Briefing: What is a 'growth mindset'?

One of the barriers to opportunities afforded by education is the mindset of our students. There's a considerable body of evidence supporting the view that implicit theories of intellect can undermine or improve student motivation in school. Whether a student directs their efforts trying not to look 'dumb' or actively engages with challenging work appears to affect the progress they make in school and their attainment in exams. However, these laboratory interventions may be difficult to apply effectively within a whole-school context and there are reasons why trying to enthusiastically promote a 'growth' mindset within schools may have little effect.

About the author:

Nick Rose *teaches psychology at Turnford School in Hertfordshire. This summary was adapted from an article on the Evidence into Practice blog. The full version of the post entitled 'Growth mindset: It's not magic' is available here:*

http://evidenceintopractice. wordpress.com/2014/06/01/ growth-mindset-its-not-magic/

Learned helplessness and attribution theory

Carol Dweck is synonymous with the terms growth and fixed mindset. She developed her ideas during the 1960s studying the phenomenon of 'learned helplessness' in animal motivation.

These animal studies found that when exposed to an aversive stimulus that the animal could not escape, the animal became increasingly passive – and stopped trying to avoid the stimulus even when opportunities for escape became available. No amount of threats, rewards or observed demonstrations appeared to encourage the animals to act independently once an animal adopted this 'helpless' behaviour.

In humans, learned helplessness appears much more variable. For some individuals the helplessness remains specific to one situation, but for others it generalises. A group of people can experience a similar negative event, yet how those individuals interpret the event affects whether they respond in a helpless way. This variance in human response appears related to the attributions (the attitudes and beliefs) held by the individual.

In essence, how people attribute the cause of their success or failure influences how much effort they apply in the future. If this cognitive evaluation leads to a positive affect (i.e. a positive emotional outcome) and there is a high expectation of future success, the person typically shows greater willingness to undertake such tasks in the future. Conversely, if the attribution leads to a negative affect and low expectation of success, the person tends to act in a more helpless manner when placed in a similar situation.

Dweck helped identify a key attributional variable that affects how students respond to the challenges and obstacles they face when learning in schools. Some students possessed an 'incremental theory' of intellect (what has become known as a 'growth mindset'), they frame the experience of school in terms of learning goals and see ability as something that can be increased with effort and time. Other students possessed an 'entity theory' of intellect (a 'fixed mindset') and frame school work in terms of performance goals; seeing ability as something that is static and inflexible. These implicit theories don't just affect children in school; similar effects have been found in range of other contexts, for instance athletics, dieting and leadership.

Using praise to manipulate mindset

Much of the literature on growth mindset has focused on the feedback that students receive from teachers. For example, avoiding personal praise and phrasing feedback in terms of the product, the effort involved or the process used instead.

However, there's a complex picture emerging around the use of praise. For instance, it appears that the effect of praise may vary by age and gender. For example, Henderlong Corpus and Lepper (2007) reported that product and process praise enhanced motivation and that person praise dampened motivation for upper-elementary age girls, but that praise had little effect on motivation for boys.

On the other hand, there's some evidence to suggest that process praise doesn't have a positive effect on motivation and that purely objective feedback may be as effective. Skipper and Douglas (2011) found that when students began to struggle they responded better to process praise rather than person praise. However, while students were succeeding they responded equally to person and process praise, and indeed no praise at all.

Given the evidence, it would seem the advice to avoid person praise is a sensible strategy. However, there is still a danger that controlling praise might be interpreted by some students as manipulation or that over-praising (for instance, overestimating the effort invested by a student) may communicate low expectations (Willingham, 2005).

Using interventions to manipulate mindset

Other methods for changing mindset have involved encouraging students to perceive the brain as 'like a muscle'. Given the success of experimental procedures to subtly manipulate mindset and produce apparently strong gains in attainment, there's considerable interest in developing a social-psychological intervention that could be used at the scale of an education system. However, whilst brief exercises to target students' attributions about a learning activity have had success, the problems of applying this to benefit large numbers of students across an education system are not trivial.

For example, Yeager and Walton (2011) whilst optimistic that mindset interventions could produce powerful, positive effects within education, warn that applying these laboratory interventions to a wider scale is not a quick-fix. Yeager, Walton and Cohen (2012) suggest that scaling these social-psychological interventions raises a range of practical and ethical issues that should not be ignored. Another difficulty in scaling up these experiments lies in the subtle nature of the interventions used. The delivery mechanisms tend to be stealthy and brief. They suggest that training teachers and parents to reinforce mindset messages or holding a large number of workshops over a year won't necessarily improve outcomes. Indeed, they warn that if adolescents perceive this intervention as suggesting that they are in need of help, such programmes may lack any benefit at all. The advice would appear to be that, although mindset interventions appear powerful in the laboratory, we should be aware of the ethical issues and the practical difficulties involved in scaling mindset manipulation techniques before launching versions of these psychological manipulations as whole-school initiatives.

References

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