

**PINPOINT**

Most educational research is expressed in a way that is not immediately accessible by teachers ...it is rarely presented in an implementable form.

David Hopkins

The Gap

The vision of education being an evidence-based profession has blinded many to the enormous gap that still exists between the researcher and the classroom.

After the initial glow from the emergence of the meta-studies, the spotlight is now directed at the imprecise, impractical and abstract nature of the research.

Hoodwinked by Numbers

For the most part, research findings in education take the form of generalisations. The meta-analyses report at the abstract level of strategies such as assessment for learning or group work, for example. Nowhere do they specify which particular techniques were used, their steps or how well they were applied.

And yet their effect sizes are presented with great accuracy – often down to two decimal places. This statistical precision should not be confused with pedagogical precision. They're quite different.

Translating the Evidence

As evidence is, as yet, not fit for direct application to classrooms, it might be better to talk of evidence-informed rather than evidence-based teaching.

There is a great deal of work in translating word-dense studies and near-vacuous lists into practical, classroom-ready techniques.

Informed by evidence, the HOW2s offer teachers accurate and practical guides to the methods behind the headlines.



One of the main reasons that educational research has had so little impact on educational practice is because the very hardest task of all – working out how to implement research findings into real contexts – has been left almost entirely to teachers, and this is both unfair and foolish.

Dylan William & Siobhan Leahy



Teachers have to be professionals, deciding for themselves whether the research is applicable in this particular context with my particular students in the context of what I'm teaching them.

Dylan William & Siobhan Leahy



When learning something new, we are all visual learners.

Ruth Clark



When teaching how things work...still visuals [are] better than animations ...because animation overloads our brains.

Ruth Clark

Meta-Analyses, Books, Courses and Teachers

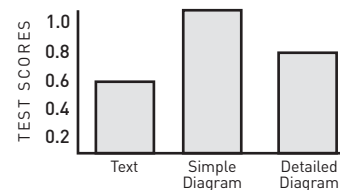
HOW2s draw heavily on the meta-analyses of Marzano and Hattie. Their origins can be traced directly back to these ranking lists of strategies. Additionally, the HOW2 creators were also informed both by the several thousand teachers they met while leading their courses around the UK and abroad, and by their school colleagues they worked alongside over several decades.

Visual Explanations

There is overwhelming evidence from the field of workforce learning of the superiority of visual communication over word-dense explanations, spoken or written. HOW2s were designed with these studies firmly in mind.

Visual Superiority Effect

Back in the 1970s Allan Paivio showed how images trumped words for ease, speed and clarity of message. Ever since, his findings have informed the best designs on learning.



Butcher, K. R. (2006)

Signal to Noise Ratio

When background details are removed from an image, the main message is more easily and accurately understood. For this reason, HOW2s only depict the essential components of a teaching technique. As a result, teachers easily scan and grasp the nature of the method in minutes.

Still Images v Video

Numerous clinical studies have shown that live or video modelling can easily overload the observer. Additionally, as Doug Lemov warns, without first *calling your shots* (explaining what you should focus on), much inaccurate learning takes place which becomes very hard to undo. Studying a HOW2 immediately before a video or classroom observation, however, ensures both teacher and observer focus on the important details.

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