

## Teach the Future, Foster Innovation

By Deanna Kuhn

The Common Core State Standards, along with the recently released Next Generation Science Standards, have educators mobilized, even if uneasy. Many are hopeful these rigorous new standards will fix whatever is wrong with American education and boost U.S. standing in international comparisons. Why shouldn't U.S. students be scoring at the top on these tests, along with Singapore and Finland?

I've just returned from a meeting in Singapore, whose education leaders meet frequently to take stock and look ahead, and I was interested in what might be on their minds. Are they resting on their laurels, content that their national investment in education has paid off—perhaps even hesitant to make any changes to what appears to be working so well?

To the contrary, I found them uninterested in the status quo, eager to invest in new approaches, and concerned to identify objectives that are not being met. A current major concern, and the focus of the meeting I attended, is developing curricula that will foster innovative thinking in students, an attribute the country's leaders see as critical to 21st-century success, and one, by the way, that international assessments have yet to tap.

Singapore's leaders are not at all confident that the international assessments they participate in are measuring what's most important for students to learn. What curricula have we instituted in the United States, I was asked, to develop creativity and innovative thinking in American students?

I had to respond that this is not a current priority in U.S. classrooms. A number of well-regarded educational thinkers and writers, I explained, embrace these objectives, arguing for the importance of developing students who are flexible, generative thinkers ready to address the yet-unknown issues that will confront their generation. But these writers are not the individuals in positions to mandate curricula on any broad scale in the nation's schools.

Those who do have a say in what is taught and how in U.S. schoolrooms—from district superintendents to classroom teachers—are preoccupied with other concerns at the moment. The new, now widely adopted common standards are just that—standards stipulating what students are to have mastered at each grade level.

How teachers are to teach the material and ensure their students meet the standards is left to local discretion, with guidance for individual teachers scarce, at best. Unsurprisingly, anxieties about measuring up to new expectations are running high.

With their plates full, U.S. teachers are unlikely to find time to nurture attributes such as creativity, or other qualities that we don't yet know how to measure well or that don't enter into student- or teacher-performance evaluations. So, while high-level talk continues about the need to equip students with "21st-century skills," attention on the ground is focused on improving students' performance on more-rigorous standardized assessments that will bolster their international rankings.

The problem is that these international assessments represent the past and present, not the future. It's countries like Singapore that are hard at work looking at what could be, not what is, with respect to educating their youths. They have already moved beyond mere talk of 21st-century skills to better identify just what these skills are and, most important of all, how to foster them.

Is it possible, then, that a decade or two from now the United States will find itself left behind, having devoted its resources to boosting student performance on the kinds of tests that the most educationally forward-thinking countries will have replaced?

It needn't be so. The United States has long been known as a center of innovation. Why not in education, where we might expect innovation to be both central to practice and fostered in the next generation? Something to move us in this direction might be attention to a missing voice among the stakeholders in the debates on standards: that of students themselves.

What is going to motivate students to invest the greater effort required to achieve the new, more rigorous standards? In the end, teachers can only successfully teach students what they are willing to learn.

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I recently asked urban public middle school students in three different classrooms to write a letter describing their ideal school to potential applicants. A few students treated the assignment as an opportunity to fantasize, describing amenities such as locker rooms equipped with Jacuzzis. These were the exception, however.

The surprise, given the open-ended nature of the assignment, was how frequently two themes appeared: One was student choice in what they would study. The other was time to pursue their interests. A 6th grader, for example, described a school in which "[students] are put in learning groups with people whose interests are very much like their own. ... Because of this curriculum, students realize their interests, which helps later when they begin their careers."

Learning groups formed around individual interests? An intriguing idea worthy of serious consideration, but how does it happen to occur to a 12-year-old?

Surprisingly, she was not alone, although students expressed their ideas in different ways. Some had a rhetorical flair for the persuasive in describing the mission of this ideal school in which students have a say in defining the curriculum: "We help students reach their goals," one wrote. "We're here to pursue their dreams," wrote another.

Like most adolescents, these students have begun to envision who they might become and would like to see the way from here to there. Several echoed this idea in making the case for choice: "Adults make almost all their choices for themselves, so one of our main goals is to incorporate personal choices into our school."

Another said the school would “teach students to be responsible and to make their own decisions,” adding that “most schools don’t agree” with this philosophy.

Were schools to allow students the space to invest in their own intellectual interests, only the luckiest would develop a passion strong enough to shape who they become. Not all tinkerers in the family garage become Steve Jobs. But many could have the chance to forge concepts of themselves as specialists in something, whatever it might be. It is in such sustained investment in problems of their own choosing, rather than only in a packed-full, standards-dictated curriculum, that the seeds of innovation lie.

The education and cultural critic Neil Postman characterized education as “the central institution through which the young may find reasons for continuing to educate themselves.” This is the ultimate goal if we seek to educate for the future.

Although adolescents’ visions of a future are at best vague, their typical school experience does little to make these clearer. The implicit message their history classes convey is that learning about the past takes precedence over contemplating the present or future. Why not teach the future?

Few classrooms engage students in significant debate of serious issues of the day, arguably the best practice to prepare them to address the issues of the future, and to develop their identities as citizens with the capability and responsibility to address these issues.

America’s investment in education could start to take a different direction, if we summon the vision and the will to look to the future and to invest generously and wisely in it. Americans need not defer to other nations to take the lead in educational innovation, nor should we fail to nurture a new generation of innovators.

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