

Relay

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Edu-blog Spotlight:

The feedback pupils want or need?



New research:

Video models for professional development



Tried and Tested:

Finding modelled examples

Improving Primary Science

The Education Endowment Foundation's Improving Primary Science guidance report was published at the end of November 2023, and joins 2018's Improving Secondary Science report in offering evidence-informed recommendations for best practice with support for practitioners 'to close the attainment gap and cultivate positive pupil attitudes towards science.'

The authors recognise the broad scope of 'science' and for this report they 'focus on science as defined by the national curriculum' for pupils 5-11. The guidance report follows the familiar structure of key recommendations, followed by detailed explanations and case studies, however the publication of this report comes at a time when the EEF and Research School Network are making a deliberate shift towards exemplification, and the format of the report reflects this with the use of illustrative scenarios, questions to consider and support to contextualise the evidence through worked examples.

The report is full of detailed staged explanation including why each recommendation is important and full of examples of things to try out. Familiar concepts from previous guidance reports such as implementation and supporting self-regulated learning are referenced, and there are frequent opportunities for other subjects to benefit.

Six Key Recommendations

Develop scientific vocabulary

Encourage pupils to explain their thinking

Guide pupils to work scientifically

Relate learning to real-world contexts

Use assessment to support learning and responsive teaching

Effective professional development



<https://bit.ly/3NrKZ8N>

Video models for professional development

‘Modelling the technique’ is one of the five mechanisms that sits in the category ‘developing teaching techniques’ of the Education Endowment Foundation’s Effective Professional Development Guidance Report.

Models are described in the guidance as worked examples, provided either in person or in film/pictures, that offer an opportunity to observe and work through challenges and specific techniques in advance. Videoed models offer the benefit of consistency as all teachers watch the same process, which can be quality assured, and there is flexibility in both how they can be accessed and that they can be revisited.

Whilst the systematic review and meta-analysis behind the guidance report found modelling present in effective professional development, recently published research by Ambition Institute, led by Dr Sam Sims, states there is currently little evidence of the causal effects of modelling on improving teacher practice. This new research (Sims et al, 2023) addresses a gap in the literature by looking at the causal effects of modelling evidence-based practice in teachers' skills, knowledge and self-efficacy, alongside how best to integrate this within wider professional development practices.

The authors hypothesised that viewing video models of evidence-based teaching practice would improve pre-service teachers’ skills and self-efficacy in the use of that practice, relative to rereading the evidence behind the practice; and that highlighting the important aspects of practice within these videos would improve skills, relative to no highlighting or just re-reading the underpinning knowledge.



They used a classroom simulator 'to test the impact of different representations of evidence-based practice.' Participants were asked to read an evidence

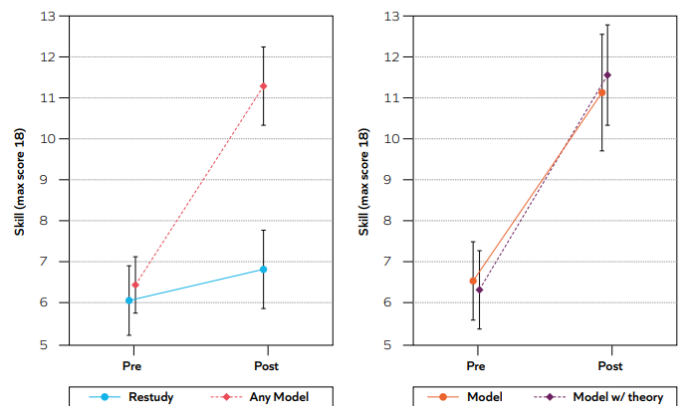
summary of ‘questioning for retrieval’ before their first simulator attempt and completing a self-efficacy questionnaire. They were randomly allocated to either a restudy group, who re-read the summary, a group who watched a video model of the technique, and a group who

watched a similar model with theory presented as text snippets within the video. They completed a post-test simulator attempt and self-efficacy questionnaire, with a multiple-choice knowledge test one week later, to test knowledge retention.

