

THE AASL STANDARDS ACCORDING TO...

Who Will the 21st-Century Learners Be?

Carol Dweck

dweck@stanford.edu

In a wonderful document *Standards for the 21st-Century Learner*, AASL describes the skills, dispositions, responsibilities, and self-assessment strategies that are necessary for a 21st-century learner. For each of these qualities, the standards pose a question. For skills, they ask: "Does the student have the right proficiencies to explore a topic or subject further?" For dispositions, they ask: "Is the student disposed to higher-level thinking and actively engaged in critical thinking to gain and share

knowledge?" For responsibilities, they ask: "Is the student aware that ...21st-century learning require[s] self-accountability that extends beyond skills and dispositions?" And for self-assessment strategies they ask: "Can the student recognize strengths and weaknesses over time and become a stronger, more independent learner?" (AASL 2007, 8).

For many of our students, the answers will be "no." Not because they don't have the capacity to attain these proficiencies, but because they have a fixed mindset. Students who have this mindset believe that their intelligence is simply fixed—they have a certain amount,

Carol Dweck is the Lewis and Virginia Eaton Professor of Psychology at Stanford University (CA) and the author of *Mindset: The New Psychology of Success* (Random House 2006). She is also the recipient of the 2010 Klingenstein Leadership Award for leadership in education.



and that's that. My research has shown that when students have a fixed mindset, they value looking smart over learning. They do not care to explore topics in depth; they are not disposed to engage in critical thinking to gain and share knowledge; and they are low on self-accountability and self-assessment strategies. In fact, rather than trying to recognize their weaknesses, they run from them, conceal them, and even lie about them. As wonderful as AASL's 21st-century goals sound, they will fall on deaf ears because these students are more interested in whether they look smart or dumb than they are in acquiring the knowledge they need to succeed in the future.

What can we do about this? My research shows that students with a *growth mindset*—those who believe that their intelligence can be developed—are eager learners and seek to cultivate the very things the AASL so passionately recommends! What's more, librarians can help them develop a growth mindset.

In our research we find that students with a growth mindset seek out learning, develop deeper learning strategies, and strive for an honest assessment of their weaknesses so that they can work to remedy them. In study after study we have seen their engagement, critical thinking, persistence, and knowledge-sharing in action. And because of this, we have seen them outperform their peers with fixed mindsets over and over (Dweck 2006).

How is a growth mindset cultivated? First, it is fostered by praising students for their learning process and *not* for their intelligence. Our work has shown that praising students' intelligence puts them into a fixed mindset with all of its vulnerabilities. First, it makes them so eager to look smart and

uphold their image that they will reject a chance to learn if they might make mistakes. Next, it leaves them vulnerable to plummeting confidence, motivation, and performance when the material becomes difficult. They have learned that success means they're smart, and they conclude that difficulty means they are not.

However, when students are praised for the process they engage in—their effort, strategy, concentration, or persistence—this promotes a growth mindset with its emphasis on learning and its resilience. When things get difficult, they engage more fully, analyze the problems more deeply, persist, and improve.

The growth mindset can also be directly taught to students, and, when it is, students show increased motivation in school, better grades, and higher achievement test scores. Students are taught the growth mindset in workshops that teach them about the brain and that teach them how the brain forms new connections every time they stretch themselves and learn new things. Recently, we have even developed

an interactive computer-based workshop, called *Brainology* <www.brainology.us> that teaches students how to make their brains work better and how to form new connections in their brains to get smarter. Students find this image of their brains forming new connections to be extremely empowering and report that they engage more often and more fully in difficult learning to maximize the growth of their connections.

The twenty-first century will belong to the passionate and resilient learners. Let us foster the growth mindset in our students so that they can be among them.

Works Cited:

American Association of School Librarians. 2007. "Standards for the 21st-Century Learner." <<http://www.ala.org/aasl/standards>> (accessed September 18, 2009).

Dweck, Carol S. 2006. *Mindset: The New Psychology of Success*. New York: Random House.

