5 IDEAS FOR BETTER TEACHING

Gareth Mills sifts through mountains of educational theories to highlight those that have been proven to make a positive difference to student outcomes...

In the words of the academic Dylan Wiliam, education is often driven by "fads and fashions." But with so much instantly accessible information at their disposal, how can educators discriminate between passing whims and reliable research?

The work of the New Zealand born academic Professor John Hattie is a good place to start. His book ***Visible Learning*** brings together over 15 years of evidence-based research into what actually works in schools, identifying over 100 influences on attainment with varying levels of impact.

Here are five of the most significant – from Hattie and other leading theorists:

1 The plasticity of the brain

Researchers like Professor Tracey Tokuhama-Espinosa and others distinguish between well-established findings and neuro-myths (ideas for which there is little or no evidence). And one of the most significant neuro-myths for educators – a theory that is well embedded in most schools – is learning styles (the belief that we are all, intrinsically, visual, auditory or kinesthetic learners). Because we all learn through all our senses, in different ways, at different times, labelling children as having one particular learning style can be limiting. Intelligence is not fixed and we can all improve our capacity to learn, say researchers. Teachers can make a big difference – presenting knowledge in different ways, allowing time for reflection or creating authentic opportunities to use new knowledge. All of this can create new neural pathways, which can help with long-term understanding and retrieval.

ABOUT THE AUTHOR

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2 Growth and fixed mindsets

Every teacher should also explore the work of the American academic Professor Carol Dweck, who demonstrates that 'fixed mindset' people tend to believe that people's ability is innate and static, while 'growth mindset' people understand that ability is the result of effort and application. Each of us tends to apply one of these two beliefs, to other people as much as to ourselves – something that has far-reaching consequences for our success. Teachers should value error as a springboard for further learning and not as an indicator of an inability to learn. They should also understand that that focusing on effort and deliberate practice (concentrating on a particular aspect of an activity or performance, with the aim of improving or mastering it), along with formative feedback can help every child become a successful learner.

3 Meta-cognition

The work of Hattie and organisations like the educational charity The Sutton Trust show that one of the most effective ways to help pupils learn is to get them to think, explicitly, about the process of learning. This approach, known as meta-cognition, can include student self-assessment and spacing practice (learning over a long period of time instead of 'cramming'). Above all, students need to understand the language of learning, for example what good research looks like or that perseverance is sometimes necessary to master a particular skill or task. And there is a strong body of evidence to suggest this can accelerate children's learning by as much as nine months.

4 Reciprocal learning

As most educators know, the best way to learn something is to teach it to someone else. Just as it is more challenging to make a film than is is to watch one, the process of carrying out research, synthesising ideas and communicating them with others can be a powerful way for young people to learn. Asking students to teach something to others encourages them to monitor their own understanding and ask questions, and evidence from researchers such as Palenscar and Brown show that this is an effective way for students to acquire and retain information.

5 Graphic organisers and concept mapping

Getting children to manipulate concepts graphically – through mind maps, storyboards and sequencing postcards, for example – can help them to achieve high levels of cognitive performance and make links between facts, processes and big ideas. The talk and decision-making involved in creating graphic organisers and concept maps requires children to think at a higher level and encourages them to see relationships between different types of information. This can be far more effective for long-term recall than simply learning facts.