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21st Century Skills: The Asian Version

By Marc Tucker on June 30, 2017 8:12 AM

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Many American educators have a rather smug view of Asia as the home of rote learning and nose-to-the-grindstone schools. While this may have been true years ago, a new report from Asia Society should put that image to rest. "Advancing 21st Century Competencies in East Asian Education Systems" is a fascinating read. East Asia, it turns out, can lay claim to one of the most progressive visions of education in the world.

The report was authored by Professor Kai-ming Cheng of the University of Hong Kong, who assembled an international team of senior researchers to do a comparative study in Hong Kong, Singapore, Taiwan, South Korea and Japan.

Professor Cheng begins by pointing out that these countries have not conceptualized the so-called 21st century skills as an add-on to the current education system but instead have used the idea to stimulate a broad reconsideration of the purposes of education in a rapidly changing world. Compared to the West, which seems to be focused mainly on economic challenges, these East Asian countries have cast their net wider. While they have taken globalization and economic transformation seriously, these countries also look at "lightning breakthroughs" in technology, growing social and economic disparities, generational differences, the rise of China, changes in family relationships, the explosion of new media and rapidly changing values and norms in their societies.

The East Asian countries, Cheng reminds us, tend to spend a lot of time at the beginning of any major reform on the philosophy, rationale and conceptual underpinning of the reform they are considering, involving not just government officials and the major stakeholders, but a wide range of citizens in what amounts to an extended conversation. This takes longer than the traditional Western approach, but the result is more likely to be a broad and deep consensus that makes implementation easier and more faithful to the original conception rather than implementation that is little more than surface compliance with formal policy. This description of the East Asian approach to planning certainly characterizes the way these countries approached the 21st century skills debate.

The result is that extended consideration of the 21st century skills in these countries has led to a reconceptualization of the goals, curriculum, organization and function of schooling, not just a list of new skills to be taught in addition to the old ones.

Cheng reports that the goals in this case are not so much responses to perceived problems with the current system as a vision for what it might be. He describes this as an "aspirational" model, not a deficit model.

The contrast here is between reform as an effort to fix some specific aspect of the system and reform as changing the purposes of the whole system and the way it is designed. So what does that look like?

First, it shifts the emphasis from what the student knows to what the student can do with what she knows. It includes a continued focus on mastery of the traditional curriculum but it adds a no-less-important focus on social and emotional development and student values. It shifts the focus from raising test scores, improving motivation and reducing dropouts to developing new curriculum, a new pedagogy and a new set of goals. It shifts the focus from teaching to learning, a move captured by the Singaporean slogan, "Teach less, learn more."

These changes affect not only the academic curriculum but also the vocational program, where the researchers found much more emphasis than before on the personal development of the whole student, not just technical skills. This emphasis includes more experiential learning activities designed to build students' social and emotional skills and opportunities to spend time abroad to better understand how people in other countries do things and why they do them that way. Because jobs are now morphing more quickly than they used to, vocational programs are less likely to focus exclusively on training for one occupation and are instead designed to enable the student to move skillfully around a family of jobs and learn quickly as the demands of those jobs change. Because more of the routine jobs are being done by intelligent machines, vocational education students are expected to meet higher academic standards than before to enable them to qualify for jobs requiring more education.

Though the specific implementation of the 21st century skills in the countries studied varies considerably, all of these systems, Cheng says, are creating experiences for students that will enable them to become much more active learners, offering much more experiential learning and deliberately creating opportunities for students to pursue diverse learning outcomes. This last point, he notes, is not news in Western countries but is more difficult for the more collectivist East Asian nations.

One of the most interesting aspects of Cheng's report is his observation that all of the nations he reports on have made a strong effort to infuse their approach to the 21st century skills with distinctly Asian values. In Taiwan and Hong Kong, for example, this takes the form of reinforcing the traditional "five dimensions": moral, intellectual, physical, social and aesthetic. Looked at this way, there is, he points out,

nothing new about the 21st century skills. For a millennium or more, intellectual development was only one of the goals of education.

Cheng is full of enthusiasm for this agenda and makes it clear that the ministries of education in all of the countries studied have not only fully embraced it, but have well-developed implementation plans, including extensive training of school principals and teachers now under way to ensure deep implementation. But his team found that, with rare exceptions like the National Institute of Education in Singapore, the university schools of education were way behind the curve and the universities in general were insisting on maintaining admissions examinations based on multiple choice questions mainly related to "coverage" of topics as a vast array of facts and procedures rather than the much richer conceptions of the primary and secondary education community that has been redesigning the new system. These exams, he reports, continue to be a serious impediment to full implementation of the reforms, because parents want, first and foremost, to send their children to schools that will get them into the best universities possible.

American readers of this blog will, on a quick reading, find nothing new in what I have related, though they might be surprised to find these ideas alive and well in East Asia. But a broad yawn would, in my judgment, be misplaced. While we can all find individual schools in our states that are actively pursuing at least parts of this agenda, there are few states that I know of that are making a concerted effort to implement this agenda as a unified set of ideas throughout their state in an organized and determined way.

But that point needs to be combined with another. Cheng notes that his team had little to say about reforms in the way native languages, literature, mathematics, science, technology and engineering are being taught in their schools. He opines that the reason for this is that their teachers know how to teach these subjects and their students do very well in them. Indeed performance in the core academic subjects is literally at a world-class level in all of the countries studied.

This makes all the difference. When schools try to do experiential learning and active learning with students whose command of reading, writing, mathematics, science and technology is very shaky, the outcomes may be worse than if these pedagogical approaches were not tried at all, because, all too often, the result is shallow learning. The countries that Cheng and his colleagues studied are very likely, in my judgment, to do a much better job of teaching the 21st century skills than most of our schools can, because they are building on a foundation most of our students simply do not have. Combine that with the highly disciplined effort they are making to further develop the skills that their already highly-skilled teachers and principals have, and we have a formula for these East Asian nations getting even further ahead of the United States than they are at present.

These countries are building on a decades-long process of steady improvement in the quality of their teachers, complemented by a no-less-determined effort to build a very strong state curriculum in their core subjects. The United States has done neither, certainly not with the discipline and effectiveness we have seen in these East Asian nations. And now these nations are reaching ahead to once again redesign their systems to establish an even higher benchmark.

The irony here is that, to some extent, the countries covered in Cheng's report are building on the accomplishments of Western science. Two years ago, I was present at a meeting in Hong Kong to which Cheng and his colleague Nancy Law invited representatives of the U.S. National Science Foundation (NSF) and researchers whose work the NSF had funded on the science of learning to present their results to Asian educators in a colloquium designed for sustained interaction. Education leaders in Asia have proven much more adept at evaluating and using the most promising developments from the rest of the world than educators from the United States and they are benefiting mightily from that.

But they are doing this in a way that makes it their own, threading together the lessons of Western research with what they cherish about their own values in a very thoughtful way. It is that process that gives the reforms Cheng describes their holistic, integrated character.

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