Assessment is education's new apple-pie issue. Unfortunately, the devil is in the details.

By Kenneth C. Green

Have you been hearing a lot lately about assessment in education? Assessment has become the big thing. President Clinton supported assessment. President Bush supports assessment. It seems like every member of Congress favors assessment. So too, it seems, do all the nation's governors, and almost every elected state and local official -- school board members, city council members, mayors, city attorneys, sheriffs, county commissioners, park commissioners, and more.

The CEOs of major U.S. companies want more assessment. Moreover, many school superintendents, like Education Secretary Rod Paige, former superintendent of the Houston Independent School District, also support assessment.

Assessment is education's new apple pie issue. Everyone supports efforts to improve education; and everyone seems to believe more assessment will help improve education.

It's just grand that many people in so many elected and administrative offices support assessment.

There is, however, one little problem: getting all these individuals to agree on how and what to assess and how to use the data. They all agree about the need for more assessment. Unfortunately, the devil is in the details.

It may be a stretch, but I see some striking similarities in the public conversation about technology and assessment.

First, well-informed folks -- some in education, some not -- believe that more assessment will improve education. Similarly, many people -- some who are educators and many others who simply care about education -- believe that more technology will improve education.

Second, assessment costs lots of money. One dimension of the discussion underway in Congress and in state capitols involves how much money to spend on assessment. Similarly, one dimension of the continuing conversation about technology in schools and colleges is about the costs.

Third, it seems like everyone has strong opinions about assessment. Moreover, anyone with an opinion becomes an immediate expert. Similarly, it seems like everyone has strong opinions about technology. Moreover, like opinions about assessment, anyone with an opinion about technology believes it is an expert opinion. In an interesting and important twist on Cartesian logic, we are all sum ergo experts on both assessment and technology.

Finally, as an acknowledged sum ergo expert, let me suggest an additional similarity: Those who profess great faith in the power of assessment or technology to enhance education may be engaged in just that -- an act of faith!

Wait, please. Let me explain. I believe in assessment. I believe in technology. But I also believe in research. And while I know a little less about the assessment literature and a little more about the technology literature, I do know enough about both to know that the research literature in both areas is often ambiguous.

Indeed, advocates for both assessment and for technology often have to confront the "no significant differences" question. For those of you who missed statistics in college, this means that at the end of the day, does the treatment (the intervention) generate a statistically significant difference in outcomes or performance?

Here, the hard questions are about learning outcomes. Let's frame the questions as hypotheses in a doctoral dissertation:

**H1:** Assessment contributes to enhanced learning outcomes for individual students.

**H2:** Assessment contributes to the enhanced performance of schools and colleges.

**H3:** Technology contributes to enhanced learning outcomes for individual students.

**H4:** Technology contributes to the enhanced performance of schools and colleges.

You may take issue with the academic presentation. However, in the context of the public discussions, as well as public policy and educational planning, these are the core
issues: Do assessment and technology contribute to enhanced student learning and to the enhanced performance of schools and colleges?  

Alas, we don't really know. We think we know. We draw on personal experience as hard data. We accept anecdote and testimonial as evidence of impacts. But the hard research evidence remains elusive; the aggregated research is ambiguous.

Indeed, it may well be a good (and obvious) "intervention," as suggested by President Bush and others, to conduct annual "reading and math assessments [to] provide parents with the information they need, to know how well their child is doing in school, and how well the school is educating their child." But we really do not know if this will make a difference in educational experiences of students or the effectiveness of individual schools.

This issue is not new. Consider the 1971 Congressional testimony of then Harvard professor (later U.S. Senator) Daniel Patrick Moynihan: "Things [in education] are far more complicated than we thought. The rather simple input-output relations which -- naively no doubt, but honestly -- we assumed to obtain in education simply, on examination, do not hold up." Moynihan's topic that day was not computers or assessment, but rather the historic Coleman Report and related educational research.

Moynihan's insight and candor, accurate then, remain informative today.

Consider, in contrast, the billions pharmaceutical companies spend testing new drugs. Before a new cold medicine or cancer cure comes to market, these drugs go through extensive testing: lots of research supported by ample documentation, plus the independent review of Food and Drug Administration (FDA) scientists. Pharmaceuticals are a big, serious business.

So too is education. American schools and colleges enroll some 69 million students, roughly one-fourth of the U.S. population, according to the latest census data. American schools and colleges will spend about $65 billion dollars this year -- $80 billion more than the combined revenues of the top three Fortune 500 firms (Exxon Mobil, Wal-Mart and General Motors). Education would clearly benefit from some of that big-time, big-dollar FDA-quality research on the impact of assessment and technology initiatives in schools and colleges. But research has always been a low priority in the public and policy conversations about education.

Maybe we in the "educational research establishment" have some responsibility for this. No doubt, we fail to explain our work in terms that parents and politicians can understand. Maybe part of the problem is that every research project -- from a doctoral dissertation to a journal article to a large, multimillion-dollar federally-funded research report -- always seems to include a closing observation on the need for still more research.

What's ahead for assessment? As in the past, we'll probably muddle through. For some, it is little more than the new thing, the next wave of innovation (or faddishness) in education. Still, given that we've documented some important similarities between technology and assessment, it is also drawing on the important lessons from the "implementing" technology experience over the past two decades that might facilitate efforts to "implement" assessment.

First, planning matters. The political conversations in Washington and state capitols suggest assessment is simply a matter of enabling legislation that will mandate assessment and provide government funding. Not so! Simply distributing millions of test booklets, like installing millions of computers, will not guarantee enhanced student learning or better schools. Broad, ambitious initiatives require careful, thoughtful planning.

Second, teachers must be involved. The history of efforts to bring innovations into education documents the critical role of teacher involvement at each step along the way. If the assessment movement is to be successful, it must convince teachers that the intent of assessment is to provide feedback to the student, to parents, and to teachers about student learning. Assessment will fail if it becomes a punitive measure against teachers.

Third, students are also important. While younger students are captive to classroom testing, high-school students know the value of a well-timed conspiracy. Reports from several high schools here in California suggest whole classes of students intentionally blew a state assessment exam because they were unhappy about various things in their schools. In these instances, the schools suffered: When the students intentionally bagged the test, the school district lost an opportunity for performance-based funding.

Remember Moynihan's observation: "Things in education are more complicated than we thought." The search for simple, sweeping solutions (more assessment, more technology) may be comforting and may provide for temporary consensus. But comfort and consensus will not yield long-term solutions for many of the complex challenges that confront students, teachers, schools and colleges.

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