas with some popular approaches where the evidence we found was more mixed and suggested some important considerations in using these approaches, including peer tutoring, enhanced immediate feedback and explicit teaching.



### Matt Burdett (Headteacher), Three Bridges Primary School

*"The importance of our children leaving primary school with the ability to express themselves clearly and access a range of strategies with which to critically digest the world around them is at the heart of our focus on oracy. Pupils are now regularly put in positions to question their own thinking and support one another in the formation of new ideas."*



### iii. Pupil progress and review

Understanding how pupils are progressing is essential to get right to ensure that teaching is effective so pupils are able to progress further. Effective teachers incorporate the following in their approach:

- **Clear and consistent understanding of expected outcomes and what progress means for specific pupil groups, years and in different subjects.** In effective schools, all staff understand this and are uniform in their approach. Teachers use it to spell out their expectations to pupils (where they are and where they should be), as well as to inform their own teaching.
- **Monitoring pupils' progress frequently.** There are many ways to do this. Effective schools:
  - choose methods they find reliable, quick and simple, which checks:
    - **Are all pupils able to explain what they are learning?**
    - Do all pupils understand what they need to learn or practise next or what they are aiming to do?
    - How deep or shallow is pupils' understanding? [see chapter 2a i) d)]
  - may, for example, use the following:
    - direct questioning of pupils;
    - pupils questioning each other;
    - whole class discussions; and
    - pupils displaying answers on whiteboards or demonstrating particular skills.
- **Reviewing common challenges and gaps as well as specific pupil needs.** Effective teachers do this to improve future teaching, to adapt future lessons and identify any corrective teaching required.

### QUESTIONING:

- Correlational evidence suggests effective teachers use lots of questions<sup>47</sup> and particular approaches to questioning.<sup>48</sup> In particular, asking questions is used to develop reasoning.<sup>49</sup>
- Most of the questions used in classrooms are relatively simple, procedural or 'closed' – such as "is this a square?"<sup>50</sup> **Whereas effective teachers also ask carefully-chosen questions that require pupil explanation** and so require pupils to think or reason in their answer. For example, "can you put this word into context?"; and "how are X and Y alike?"<sup>51</sup>
- Purposefully choosing a mixture of question types to suit lesson content prompts pupils to think harder about the content or subject and therefore learn more. It also helps teachers understand pupils' progress and informs their feedback.<sup>52</sup>
- Choosing the right 'level' of questioning to suit the desired learning seems key to getting this right. Asking questions frequently during class discussions can help pupils learn facts, but asking too many higher questions when pupils are being taught complex new material may have no effect - or even hinder pupil understanding.<sup>53</sup>

- How teachers ask questions is also important:
  - Effective teachers consider ways to get all pupils to do the thinking - such as asking all pupils to write their answers down or expecting pupils to briefly discuss answers in pairs, before selecting pupils to feedback.<sup>54</sup>
  - Effective teachers provide enough time for pupils to think about their answer whilst maintaining attention and engagement. For simpler questions, allowing pupils about 3 seconds to answer seems best. For more complex questions, pupils may become more engaged and perform better with longer wait times.<sup>55</sup>
- Effective teachers guide and support pupils by explicitly modelling their own thinking, and providing guidance and structures as to how to answer questions. This can help improve pupils' reasoning, understanding and learning. Helping pupils to generate their own questions can take this further still.

## 2C. DEVELOPING SUBJECT TEACHING

**Subject leaders who oversee both planning and teaching across all year groups are an effective way to improve teaching. A teacher's understanding of a subject and how children learn that subject is very important. Many primary schools are using specialist staff to teach some subjects but at present there is no evidence that subject specialists are more effective at teaching core subjects than generalists.**

### QUESTIONS FOR LEADERS

- How do you understand and measure the impact of your approach to developing subject expertise and leading subject teaching?
- How do you work with subject leaders to ensure the quality of teaching in specialist subjects and measure its impact on pupils?
- How do you ensure that your teachers have sufficient subject knowledge to challenge and stretch all pupils within the classroom, across the curriculum (and its changes)?
- If you use subject leaders, how can you be confident that they have sufficient subject knowledge and skills to support fellow staff and subject teaching across the school?

### QUESTIONS FOR MIDDLE LEADERS

- Within your area of responsibility, how confident are you that your own practice is an outstanding model for others including how you develop your subject knowledge and expertise?

### QUESTIONS FOR TEACHERS

- How do you develop your teaching of subjects across the curriculum, including developing your knowledge, and how do you use subject leaders and other resources to support you?
- If your school does not use subject leaders, how do you create opportunities to share knowledge and skills with colleagues teaching other year groups, to promote pupil progress?

A teacher's understanding of a subject and how children learn that subject is very important. **Effective schools explicitly plan for developing expertise in particular subjects.** Broadly there appear to be two ways to achieve this:

### Specialist teachers

For the core subjects (maths, English and science) the evidence is mixed and unclear about the value of specialist teachers (that is, teachers who mainly teach one subject).<sup>56</sup> It appears that the effectiveness of teaching practices and the quality of the relationship between pupil and teacher are significant. We do not think this means that schools should automatically avoid using specialist teachers, but rather that schools should make sure they have considered how to balance the pupil-teacher relationship aspect, and are clear how they are evaluating the impact on pupil outcomes.

We think subject specialist teachers are more commonly used in subjects such as PE, art, music, DT and foreign languages. There is an absence of good evidence about their impact on outcomes in these subjects (however, there is a general lack of robust evidence about effectiveness of any education intervention in terms of art and music outcomes). There is an even more compelling argument that if schools have high enough expectations of appreciation and achievement in these subjects, then they will need to work very hard to ensure the necessary knowledge of the subject and how to teach and assess it is available within, or to, its teachers.

### Subject leaders

Our view is that **subject leaders appear to be a good way to develop subject expertise** across all subjects, from history to art. Effective subject leaders are knowledgeable and informed about their subject and are able to observe practice across a school. They focus on **supporting** teaching and planning (as well as teaching pupils a particular subject directly). In effective schools they:

- promote a shared understanding of outcomes and how to measure outcomes in their subject;
- support professional development and help develop teachers' subject knowledge: in particular, teachers' understanding of how pupils learn and understand a subject and master its key concepts and skills, thus helping all pupils achieve;
- support planning, including helping with the selection of high quality tools and resources like textbooks and schemes, to ensure consistency of approach across the school;
- are given time and opportunity to observe other teachers teaching that subject; and
- make the links to external sources of subject expertise, for example, maths or music hubs.

On our visits, we saw some examples of schools using subject leaders creatively to build capacity and to plan across year groups, using their expertise to ensure consistent and high expectations but also helping reduce teacher workloads.

**Debbie Weible (Assistant Headteacher and Maths Leader), Oldway Primary School**

*"A lot of work has gone into developing the role of subject leaders and creating an open culture, where staff at all levels are keen to learn from the knowledge and expertise of subject specialists. As maths subject leader, I've worked hard to develop teaching and learning in maths not only by leading staff meeting/ INSET sessions but also by being available to support teachers in other ways."*



# CHAPTER 3: SCHOOL RESOURCES

Effective schools make the most of all their resources. In particular, they recognise that their staff need to use their time in the most effective way. This includes:

- 3A. use of teacher time, including planning and timetabling;
- 3B. use of teaching assistants and other support staff (and volunteers);
- 3C. use of the classroom (layout); and
- 3D. use of technology.

