Educational research has a limited ability to transform practice, although this does not mean that researchers should not try. There are three primary reasons for the continual tension between the knowledge researchers produce and the lack of response from the profession.

The first and most obvious reason is that researchers often do not agree with one another about the significance of their research findings. Take one example. Eric Hanushek, an economist at the Hoover Institution at Stanford University, argues that one can calculate the contribution to a country’s economic growth rate based on students’ math and science skills. If this is true, countries should invest more in math and science and should not worry so much about the fate of the fine arts, foreign languages, or physical education. Hal Salzman, an economist at Rutgers University, disagrees with Hanushek. He contends that the connection between educational attainment and economic growth is tenuous at best, and is affected by a host of other factors, such as the business cycle, demographics, and political trends. If this is true, perhaps policy makers should invest broadly in education, attending equally to all curricular areas, so that citizens are well adapted to the diverse needs that may arise in the future.

When scholars cannot agree on what research shows, we cannot expect policy makers or the public to sort out the differences—especially when they involve complicated economic models—and draw the right implications. We might be able to make more honest contributions by helping the public and policy makers to explore the ethical ramifications of different strategies. Rather than posturing about what research shows as if our findings are unambiguous, we should be more honest about what we know and do not know, with greater modesty informing the conversation.

The second reason that researchers have a limited
ability to transform practice is that even when we have established consensus—say, about literacy gains in District Two of New York City in the 1990s—this does not mean that the factors that promoted those gains can be transferred to another setting. Mary Key Stein, Lea Hubbard, and Hugh Mehan documented factors that undermined efforts to transfer gains from New York to San Diego. One of the major issues concerned the length of time required to adapt to change. Educators in New York had years to own changes in their instructional repertoire, their curricula, and their assessments and to engage in a professionally inclusive process that preserved their dignity and their control of the reforms. In San Diego, by contrast, reforms were brought in with little awareness of local conditions, and the process was rushed. As a result, micro-level resistance from educators and the community became widespread. Anticipated learning gains for students did not materialize. Respectful engagement with teachers, parents, and students is imperative in adapting new changes.

A third reason that research is limited in its ability to influence practice is that sometimes the most rigorous and scientifically based research is flat out rejected by communities. Educators who are fearful of their job security and negative publicity have learned to avoid controversial topics. A majority of biology teachers in the U.S. choose not to teach evolution because they fear public attacks by their critics. We need to do more to protect teachers and to develop their sense of civic courage in such contexts.

In the U.S., we are now facing a moment of truth because so many of our policies are at odds with the practices of high-achieving nations. Finland emphasizes collective responsibility over new business models of accountability. Singapore promotes rigorous teacher evaluation but without including test score gains as is now favored in the U.S., Canadians have no counterpart for the pay-for-performance schemes now pushed by the Teacher Innovation Grants of the U.S. Department of Education. We have an opportunity to learn from other jurisdictions in the U.S., and we need to change.

**How has the teaching profession changed as a result of the standards and accountability movement?**

I would say it has changed radically. How much it has changed can be grasped with a bit of historical perspective on previous ways of change.

Andy Hargreaves and I argue that a *First Way* of educational change can be identified in the 1960s, when teachers had enormous latitude in their choice of curricula, their manner of assessing students, and their teaching repertoires. While this allowed for brilliant teachers to spread their wings and foster pinnacles of excellence, it also allowed for incompetence to persist unchecked and uncorrected.

This attitude of professional *laissez-faire* and indifference needed rectification, so in the 1980s a *Second Way* of change was inaugurated. In the U.S. we tend to focus on the 1983 *Nation at Risk* report, but the report was augmented within the profession by Al Shanker, president of the American Federation of Teachers at the time. Shanker understood that for teaching to go beyond being an occupation that one could practice at will to a profession with a common set of skills and expertise, greater peer support and pressure would be needed. We saw the rise of voluntary standards that were codified by teachers’ subject area associations and could be adapted by the states.

The core problem with the rise of the standards and accountability movement is that it has eclipsed discussions about what constitutes a rich and rewarding curriculum. Assertions that nothing existed to provide an
intellectual framework for the profession prior to standards and accountability indicate ignorance about the richness of curricular history and its many permutations across jurisdictions.

