

This appeared as a front page Commentary in the opinion section of the Star Tribune on August 10, 2014. It summarizes the central ideas in a small book the author is sending to those in the national policy debate. It can be found as an e-book on Amazon and other sites, and as a PDF on www.educationevolving.org.

Education reform: What's the big idea? Lots of little ones

By Ted Kolderie

To reach any goal, the key question is always: How?

How? was the question during World War II. Roosevelt and Churchill had their grand strategy — to supply Britain from factories in North America, to bomb Germany night and day, to open a second front in western Europe. But early 1943 was a dark time. Ships were being sunk, bombers shot down at unsustainable rates. Winning would depend on figuring out how to get ships safely past the U-boats, how to provide fighter cover for the bombers over Germany, how to land an army on a hostile defended shore.

How? is the question, too, for education policy. It's fine to say we'll close achievement gaps, make graduates college-ready, raise standards, enforce accountability and draw top candidates into teaching. But stating objectives does not make things happen. There has to be a How. And education policy is still searching for its 'how'.

In "Engineers of Victory," Yale historian Paul Kennedy tells how the answers were found in World War II:

- Canadian engineers replaced a bomb bay with an additional fuel tank, greatly extending the range of B-24s patrolling for submarines.
- Physicists in Britain figured out how to miniaturize radar to fit in a nose cone.
- Ronnie Harker, a Rolls-Royce test pilot, suggested putting the Spitfire engine into the American P-51, producing a fighter — the Mustang — able to accompany the B-17s to Berlin.
- Army engineers at Aberdeen Proving Ground turned the Russian T-34 into a tank that drove the German panzers out of Russia.

But what was "the how of the how"? It was, Kennedy says, leadership's "creation of a climate of encouragement for innovation."

Answers couldn't be found from the top. They came from people close to the action.

"The successful systems," Kennedy writes, "stimulated initiative, innovation and ingenuity and encouraged problem solvers to tackle large, apparently intractable problems."

He concludes: "The winning of great wars requires people [to] run organizations ... in a fashion that will allow outsiders to feed fresh ideas into the pursuit of victory. None of this can be done by the chiefs alone. ... There has to be a support system, a culture of encouragement, efficient feedback loops and a capacity to learn from setbacks."



The lesson, he believes, can be applied in other fields. We need to apply it now to education policy.

During World War II, the How was found in 18 months. America has been fumbling around with its education problem for almost 40 years.

The standard theory for educational change has been to move from what we have to The Way Everything Should Be, through a comprehensive transformation, politically engineered.

That has not been a successful theory. Inevitable disagreements block consensus. Even were there consensus on a new model, it could not be imposed, given our system of local control. Frustrated, even commissioners of education sometimes — privately — say: Blow it up and start over. But that won't happen, either.

What actually happens is not a redesign of school, but pressure to improve the performance of conventional school, and growing resistance from those being pressed to do-better. No wonder learning improves only slowly.

What now passes for “school reform” is the effort to drive change into an inert system — rather than to change what makes K-12 an inert system. States, and increasingly the national government, are telling schools and teachers what to teach and how. Districts replicating “best practices” are centralizing and standardizing. In classrooms, despite the differences in student attainment, curriculum and pedagogy are prescribed and uniform — “focused instruction” in Minneapolis; “managed instruction” in St. Paul. Districts defend uniformity as ensuring that all students will learn.

Many teachers hate being scripted; many see teaching becoming less attractive as a career. Believing (not unreasonably) that it is unfair to hold them accountable for student success — when boards and central offices control what matters for student success — good teachers exercise their option to quit, further weakening a system that anyway loses half its new teachers within five years.

Minnesota, like the nation, could be getting far more than it is from its students and its teachers. But we do not currently have a school system that can do this or a successful process for getting one. We need a better How.

The obvious possibility is to create what Professor Kennedy called a “climate of innovation,” a system that encourages schools and their teachers to try things. That would at last arrange for education to change the way successful systems change.

We do have successful systems, self-improving systems. Over time these change dramatically as “outsiders” come up with new services and products, or with new ways of organizing and operating.

Usually the new, at first, is not high-quality (think about the “first” anything). So at first most people stay with the traditional. But often the different improves; sometimes rapidly. Landline phones are giving way to cellphones. Most cars are still gasoline-powered, but hybrid/electric is growing.

For education, think of it as a “split-screen” strategy. No more debating The Way Everything Should Be. Go on working to improve traditional school. But in parallel run a sector truly open to innovation.

“Truly innovative” means not asking teachers what is their innovation: What they try will be up to them. Don't insist their ideas be “research-based.” Research can't evaluate what has not been tried. Trust them taking a risk. Innovation will be a choice for both teachers and students; scale will be small; failures can be quickly corrected.

We will likely see teachers departing from:

- Whole-class-instruction. We will see teachers personalizing learning by using the potential of digital electronics to ensure each student gets what he or she needs. Children differ, so whole-class instruction breeds failure. “Any successful effort to improve learning,” a wise educator advised, “will begin by improving student motivation.” Motivation is individual. The teacher’s job is to adapt to student differences. A Minnesota teacher of the year thought it was obvious: “Only individualized instruction can leave no child behind.”
- Age-grading. With learning personalized, and with students moving at different paces, the old grouping-by-age (for the convenience of administration) can shift to “continuous progress.” Learning should improve for all students as those who need more time get more time, and as those who can go faster do go faster.
- The one-dimensional definition of achievement. Arguably this ensures an “achievement gap.” Try to think of an area of life in which success or quality is one-dimensional. Quality is multidimensional, and judgments are made on balance.
- The boss/worker model of school. In their professional groups, lawyers, doctors, architects and engineers handle questions of quality and accountability. A department of a high school, a whole school, or a district program could work like that — teachers as professionals accepting accountability in return for being able to “call the shots” about learning. A surprising number are interested in that arrangement, as surveys done in 2003 for Public Agenda and in 2013 for Education|Evolving make clear.

Innovation might be easiest in the chartered sector, though it is now less about “different” than it once was. Around 2004 new national leadership of the charter school movement turned it toward doing conventional school better; showing it could out-do districts in creating elementary schools where inner-city students get high test scores and in closing schools where they do not. Some charter advocates talk down innovation. Still, the sector can innovate. In Minnesota the authorizer Innovative Quality Schools requests proposals outside the givens.

Innovation schools can appear in the district sector as well, where schools get a real delegation of authority. Some progressive Minnesota superintendents now do that. Prospects for personalization turn on teachers getting that authority. In school, only teachers know students as individuals.

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Again, this is not a proposal for The Way Everything Should Be. That’s the old notion of top-down “comprehensive” change. This is a proposal for a radically different How — for freeing those closest to the students to create more effective ways of learning.

Getting there won’t be easy. The pressure inside, as Stillwater Superintendent Tom Nelson says, is for “sameness.” Many in the policy discussion resist change because the present system works so well in theory. Big central offices, as in Minneapolis, in no way want to delegate authority to schools.

Surely, though, after decades of falling short, it is time to be practical. We do not have to bet everything on the incremental improvement of conventional school. With a “split-screen” strategy schools and teachers can at the same time be trying new approaches to learning.

Success will depend on teachers — and their unions — insisting that if they are to be accountable for school success they must control what matters for school success.

Why would we not arrange for education to change the way successful systems change?