

## Review of Mindset

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### ABSTRACT

Educators can benefit from occasionally stepping outside our profession to look for new ideas. *Mindset: Changing the Way You Think to Fulfil Your Potential* is a book that was written by a well-regarded psychology professor and has sold more than a million copies. The book's central premise is that people tend toward one of two mindsets: a fixed mindset, which sees ability as inborn and largely unmodifiable; and a growth mindset, which sees ability as something people can develop by making persistent effort and learning new strategies. The present book review begins with explaining the two mindsets. Then, questions about mindset are answered. Next, in the review's longest portions, suggestions from the book which might be useful for teachers are shared. These suggestions may help students become more successful learners, not to mention better people overall. Finally, the reviewer recommends that when the author and her colleagues do further work on mindsets, they might wish to examine mindsets through a more collective, sociological perspective than from an individual, psychological view.

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## INTRODUCTION

It is so much fun to teach when I have a class full of motivated students, students motivated by a love of learning, not by the greed for grades, students willing to take risks, not trying to avoid mistakes. Teaching such motivated students is so much fun that I am almost willing to teach for free. (Please don't show this book review to my boss.) The quest for such intrinsically motivated students leads us teachers on a quest for ideas about how to transform an average class into a fun-to-teach class. That quest led me to the book *Mindset* by Carol Dweck, and this review is written to share some of what I learned from the book with you, so that you can decide whether some of Dweck's ideas might add fun to your own teaching.

### Growth Mindset and Fixed Mindset

Dweck is a good storyteller, and she starts the book with a story from her early days as a psychology researcher investigating how children about 10 years old react to failure. For a research project, Dweck gave the children puzzles to solve, and as the puzzles become too difficult to be easily solved, what Dweck saw, as exemplified by the reaction of two kids, surprised and delighted her (p. 3):

“{one] rubbed his hands together, smacked his lips, and cried out, ‘I love a challenge’. Another, ... looked up with a pleased expression and said with authority, ‘You know, I was hoping this would be informative!’”

These two kids stood out because of their mindset; they had what Dweck has come to call a growth mindset which contrasts with a fixed mindset. As with most other traits, mindset is not either/or but a continuum. Table 1 (adopted from p. 263) summarises some of the differences between the growth and the fixed mindsets.

Table 1  
*The Growth Mindset and the Fixed Mindset*

	<b>Growth Mindset</b>	<b>Fixed Mindset</b>
<b>Life Encounters</b>		
<b>Challenges</b>	Embrace challenges.	Avoid challenges. Not interested in learning from failure.
<b>Obstacles</b>	Persist in the face of obstacles. Enjoy articles. Relish hard work.	Get defensive or give up easily. Want things easy. Easy is fun; hard is misery.
<b>Effort</b>	See effort as the path to mastery: “It’s a lot more difficult for me than I thought it would be, but it’s what I want to do, so that only makes me more determined” (p. 23)	See effort as fruitless or as a sign of lack of talent.

<b>Criticism</b> (p. 29)	Learn from criticism. Criticism is energising.	Ignore useful negative criticism or question the expertise or motivation of the criticiser. Feel that criticism is deflating.
<b>Success of Others</b>	Find lessons and inspiration in the success of others.	Feel threatened by the success of others; question the genuineness of their success.
<b>Definition of Failure</b> (p. 33)	An action, e.g., “I failed at x this time.”	An identity, e.g., “I am a failure” or “I am a failure at x.”
<b>Success for Themselves</b> (p. 24)	“When it’s really hard, and I try really hard, and I can do something I couldn’t before.” “[When] I work on something a long time and I start to figure it out.”	“It’s when I don’t make any mistakes.” “When I finish something fast and it’s perfect.” “When something is easy for me, but other people can’t do it.”
<b>Ability</b> (pp. 24-25)	Ability is something we develop. “I can’t do that <i>yet</i> ” (italics in original.) Dweck (2014) talks about the power of YET in a TED Talk video.	Ability appears independent of learning; it is innate. “If you have it, you have it, and if you don’t, you don’t.”

The book is full of elaborations of the ideas in Table 1, including examples from parenting, teaching, and coaching, and ideas for how to encourage a growth mindset in ourselves, about ourselves and our students. Also, the book contains many stories, both anecdotes and research reports. The anecdotes come from famous and not famous people engaged in parenting, teaching, sports (including Michael Jordan and his powerful growth mindset), the arts, and business.

One sports story that brilliantly illustrates a growth mindset comes from a not-famous player of American football, Jim Marshall (pp. 33-34). In American football, teams score points by taking the ball into the other team’s goal area. During the first half of one game, Marshall, who played a position that seldom or never touches the ball, accidentally gained possession of the ball, ran with it, and scored six points, but for the other team, as he had run the wrong way. What a mistake! Fortunately, Marshall had a growth mindset; he used the incident to push himself to play harder and smarter, and his team went on to win the game. Furthermore, Marshall became a hero to those who had also made major blunders and used those blunders as growth opportunities.