In the continental European Didaktik tradition, for instance, one may learn about the intensely philosophical debates about the relationship of academic content areas (Fachdidaktik) to the education of the whole person (Allgemeindidaktik). Within such an educational framework educators are encouraged to attend carefully to the overall educational context they are creating for children, and to practice their skills of observation so that they continuously can modify and adjust curricula to help the growing child.

This repertoire of decades of educational theorizing has been lost in the tsunami of recent reforms. Teachers in the U.S. now spend too much time identifying state standards for their lessons, filling in lesson plan forms, writing standards on their boards, and measuring what they have then taught the students. These skills are important for beginning teachers with weak academic content knowledge and they have a place in settings where discussions of the complexity of the educational encounter are at an introductory level. They do nothing, however, to develop the relational dimension of education that students are seeking with their instructors, and they steal time away from lesson study, peer observation, and team planning that could be done with colleagues.

In some contexts efforts have been made to professionalize recent reforms by developing interdisciplinary and cross-school collaborations. Andy Hargreaves and I studied these in a network known as “Raising Achievement Transforming Learning” (RATL), led by David Crossley in England a half-decade ago. RATL was able to post rapid gains in student achievement, with over 200 of 300 secondary schools with prior low value-added measures doubling the gains of the nations’ secondary schools in just two years. With a philosophy of “schools learning from schools” and “raising achievement with dignity,” RATL provided hope that even in contexts of high accountability school reform could be humanistic. With far more engaging lateral learning within and across schools, RATL suggested a new way forward that we labeled a Third Way of educational change.

This Third Way had promise. It restored dignity to demoralized professionals and got the achievement results the policy makers and the public wanted. RATL leaders were enthusiastic, charismatic, and driven. Data was followed avidly, even relentlessly. Gains indicated that reforms were on the right track and provided motivation to push on even harder.

Unfortunately, the negative effects from the Second Way persisted and in some ways were even exacerbated in the Third Way. Teachers were freed to collaborate but their collaboration produced a new culture that obsessed on achievement results. RATL had developed an innovative menu of short, medium, and long-term change strategies, but under the pressure of tight achievement deadlines, only the short-term strategies came into effect.

These problems led Andy and me to wonder if we can we develop a model of change where curricula, testing, and accountability are rightly calibrated with one another so that the children become the focus of the educational enterprise. We believe we can do this if we can find new ways to de-privatize and uplift the collective talent of educational professionals. This talent needs to entail careful observation of students as learners, a professional culture that is open-minded and critical, and respectful engagement with parents and community members. This will require less
tightening up and more letting go; less prescription and intervention by the state and more steering and support; and greater attention to student voice.

These components of education change are part of what Andy and I have called the “Fourth Way.” We have some excellent examples of Fourth Way practices in the U.S., particularly in the area of community organizing for educational change. Grassroots organizing brings an infusion of energy and talent into schools that is bracketed out when schools become excessively bureaucratic. In the case of “Grow Your Own” programs in Illinois, grassroots groups mobilized to create new alternative certification programs to help working class and immigrant populations to find new pathways into the teaching profession. If other countries wished to learn about Fourth Way practices in the U.S., community organizing offers an excellent point of departure. Andy and I are now completing a new book entitled The Global Fourth Way, focused on evidence drawn from around the world and with special attention given to Finland, Singapore, and Canada.

How is technology changing teaching practices in our public schools?

Individual technology programs that offer carefully scaffolded support for dyslexic readers or web platforms that allow children in isolated rural enclaves to have access to educators who teach them Mandarin or Russian cannot be praised enough. Thanks to technology millions of children have greater access not only to the general curriculum, but also to a broader and more diverse curriculum than that which was unavailable to them previously. For children who were denied such access in the past due to no fault of their own, the technological revolution in education truly is liberating.

At the same time, a raft of new studies report that cyber charter schools are producing low achievement results. We are finding that students can produce power point slides that are just as packed with misinformation and grammatical errors as narratives written out in longhand before the advent of personal computers.

Technology is being abused when it is used as a tool to compel teachers to dedicate precious time to enter in data on district software and then to study spread sheets of student data that provide few clues on how one could create a more engaging lesson or entice reluctant learners to explore a more demanding curriculum. This is not education but a distraction from it. It’s a misuse of the talents, curiosity, and drive of educators, and it underestimates students’ desire to understand the world even when it involves hard work and perseverance.

