Global Trends in Educational Policy and Practice

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Consistently ranked among the top 20 schools of education and the top ranked Catholic school of education in the country, the 60-year-old Boston College Lynch School of Education offers three undergraduate majors and 15 graduate programs in education and applied psychology, as well as five dual degrees.

The Lynch School attracts more than $13 million a year in sponsored faculty research and boasts seven endowed chairs and seven nationally and internationally known research centers: the Barbara and Patrick Roche Center for Catholic Education; the Center for Optimized Student Support; the Center for Human Rights and International Justice; the Center for International Higher Education; the Center for the Study of Testing, Evaluation, and Educational Policy; the Institute for the Study and Promotion of Race and Culture; and the TIMSS and PIRLS International Study Center.

A leader and stalwart partner in advancing research and practice in education and applied psychology, the Lynch School engages with mental health clinics, colleges and universities, research centers, and urban and suburban public, Catholic, and private K–12 schools both in the United States and abroad.

The Lynch School’s mission aims to enhance the human condition, to expand the human imagination, and to make the world more just.
Influencing Education Policy and Practice Internationally

Committed to generating research that influences education policy and practice throughout the world, the Lynch School of Education is the proud home of the TIMSS and PIRLS International Study Center, directed by professors Ina Mullis and Mick Martin. We eagerly anticipate the simultaneous December 2012 release of the 2011 TIMSS and PIRLS assessments—rich and extensive sources of data that describe students, teachers, schools, academic curricula, and educational policies around the globe.

Eight Lynch School faculty from our programs in teacher education, higher education, counseling psychology, and educational research, measurement, and evaluation have contributed to this publication. Cumulatively, their essays highlight the social, educational, policy, and research contexts that give meaning to and guide interpretation of international assessments.

Warm wishes,

Maureen E. Kenny
Interim Dean and Professor
The TIMSS and PIRLS International Study Center

by Ina V.S. Mullis and Michael O. Martin, executive directors

The TIMSS and PIRLS International Study Center at Boston College’s Lynch School of Education directs two widely respected international assessments.

TIMSS reports international trends in mathematics and science achievement in the fourth and eighth grades every four years, such that the sixth assessment, in 2015, will result in a 20-year trend line. TIMSS Advanced assesses students engaged in advanced high school mathematics and physics study that prepares them to enter Science, Technology, Engineering, and Mathematics (STEM) university programs, with the third assessment in 2015 also resulting in a 20-year trend line.

PIRLS assesses fourth-grade children’s reading achievement every five years, with the fourth assessment in 2016; prePIRLS, a less difficult version of PIRLS, assesses reading at the end of the primary school cycle in developing countries.

Each assessment also collects extensive policy-relevant information about the home, school, and classroom contexts for teaching and learning mathematics, science, and reading.

Close to one million students participated in the most recent (2011) TIMSS and PIRLS assessments, when the cycles of both studies converged; almost 40 countries took advantage of this opportunity to assess the same fourth-grade students in reading, mathematics, and science. Also, both TIMSS and PIRLS have a benchmarking component whereby regional entities (e.g., states or provinces) may participate in the same way as countries, and thus compare their achievement with top-performing nations internationally. In 2011, nine U.S. states were TIMSS benchmarking participants.

The reports will provide achievement trends over time and a rich array of information about students’ background and attitudes, the curriculum, teachers’ educational development, classroom instruction, and school environments. Two companion TIMSS reports will summarize mathematics and science achievement in each of 63 participating countries and 14 benchmarking regions, and the PIRLS report will describe reading achievement for each of its 49 countries and nine benchmarking regions. A subsequent
report will include in-depth analyses of fourth-grade achievement in reading, mathematics, and science in the countries that administered TIMSS and PIRLS to the same students, along with fully documented databases.

The TIMSS 2011 and PIRLS 2011 Encyclopedias provide qualitative counterparts to the quantitative international reports. Experts from each country prepared an overview of its educational structure, curricula, and policies, providing a concise yet rich international portrait that is an indispensable resource for policy and research.

Additionally, educators use TIMSS and PIRLS data to compare their own achievements with those of other countries in order to monitor progress from global as well as national perspectives, often initiating educational reforms as they make special efforts to reduce achievement disparities among ethnic, social, or regional groups. Across the years, TIMSS and PIRLS data, frameworks, and assessment items have been a basis for curriculum reform and for teacher education in almost every participating country.