#### Questions about Mindset

Here are Dweck’s answers to questions about mindset.

1. Can mindsets be changed?

Yes, and Dweck recommends that teachers help students move toward a growth mindset.

2. Can and should everything about a person be changed (p. 50)?

No. Growth mindset focuses on abilities, not on preferences and values. Also, we all have our flaws. If those flaws are not seriously harming ourselves or others, maybe they can be left alone, while we direct our efforts at more impactful changes.

3. If effort and mindset are so important, does that mean that anyone can do anything, and if they fail, does that mean they did not try hard enough or they had a fixed mindset?

No, not everyone can do everything, although often we can improve. No, people can try hard but still fail, although failure is less likely when we try hard. Other factors, in addition to effort and mindset, affect outcomes. Support constitutes a very important factor. Students need what educators call scaffolding (Wood, Bruner, & Ross, 1976), i.e., people and materials that support their learning. Aptitude also plays a role, but Dweck definitely falls on the side of nurture in the nature/nurture debate.

### **Applications of Mindset**

#### **Ability grouping**

In Singapore, it is not unusual to hear teachers use the terms Ha, Ma, and La when talking about students. No, this is not a new form of Do, Re, Mi for teaching music. Ha, Ma, La means High Ability, Middle Ability, and Low Ability. Yes, language students may be at different levels of proficiency in the target language, but proficiency can change. Using the word ‘ability,’ forces a fixed mindset perspective onto the discussion. A sad example is the famous Pygmalion study (Rosenthal & Jacobson, 1968). To briefly describe the study, researchers lied to teachers, telling them that one of the two cohorts of their students were intellectual bloomers, while members of the other cohort were unlikely to do well. In reality, prior testing had shown the two cohorts to be even in terms of past achievement. Apparently, the teachers in the study had a fixed mindset, and, as a result, they had higher expectations for the bloomers and treated the bloomers better. In the end, these differential expectations and treatment became a self-fulfilling prophecy. In another study, teachers “preached and practiced” (p. 66) a growth mindset, and by the end of the year, even the “low-ability” students ended up with high results.

#### **Advice for Teachers**

Dweck’s advice for teachers includes:

1. Praise the effort, not the person, e.g., a school counsellor dealing with school violence praised a student’s effort, “I notice that you have been staying out of fights. That tells me you are working on getting along with people” (p. 173).

2. Avoid praising a person and their traits, rather than their behaviour. “Yes, children love praise. And they especially love to be praised for their intelligence and talent. It really does give them a boost, a special glow—but only for the moment. The minute they hit a snag, their confidence goes out the window and their motivation hits rock bottom. If success means they’re smart, then failure means they’re dumb. That’s the fixed mindset” (p. 178). In other words, performance is not a reflection of character.
3. Empower students to monitor their own progress, e.g., via portfolios and, more generally, via ipsative assessment. Via ipsative assessment, in which students are compared against their past achievement, students can become more self-reliant and autonomous (Cohen, Manion, & Morrison, 1998).
4. Teach students to thirst for “challenges, be intrigued by mistakes, enjoy effort, seek new strategies, and keep on learning” (p. 180).
5. Focus on the process, as in the Process Approach to Writing (Raimes, 1972). Examples of what teachers can say to highlight process include (pp. 180-181):
  - a. “You really studied for your test and your improvement shows it. You read the material over several times, you outlined it, and you tested yourself.”
  - b. “I’m really excited about how you’re stretching yourself now and working to learn hard things”.
  - c. “That homework was so long and involved. I really admire the way you concentrated and finished it.”
  - d. “Tell me about them” [about how the process the student used to produce a good piece of work].
  - e. “I liked the effort you put in, but let’s work together some more and figure out what it is you don’t understand.”
  - f. “Everyone learns in a different way. Let’s keep trying to find the way that works for you.” This obviously echoes Multiple Intelligences Theory (Gardner, 1993).
  - g. One more way to promote growth mindset that I learned elsewhere is, when students do not do well, to praise student effort and blame myself, the teaching materials, etc., and ask the students to give us another chance.
6. Treat speed and perfection as harmful to learn. If students finish something quickly and do it perfectly, say “Whoops, I guess that was too easy. I apologize for wasting your time. Let’s do something you can really learn from” (p. 182).
7. Provide frequent, straightforward, constructive feedback as in formative assessment (Burner, 2016). Students should not be “protected” (p. 185) from

constructive feedback. They need to learn to seek it, not to see it as a punishment or an insult to their intelligence.