## 3A. MAKING THE MOST OF TEACHERS' TIME

**In effective schools, teachers use their time on those things that make the most significant difference to improving outcomes for all their pupils.**

### QUESTIONS FOR LEADERS

- How do you deploy your staff for efficiency and for greatest measurable impact?
- How does your timetabling approach support pupil learning and progress?
- How do you ensure the effectiveness of teachers' time, especially time spent on planning?

### QUESTIONS FOR MIDDLE LEADERS

- How do you support the development and improvement of others' teaching practice to ensure quality of teaching across the school in your subject/phase?

### QUESTIONS FOR TEACHERS

- How do you create time for spacing (learning the same content multiple times with breaks in between) and interleaving (careful mixing up of teaching and practice of different topics or concepts); and revisiting the most important content, concepts and techniques?
- How do you ensure you prioritise your time on activities that make the most difference to teaching and pupil outcomes?

The most effective schools are **explicit and purposeful about how teachers are using their time**. In these schools, there is a clear expectation of leaders to support their teachers in making the most of their time, and leaders live up to those expectations. For example:

- Removing tasks from teachers that have a lower impact on pupil outcomes: effective schools may use TAs for activities which do not require a teacher. This is best when it is purposeful – where it frees up teacher time to do work with a greater impact on pupil outcomes, which could include specific planning or development time. For example, TAs may help with taking registers, giving out/taking in homework, etc.
- Careful timetabling of specialist class time: effective schools use any specialist teachers (e.g. sports, music, language) in a way that enables class teachers to make the most of that time, e.g. joint PPA time.

- Taking creative approaches to cover lessons, including using higher level teaching assistants (HLTAs) where teachers need additional time to undertake training, planning, monitoring and/or additional responsibilities. They strike a balance between reducing pupil-teacher time and supporting teachers by making time for their development or wider planning.
- Making weekly staff meetings about teaching, not administration: this time is better spent on professional development or reflective discussion of teaching practice, and expectations of learning. Effective schools do not waste these meetings on business matters.

**Marie-Claire Bretherton (Executive Headteacher), three primary schools and the Kyra Teaching School Alliance**

*“Directing teachers to focus their time on the things that make the biggest difference to pupil outcomes is an important part of our teacher development strategy. For example, we have structured PPA time so that it is always a collaborative activity with teachers working in triads. By giving teachers guidance on what to focus on, the time is used to enhance teacher learning, as well as plan and prepare for future lessons. Teachers say that by working with their peers they are more focused, and through peer accountability they achieve much more with the time they are allocated.”*



Effective schools maximise the impact of planning and give active consideration to its improvement. For example, they:

- **Provide adequate planning time/expectations.** Teachers are given an appropriate amount of time, agreed by the school, to plan in order to be able to deliver lessons. These schools recognise that it is better for teacher workload – and can also improve the quality and impact – if this time is built into working hours.
- **Support collaborative planning.** Groups of teachers were often released to plan together (e.g. from the same year; same phase; SLT-organised ‘triads’ of new/experienced/SLT or based on baseline assessment of strengths/weaknesses). Teachers were provided with structures and support to use this effectively. This improved teacher practice as they learned from each other and took a consistent approach. It also helped teachers to share the workload and, when it was done across years, it supported pupil progress across the school.
- **Focus on the mid-term.** There was scrutiny of mid-term plans only (generally half-termly or termly). These schools recognised that strict daily lesson plans are time consuming, bureaucratic and have no demonstrable impact on pupils’ outcomes. Their teachers were able to teach content flexibly from these mid-term plans: adjusting subject timetables, projects and groups on a regular (even daily) basis to support learning and ensure pupil progress. However, less experienced or struggling teachers may need to use more detailed planning and help in doing so, but a balance should be struck to focus on pupil outcomes and avoid unnecessary burdens.
- **Make use of existing resources.** Textbooks, robust online resources and structured programmes (not surfing the net) were used to aid planning, avoiding reinventing the wheel and freeing up teacher time. These schools may develop a framework for what constitutes a high-quality resource, or set a school policy to use specific textbooks/programmes, to ensure a consistent approach between staff.
- **Quality assure planning by focusing on outcomes, not format, process or bureaucratic compliance.** Senior leaders and/or subject specialists/leaders are responsible for effective oversight, providing constructive challenge and support as required, and ensuring that suitable progression (within and between years) is being planned for.



**Michelle Green (Executive Headteacher), Corngreaves Academy**

*“We give all of our class teachers one week to plan at the end of each term, with subject leaders there to support. We felt that we needed to give teachers time and support from subject specialists to ensure that all teachers planned a progressive learning journey that resulted in high quality outcomes for all. Teachers highly value this time and as a result we now have outstanding outcomes for all our children across the curriculum.”*



Successful schools support the **effective use of PPA time**, to ensure that all pupils progress sufficiently and that teachers can manage their workload. They do this by:

- **Supporting teachers to use the time well.** They talk to their teachers about how best to support them to make the most of this time, including having time with SLT, experts and each other.
- **Having a consistent approach.** They share practice across the school – they do not leave this to chance. One way of doing this may be through providing a framework for how PPA time should be used, within which the school allows staff flexibility.
- **Monitor the impact of PPA time on pupil outcomes.** Looking at the impact of how the time is used, focusing on outcomes not processes or the specific activity undertaken by their staff during this time

**Barbara Slider (group member)**

*“When visiting schools, I was particularly impressed where there was a clear focus on using teacher’s time effectively so it benefits the pupils most. This requires leaders to support teachers in considering their core role, priorities and focus. When it is done really well teachers are encouraged to research, reflect on and refine their practice and not to become distracted by large volumes of unnecessary paperwork that do not improve outcomes.”*



Many of the approaches to timetabling are received wisdom or relate to practical considerations, rather than being based on good evidence and educational reasons. **Effective schools are open to challenging these approaches and are flexible about how they timetable.** For example:

- **Lessons do not have to be one hour.** There is some evidence that children’s on-task behaviour can decline as instructional time increases.<sup>57</sup> Such schools may trial shorter, more frequent lessons, to enable teachers to make use of spacing (learning the same content multiple times with breaks in between) and interleaving (careful mixing up of teaching and practice of different topics or concepts), both of which help retention and recall.
- **Time of day can impact on pupil’s ability to learn and their attention.** But the evidence does not suggest that maths and English must be taught in the morning and everything else in the afternoon.<sup>58</sup> Schools may trial teaching different subjects at different times of the day - considering spacing and repetition - and be willing to consider things like longer mornings and a late lunch.
- **Balancing different subjects.** Using longer-term planning to identify how much focus is needed on different subjects in order to get their pupils to a particular point by the end of the term/year. They also identify opportunities to use all subjects to build vocabulary and improve reading and writing.

## Resource links:



[Teacher Workload Group - Eliminating unnecessary workload associated with data management](#)

[Teacher Workload Group - Planning and Resources Review](#)



[Education Endowment Foundation – Evidence on Marking](#)



## 3B. USING TEACHING ASSISTANTS

**Teaching Assistants (TAs) are used most successfully where careful consideration is given to whether to use them at all and what to use them for: in particular the types of interventions they support. Effective schools avoid creating dependency with individual pupils and specific TAs – such as that known as the ‘velcro’ model.**

### QUESTIONS FOR LEADERS

- How do you deploy your TAs to have greatest measurable impact, taking account of the evidence to support pupil progress?
- How do TAs work with teachers in your school to support teaching?
- How do you plan PPA time and cover staff absence (planned or unplanned)?