The study found that teachers who were allocated to the restudy condition made no increase in their skills in using questioning for retrieval, however, those allocated to either of the model conditions (with or without text snippets), ‘almost doubled their score between the two simulator attempts’, and the presence of the text theory prompts did not make a difference between the two groups for skill-level or knowledge. There was no measurable difference in the rate at which the groups improved their self-efficacy.

Figure 3. Changes in teacher skill outcome across treatment arms

Note. N=89 (left panel) and 58 (right panel).

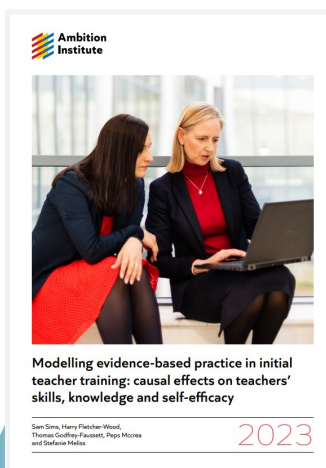


This study set out to better inform teacher educators in their design of professional development, and the conclusions show that video models have potential as an effective way to improve practice.

Where can you find video models? This issue’s ‘Tried and Tested’ outlines some sources of videos for you to use to improve your practice.

Ambition Institute paper: <https://bit.ly/46JCTza>

Effective PD Guidance Report: <https://bit.ly/3uPPZNY>



Edu-blog Spotlight

Inner Drive is a mindset coaching company creating the tools for educators to use findings from learning and performance psychology. They tweet as [@Inner_Drive](#) and blog at blog.innerdrive.co.uk/



In a recent post, Inner Drive explores 'The feedback students want vs the feedback students need'. They give an overview of the different types of feedback you can give pupils, how pupils perceive feedback, how to build pupils' understanding of feedback, and the difference between 'feedback' and 'feedforward'.

Feedback is crucial for pupils learning; helping them improve, and their development of independence and confidence. The post outlines four types of feedback:

Task feedback – Focussing on what they did right or wrong in a task.

Process feedback – Offering insights into 'the "how" rather than the "what".'

Self-regulation feedback – Supporting independent learning.

Self/Praise feedback – Acknowledging effort and performance to boost self-confidence.

The post considers whether there is a 'best' type of feedback and sites research that shows pupils recognise the importance of feedback for improvement (process feedback), but report that they prefer task feedback. They also didn't identify the importance of becoming self-regulatory; what they want isn't necessarily what they need.

In terms of how we could help pupils understand the importance of different types of feedback for learning, the post suggests 'active intervention' - teaching them about feedback and using clear language to reduce ambiguity. They also propose going a 'step further' and introducing 'future-orientated' feedback - feedforward, based on the work of John Hattie. This means teachers explain why strategies should be used to help pupils understand the thinking behind feedback.

They conclude that learning is messy, and pupils will respond to feedback differently. By understanding the difference between what pupils want and what they need, we can support pupils' 'development and motivation.'

Cognitive Bias of the Half-term

Cognitive biases are shortcuts in our thinking but they can make us lose objectivity. Each issue we introduce a new bias to help you avoid its pitfalls.

Functional fixedness

Functional fixedness is a cognitive bias that limits people to use something only in the way it is traditionally used.

This can stop people re-conceptualising something in a manner that allows them to solve the problem, for example, not thinking to use a shoelace as a piece of string.

Tried and Tested

New research from Ambition Institute shows that watching video models of practice can support effective teacher implementation. There are an increasing number of places you can access videos.

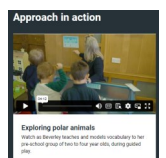
Chartered College of Teaching <https://chartered.college>

If you are a member of the Chartered College, you have access to all their professional development resources, including the Video Hub.



Education Endowment Foundation (+ Research Schools) bit.ly/471wzm0

The EEF and Research Schools are developing their communication and exemplification offer to include more videos. There is an excellent, new resource as part of the Early Years Evidence Store with videoed models being uploaded regularly.



Chiltern Teaching School Hub - YouTube teaching-school.co.uk/CPD/

Chiltern Teaching School Hub have made all their online CPD sessions available, which include modelled examples you can use in the classroom, and as part of planning and preparation.

