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Seven skills students desperately need
Today's students could fail at life, says Harvard's Tony Wagner, because their schools are too busy teaching to the test
By Meris Stansbury, Assistant Editor

Teaching to the test is a mistake, Harvard's Tony Wagner reminded the audience of his Nov. 18 keynote address to the State Educational Technology Directors Association (SETDA), because it interferes with transmitting the seven "survival skills" every student should acquire before graduating.

Wagner's remarks came during a forum organized in Washington, D.C., as one way to advance the 10-point "Action Plan" SETDA had issued the day before.

As the Obama administration prepares to take over in the nation's capital, SETDA and similar groups are offering advice on how federal policy makers and state and local education leaders can transform education and help students obtain 21st-century skills with the help of technology.

"With this summit and with the release of our Action Plan, we hope to figure out how to make the steps of crucial change more scalable," said SETDA Executive Director Mary Ann Wolf.

Wagner, co-director of the Change Leadership Group at Harvard University's Graduate School of Education, said economic change will come as soon as classroom and national practices involving instruction change as well.

"A lot of people think the skills that students need to learn for the workforce and the skills they need to learn to be a good citizen are two separate sets. But they're not. What makes a student successful in the global workforce will make a person successful at life," he said.

Wagner said he hears two things repeated constantly by today's employers: "We need people who can ask good questions, and we need people who can engage others in thoughtful conversations."

"When I asked them whether or not they needed students to know the latest version of software, they said no," he added. "They told me that technology moves so fast that it's hard to keep up with. [From] the time students graduate to when they get the job, it's usually changed anyway. . . . [Employers] . . .don't mind training employees in technology--but you can't teach someone how to think."

Wagner, who consults for public and independent schools, districts, and foundations across the country and internationally, said his visits to some school districts have highlighted why state standards need to change--and why teaching to the test is not the way to achieve success.

"I went to visit many science labs in these districts," said Wagner. "Some of them were great, achieved great test scores, and most of their students went on to postsecondary education. But some weren't so great, and here's why: I was watching a group of high school students in a science lab. One group had a problem, and the Bunsen burner was smoking. But they weren't doing anything about it--just waiting for the teacher to come by and fix it. But the teacher wasn't looking, so I went over, and I asked: 'What's going on?' One of the kids said, 'Don't know, not working.' So I looked at them and I said, 'Well, what's your hypothesis?' They all stared blankly. Finally one said, 'Oh yeah, a hypothesis, that was one of our vocabulary words the other day, but I don't know what it means.'"

Wagner said the problem is that you can have all the equipment and technology you want, but "if you don't teach kids how to think, how to think beyond multiple choice, you've got a problem."

He told another story illustrating this same problem:

"I went to a school once that had a lot of AP courses. I went into one AP course on government. Here was this teacher asking kids questions, and of course, there's the one kid who keeps raising his hand, but the rest of the class was dead. The teacher asks the questions, the one kid raises his hand to answer, the teacher calls on him, the teacher moves on to the next question. This gets repeated over and over again. Finally the teacher asks a question the one kid doesn't know: 'What's the Iron Triangle?' No one raises [a] hand. The poor teacher, flustered that he has to cover so much in so little time, says hurriedly, 'OK, here's how you answer this one' and writes the answer on the board."

Wagner continued: "The problem is that teachers are teaching to tests--telling kids answers that they don't think [of] for themselves--and that's why students may pass high school but can't cut it in college or in the workforce."

Wagner suggested that states and schools move from content standards to performance standards, and he urged education stakeholders to think of ways to start assessing 21st-century skills.

"I realize education is a very risk-averse sector," said Wagner, "but assessments either drive instruction for the better or for the worse, and right now in the U.S., it's for the worse. If our assessments measured performance and 21st-century skills, like the European PISA assessment, that would be another story."

Wagner said teaching to the test not only limits students' ability to think for themselves, but also discourages students from studying subjects they love.

"Once I was talking to this student from MIT," he said. "Very successful and had gone to an AP magnet school. 'I used to love science and STEM subjects,' he told me, 'but all the testing turned me off. Now I'm going to become a teacher to try and change that way of teaching.'"

According to Wagner, students of this generation are not unmotivated; they're just differently motivated.

"They're multi-taskers, they are drawn to graphics, they like instant gratification, they use Web 2.0 tools to create, and they love collaboration," he said. "If we can figure out how to grab their interest in learning, they'll become great thinkers and be eager to learn the basics."

Wagner presented a list of seven "survival skills" that students need to succeed in today's information-age world, taken from his book *The Global Achievement Gap: Why Even Our Best Schools Don't Teach the New Survival Skills Our Children Need--And What We Can do About It.* It's a school's job to make sure students have these skills before graduating, he said:

1. Problem-solving and critical thinking;
2. Collaboration across networks and leading by influence;
3. Agility and adaptability;
4. Initiative and entrepreneurship;
5. Effective written and oral communication;
6. Accessing and analyzing information; and
7. Curiosity and imagination.

"We are making [Adequate Yearly Progress] at the expense of failing our kids at life. Something has to change," he concluded.

Links:

Tony Wagner's web site

SETDA

Note to readers:

Don't forget to visit the " **Creating the 21 st Century Classroom** *"resource center. Preparing today's youth to succeed in the digital economy requires a new kind of teaching and learning. Skills such as global literacy, computer literacy, problem solving, critical thinking, creativity, and innovation have become critical in today's increasingly interconnected workforce and society--and technology is the catalyst for bringing these changes into the classroom. Go to Creating-the-21st-century-classroom*

Students: Go online and read: http://www.schoolchange.org/articles/rigor_redefined.html