### QUESTIONS FOR MIDDLE LEADERS

- How do you support and monitor the deployment of additional staff, such as TAs, to support teaching, ensure a positive impact on pupils and provide value for money?

### QUESTIONS FOR TEACHERS

- How often, and in what ways, do you direct and deploy TAs to specific tasks in the classroom?
- How do you monitor the value that TAs add to your lessons, and the impact they have on pupil learning?
- How do you involve TAs in planning lessons and teaching?

*This section focuses on the deployment and practice of teaching assistants. In some cases, points may be applicable more generally, particularly classroom-based support staff such as nursery nurses but also to other school support staff or volunteers; school nurses; midday supervisors; library staff; education welfare officers; attendance officers; administrative (including school business); maintenance and technical staff.*

The role and purpose of TAs must be considered carefully for them to be used to greatest effect. It is essential that this role is clear to everyone – especially to the TA and the teacher they are supporting.

The evidence is clear that **TAs are not a replacement for teachers**.<sup>59</sup> In successful schools, teachers lead the teaching and learning. It might make sense for teachers and TAs to plan together, do some shared professional development and for TAs to be involved in staff meetings and discussions. Joint planning in particular enables TAs to gain a clear understanding of pupil learning outcomes and expectations and ensure they can take an active role in supporting assessment of pupils.<sup>60</sup>

In the best examples of schools we visited, **TAs were being developed according to the role they undertake, through relevant training and development**, in the same way as teachers. There were examples of including TAs in wider professional development which appeared to have a positive impact on their skills and, subsequently, on the quality of support they provide to pupils. TAs were being used according to their strengths and this was supported by robust systems of appraisal and performance management.

### Sharmee Sissons (group member)

*“It makes a greater impact when TAs are deployed through identifying individual children’s needs. This often includes using 5 minute boxes to help reinforce previous learning, corrective teaching, pre-teaching, group work as well as 1:1 work where needed. HLTAs have taken classes when needed instead of supply teachers to release class teachers so that they can conduct parent meetings during the day. This ensured continuity in school with the children and gave HLTAs opportunities to develop professionally.”*

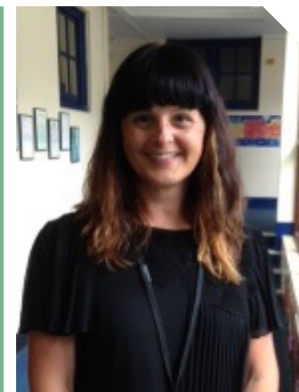


Schools that deploy TAs effectively consider:

- **Using interventions with strong evidence.**<sup>61</sup> This often means using TAs to deliver short, targeted sessions with pupils (individually or in small groups) that clearly link back to classroom learning, with accurate diagnosis and/or assessment of pupil gaps. These interventions often have strong structures or programmes and protocols which seem to help support effective delivery.<sup>62</sup>
- **Avoiding creating dependency.** Effective TAs support pupils to develop their own learning. In particular, ‘velcro’ TAs seem largely ineffectual and possibly detrimental – 1:1 support can impede pupil attainment and lead to dependency.<sup>63</sup> This does not mean that in some circumstances, some pupils with significant, particular or complex needs, maybe not be best served with individual 1:1 support. In these circumstances, we would suggest particular care about the training, role and that the overall teaching is still effective.
- **How best they can be used to support teachers use their time for greatest impact.**<sup>64</sup> Sometimes TAs are used to help take tasks away from teachers to enable them focus on teaching. For example, taking registers/homework may sometimes be a better use of resource.
- **Using HLTAs to cover lessons, rather than supply teachers.** Class teachers still plan these cover lessons to ensure rigour. Pupils already know the member of staff, meaning HLTAs can focus on the learning rather than building new relationships. This approach supports consistent learning as well as ensuring a constant and consistent message to the children, through (for example) school policies on behaviour, teaching style and marking – with knock-on positive effects on pupil behaviour. HLTAs may be best used to pre-teach and to help pupils practise concepts already covered in class, rather than teaching them new material.

### Sam Bone (Deputy Headteacher), Oldway Primary School

*“One of our TAs who delivers art enrichment sessions to groups of key stage 2 pupils has qualifications and experience in fine art but also an interest in physical activity. Our school has supported this teaching assistant’s professional development so they now have a qualification in coaching young people and deliver extra-curricular activities for Oldway’s children - which obviously adds to the opportunities for Oldway’s pupils but also increases job satisfaction for the staff member too!”*



Effective schools considered the impact of TAs in practice against expectations/objectives of their use. They focused evaluation on pupil outcomes where TAs were supporting teaching and learning. This is especially important given:

- there are more TAs in primary schools in England than teachers,<sup>65</sup> and together schools spend more than £5bn on TAs<sup>66</sup> – value for money really counts;
- research tells us the way in which TAs are deployed, managed and supported determines their impact – more so than the decisions TAs themselves make;<sup>67</sup> and
- teachers often report a positive impact in reducing disruption and increasing teacher time, although the hard evidence on this is mixed.<sup>68</sup>

#### Resource link

[Education Endowment Foundation – Making the Best Use of Teaching Assistants](#)



## 3C. USING THE CLASSROOM: LAYOUT AND ENVIRONMENT

**The teaching and expected learning should dictate the classroom layout – rather than the layout dictating the learning. Effective classroom environments focus on pupil learning, providing reference points and scaffolds to support this.**

### QUESTIONS FOR LEADERS

- How do you use your classrooms flexibly to create a high-quality learning environment?
- How do you support staff to use their classrooms flexibly to support their teaching and pupil learning?
- How do you ensure a consistent approach throughout the school to classroom environments in line with the school vision (including inspiring use of display and avoiding clutter)?

### QUESTIONS FOR MIDDLE LEADERS

- Within your area of responsibility, how do you encourage other staff to think about their classroom layout in terms of teaching and the learning environment to enable the best pupil outcomes?

## QUESTIONS FOR TEACHERS

- How do you think about your classroom layout to support specific learning objectives or tasks?
- How have you used different layouts to support your teaching and measured their impact?
- How purposeful are your classroom's displays? Are they organised; do they balance permanent and fresh elements; and do they promote pupil engagement?

Effective schools consistently take a purposeful approach across the school. They are flexible according to the task at hand and question their practice – they do not default to children in groups around tables.

Varying the **layout** and monitoring the impact on pupil outcomes can help schools see what works in different situations to aid pupil progression. There are three main options whether using table and chairs or the carpet:

- **Rows:** these are good for individual work, to increase time on-task. Rows may be better than tables for less attentive and less successful pupils<sup>69</sup> and may help with pupils' focus on the teacher. It is helpful to be aware of how teachers involve all students in the classroom as studies suggest there is a zone of increased involvement across the front and down the middle of the room.<sup>70</sup> Varying pupil location can stimulate attention in the room.
- **In-groups:** seating pupils in tables for group work makes sense when doing group activities. Working in groups can support social interaction and pupil-to-pupil assistance, and increase student participation – when it suits the task at hand.<sup>71</sup> Changing the size for reasons other than practical ones can be effective. Sitting in groups does not guarantee that pupils will work or learn as a group effectively.
- **Horseshoe:** this allows pupils to see each other as well as the teacher. In whole class discussions, this format may increase student participation with increased on-task behaviour and fewer disruptions. Some teachers also find it easier to control the whole class.<sup>72</sup>

Whatever layout is used for a task, our visits showed that it is vital that **all pupils can see the teacher** and the whiteboard (interactive or not) during teaching and modelling - i.e. when these are the focus of learning.