TIMSS and PIRLS are the core projects of the International Association for the Evaluation of Educational Achievement (IEA), which, headquartered in Amsterdam, has pioneered international assessments that enable countries to learn from one another about effective educational approaches.

Professor Ina V.S. Mullis and Research Professor Michael O. Martin are the executive directors of the TIMSS and PIRLS International Study Center, where for 18 years they have managed, designed, developed, and administered large-scale international assessment projects and reported results. They also have mentored doctoral students who now hold senior positions in organizations that conduct national and international assessments.
It has been assumed that, because of their dramatic economic growth and expanding higher education systems, the emerging economies of the BRICs (Brazil, Russia, India, and China) will lure home students who go abroad to study when they finish their degrees, as well as some graduates who have settled in the West. But data seem to show that this is not happening. The brain drain, now euphemistically called the “brain exchange,” seems to be alive and well. Research shows that a large majority of international doctoral recipients from American universities remain in the United States after graduation. We live in an era of the global mobility of highly skilled talent in general and the academic profession in particular, but this mobility moves largely in one direction: from developing and emerging economies to wealthier nations, especially the English-speaking countries. Increasingly, although ideas and capital do flow back to countries of origin, major economic and social contributions are made in the country in which an individual is primarily located. The realities of globalization remain highly unequal.

**WHO GOES AND WHO STAYS?**

The countries with the most impressive economic and educational expansion have the largest “stay” rates. For example, during the 1980s, 25.9 percent of Chinese doctoral graduates returned home immediately after completing their degrees. In the 2000s, the return percentage had declined to 7.4 percent. India’s figures are also quite low—13.1 percent returned in the 1980s and 10.3 percent in the 2000s. Yet return rates vary considerably, ranging from 84 percent of Thais, to 60 percent of Mexicans and Brazilians, to 39.5 percent of Africans. A particular surprise is the decreasing European return rate, which has gone from 36.9 to 25.7 percent over 30 years.
Why do the international doctoral holders choose to remain in the United States? For all of the current problems of American colleges and universities, the terms and conditions of academic work—including salaries—are by international standards quite good. Having studied in the United States, international degree holders have familiarity with the system and often can call on mentors to assist them in the local job market. Although a few countries, such as China, offer incentives for top graduates to return home, such programs are small and serve only the top elite. For many, returning home to academic institutions that may be hierarchical and sometimes ill-equipped is not an attractive prospect—academic salaries may be low, and moonlighting is often necessary. Even in China’s top universities, which have received massive infusions of money and built impressive campuses, the academic culture is often problematical for graduates familiar with the relatively open and meritocratic institutions in the United States or other better-established academic systems.
The upcoming release of the TIMSS and PIRLS reports provides an opportunity to reflect on the meaning and implications of broad-based international assessments. Despite the misgivings that many educators and policy analysts have about relying too heavily on test scores, the academic performance rankings have taken on the aura of a clear, unequivocal index of the preparedness of the citizens of a given nation or state to assume the high levels of skills needed for the 21st-century workplace. A superficial examination of the data in relation to various indices of global competitiveness will bear this assumption out, but the reality of the situation is far more nuanced.

One issue that must be considered is that it is difficult to predict what form the 21st-century workplace will assume, given the intensity and length of the Great Recession. It is hard to imagine that core academic skills will no longer be essential. However, my research on unemployment, poverty, and working, as well as the work of many of my colleagues, suggests that the workplace will be far more demanding and far less predictable than it ever has been. The demanding quality will clearly involve high levels of academic skills, but will also require skill development in areas that are not assessed in these international evaluations. For example, engaged workers in the 21st century will need empathy, flexibility, creativity, and a great deal of perseverance. Moreover, productive workers will need to be sophisticated about culture, race, relationships, and a host of other skills that are not easily measured in standardized tests.

