

ESSAY | July 13, 2012, 5:50 p.m. ET

Flummoxed by Failure—or Focused?

It's not about being smart. The key to getting past unsuccessful moments is a flexible view of learning

By KEN BAIN

Many people think of intelligence as static: you are born with lots of brains, very few, or somewhere in between, and that quantum of intelligence largely determines how well you do in school and in life.



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2.5 Where do helpless students get the notion that intelligence is fixed? In part from our culture, which bombards them with the idea that IQ tests measure how bright they are.

2 The astrophysicist Neil deGrasse Tyson has never liked this view. "I hardly ever use the word intelligence," says Mr. Tyson, who directs the Hayden Planetarium in New York. "I think of people as either wanting to learn, ambivalent about learning or rejecting learning." He speaks from experience: As a young man, he was booted from one doctoral program but managed to get into another and complete his Ph.D.

3 Over the past 25 years, social scientists have produced some key insights into how successful people overcome their unsuccessful moments—and they have found that attitudes toward learning play a large role from a young age.

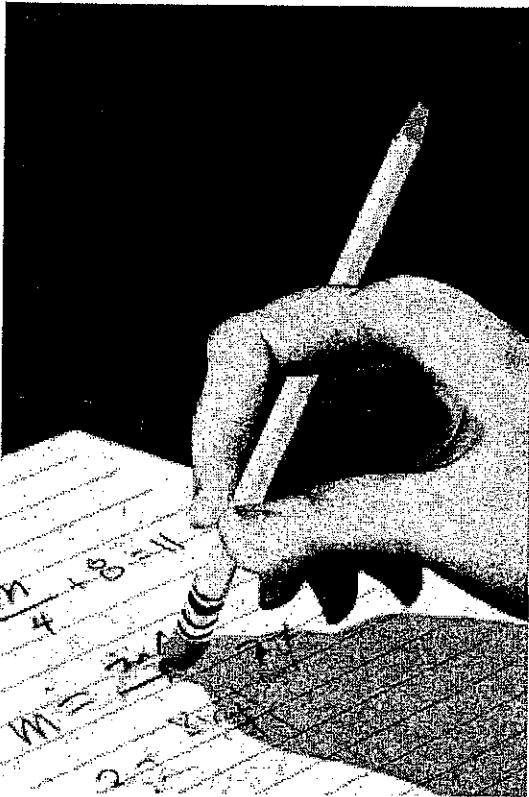
4 In a 1978 study, the Stanford psychologist Carol Dweck and a colleague gave a series of puzzles to children, all of them about 10 years old. The first eight problems required some careful thought, but none was too demanding. The next four, however, were far too hard for anyone that age to solve in the allotted time. On the first eight, all of the youngsters solved the exercises and appeared to enjoy them. But everything changed with the impossible second set.

5 Reactions differed enormously. One group of students said things like, "I can't solve these problems. I'm not smart enough." They wilted in the face of failure. Children in the other group took a different approach: They kept telling themselves that they could solve the difficult problems with more effort.

6 Dr. Dweck and other psychologists have assigned labels to these two types of students. Students of the first sort are called "helpless" because they develop the idea that they just can't do something. If they continue to believe that they are generally smart, they still often become helpless because they are afraid to try anything new for fear that failure will undermine their self-image as "one of the bright ones."

7 Kids of the second sort, however, are said to have a mind-set of "mastery" or "growth." They believe that they can expand their abilities if they try. If they don't succeed, they look for new strategies rather than giving up.

8 Are these students just smarter than their "helpless" peers? Not according to Dr. Dweck. She has found that children in the two groups have roughly the same natural abilities. In fact, sometimes the "helpless" ones demonstrate greater native powers.



Brian Stauffer

Social scientists have found that attitudes toward learning play a large role from a young age.

9 Where do helpless students get the notion that intelligence is fixed? In part from our culture, which bombards them with the idea that IQ tests measure how bright they are. Even well-meaning parents and teachers can foster this view. Melissa Kamins, who worked with Dr. Dweck, discovered that children who primarily receive personal praise ("how smart you are") rather than kudos for their efforts are more likely to develop fixed views of intelligence.

10 A growth mind-set can be learned. In a 2007 study by psychologists from Columbia and Stanford, nearly 100 seventh graders (most of them struggling in math) participated in an eight-week workshop on studying. The subjects were secretly divided into two large groups. Both groups received instruction on how to use their study time most effectively and how to organize and remember new material.

11 But then came the difference: One of the groups read aloud an article titled "You Can Grow Your Intelligence." It explained research on how nerve cells in the brain make stronger

connections after we learn something new. Students in the other group spent that time reading an article about how memory works and learning new strategies for recalling material.

12 Most of the students went into the sessions generally believing that intelligence was fixed for life, but the group that read about the brain's growth emerged from the experience with much stronger notions about improving intelligence with effort. That group generally showed greater motivation to do well in math class in the weeks and months after the experience.

13 As the researchers noted, someone's theory about intelligence may not make much difference when times are easy. But when failures accumulate, those who believe that they can improve their basic abilities are far more likely to weather the storm.

—Adapted from Dr. Bain's new book, "What The Best College Students Do" (Harvard University Press).