### Dame Reena Keeble (chair)

*"I was struck by how one school used the furniture in their reception classrooms. Teachers in reception sat children at their tables facing the front so that they could see the teacher during a phonics lesson. Later in the morning the teachers had rearranged the furniture into small groups to enable a different type of teaching. I was impressed by the pupils' level of engagement and concentration during the phonics lesson. The teachers explained that the teaching had to dictate how the furniture was organised rather than it be governed or restricted by how the tables and chairs were organised. I saw this policy of being flexible about how furniture used throughout the school and saw similar high levels of pupil engagement."*





We believe that effective schools make the most of the classroom environment. They challenge themselves about whether they have learning at the heart of what they do, rather than 'showing off' for the benefit of visitors or inspectors. They consider:

- having tidy, organised classrooms which, viewed from a pupil's perspective, avoid clutter and unnecessary distraction;
- how the classroom promotes a calm and purposeful approach to learning, helping pupils to focus and supporting pupil's self-regulation (that is: being able to avoid impulsive behaviour and stay focused);
- how the classroom walls and display enhance, not distract, from teaching and pupil's learning;<sup>73</sup>
- having resources (like books) available to pupils so that they do not need help to get them;
- making sure everyone has access to prompts and learning cues to strengthen independence and help pupils move on when they get stuck; and
- opportunities to use display to extend pupil learning.

Effective schools on our visits used displays that balance permanent and new elements to promote ownership and engagement. Displayed pieces of work are inspirational and celebrate excellence.

At a school level, it is useful to double check the basics of the wider classroom environment such as air quality, noise levels and temperature. Warmer and more humid conditions generally seem to have a negative impact on learning; while in the early years specifically, poor air quality and high noise levels have a negative impact. Other than these elements, once a school reaches minimum standards, the evidence suggest it is unlikely that further changes have a big effect.<sup>74</sup>

### 3D. USING TECHNOLOGY TO SUPPORT TEACHING

**Technology should be used to improve teaching – if it has a clear pedagogical purpose – rather than for the sake of using it in and of itself. Before purchase, effective schools are clear about how technology will be used, what training will be required, how will it be embedded and how the impact will be monitored.**

#### QUESTIONS FOR LEADERS

- When bringing in new or innovative technology, can you explain clearly how it will support teachers to teach and improve pupil learning and how you will measure impact?
- How do you ensure technology has a measurable impact, including professional development of staff?
- How do you gather data and evidence about the impact of current use of technology on different pupil groups?
- If you are considering new technology, have you considered what other resources could provide the same or better impact on pupil outcomes, which might be simpler, more reliable or cheaper to use?

#### QUESTIONS FOR MIDDLE LEADERS

- How do you ensure effective use of technology within your area of responsibility and how confident are you in modelling use of this technology as necessary?

## QUESTIONS FOR TEACHERS

- How do you use technology in different subjects and consider how to use effective approaches in different subjects?
  - How do you use technology to target individuals or specific groups and how do you decide who to target and measure impact?
  - If you lack confidence in the use of new technology in certain subject areas, how could you take responsibility for developing your confidence in this – for example, are there other members of staff from whom you could learn?
  - Is your use of technology based solely upon the learning you want to take place in the classroom? Is any additional pupil engagement brought about by new technology being translated into improved learning?
- 

Using technology is not a 'silver bullet' to help pupils learn. Some technology is clearly required in schools, such as computers and visualisers/interactive whiteboards; gaming, tablets and digital applications have a certain appeal. How such technology is used, however, will determine the impact it has. It should be introduced to respond to a learning need, rather than for its own sake.<sup>75</sup>

Effective schools think carefully about what, how and when they use technology in order to help students. In particular they:

- Are clear that learning should dictate use of technology, not vice versa. Schools that focus on the learning outcomes they want, and then consider what supports that goal, have greatest impact. This point can be applied to any teaching resource – technology is no different. Even when a technology's impact on learning outcomes is understood, effective schools also consider how simple, reliable and engaging for pupils it is before implementing changes.
- Ensure that they have access to expertise or staff with the capability to make effective decisions about what new technology to buy/use, who also understands the vision for teaching of the school and the intended impact on teaching and pupils.
- Ensure teachers and TAs (both new and existing) are trained and confidently able to use any innovative technology they have in the classroom – making sure it will be used appropriately to plan and deliver content. Ideally, new teachers will have the skills to work with new classroom technology; in any case, good professional development is essential for all teachers to ensure such technology is used appropriately. Indeed, using such technology without proper training can actually harm pupils' learning.<sup>76</sup>
- Ensure that the use of innovative technology complements and supplements teaching by the teacher, rather than replacing it. The latter approach is at best ineffective, and at worst detrimental.
- Use innovative technology to support scaffolding (to build up learning during a lesson) or for modelling (to demonstrate a good example to students). For example, explaining the reasoning and thinking of the teacher in answering a question, or to help retrieval practice. To do this well requires an up-to-date understanding of the wider evidence around effective teaching practices.

### Resource link

[Education Endowment Foundation – The Impact of Digital Technology on Learning](#)



# CHAPTER 4: ORGANISE, STRUCTURE AND PRIORITISE

Effective schools make clear choices about how they organise, structure and prioritise they:

- 4A. invest in reception;
- 4B. consider whether to use setting and streaming; and,
- 4C. are clear why, and whether to, use homework.

## 4A. INVESTING IN RECEPTION

**Effective schools invest in developing a strong reception year with a structured approach to teaching and a focus on planning for learning rather than aimless activities.** (see mythbuster below)

### QUESTIONS FOR LEADERS

- How does your understanding of reception year, effective teaching and the reception curriculum, contribute to your leadership of reception and pupil outcomes?
- How do you ensure your reception curriculum (and any schemes of work) including phonics, reading, writing (including handwriting) and maths in reception are most effective for teaching pupils?
- How do you ensure all teachers in your school understand reception in terms of its expected outcomes and its potential in contributing to the outcomes of the school?
- Do you apply the same rigour and high expectations in target setting, pupil reviews and appraisal in reception as you do for year 2 and year 6?

### QUESTIONS FOR MIDDLE LEADERS

- If you are the early years leader, how effectively are you demonstrating progress from the teaching approach across reception? How does this prepare them for key stage 1?
- If you are a middle leader with responsibility for another area or subject within school, how do you ensure you build and maintain a good understanding of reception practice?

### QUESTIONS FOR TEACHERS

- How do you ensure that your current approach reflects what your pupils need to learn and balances learning through play with more formal approaches?
- How do you plan for what your pupils will learn and what difference is this making to their outcomes?
- How confident are you that, at any one time, your pupils could explain what they are doing and why (if those pupils have the necessary communication skills)?

In our view, **reception is the most important year**. Done well and properly invested in, it will provide pupils with a strong foundation for the rest of their time in school.

