



Book review

A surprisingly sensible 21st-century

Review by Jay Mathews of Bena Silva's report on *Measuring Skills for the 21st Century*

Only six weeks have passed since my last cranky diatribe about teaching what are called “21st-century skills” in our schools. I think the 21st-century skills movement is mostly a pipe dream, promoted by well meaning people who embrace the idea of modernity but fail to consider how these allegedly new and important lessons can be taught by the usual victims of such schemes, classroom teachers. Now I am forced to calm down, take a breath and consider the possibility that I was wrong about this, because a scholar whose work I admire has produced the first sensible report on 21st-century skills I have read. “*Measuring Skills for the 21st Century*” was written by Elena Silva, senior policy analyst at the Education Sector think tank in Washington, and it is available at http://www.educationsector.org/research/research_show.htm?doc_id=716323.

I telephoned Silva to express my concern that we differ on this issue, since she always knows what she is talking about and I sometimes don't. Our conversation reassured me. She has the same doubts I do about the loose and overheated way the 21st-century skills concept has been marketed, and the failure to give teachers useful guidance on what to do with it. She agrees with me that much of what is labeled 21st-century learning is not new, but represents what our best educators have been teaching for several centuries.

For those of you unfamiliar with this topic, here is what the alleged 21st-century skills are: the ability to think creatively and to evaluate and analyze information. Does that sound futuristic to you?

Silva and I are also of one mind on the need to make sure this emphasis on analytical and critical thinking does not derail the national effort to make sure all students learn the basic content of the important disciplines, such as literature, math, and science. Learning how to learn, one of the goals of the 21st-century skills movement, is fine, but it is not a substitute for being able to recall, without resort to Google, vital facts and concepts—such as the causes of World War I, the usefulness of active verbs, and how to calculate growth in percents.

The most important conclusion of Silva's well sourced 11-page study is that the best learning happens “when students learn basic content and processes, such as the rules and procedures of arithmetic, at the same time that they learn how to think and solve problems.”

Okay, I said. That sounds good. But what of my complaint in that peevish column last month, “Why I Don't Like 21st-Century Reports”? Before our various 21st-century think tanks show me their shining vision of a revolutionized education system churning out a new generation full of Warren Buffetts, Antonin Scalias, and Rachel Maddows, how about letting me see one or two schools that are already showing this is possible?

Silva has done that. Her prime example is the New Technology High School Model, created by teachers, business executives, and community leaders in Napa, Calif., in 1996. They got money from the Bill and Melinda Gates Foundation and now have 40 schools in nine states. “Student learning at New Technology is designed to simulate real life and real work,” Silva writes. “Instead of completing traditional worksheets and daily assignments, students are assigned periodic projects, often as teams, and must complete a combination of products, including written essays and practical demonstrations. Each project assigned

to students is accompanied by a set of rubrics that measure a student's performance on fundamental skills, such as writing, as well as critical thinking, application and originality. Students receive multiple grades, one for each criterion, for each project.”

I need to see data on this approach but, at least as a guide to teachers, it is clearer and more comprehensible than I have seen in other 21st-century skills reports. Assessment turns out to be a very important part of Silva's paper. She recognizes that we need some way to determine whether 21st-century schools are producing anything more valuable than cool-looking brochures and web sites.

Here are some existing assessments of advanced skills—the College Work and Readiness Assessment, the Programme for International Student Assessment, PowerSource, the Key Stage 3 Information Communications Technology Literacy Assessment, and a new National Assessment of Educational Progress Science Assessment.

I threw all those into one sentence to emphasize the fact that a lot of these measures are very technical and may induce slumber if read late at night. Some seem rudimentary. It is unclear, at least to me, whether what they are measuring are teachable skills or character traits, such as persistence and affability, that most schools have barely an inkling of how to foster.

But Silva cites enough research to convince me, almost, that if 21st-century skills, as she says, “can be measured accurately and in a common and comparable way,” we will have the tools to do that before long. I would be happy with a yardstick that did no more than separate schools that I grudgingly admit may be adding value, such as New Technology High, from those that slap a 21st-century label on the same old courses in hopes of fooling the PTA.

The report reminded me of something I knew but had not put in this context. We already have in several hundred American high schools a program that teaches critical thinking and measures the results with depth and clarity. That would be the International Baccalaureate program. Its three- to five-hour final exams at the end of college-level courses in all the major disciplines—no multiple choice questions allowed—provide a more sophisticated assessment of student learning than anything else in American public schools.

Silva says IB “is built on the principle that students can and should master both basic subject matter and higher-order skills.” I think Advanced Placement, which also offers college-level learning and assessment in many more U.S. high schools, does the same thing, even if its final exams are not quite as good. To their credit, neither IB nor AP advertise themselves as the key to 21st-century skills. Once we get straight that the 21st-century label is a marketing trick, and refers to the kind of learning that has produced scientific and cultural advances in every era, we might be able to do something with some of the programs Silva describes.

I will remain skeptical. I have seen too many glittery labels come to a bad end when applied to classes organized with very little thought. But I will look for more from Silva. I will also welcome any firsthand observations of 21st-century skills classes readers might have. E-mail me at mathews@washpost.com. Good or bad, we can learn something from what you have seen.