What’s missing? Education involves engaging young people in the complex cultural inheritance from the past, preserving their sense of wonder and awe at the mysteries and complexity of the natural world, and promoting a sense of compassionate engagement with one another in building a more fair and free society. To cultivate these educational virtues young people need opportunities to reflect, question, and probe their ideas with one another. This happens best in small Socratic seminars with a teacher who is alert to all of the nuances of group dynamics—the wavering attention of a student, a raised voice, a passionate debate—and can steer students to explore the curriculum with greater depth and insight than they themselves thought possible.

We need to bring the same rigor that we brought to curricular analysis before the advent of new electronic technologies to the software and programs now flooding our schools. I have tried to use principles of mindful teaching and learning in this respect in a recent article entitled, “The Fourth Way
of Technology and Change” in The Journal of Educational Change. With the average U.S. teen now sending over 4,000 text messages each month, and students plugged into one form of technology or another for over eight hours a day, it’s becoming increasingly difficult to argue that even more interaction with technology is going to bring us to a pedagogical promised land. It may turn out that the most important 21st century skill of all is the ability to turn off one’s laptop, stow away the headset and the cell phone, and actually read a demanding book for several hours in a row or to engage in rapt conversation and debate without once yielding to the “continuous partial attention” that new technologies evoke.

What efforts have you seen within the U.S. education sector to realize the Fourth Way?

The Fourth Way differs from many mainstream approaches to educational change because there is a fundamental conviction that community organizing and public engagement are central to improving schools. If one looks at the publications that emerge from the Organisation for Economic Co-operation and Development (OECD), McKinsey & Company, or the National Council on Education and the Economy, for example, there is no theory of how to improve schools when policies are wrongheaded or flat-out oppressive. Such groups only talk to policy makers, not the public, and sometimes it appears that they do not even want to talk to teachers’ professional associations.

This problem of incestuous dialogue among policy makers that leaves out the profession, the public, and especially, historically disenfranchised populations is not going to improve our schools. The Fourth Way model is designed to respect the essential role of civil society in promoting freedom, prosperity, and social justice. Educational researchers should not want to circumvent the public; we should want to learn from and engage with it.

There are many good aspects of U.S. schools that are readily acknowledged by foreign visitors who comment on innovative practices, spirited dialogue and debate, and a strong research infrastructure. Within the profession, Fourth Way practices are evident in schools and districts in the U.S. where teachers visit one another’s classrooms, give each other critical feedback, and use that to elevate teaching and learning. Programs such as Peer Assistance and Review, which provide support for struggling teachers and are supported by teacher unions, model a networked understanding of school improvement as advocated in The Fourth Way. The Quality Education Investment Act, the result of a lawsuit by the California Teachers’ Association against then-Governor Arnold Schwarzenegger, is a good example of a union-led change network. Distributed leadership, respect for diversity, and professional networks are all part of the Fourth Way, and we see these in many jurisdictions in the U.S.

What do you see as one of or the most pressing issue related to educational change today?

The major problem we face is that educators have lost control of the future of the profession. Whether it is McKinsey & Company disseminating a framework for the development of schools across jurisdiction, the Pearson Corporation driving new teacher candidate guidelines, or the OECD pushing its own interpretation of policy borrowing across jurisdictions, school leaders and especially, teachers too often are the last group to be consulted about the on-the-ground, classroom-level impacts of changes.

This does not mean that there are not good parts to the work of international consultancies. The OECD is a powerful champion of economic equality and
Dr. Dennis Shirley’s work spans from the micro-level of assisting beginning teachers to the macro-level of guiding large-scale research and intervention projects for school districts, states and provinces, and nations. He recently collaborated with an international team on a study of the Alberta Initiative for School Improvement in Canada. In 2011 he served on an OECD team studying improvements to lower secondary education in Norway and was a traveling scholar with the Australian Council for Educational Leaders. Dr. Shirley’s recent books include *The Fourth Way: The Inspiring Future for Educational Change* (with Andy Hargreaves, 2009, Corwin) and *The Mindful Teacher* (with Elizabeth MacDonald, 2009, Teachers College Press). He is the new chair of the Educational Change SIG of the AERA. His next book, co-authored with Andy Hargreaves, is entitled *The Global Fourth Way* and will be available later this year. He can be reached at dennis.shirley@bc.edu.