**Matt Burdett (Headteacher), Three Bridges Primary School**

*“We believe in a balanced approach to learning in our EYFS – with both adult-led and child initiated activities, culminating in focussed opportunities to read, write and solve problems. Despite the fact that our children enter our nursery and reception significantly below the national average, through our balanced approach we are securing excellent outcomes for every child... and every child enters year 1 ready for the national curriculum.”*



Our visits to schools showed varying approaches; we believe the following points are essential to getting this year right:

- **Teaching is important.** Effective schools are very clear about what pupils need to learn and by when. They build the timetable of teaching including purposeful play around this.<sup>77</sup> They give particular attention to opportunities for pupils to develop their language and their ability to explain their actions, their reasoning and their learning.<sup>78</sup> They allocate time every day to teaching pupils in short sessions, as a whole class (e.g. for maths, phonics and guided reading time). Done well this is not boring drilling leading to unhappy pupils - quite the opposite. Pupils delight in the taught input, make better use of the wider provision as a result and relish in their learning across the curriculum.
- **Setting expectations of learning behaviours and outcomes that are consistent with the rest of school.** This means identifying and emphasising similarities between reception and other year groups, rather than differences. It also means explicitly considering how pupils are expected and taught to develop their reasoning and self-regulation. Evidence suggests that these have small positive benefits for attainment.<sup>79</sup>
- **Focused planning and assessment.** Planning starts with the learning outcome in mind, rather than the activity. In the best schools we visited, pupils were able to explain what they were doing and why – where they had the necessary language development. There was purposeful teaching by all adults to secure specific outcomes through modelling, vocabulary building and focused questioning.
- **Effective reception teachers are developed, supported and accountable.** Effective schools invest in developing teachers and teaching practice in reception and make sure reception teachers are as accountable as key stage 1 and key stage 2 teachers for results and outcomes. Investing equally in all three phases is better for pupil outcomes and avoids teachers in later years having to remedy issues which developed in the early years.

**Mythbuster:** By a structured approach, we do not mean a purely top-down, formal approach to teaching (and neither do Ofsted).<sup>80</sup> In effective schools there was a focus on maximising learning across the entire day, so all teaching was purposeful whether during more formal, whole class sessions or during opportunities for children to work independently. Put simply, teaching encompasses the many different ways that teachers helped pupils to learn. This includes the planned and spontaneous interactions between adults and pupils, and in the use of resources and organisation of the classroom. The important point though is that teachers structure and scaffold learning through their decisions about what pupils need to know, understand and be able to do next, and how best this should be taught, to achieve success.



**Helen Callaghan (EYFS Leader), Hartsholme Academy**

*"We ensure that our high level questioning and stimulating challenges which provoke children to find solutions as they play, move pupils' chosen play into a high-level outcome that is purposeful and relative to their individual experiences."*



Schools with a strong reception year consider:

- **Pupil starting points.** Effective schools focus on building communication and collaboration skills, especially in developing talk and conceptual understanding. Where starting points are low, some schools are considering taking younger children, or thinking about how they support nurseries, pre-schools or parents to improve development before children start in reception. Our visits tell us this is having a positive impact with on-entry starting points.
- **How 'school ready' their pupils are by the end of reception.** Schools that most effectively supported transition bring year 1 approaches into reception. In preparation for year 1, the reception classroom layout evolved gradually to support these children to make a successful transition. High quality teaching should ensure that all pupils have the core skills in place to progress, and are ready and excited to meet the challenges of the year 1 curriculum.

**Jan Knox (Headteacher), Houghton on the Hill Primary School**

*"We recognised early on that there was a mismatch between the expectations for Early Years Foundation Stage and the rest of the school; where in most classes we were seeking greater depth rather than acceleration. Implementing a whole class mastery approach to the teaching of phonics in year 1 had shown good results – an increase in our pass rate of 5% - but more importantly the large majority of those children working below the standard were significantly less far adrift from their peers. As a result, teachers in EYFS are adopting a similar approach to the teaching of basic skills in phonics, reading, writing and maths."*



## 4B. WHETHER TO USE SETTING AND STREAMING

**Setting and/or streaming may not help all pupils to achieve.**

**'Setting'** – the grouping together pupils of similar ability **on a class-by-class basis** (e.g. a pupil could be in the top set for maths and the middle set for English).

**'Streaming'** – grouping together pupils of similar ability **across all classes** (i.e. the pupil would be grouped with the same pupils for every subject).



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## QUESTIONS FOR LEADERS

- How do you ensure that any use of setting or streaming does not set limits for pupils to succeed and how do you monitor the impact on gaps between ability groups?
- Are there opportunities for you to trial different approaches and monitor the impact on pupil outcomes?
- If you do not use setting or streaming, how do you know that your approach ensures all staff have sufficient knowledge to provide adequate stretch and support for all pupils?

## QUESTIONS FOR MIDDLE LEADERS

- Within your area of responsibility, do you understand how pupils are grouped, when and for what, and how this impacts on pupil outcomes?

## QUESTIONS FOR TEACHERS

- How do you set expectations so that they are equally stretching and challenging for all pupils?
  - Have you considered moving away from setting or streaming pupils and any support you might need to do so effectively?
  - How do you reward effort from all pupils and help them understand mistakes are an important part of learning?
- 

Our visits suggest that many primary schools use some form of ability grouping. In some cases, this was in the form of more formal setting and/or streaming, where the evidence on balance suggests neither approach benefits middle and lower attainers, or disadvantaged pupils. They may even impede the progress of lower attainers, particularly in key stage 2.<sup>81</sup>

Setting and streaming may limit expectations by confusing prior attainment with ability. This means that a lower attaining child might not have access to material that would allow them to catch up to pupils with higher prior attainment – even if they are capable of doing so. In effect, this means they are then never able to catch up.

Further, the evidence suggests the impact of setting and streaming is in part due to the way they are carried out in practice.<sup>82</sup> This includes:

- assigning pupils incorrectly or assigning based on behaviour;
- little movement between groups;
- putting least effective or weakest teachers with lower groups; and
- failing to differentiate sufficiently between ability groups.

### Janet Hilary (group member)

*"I saw some effective schools who set no limits on learning and who taught pupils with an expectation of success for all. For example, a brilliant year 5 maths lesson in one school had pupils solving complex equations in groups of six and testing their methods via tablet technology with the rest of the class. A year 6 writing activity in another school had pupils moving in a carousel to different workstations and adding text to a class narrative. Vocabulary choices, edited group by group, were superb and the classroom fizzed with excitement."*



Flexible within-class groupings are different to both setting and streaming. Some within-class groupings might be beneficial: research on intensive enrichment or remedial work (i.e. 'topping up' knowledge, or providing additional support) is promising.<sup>83</sup> Using within-class groupings flexibly may help pupils in learning specific things.

Evidence suggests that in general, mixed-ability classes are best to ensure all pupils are challenged and given high expectations. Mixed-ability classes can also bring wider benefits:

- help the attitudes, self-esteem and engagement of lower attaining and disadvantaged pupils;
- help higher attaining pupils to realise and act upon their areas for development; and
- it can also encourage a growth mindset in all pupils – a belief that their basic ability can be improved through hard work and perseverance, encouraging them to be resilient and love learning.<sup>84</sup>

Using mixed-ability groups **does not mean lowering expectations for the higher attaining pupils** – it means challenging them and providing stretching tasks within mixed-ability classes. Mastery principles provide some possible answers, such as higher attaining pupils creating their own examples to deepen their understanding, or practising explanations to others to develop their own fluency in automatic recall of prior learning (though pupils should not be used as proxy teachers).

**Mythbuster:** This does not mean we are suggesting that schools should never use ability grouping, but that given the evidence, they should have a clear rationale, have considered how to avoid the potential negative consequences and be actively measuring impact.



Moving away from setting/streaming may be challenging. Some ways that schools have successfully managed this are:

- talking to other schools who have successfully moved away from it;
- phasing in mixed-ability classes up the school, starting with the youngest year group which is currently set/streamed;
- using professional development, coaching and lesson study to develop teachers' ability to support all pupils;
- building in time for rapid interventions (focused keep-up teaching directly related to the work covered in previous lesson) for those pupils who need it. For example, this could be done first thing, or immediately after lunch. During this time, the rest of the class are doing other activities; and
- using mastery approaches to teaching across a variety of subjects to stretch all pupils – including the higher attainers through depth – and remove the 'ceiling' in terms of expectations.

