# STUDENT SELF-THEORIES AND APPROACHES TO LEARNING

## Entity and Incremental Theory

Carol Dweck of Columbia University has distinguished between two theories that people hold about their own intelligence: entity theory and incremental theory.

"Some people believe that their intelligence is a fixed trait. They have a certain amount of it and that's that. We call this an 'entity theory' of intelligence because intelligence is portrayed as an entity that dwells within us and that we can't change" (p. 2).

"Other people have a very different definition of intelligence. For them intelligence is not a fixed trait that they simply possess, but something they can cultivate through learning. We call this an 'incremental theory' of intelligence because intelligence is portrayed as something that can be increased through one's efforts" (p. 3).

"What makes students with an entity theory feel smart? Easy, low-effort successes, and outperforming other students. Effort, difficulty, setbacks, or higher-performing peers call their intelligence into question—even for those who have high confidence in their intelligence" (p. 3).

Incremental theory, too, "has many repercussions for students. It makes them want to learn. After all, if your intelligence can be increased why not do that? Why waste time worrying about looking smart or dumb, when you could be becoming smarter? And in fact students with this view will readily sacrifice opportunities to look smart in favor of opportunities to learn something new" (p. 3).

## Can We Influence Students' Self-Theories: A Study

Students were given a reading comprehension test. As a basis for the test, they were given an article to read. But they were not all given the same article. Half (selected at random) were given one article, half another. Randall Bergen (a graduate student at the time) had written two "*Psychology Today* type articles." One article argued for entity theory, the other for incremental theory. Both used credible evidence and vivid examples. "Half of them read a vivid and convincing version that espoused the entity theory and the other half read the vivid and convincing version that espoused the incremental theory" (p. 25). After reading the articles and answering a few questions about them, the students went on to the nonverbal ability test. (This was not directly related to the articles they had read.) Students were then given feedback reporting whether they had done well or poorly on the nonverbal test. "However, before moving to the next set of problems, students were offered a tutorial 'that was found to be effective in improving performance on the test for most people.'" Who chose to do the tutorial?

Students who were informed they did well on the test:

> Of those who read the incremental theory article, 73.3% chose to take the tutorial.
> Of those who read the entity theory article, 60.0% chose to take the tutorial.

Students who were informed they did poorly on the test:

> Of those who read the incremental theory article, 73.3% chose to take the tutorial.
> Of those who read the entity theory article, 13.3% chose to take the tutorial.

**Conclusions**

"Interestingly, most of the students who had done fairly well elected to take the tutorial. . . . This means that when entity theorists have done fairly well and aren't afraid that they will expose an alarming degree of ignorance, they are willing to take remedial steps

"Among those who had done poorly, a different story emerged. The students who were exposed to the incremental theory still wanted the tutorial. . . . However, those who were exposed to the entity theory rejected the opportunity to improve their skills. . . . Once again, when students have a fixed view of intelligence, those who most need remedial work are the ones who most clearly avoid it.

"In short, we have shown that it is possible to influence students' theories about their intelligence, and that when we do so we influence their goals and concerns. Those who are led to believe their intelligence is fixed begin to have overriding concerns about looking smart and begin to sacrifice learning opportunities when there is a threat of exposing their deficiencies. Those who are led to believe their intelligence is a malleable quality begin to take on challenging learning tasks and begin to take advantage of the skill-improvement opportunities that come their way" (pp. 25-26)

Source: Carol S. Dweck. 2000. *Self-theories: Their Role in Motivation, Personality, and Development.* Philadelphia, PA: Psychology Press.