Another important issue that needs to be considered is the nature of the workplace itself. Increasingly, people are viewing the neo-liberal ideas and free market policies of most Western nations as a reality that is non-negotiable. And, given the trends in the Western world, it seems that a labor market of intense competition with insufficient jobs is being treated as a
fait accompli. Indeed, the competition that ensues as a result of the international assessments parallels the competition of the workplace. In that sense, it is good preparation for an environment of rankings and consistent evaluation. However, is it possible to think about a society that does not reify intense competition at every turn?

The fact that we live in a world in which unemployment is considered a constant that cannot be ameliorated, in some ways, perpetuates the notion that some will be on top and others on the bottom. In my view, it is essential that scholars and policy analysts make a strong case that full employment needs to be a priority encompassing the full commitment of a nation and its resources. The notion that work is a human birthright is actually not all that new and not all that radical. Perhaps we can consider the newly released international rankings as a clarion call for greater attention to the need to create a society that dignifies work and engages in policies designed to create full and fair employment for all.

David L. Blustein is a professor in the counseling, developmental, and educational psychology department, coordinator of the Mental Health Counseling program, and a licensed health services provider psychologist. A fellow of APA Division 17 and the American Educational Research Association, he received the John Holland Award for Outstanding Achievement in Personality and Career Research and the Extended Research Award from the American Counseling Association.
In recent years, the release of results of international large-scale assessments (ILSAs), such as TIMSS and PIRLS, have become media events. Certainly, ILSAs play an important policy role by facilitating comparisons of achievement across national boundaries. Without a common assessment, each nation’s system remains “hermetically sealed,” as it is otherwise impossible to make meaningful comparisons among them—leaving policy leaders free to make assertions regarding their nation’s relative standing in regard to educational achievement without fear of contradiction.

Unfortunately, popular attention is now focused on the latest rankings, as well as who’s up and who’s down—and all but ignores the rich database and preliminary analyses that accompany each release. For any country, including the U.S., it is truly of little import whether its rank has moved a few slots or whether its score has changed by a few points. More informative is, say, the relationship between achievement and various measures of socioeconomic status or the size of the disparities among sub-populations variously defined, and how these have changed over time. In this context, international comparisons indicate where we stand with respect to the twin goals of excellence and equity, whereas comparisons with National Assessment of Educational Progress (NAEP) indicate the extent to which these patterns may be assessment dependent.

Both kinds of comparisons can be informative, and a natural outgrowth of such comparisons is the search for policy prescriptions. In fact, a mini-industry has emerged based on culling “lessons learned” from the study of high-performance systems. Delegations from lagging jurisdictions have been routinely dispatched to such destinations as Finland, Singapore, and Ontario to ferret out the secrets of their success. Commissioned reports

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drawing on the policies and practices of several leading nations purport to have distilled the keys to improved achievement.

Although participating jurisdictions do form a natural experiment, high rankings or rapid progress is likely due to a confluence of factors, both educational and extra-educational. Attention to certain common features of their education policies offers only a partial and perhaps misleading picture. From a methodological perspective, drawing causal conclusions from such cross-sectional analyses is a highly speculative enterprise and caution should be the watchword. U.S. policy makers would derive greater benefit from a comprehensive, comparative analysis of the patterns and relationships generated by ILSAs viewed from the perspective of the overarching priorities for our children—chief among them being a significant reduction in the achievement gaps among groups defined by race/ethnicity and social class. Both the vigor of our economy and the health of our democracy depend on our success in this endeavor.

Henry Braun is Boisi Professor of Education and Public Policy and director of the Center for the Study of Testing, Evaluation, and Educational Policy. Previously, he was a distinguished presidential appointee at the Educational Testing Service, where he worked for 27 years. Braun has published broadly in probability, statistics and educational measurement, and he has consulted for a variety of private, public, and governmental organizations.
There is now unprecedented emphasis on teacher quality almost worldwide. This means high expectations for teacher performance, and it means that teacher recruitment, preparation, and retention are near the top of policy agendas. Increasingly, improving teacher quality is assumed to be a central strategy for improving a nation’s ability to compete in the global knowledge economy, ensure the quality of its workforce, and meet rising social expectations related to diversity and equality. This approach is based on the (arguable) assumption that education and the economy are inextricably linked, a viewpoint encouraged nationally by both Democratic and Republican administrations since the 1980s and internationally by organizations such as the World Bank, McKinsey & Company, and the Organisation for Economic Co-operation and Development.