### Resource links



[Education Endowment Foundation - Setting or Streaming Toolkit](#)



[Education Endowment Foundation: Best Practice in Grouping Students](#)

## 4C. WHETHER TO USE HOMEWORK

**Homework should have a clear purpose, and be used only if it is expected that all pupils will achieve the learning objectives.**

### QUESTIONS FOR LEADERS

- How does your school policy identify the purpose of homework and how do you measure its impact?
- How do you engage parents in the homework policy and discussions of other ways they can support their child's learning?
- How do you guard against the risk that your homework policy may disproportionately add to teacher workload and/or pupil workload?

### QUESTIONS FOR MIDDLE LEADERS

- As a leader in school, how do you ensure you are clear about how the homework policy impacts on your subject of responsibility and its effect on pupil outcomes?

### QUESTIONS FOR TEACHERS

- How do you encourage pupils to understand the school's homework policy and the purpose behind each piece of homework?
- Are you able to use your school's homework policy to impact positively in your classroom?
- How do you ensure that children who may have barriers to accessing, or completing homework, are not disadvantaged?
- How do you ensure that the homework you set has a positive impact without distracting you from your core purpose of the delivery of teaching in the classroom?

Evidence suggests homework has a very limited impact on achievement for primary-age children – and some suggests a negative impact.<sup>85</sup> Meanwhile, research on possible non-academic advantages (e.g. developing responsibility, good study habits and time-management skills) is lacking. Our view then is **that homework should only be set when there is clear justification for it and there are evident benefits for pupils, including school data to back this up.**

Schools typically use homework in three ways:

- **To practise and recap.** Focusing on the most important learning from class through quizzes and no-stakes tests, or letting students test themselves. Helping pupils to space (revisiting the same topic a day/week/month/term later) or interleave (when more than one topic is spaced in this way) their learning engages memory retrieval and supports mastery learning. If homework is going to be set, this might be the most helpful approach.
- **Extension.** Setting longer-term, often voluntary projects, incentivising pupil participation while allowing them and their families flexibility to manage the projects around their home lives. Some schools provide a schedule so parents and pupils know what to expect and when.
- **New learning or pre-work.** This has the weakest evidence and is best avoided unless schools are clear about the capacity of the pupils, the quality of resources, and the quality of support/explanation pupils receive.

### Rob Carpenter (group member)

*“Some schools I have visited use two types of homework:*

- 1. Homework to support teaching through practising the basics of reading, maths and grammar. The amount and frequency of this homework depends on the age of pupils but all pupils are encouraged to read to foster a love of books.*
- 2. Project-based homework that seeks to help pupils make links across the subjects and connect their learning to practical applications and the wider world. Parents have a choice to opt in or out. If they opt in, schools expect homework tasks to be completed to a high standard and for teachers to acknowledge this.”*



Where effective schools do set homework, they ensure that it is in line with their overall vision for teaching and learning. In particular, both the level of challenge and the feedback are considered to ensure that homework promotes a greater love of school and interest in learning. Schools utilising homework effectively are clear about:

- **Its purpose:** having this conversation with parents and telling them why homework is being set. This might be to serve the teacher (by supporting pupil learning) or the parent (by engaging them in their child’s learning). The school ensures that no pupils lose out and all understand its purpose clearly.
- **Impact on teacher workload:** following up, but in a way that does not disproportionately add to teacher workload. Peer marking – with teachers stepping in to support the whole class through any outstanding questions – may be used to encourage responsibility and independence while reducing teacher workload.
- **Parental engagement:** communicating with parents so that they understand why their children do or do not have homework, in addition to what their child does in school and how they can support this at home (e.g. how they will learn maths, what phonics means, any tips or resources to support learning about history or geography). In these schools, parents understand their role and have the skills and support from teachers to undertake it.
- **Limiting the time that pupils spend doing it:** including telling pupils to stop after a set time, even if they have not finished – as there is evidence that for primary pupils the amount of time spent on homework has no effect.<sup>86</sup> This may be due to the limited attention span in younger children. Also, **outside school, time spent with family, friends, sleeping and on broader activities is vital – and contributes to overall well-being, memory, focus etc.** The US rule of thumb (‘10 minutes per grade’) seems helpful to minimise the load and family stress.<sup>87</sup>
- **Level of challenge:** allowing pupils to succeed without too much struggle and without needing to lean heavily on their parents (encouraging both independence and responsibility).
- **The social context:** considering the impact of the social context and ensuring that any homework set accounts for different pupil experiences, background, and types of parental involvement. It could be related to out-of-school activities that younger children enjoy, such as sports or reading.

Encouraging and supporting active involvement in pupils’ learning from parents and through positive home environments can be an important part of a school’s role and is how some schools have helped improve pupil outcomes. We are less clear that this necessarily means that homework is required or the most effective way of schools doing this.

**Homework has the greatest impact on pupil outcomes when its effect is consistently evaluated against pupil progress, and adjusted when judged necessary through this process.**



**Mythbuster:** While the Ofsted framework includes mention of homework, as one part of the criterion for judging teaching, learning and assessment, this is in relation to how a school is implementing its own policy on homework consistently and ensuring any decisions are appropriate for the different ages of pupils within the school. Ofsted is focused on how well a school’s homework policy supports pupils’ learning and outcomes and whether heads and leaders can justify the approach they have taken.

# CHAPTER 5: RECOMMENDATIONS

Having considered practice across the schools we visited, and in the schools that members of the group work in and with, we make the following five recommendations.

The longer term development of excellent teaching practice would benefit from professional, national debate and research; meanwhile effective teaching in schools also needs to evolve in the shorter term. Therefore, as a starting point:

**1** All headteachers and leaders in schools are encouraged to reassess their practice in light of this report. In particular they should consider:

- their role in leading teaching and learning;
- their role and investment in developing teachers, including by means of effective professional development;
- using mastery teaching approaches across the curriculum, focused on mastery for all, with greater depth for the higher attainers;
- using evidence-based teaching approaches that show promising signs of boosting pupil attainment.

We want to build on the progress in primary schools and see a further a cultural shift and a significant change in how the teaching profession develops effective practice itself. We hope that this report can contribute to this, but in addition we need:

**2** A profession-led body – for instance the Teaching Schools Council – to conduct a rolling programme of reviews looking at evidence relating to teaching practices that have most impact on achievement and learning. These reviews should be focused on particular elements of primary teaching and the findings updated regularly - perhaps every five years. These should draw on, and work with, organisations such as the EEF.

In some instances, current practice did not fit well with the existing evidence relating to effective teaching strategies. In part this was because there was a lack of consistency in the understanding and terminology used to describe teaching practice. There were a number of areas of practice with little or no evidence to support them - that we could find. Therefore, we need:

**3** More high-quality and rigorous research to investigate the areas of pedagogy where there are significant gaps. The largest areas identified for attention were: effective teaching practices in the arts and music for achieving the best outcomes in those subjects, and the most important aspects of relationships between pupils and teachers and how they affect or contribute to pupil outcomes.