8. Express disappointment in growth mindset terms (p. 186).
  - a. “[I]t really makes me upset you didn’t do a full job. When do you think you can complete this?”
  - b. “[I]s there something you didn’t understand in the assignment? Would you like me to go over it with you?”
  - c. “I feel like you’re missing a chance to learn. Can you think of a way to do this that would help you learn more?” I especially like this as a way to promote self-directed learning and learner autonomy (Watkins, 2015).
  - d. “[T]his looks like a really boring assignment. You have my sympathy. Can you think of a way to make it more interesting?”
9. Consider your roles from the students’ perspectives. Do they see your roles as those of judge, punisher, and rewarder, or those of facilitator, fellow learner, motivator, and mentor? Say to students, “I’m going to teach you,” not “I’m going to judge your talent” (p. 200).
10. Let students make choices. My father, who was a social worker with a master’s degree, told me that he was fine with whatever career choice I made, as long I gave that career my best. When I was in secondary school, he used to tell me, “I’m happy if you decide to be a garbage collector; just be the best garbage collector you can be.” Dweck (p. 194) quoted Tiger Wood’s father voicing a similar sentiment, “If Tiger had wanted to be a plumber, I wouldn’t have minded, as long as he was a hell of a plumber. The goal was for him to be a good person.”
11. Appreciate small steps, i.e., approximations, similar to Vygotsky’s (1978) Zone of Proximal Development. In contrast, the fixed mindset believes either you have it or you do not have it, i.e., all or nothing. Students told Dweck that a fixed mindset led to procrastination, caused excessive stress, made them stop trying, and disrupted their thinking. Dweck (p. 210) quoted a famous basketball coach, “You have to apply yourself each day to becoming a little better. By applying yourself to the task of becoming a little better each and every day over a period of time, you will become a *lot* better.”
12. Show excitement about new ideas, whether from students, the news, or your own thinking, i.e., enact what Author, Renandya, and Power (2016) call teachers as co-learners. Part of that teacher learning is learning more about the content you are teaching, e.g., rules for forming irregular noun plurals, and another part is learning about teaching, e.g., Dweck (p. 199) described a famous teacher, “The challenge was to figure out how to make [learning] happen.”

13. Try not to blame students. “It’s too easy for a teacher to say, ‘Oh this child wasn’t born with it, so I won’t waste my time.’ Too many teachers hide their own lack of ability behind that statement.”
14. Have high expectations, but help students meet those expectations.
15. Guide students to become not just better learners but also better people. Dweck (p. 211) described a famous coach, “He was able to help players fulfil their potential, not just in basketball, but in life--something he found even more rewarding than winning games.”
16. Go for understanding and deep learning, not memorization and temporary learning.
17. Bear in mind that changing mindsets and habits takes time and is often a case of two steps forward, one step back. Dweck recounted that even she sometimes makes statements that reflect a fixed mindset.

## CONCLUSION

Reading books such as *Mindset* offers a way for educators to do what Covey (1990) said in his famous *Seven Habits of Highly Effective People* (a book which the Singapore Ministry of Education recommended to all its teachers). One of those habits is to “sharpen the saw,” i.e., to learn new ideas. Here is a one-sentence summary of new ideas I hope to take away from reading *Mindset*: I should highlight to myself, my family members, my colleagues, and my students the importance of making sustained effort, of learning new information and strategies, of being intrinsically motivated, and of enjoying learning.

One wish I have for a new edition of the book is to have more emphasis on community and on social neuroscience (Cozolino, 2013), i.e., learning with and for others. Too much of the book treats everyone as an individual, rather than as a member of various groups. A more social view of learning can be found in the literature on cooperative learning, a.k.a., collaborative learning, which talks about positive interdependence (Johnson & Johnson, n.d.), i.e., a feeling among people in which they believe that what helps one member of a group helps the others, and what hurts one member hurts the others. Positive interdependence encourages students to grow not just for themselves but also for others.

Of course, many other differences, not only the growth-fixed mindset difference, play important roles in education. Indeed, the concept of paradigm (Author & Farrell, 2003) is roughly equivalent to mindset and has been popular in the SLA (Second Language Acquisition) literature for many years. One example of contrasting paradigms/mindsets are the Student Centred Learning (SCL) paradigm and the Teacher Centred Learning (TCL) paradigm. Certainly, the SCL paradigm



better fits the growth mindset, while TCL paradigm seems more congenial with the fixed mindset.

In conclusion, the introduction to this review talked about the joy experienced by everyone in classrooms resplendent with motivated students. By sharing about the book *Mindset*, I hope to have given you ideas and inspiration for increasing your students' motivation, as well as your own. Just imagine what we can collectively achieve when students and teachers grow together.

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