In many countries, however, there is also much debate about teacher preparation and about whether teacher quality is enhanced by teachers’ characteristics, credentialing regulations, the quality of preparation programs, the conditions of schools, and/or broader policy and accountability contexts. In nearly every country, these issues are highly politicized, reflecting the fact that social institutions in democratic societies are inevitably the sites of political disagreement and that teacher preparation is not a straightforward matter of establishing “best” policy or practice but is a fundamentally political enterprise, increasingly influenced by globalization based on the ideas of neo-liberalism.

One way to examine the politics of teacher preparation is to look across nations. A special issue of The Education Forum, which I coedited, focuses on teacher education policy and politics in four English-speaking nations.
where I have lectured and worked with teacher education colleagues—the U.S., England, New Zealand, and Ireland. Each of these nations is constructing teacher preparation policy in light of concerns about the global positioning of their economies. At the same time, however, the historical trajectory of each country is different, and the policy landscape in each is changing in different ways. To mention just two examples—in Ireland, policy makers are responding to what has been termed “PISA shock” in the face of sharply declined 2009 scores and economic recession. In New Zealand, on the other hand, which has consistently performed well on international comparisons, the current right-of-center government plans to address the gap between high and low achievers through new graduating teacher standards and value-added assessments.

Looking across countries that have made teacher quality and teacher preparation major national priorities makes it clear that teacher preparation is highly contested terrain. It involves the negotiation of conflicting values and assumptions about the purposes and contents of schooling, the responsibilities of teachers, and the role of education in the health of economies.

Marilyn Cochran-Smith is Cawthorne Professor of Teacher Education for Urban Schools and director of the doctoral program in curriculum and instruction. Author of nine books, six of which have won national awards, she is an elected member of the National Academy of Education, a former president of the American Educational Research Association, and a frequent keynote speaker.
All nations should be concerned when their students are not excelling or when there are inequities in their levels of achievement. Comparing the performance of nations against one another has become known as international benchmarking. This has been the focus of our work over almost 10 years—investigating high-performing schools and school systems to uncover lessons that can benefit students in other systems.

In *The Fourth Way: The Inspiring Future for Educational Change* (2009) and *The Global Fourth Way: The Quest for Educational Excellence* (2012), we identify patterns that educators might learn from in pursuing their own improvement strategies. This is not how everyone uses international comparisons, however.

*Policy benchwarmers* are interested only in watching their own team, rather than in learning from others. When other systems perform better, they make excuses and say there is nothing to be learned from them because they are smaller or less diverse, or have a different political system.

*Benchpressers*, on the other hand, pay attention to comparative data but only to push harder and outdo one another. Learning becomes a competitive game where tested achievement is driven up to beat out others. The current U.S. educational strategy, “Race to the Top,” is benchpressing in action.

*Benchmarkers* in education follow the best business practices of industrial benchmarking. They look at what high-performing systems do well and consider how these practices might be adapted to improve results in their own settings.

*The Global Fourth Way* is our own contribution to international benchmarking. It describes our research on some of the world’s highest performing schools and systems. From these, we have drawn conclusions about a better, evidence-based approach to high performance than the strategies now used in the U.S. After reviewing three previous approaches to change pursued by policy makers in recent decades, we call this new approach the “Fourth Way.”

Fourth Way high-performing systems such as Finland, Singapore, and...
Canada value the teaching profession. They invest in teachers’ professional capital. Teachers have a long and rigorous university-based preparation; there are no alternate paths into teaching. These systems support and develop all teachers, rather than rewarding a few through competitive performance-based incentives.

In Fourth Way settings, almost all schools in the system are public schools, so the entire nation is invested in its schools. While some high-performing systems do have standardized testing, none of them test all students annually on everything from grades three through eight.

Educationally, the U.S. lags behind most other developed nations. Like other benchwarmers, it is too preoccupied with its own game to learn from anyone else’s. When it has caught on that it is losing ground, the response has been bullish benchpressing that turns improvement efforts into a competitive game focused so much on results that the substance of teaching and learning is neglected.

There is a lot to be learned from other top-performing systems. Our work is dedicated to communicating their principles and strategies to educators across the globe, and engaging the profession and system leaders to help all children succeed.
