The 2012 AERA theme is “Non Satis Seire: To Know is Not Enough.” As a research community, what can we do to more effectively move education research into action on the local level?

My work in change over the past 40 years started with the premise of finding out as much as possible about the problems of implementation. The more we found out the more we got drawn to doing something about it. In the last decade and a half, we teamed up with local practitioners and system politicians to cause greater implementation. What we discovered is wonderful news for research, namely, ‘to do is to know more.’

For example, one of our latest discoveries concerns the role of moral imperative—how does one raise the bar and close the gap of student learning and achievement. We call it moral imperative realized. If you took research on change at a superficial level you might have concluded that the first step is to develop a shared vision and then implement it. In fact, as it turns out, the reverse causal sequence is more effective. Help people accomplish success in the first place and, by so doing, you actually deepen their moral purpose.

Thus, the lesson is that we need more research in which we partner with practitioners to ‘cause’ success. There is a dual purpose to this stance. One is to contribute to the betterment of society, but the other more subtle purpose is to generate better research knowledge. I guess this takes us to the conclusion that we need more action research, but I do not want to confine it to a particular label.

The basic conclusion is that we need to define our roles as building better research knowledge and theories by examining closely actual practice at the local and system levels. We need to study change processes up close. We always need to be able to understand impact. Research that is not linked to evidence of intended and unintended consequences is a limited value.

In short, we should not wait until after given research is completed to ask the question ‘how does this research help practice.’ This very question should be built into the research design. This
means that researchers have to become more comfortable in the field—at home, with schools, communities, and in the policy arena.

**Based on your work in Canada, what do you believe are the fundamental ingredients for a meaningful whole system level change?**

Our first big foray into this work was actually evaluating the literacy-numeracy strategy in England from 1997-2002. And we have and continue to draw on international research, much of which is developed in the U.S., U.K., Australia, and New Zealand. Lately, we have become part of ‘the PISA crowd’ in learning from the performance of front-running countries like Singapore, Finland, and Canada itself.

From the England research we learned four things: two things not to do, and two that were crucial. On the negative side, we concluded that obsessing with targets and using punitive accountability in the name and shame fashion is counterproductive. But, the literacy-numeracy strategy generated two critical positive findings for whole system reform. The first, which we still hold to, is the need to focus on a small number of ambitious goals or priorities. The second is to invest in collective capacity building—the skills and competencies of educators and others required for success. Some capacity building relates to instructional practice, change agent roles such as literacy and numeracy coaches, and new leadership by school principals, district, regional, and state staff. Other new capacity builders are in the form of curriculum resources and material, as well as time to collaborate and so forth.

Fortunately, on the heels of our 2002 evaluation report, we had the golden opportunity to put all of these ideas into practice in the service of whole system reform when Dalton McGuinty was elected Premier in October 2003. He appointed me as his Special Adviser in Education, and we set out to focus the system, build capacity, and get results. Ontario is Canada’s largest province. There is no federal agency in education in Canada, so think of Ontario as an autonomous entity. There are 13 million people, two million students, 4,000 elementary schools, just under 900 secondary schools, all organized into 72 districts. Over 97 percent of all students are in the ‘public’ system, which consists of English public, English Catholic, and French public and Catholic systems. At that time, performance of the system had been stagnant for at least five years in terms of literacy, numeracy, and high school graduation rates. There was considerable conflict between the government and the education sector including teachers and their unions.

What did we do and what have we learned? We first sent a message to the sector that we were going to show respect to teachers and commit ourselves to focused partnership with a link to actual results. We began to build capacity to lead change at the government levels, especially within the Ministry of Education. We appointed Ben Levin as Deputy Minister with the mandate to develop unified capacity within the Ministry, develop the newly created unit called the Literacy and Numeracy Secretariat (an idea we got from England), and we established a Guiding Coalition at the center, chaired by the Premier that monitored and shaped the strategy as we went.

We began to get positive results within one year, which is very encouraging and says that just by focusing and having a positive stance you can get people’s attention and new effort. Now, two elections later (2007, and 2011, with McGuinty getting elected, including a minority government from 2011), we have had steady progress with a few sub-plateaus. Literacy and numeracy have risen by 15 percent across the 4,000 elementary
schools, and high school graduation rates have climbed an impressive 13 percent from 68 to 81, and are still climbing.

We have written extensively on the nature of the reform journey (part of our commitment ‘to do is to know’). Ben Levin has two great books on the topic— *How to Change 5,000 Schools* and *More High School Graduates*. I have written *All Systems Go*. Whole system reform in Ontario is working because of the following eight factors:

1. Relentless focused leadership at the center.
2. A small number of ambitious goals.
3. A positive stance with respect to the sector.
4. A core strategy of capacity building at all three levels (school, district, province).
5. Use of evidence, data, and related research.
6. A non-punitive approach to accountability.
7. Transparency of data regarding outcomes and practices.
8. Learning from success regarding lateral and vertical dissemination and exchanges.

