September 2006

Dear Colleagues,

Last spring my wife and I had our oldest grandson with us for a weekend. Drew was 11, and had just finishing fifth grade. My wife is a special education teacher, and was just finishing her students' IEPs for the year. The night before we picked up Drew for the weekend, he called. He said he wanted to bring five things. He listed them: 1) his Game Boy (he was testing me on that one; I'm sure his mother had already informed him that going to Papa Sam's meant a weekend without a Game Boy; 2) his viola (he would have had better luck with the Game Boy request if he had asked about the viola first); 3) a book (he was reading "Rebel Moon: Battle Zone of the Future," science fiction); 4) his Boy Scout handbook to show me the merit badges he was working on; and 5) his Swiss Army knife so I could teach him how to whittle (we managed to create something that I considered a stick for roasting wienies, but he called a spear).

A little technology, some science, music, and woodsmanship—what a combination. Also, what a wonderful time in Drew's life when all is new and interesting and not yet categorized in his mind. I thought of us that weekend—all of you, myself, and the times when we chose forks in the road. College of Education. Business School. College of Engineering. Law School. We stepped into our categories.

But then there was the College of Arts and Sciences. Arts and Sciences. Two different worlds, each encompassing a universe of its own, held together in one college. C.P. Snow famously warned us that the humanities and the sciences are, in fact, different cultures, and those who dwell within them see the world through different lenses. The inhabitants of each culture must recognize the perspective of the other in order to get along and to bless us with their particular gifts.

Most of us, in this room today, are professionally in the culture of science, even though we like to think of ourselves, personally, as straddling the cultures, imbibing the civilizing graces of the humanities—we like our music, our art, our literature. We are also prone to philosophizing.

What happens when two cultures are brought together? Do they become "two pigs in a poke," as my mother would say, or is it possible for them to achieve harmony within the unity that contains them? Innovation and Improvement. Two pigs in a poke? Or a harmonious pairing?

For the Center on Innovation and Improvement, this question presents more than a ruminative exercise. The Department of Education recently established five content centers. Instruction. Teacher Quality. High Schools. Assessment and Accountability. The names ring true as bells. You know what content each center must center itself on. Like the colleges of education, business, engineering, law, medicine, the name conveys the content.

We are the Center on Innovation and Improvement, more like the College of Arts and Sciences. Two different worlds, expressed as abstractions, each large in its own right, containing many parts, and brought together as either an unnatural union or a creative cauldron, churning with the productive tension of equally viable approaches.

We believe innovation and improvement are "twin paths to better schools," existing side by side as different cultures, perhaps, with different ways of looking at the world, but aimed at the same purpose and capable of interacting catalytically with one another, capable of producing good results for children. That is our belief, our hope, and our purpose.

In the pursuit of better schools, the Innovators step aside from the norm to try something new. We know that most innovations, whether in education or in technology, fall short of the hopes invested in them. But occasionally one succeeds magnificently, and then it becomes the norm from which Innovators again attempt to depart.

An innovation doesn't replace the norm, at least not at first. It exists alongside the norm until it proves its mettle. It is an option, an alternative to the norm, testing itself against the norm, making its case, seeking its own following from those who choose its path. An innovation is propelled by the Innovator's passion, devotion, and necessity to get results. An innovation is challenged to clear the high bar set by the established norm.

In education, we apply a caution to the Innovators. We don't want them experimenting with *our* kids, at least not without our approval of the experiment. So we offer innovations as options, choices. We do that for another reason as well. Some things work with some students, in some contexts, and not with other students, in other contexts. Options and choices help us find the right match between *approach* and *student*.

In education, we don't let the Innovators get too far from our assessment of their effectiveness. We want to see the proof that what they offer as an option is *likely* to be at least as good as what is already available to the student. We guard against flat-out failures for the sake of our children.

Calling a school a charter school isn't much of an innovation, only an organizational shuffling of the deck. But what happens next could be innovative. Given the chance to "innovate," to try something apart from the norm, charter schools could generate a thousand different approaches to schooling, each tested against the norm, and each required, in order to succeed, to make its case, to attract its following. Charter school experiments that succeed may ultimately become the norm.

Supplemental Educational Services, SES, or, as someone finally put it in plain English—tutoring for kids—isn't much of an innovation. Maybe tutoring kids was innovative for Socrates, but it hasn't been since. Tutoring is a good practice, but not a bright new idea. The bright idea is to encourage a hundred different approaches to tutoring, placed alongside each other, tested against each other, tested against the norm, each required to make its case and attract its following.

We all want to be part of a successful innovation. Recently I was with a group of educators of various stripes, mostly old-timers, and I caught myself saying that before I give it up I want to be part of just one thing that "really" works. A homerun. Just one, "My God, why didn't we think of that before!" A huge "Aha." One new light that enables us to take children otherwise headed for mediocrity or worse and hitch their wagons to stars. Break the mold! Breakthrough schools! Remember those heady days? Exciting stuff to be with Thomas Kuhn and a new paradigm instead of Karl Popper and an endless string of tiny, incremental verifications and falsifications

of hypotheses. Each time we see children languishing in mediocre schools, we pray for the innovation that sets them free.

What then is improvement? How does it differ from innovation? If it didn't differ in some way, we would not need both words in the name of a center? We could just be the Center on Innovation. Or the Center on Improvement.

If the Innovators are the dreamers who persist through a thousand dry holes in order to hit one rich, black gusher, the Improvers are the chemists in the lab, carefully applying the protocols and procedures of exacting science to wring one more ounce of refined oil from a barrel of crude. Then the next day, another ounce. Step by step, within the bounds of what is known and with methodologies proven over time, they advance, following the rules, sticking to the book. In reality, the Innovators and Improvers often find themselves meeting in the middle; the visionaries who would colonize the moon, after all, gave us Tang.

When a state education department, through its system of support, sends an Improver to sit down with a principal and teachers at a school not making adequate progress, innovation is not the tone of the conversation. Improvers are the Woody Hayeses of education. Three yards and a cloud of dust. Do a few things and do them well. This is chalk talk at half time. Know the playbook and stick to it. Do what works. Diagram it, chart it, execute it. Get better at executing it. Eliminate mistakes. The Improvers like precise words that begin with "a": Audit, align, assess. Measure what you do with rubrics to keep safely within the bounds of the proven. Teach, test, reteach. Know what your students know. Match what you do to the research, to the correlates of effective schooling. Test it. Measure it. Document it. Control it. Improve it.

Improving schools is not as much fun as inventing a light bulb or connecting on a Hail Mary in the end zone, but since most innovations fail (as do most Hail Marys), someone has to tend to the business of getting better "every day in every way." Woody Hayes won a lot of ballgames that way.

Learning standards and standards-based assessments give us a means for testing the effects of innovations, of options; they also give us a yardstick for measuring the steady progress of the Improvers. Standards make it possible for Innovators and Improvers to work side by side toward common ends, even if their methods and outlooks differ.

The Improvers polish the stone of the norm, while the Innovators search the hills for the mother lode. We won't know if what the Innovators find is genuine without the stone for comparison. The Innovators may haul a ton of fool's gold to the assayer's office in their search for the true metal, while the Improvers polish the stone to an ever more golden sheen.

Two pigs in a poke? Maybe Innovation and Improvement are more like a viola and a Swiss Army knife. Or a science fiction novel alongside a Boy Scout handbook. Each is useful in its own way, and they make nice companions for the weekend. Together they can produce happy results for a kid.

Sincerely,

Sam Redding, Ed.D. Center Director