Standardized tests versus creativity

Martin Rowe - December 01, 2014

We've heard it time and time again: the world needs more young people to study engineering. Some people claim that it's the "geek" reputation attached to engineers that drives them away. Others say it's the "look to your left, look to your right" attitude at some engineering schools. Others blame the high schools for not doing enough to encourage students to study engineering or science. We also hear that engineering students should exercise problem solving rather than studying facts. Why do students study facts? Could part of the problem come from standardized tests?

In Massachusetts where I live, public school students must take MCAS tests starting in third grade. Students must pass MCAS in the tenth grade or later to be eligible to graduate. Many other states and countries also administer standardized tests, used to assess teachers and students.

A recent *Boston Globe* article cites one of the problems with standardized tests. School systems try to fill their students with the facts they need to pass.

The article opens:

*A high school English teacher in Boston likens those behind the testing craze sweeping Massachusetts to the approach of Thomas Gradgrind, the headmaster in the Charles Dickens novel "Hard Times." Gradgrind sternly told faculty to plant nothing but facts in their students' minds, "and root out everything else."

If teachers spend their time filling students with the facts needed for the tests, how well are they preparing students to function once they graduate? Can they teach students to think and to find out what they need to know to solve a problem if the focus is on standardized tests? Teaching to the test can take time away from teaching students to think and to be creative.

As a general rule—at least here in Mass.—teachers in underperforming school districts are more likely to "teach to the test" in an effort to show how well they're doing. But, some high-performing schools may also teach to the MCAS tests just to make the principal look good. Where do you draw the line between the need for testing as a measure of success and testing too much? Does emphasis on testing diminish our ability to think once we're out of school?

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