What we are doing now is still staying the course, adding other key components (but still small in number), such as investing in Early Learning (full-day kindergarten for four- and five-year olds being implemented over a four-year period), and going deeper to capture the innovations that are occurring especially with respect to higher order skills. With respect to going deeper, it is significant that the McKinsey Group found that the greater the capacity of teachers the more peers become the source of innovations. We need then to develop a strategy for the next phase that seeks and accesses innovations in the system.

Lastly, for whole system reform, part of our strategy is to contribute to and learn from the performances of other countries, especially via the PISA research.

**How do we train principals to be the “critical agents of change”**?

There are really two aspects of this answer. One involves ongoing learning that I will call ‘learning is the work.’ The other concerns what we could call ‘personnel practices.’ With respect to the former, the first place to look is to the great meta research that has been conducted by Vivianne Robinson and Ken Leithwood. Working independently, they came to the same conclusion—principals impact student learning indirectly (but nonetheless, effectively, if they do the right things). Robinson found that school principals did five things: (1) established goals and expectations, (2) used resources strategically, (3) ensured quality teaching, (4) ensured a safe and orderly environment, and (5) helped lead teacher learning and development. Notably, it was the last of the five factors that had twice the impact on student learning (effect size of .84 compared to the next strongest at .42). Helping teachers learn meant that the principal herself/himself participated as a learner in helping teachers focus and improve the school.

Thus, point one about the principal is learning by direct participation. We do this through professional development, and by helping them apply the ideas through direct feedback, role modeling, mentoring, and the like. In addition to the ‘learning is the work,’ personnel policies are used to reinforce the direction. By personnel policies I mean formal role descriptions, selection, and hiring criteria, performance appraisal, and so on. The main driver is doing the work through participatory leadership; the
reinforcer is personnel policies that push in the same direction.

In my view, there are also some ambiguities surrounding the so-called ‘instructional role of the principal.’ The meaning of this is vague with almost every principal being able to claim that is what they are doing. We need to look closely using the evidence as Robinson and Leithwood did. When that is done it turns out that transformational leadership, and one-to-one mentoring, and I suspect, even walkthroughs, are not the main point. Rather, building social capital with teachers focused on learning, monitoring, feedback, and corrective action is what really counts.

You have written recently about the power of synergistic positive pressure. How can positive pressure lead to continuous (positive) results?

Let’s start with negative pressure. It is external and punitive. The reason that it does not work is that it does not motivate people to act (in fact, it does just the opposite). But, no pressure seems problematic as well given the existential power of inertia.

The combination of factors that we have used to establish ‘effective pressure’ (pressure that motivates) includes a balance of factors that work in concert to create what Richard Elmore has called ‘internal accountability.’ These factors are: a positive stance of respect; high expectations around specific goals; transparency of results and practice; a non-judgmental attitude and corresponding interventions to help; leadership press (principals, coaches, district leaders); peer interaction focusing on data and instructional practices that are effective; and as a last resort, takeover action or other formal intervention. These create a climate whereby the group becomes accountable to itself; the external hierarchy helps through its high expectations, constant presence, and interventions designed to help. With these qualities, the system operates to create widespread ownership, reinforced by transparency of results. As Elmore has argued, no amount of external accountability will work in the face of limited internal accountability. If you increase the latter, as we have done, you actually get the byproduct of better external accountability.

It is always a balancing act, as too much pressure backfires, and too little leads nowhere. The best way, if expressing the balance, is to say that if you get an open system with focus, lots of interaction, and transparency of data, you are bound to make progress. Such a dynamic system creates its own checks and balances, as people know when the situation is tipping too much in one direction, and act to correct it. In this situation, conflict is functional and essential and rarely settles in one direction or the other. With positive pressure, I do not say, “please accept my definition and learn to live with it,” but rather ask people to agree at least on the fact that some degree of pressure is necessary for change. With the combination of factors outlined above, most people will experience the value of internal accountability. At the end of the day, positive pressure is part and parcel of intelligent accountability.

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

There are two—one is the problem, the other is the solution. The biggest challenge facing the U.S. education is the gap between high and low performers in student achievement. It is a gap that is substantial and is becoming larger. The consequences for society, as health economists Wilkinson and Pickett have so well document in their book, The Spirit Level, are enormous for individual and societal health and well-being.
The solution which itself has turned out to be an elusive one concerns how to improve the quality of the teaching profession. So far, politicians and policy makers in the U.S. have employed a bunch of what I call ‘wrong drivers’ to address the problem (they are wrong because they do not work, and in fact, are counter-productive). These wrong drivers are: external accountability (vs. capacity building), individualistic incentives (vs. team or collaborative work), investment in technology (vs. pedagogy), and ad hoc (vs. systemic) policies. It is not that these drivers have no value; rather, they have no change of actually ‘driving’ reform.

The solution involves transforming the teaching profession. Andy Hargreaves and I have just finished a book on what and how the profession should be overhauled, to be publish in March 2012 by Teachers College Press.

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