It is clear to us that developing teachers and leaders is central to the profession so that it may continue to educate and inspire children. Despite recent work (for example, the Standard for Teachers' Professional Development) too few understand the investment required to make development effective. The development currently available varies widely in quality and the provision and structure is fragmented and often incoherent. This is too important to let lie. Therefore, we need:

**4 Professional development to be consistently of the right quality to develop teachers and teaching meaningfully. As a profession, teaching must improve professional development, including its co-ordination, its quality, and its evaluation. There are various organisations that could take a role in leading this change, including national bodies such as the Teaching Schools Council, the College of Teaching; evidence organisations such as the EEF; and charities such as the Teacher Development Trust.**

One of the areas of teaching practice that particularly concerned us was the reception year. There is confusion about expectations among teachers and heads leading to inconsistency in practice and approach. This, in part at least, appeared to be because of differences in the curricula and teacher expectations of reception and key stage 1. One example that came up a number of times was that the 'Early Learning Goal 11: Numbers' focuses on a counting based approach to calculation. This is in contrast to research suggesting knowledge of composition of number is the critical factor in successful calculation and future attainment in maths, and that counting is a strategy relied on disproportionately by low attainers.<sup>88</sup> It also conflicts with the most effective teaching of maths in key stage 1 where pupils are taught subtraction by complementary addition (being able to partition numbers), leading teachers to have to teach pupils to avoid previously learnt approaches.

We also recognise that there has been a continuous succession of changes affecting teachers and schools in recent years, and that this brings with it both stress and workload, and so we do not make this recommendation lightly. We are, however, concerned about the inconsistencies between practice in reception and key stage 1 and their effect on potentially isolating reception teachers from their other colleagues, and the critical impact on pupils. Given our view that the reception year is crucial to get right, we recommend that:

**5 The Department for Education support a review to address the confusion and lack of consistency regarding curriculum and practice in the reception year. We believe this should be evidence-based and led by teachers and leaders from primary schools, and draw on research and expertise from those with reception experience in particular. We believe this would support reception teachers and help school leaders to ensure that children enter year 1 fully equipped.**

And finally:



**Jon Brunskill (group member)**

*"Being involved in this review has inspired my own school, Reach Academy, to select a 'canon of classic literature' that all children should have read before they leave our school."*

# CHAPTER 6: OUR APPROACH TO EVIDENCE

We took a four-part approach drawing on the expertise of group members to contextualise findings and offer opinions and conclusions. These were:

- looking at the academic and research literature;
- visiting schools;
- talking to academics, leaders and other experts; and
- a range of mini-surveys and other ways to understand and get a sense of opinion and views on particular aspects.

We are grateful to all those that contributed and gave their time and shared their knowledge and insights so willingly.

## Evidence from research

We read a range of research and opinion to understand the current debates in primary education. This was important to understand the strength and scope of evidence in itself, and to provide discussion points for school visits and within the group. We were led in this consideration through suggestions from the group, social media and people we met. This helped signpost strong evidence, highlighted the key debates for us to consider and allowed us to assess potentially effective practice to support our conclusions. We also drew on an independent literature review of effective primary teaching practice.

Beyond this, we drew on a range of research in terms of books, articles, essays, speeches and briefings. A summary bibliography is included at Annex B. For example:

- To understand how children learn and the cognitive psychology perspective, Daniel T. Willingham, Benedict Carey, Peter C. Brown, Gordon Stobart and Graham Nuthall.
- For analyses on teaching approaches and school structures, Robin Alexander, Ken Robinson, Daisy Christodoulou, David Didau, Rob Peal, David Dunn, Doug Lemov, John Hattie and E. D. Hirsch.
- On teacher knowledge and the potential benefits and drawbacks of subject specialists at primary level, Roland G. Fryer, Hung-Hsi Wu, Liping Ma, The National Council on Teacher Quality and the Wellcome Trust.
- On ability grouping, Becky Francis, Courtney A. Collins, Li Gan, Esther Duflo, Pascaline Dupas and Michael Kremer.

The Education Endowment Foundation website proved a useful starting point to examine evidence around many areas including digital technology in the classroom, the impact of arts education, mastery learning, homework, teaching assistants, and setting/streaming. We also referred to recent government reviews into teacher workload, standards for teachers' professional development and the initial teacher training (ITT) framework.

## School visits

We visited 20 primary schools across the country (listed at Annex C) to see the range of existing practice, to identify examples of effective teaching practice and understand how leaders and teachers have embedded this practice. Schools were suggested by group members, academics, Teaching Schools Council colleagues and staff within Regional Schools' Commissioners offices. They were chosen based on a number of factors, including: schools with a strong focus on teacher development; schools that utilise subject specialists; schools that had demonstrated significant recent improvement; and schools rated as 'Outstanding' by Ofsted.

Visits consisted of time spent discussing primary teaching practice with leadership teams and classroom practitioners, observing lessons, examining pupil data and books, and speaking to pupils. We sought views

from school staff on some of the issues arising from our literature review to challenge our thinking to date. We collected and discussed information on pupil progress and school-level evaluations and we asked leaders and teachers about their views on using effective practice from other schools and research evidence.

### Discussion and roundtables

To discuss and challenge the evidence in more depth as well as to understand how it could be applied in primary schools across England we arranged a series of discussions with a range of experts. We discussed:

- effective teaching strategies;
- how children learn;
- the role of teaching assistants (TAs);
- setting and streaming;
- the role of technology in primary schools; and
- the use of evidence in primary school teaching.

For the setting and streaming discussion, we spoke to headteachers whom we had already met during our school visits, to find out more about how they had successfully implemented their approach and how other schools could learn from their example.

### Other engagement

To engage with a wider set of primary school teachers we invited comment and opinion in a number of ways. We wanted those with an interest in our review to have the opportunity to share their own comments, to encourage engagement in and reflection upon the group's work in schools across the country. As well as being robust, it was important to us that our conclusions on the most effective teaching practices be useful for the teachers and leaders reading this report. To encourage this wider engagement, we:

- sought input from primary school teachers through the use of the Teaching Schools Council's Twitter account and through NCTL's Teaching Schools, National Leaders of Education and Local Leaders of Education newsletters;
- carried out a social media survey to understand primary schools' approaches to (and rationale for) teaching by topic, subject or both; and
- asked primary school teachers for their views on what products we should develop alongside this report, to support our conclusions to be accessible and practical for teachers and leaders.

# ANNEX A: TERMS OF REFERENCE

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The Teaching Schools Council have brought together a small group of teachers, heads and experts to produce a practical guide to the evidence about effective teaching in primary under the leadership of Dame Reena Keeble. This document briefly sets out the scope and expectations of the work and who is on the group.

## Why are we doing it?

1. The TSC wants to lead the evolution of a school-led system. At its heart school improvement must have a focus on effective teaching. This can be best achieved through systematic use of evidence to inform practice. The quality of teaching, a combination of teachers and their practice, is the most important in-school factor in determining pupil outcomes.
2. In recent years there has been a steady growth in the evidence base around pedagogy and teaching practice. The last national review of teaching practice was the Gilbert review (*Report of the Teaching and Learning in 2020 Review Group*) in 2007. Therefore, it is timely to undertake work to expose this new evidence to a wider audience, and help teachers and schools make sense of it.
3. The TSC has a role developing system leadership and, therefore, wants to help every school and every teacher to have the knowledge and ability to improve their practice.
4. Taking responsibility for leading the development of teaching practice clearly represents the next step on the path to a mature and respected profession which is central to a school-led system.

