Fostering a growth mindset

Is it as simple as it sounds?

by Annie Brookman-Byrne
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Professor Carol Dweck is well-known in the education field for her research on growth and fixed mindsets. While these sound like straightforward ideas, they can be misconstrued, and the evidence for nurturing a growth mindset is mixed.

Many of us have heard about the concept of growth versus fixed mindsets. The idea is that some learners have a ‘fixed mindset’, believing their abilities are static, while others have a ‘growth mindset’, believing their abilities can improve over time. Research has shown that learners with a growth mindset tend to seek challenges and persevere with them, showing resilience in response to failure.

On the other hand, learners with a fixed mindset see failures as exposing their innate weaknesses, and therefore struggle to persist when work is challenging. For example, a child who suggests that they are “just not a maths person” is demonstrating a fixed mindset, while another who continually tries to improve their maths ability can be said to have a growth mindset.

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Most importantly for education, some research indicates that those with a growth mindset outperform their peers who have a fixed mindset. These findings have led teachers and researchers to try to develop a growth mindset in students, in an attempt to improve academic attainment. However, Dweck explained in a recent interview that the mindset theory has many misconceptions, and has sometimes been distilled into something very different.

Growth mindsets are not about praising effort

The seemingly simple concept of a growth mindset has often led to the notion that teachers should praise hard work rather than results. While this in itself may be an approach worth considering, a student who receives praise for effort will not automatically change their beliefs in their own capabilities. If having a growth mindset really is an important factor in resilience and success, pure hard work without a corresponding belief in changing abilities may not cut it.

A further concern is that encouraging effort may lead some learners, particularly high performing students, to overwork. It is conceivable that such learners might feel that no result is good enough,
and that they should continue putting in more and more effort despite already attaining top grades.

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In 2013, researchers in the UK carried out a randomised control trial (RCT) to see if weekly mindset workshops for children could improve performance in English and maths. This was a particularly important study because the evaluation was carried out by an independent team, rather than the researchers themselves. The study saw a small improvement in English and maths, equivalent to two months progress compared to the control group, but it is important to note that this improvement was not statistically significant.

Nonetheless, the funders found this to be a promising result, and are supporting another RCT that is currently underway. This time, the sessions will be delivered by teachers, rather than individuals from outside the school. The results of this study are due in autumn 2018, so we'll have to wait and see what they find. Until then, we should be careful when talking about the potential benefits of this approach.

Dweck explains in her interview that she initially thought the concept of mindsets was straightforward. She now argues that far from being simple, implementing practices to develop a growth mindset is difficult. Given the misconceptions around the concept, it is unclear whether the studies and trials are really leading to a growth mindset, or even adopting an approach that Dweck would consider valid.

Short-term interventions are unlikely to produce the intended results

Many people see growth mindset as believing that anyone can do anything with enough effort. But we should not forget that learners are all different and will have different strengths and weaknesses. Having a growth mindset does not mean that any weakness can be overcome.

The finding that learners with a growth mindset can outperform those with a fixed mindset does not mean that trying to give everyone a growth mindset will lead to wholesale improvements in performance. Perhaps some learners have a fixed mindset because they find work so challenging. It is also worth noting the further complexity that a student might have a growth mindset when it comes to English for example, but a fixed mindset in science.

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To take an evidence-based approach, the best thing to do is to continue trials on growth mindsets, making sure not to fall into the trap of thinking it’s a simple process, and see if they work! This will require looking in depth at what is thought to constitute a growth mindset, and considering how best to encourage this in students. Dweck believes that short-term interventions like a lecture or
poster are not enough, and that the approach needs to be embedded within the teacher’s practices.

The new teacher-led trial will provide some indication of whether this is a practical concept to roll out to schools. Given the unclear results from the first trial, the findings will be very important in revealing any benefits (or indeed negative effects) of adopting a growth mindset. For now though, it’s safe to say that fostering a growth mindset is certainly not simple.

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- Bringing scientific evidence to the classroom
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- Identifying what works in education
- Brain training for children
- Fostering a growth mindset (current post)
- Electrical brain stimulation to enhance learning

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