## The scope of the work

5. The work will consider **teaching methods used in primary schools, with a view to identifying the most effective practices and how they can be best supported.**
6. This will focus on the teaching of children aged 4-11 in mainstream, state-funded schools (which includes both academies and maintained schools). In particular this will include:
  - how children learn and develop;
  - the most efficient and effective use of teachers and their time;
  - subject specialist teachers in primary school;
  - the use of teaching assistants (and other classroom-based support staff);
  - the teaching of pupils with special educational needs, transient children, and disadvantaged children;
  - the role, value and the balance between, mastery/whole class, “personalised”/ pupil-led, and differentiated approaches to teaching;
  - general and subject-specific pedagogies;
  - homework;
  - the structures to support teaching, such as timetabling, and setting/streaming;
  - the rigour and robustness of the evidence base;
  - how teachers/schools can evaluate the impact of their approaches to teaching.
7. The work should take account of any of the outputs of the reviews being run and supported by the Department for Education as relevant.

## Carrying out the work

8. The group will draw on robust research; consultation and discussion with teachers and schools; and their own experiences and expertise. It will consider evidence and practice from England and internationally.
9. The group will be supported by the TSC; additional support is available from the Department for Education.
10. The group will provide updates to the TSC and aim to provide informal and general updates via Twitter @ TeachSchCouncil.
11. The TSC hope to publish the final products of this work in autumn 2016.

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# ANNEX C: SCHOOLS VISITED

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We are grateful to all the schools that allowed us to visit and accommodated us. Whilst we saw a range of great practice, our having visited them does not mean that we believe they were all great or effective schools. In some instances our focus was on relatively narrow aspects, or where we wanted to understand the breadth of existing practice.

## East Midlands

- Hartsholme Academy (Lincolnshire)
- Houghton on the Hill Primary School (Leicestershire)
- Pinxton Village Infant Schools (Derbyshire)

## London

- Deansfield Primary School (Greenwich)
- Grange Primary School (Harrow)
- Three Bridges Primary School (Ealing)

## North East

- Stephenson Memorial Primary School (Tyne & Wear)

## North West

- Forest Gate Academy (Lancashire)
- Prestolee Primary School (Lancashire)
- Wistaston Academy (Cheshire)

## South East

- Harris Primary Academy Chafford Hundred & Harris Primary Academy Mayflower (Essex)
- Lyons Hall Primary School (Essex)

## South West

- Oldway Primary School (Devon)
- Shaldon Primary School (Devon)
- Wallscourt Farm Academy (Bristol)

## West Midlands

- Corngreaves Academy (Sandwell)
- Four Dwellings Primary School (Birmingham)
- Parkfield Community School (Birmingham)

## Yorkshire and the Humber

- Bankside Primary School (West Yorkshire)
- Selby Community Primary School (North Yorkshire)

# ANNEX D: DISCUSSIONS

## Individual discussions:

- Allison O’Leary (Ohio State University)
- David Reynolds (University of Southampton)
- Marie-Claire Bretherton (Mount St Academy, Lincoln Carlton Academy and Benjamin Adlard Primary School, Lincoln, and head of Kyra Teaching School Alliance)
- Robin Alexander (University of Cambridge)
- Steve Higgins (Durham University)
- Yana Weinstein (University of Massachusetts Lowell)

## Effective teaching strategies, how children learn, and the role of TAs roundtable:

- Andrew May (Charlotte Sharman School, Southwark)
- Jonathan Sharples (Education Endowment Foundation)
- Jun Yang Williams (Northwest University, China)
- Paula Bosanquet (University of East London)
- Peter Blatchford (University College London)

## Setting and streaming roundtable:

- Ian Clennan (Selby Community Primary School, Selby)
- Jan Knox (Houghton on the Hill Primary School, Leicester)
- Matt Burdett (Three Bridges Primary School, Southall)

## Technology roundtable:

- Angela Macfarlane (College of Teaching)
- James Bell (Renaissance Learning)
- Jan Jackson (Edge Hill University)
- Patrick May (Edge Hill University)
- Rose Luckin (University College London)

## Use of evidence roundtable

- Angela Macfarlane (College of Teaching)
- James Bell (Renaissance Learning)
- Jan Jackson (Edge Hill University)
- Patrick May (Edge Hill University)
- Rose Luckin (University College London)

## Focus groups for testing content and findings

### Primary Headteacher Reference Group:

- Andy Brown (West View Primary School, Hartlepool)
- Anthony Hull ( Evolution Academy Trust, Norwich)
- Claire Fisher (Heighington Millfield Primary Academy, Lincoln)
- Gillian Griffiths (World’s End Infant and Nursery School, Birmingham)
- Lauren Costello OBE (The White Horse Federation, Swindon)
- Pat Smart (Greet Primary School, Birmingham)
- Rabbi Dr J Yodaiken (Yesoiday HaTorah School, Manchester)
- Rachel Snape (The Spinney Primary School, Cambridge)
- Sallyanne Stanton (Kanes Hill Primary, Southampton)
- Stephen Snelson (Red Hill Field Primary School, Naborough)
- Sylvie Libson OBE (Oakington Manor Primary School and Furness Primary School, Wembley)

### Feedback focus groups:

- Bozena M. Laraway (St Helen’s Catholic Junior School Academy, Essex)
- Christine Bowen (Mottram Academy, Macclesfield)
- Daniel Craft (St Peter’s RC Primary, Dagenham)
- Gugsy Ahmed (Parkinson Lane Primary, Halifax)
- Jatinder Virk (The Disraeli School & Children’s Centre, High Wycombe)
- Martyn Boxhall (Wynard Primary, Devon)
- Sarah Manley (Snowsfield Primary, Southwark)
- Stephen Hall (Orchard, Hoxton Garden & Southwold Primaries, Hackney)
- Sue McCutcheon (Langley Primary, Solihull)

# ENDNOTES

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- <sup>6</sup> Willingham, D.T., 2009. *Why Don't Students Like School?: A Cognitive Scientist Answers Questions About How the Mind Works and What it Means For the Classroom*. San Francisco, CA: Jossey-Bass; Deans for Impact, 2015. *The Science of Learning*. Austin, TX: Deans for Impact.
- <sup>7</sup> For example: Rockoff, J.E., Jacob, B.A., Kane, T.J. and Staiger, D.O., 2011. 'Can you recognize an effective teacher when you recruit one?'. *Education*, 6(1), pp.43-74.
- <sup>8</sup> Deans for Impact, 2015. *The Science of Learning*.
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- <sup>22</sup> Willingham, D.T., 2012. *When Can You Trust the Experts?*
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<sup>45</sup> Gorard et al., 2016. 'Review of effective teaching approaches in primary schools'.

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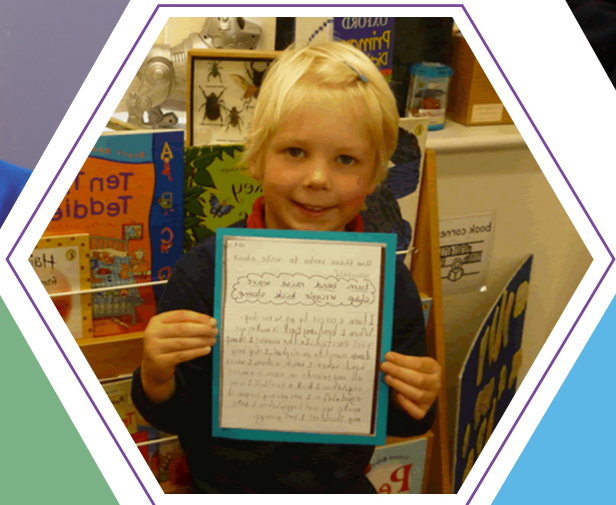
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Teaching Schools Council



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