

Innovation, Experimentation and Courage

in 21st century education

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*“Don’t experiment with **my** kid!”*

– a parent

Let’s talk about innovation. Because “innovation” is a big buzzword at the moment in education—with lots of pressure to sign our people up to do it—we have to be careful not to just rush onto the bandwagon. All “innovation” is *not* created equal. In particular, innovation does not automatically imply preparing our kids better for the future.

MOOCs, for example, are definitely an innovation in the distribution of higher education. But they do not change the way the education is done at all—it’s still a combination of lectures, textbooks, exercises and discussion. The sorts of innovations that our education really needs are different.

The reason is context. I suspect people were innovating to make a “better cruising experience” on the Titanic—right up until they hit the iceberg. At that point the context changed, and so the value of that kind of innovation went to zero.

Many of the so-called innovations being undertaken today — such as the Common Core curriculum, purchasing iPads and tablets, and developing new electronic curricula—are extremely expensive. We need a compass to be sure that our innovations are worth our time and effort, and that they move us in the right direction. Innovation should be not just doing things differently—but rather doing things that are valuable.

I propose these two criteria for evaluating whether any innovation, large or small, should be accepted and implemented:

1. Does this make people's lives and jobs better or easier? i.e. .Will almost everybody, once this innovation is implemented, hate or refuse to go back to doing things the old way?
2. Will this "innovation" move us towards a new kind of education? (Or is it just a new—and perhaps better—way of doing what we could do before?) In other words, is this innovation *also* Future●cation?

Meeting *both* of the criteria is crucial, because it is possible, and even easy, to innovate and still Past-ucate. The Common Core, I believe, fails on both counts—few, if any, think it makes life better or easier, and it is mostly oriented toward improving what we did in the past.

Other innovations that do not go far enough include:

- Devices that are constrained to a pre-determined network and curriculum, such as the iPads in LA, or the Amplify tablet. It is not "useful" innovation to give the kids new tools unless you let them do new things.
- Whiteboards, even interactive ones. Yes, much cleaner than chalk, with access to multiple images—but generally the same old pedagogy.
- Sending emails to parents, instead of letters. Much faster and easier, but typically the same communications as before.
- Moving "traditional" research from the library to online—so much quicker, but we also need new concepts about information.

There are an infinite number of ways to make what we now do easier and more efficient using technology, but that kind of innovation is not our job. We must not get distracted from the goal of making education better for the future by the idea of "becoming innovators."

This is because meeting the second criterion is much more difficult. For one thing, it involves admitting what we currently do — no matter how we do it — doesn't work in the current and future context. For another, it means thinking up new ideas not for just what we do, but for what we *should* do, given our rapidly changing context and environment.

The big danger—and the place where we must be vigilant—is that it is easy to use technology to make life easier and to think that we are making it better. I have never met

anyone from the younger generation who has used computers in school who prefers to go back to *not* using them to do old stuff like writing, and research. But typically, instead of innovations opening up wholly new possibilities and experiences for students in the future, they offer new ways to give students the same education as in the past.

Is the move to online textbooks, for example, a valuable innovation? We can be sure no one from the Internet generation will want to go back to carrying heavy paper-based texts, and it might even be—assuming we get publishers to do cost-based pricing or that teachers write open-source textbooks—cheaper.

But it fails the second criterion. Online textbooks — even enhanced with multimedia, games, and simulations — are merely an old way of looking at content in the Internet age. They are not innovative expenditures—we should be looking much further. The true innovation is that we don't need textbooks at all. But because we do not yet know exactly what works in their place, we must be totally open to experimentation.

I have heard the comment -- “*Don't experiment with my kid!*” — from numerous parents. It is certainly understandable in every parent who wants their kid to succeed. But it is also our greatest barrier to moving education forward, and our greatest danger.

We many need —given that attitude—to begin with one big innovation: we can design — and universally use—effective, easy-to-make (and fun-to-use) apps that prepare kids well for our current tests (just as we have done for the SATs and other exams). Doing the old stuff quickly and efficiently in a 21st century way—and in half the time—should be, perhaps, our first innovation priority.

But let's get this done quickly, and then let's spend our “innovation energy” figuring out how to really educate for the future. It will take much experimentation and lots of courage.

Marc Prensky—author of the 2001 article Digital Natives, Digital Immigrants—is an internationally acclaimed thought leader, speaker, writer, consultant, and game designer in the field of education and learning. He is the author of five books: From Digital Natives to Digital Wisdom (Corwin, 2012) Teaching Digital Natives: Partnering for Real Learning (Corwin, 2010), Don't Bother Me, Mom, I'm Learning (Paragon House, 2006), Digital Game-Based Learning (McGraw Hill, 2001) and Brain Gain: Technology and the Quest for Digital Wisdom (Palgrave MacMillan 2012). Marc is the founder and CEO of Games2train, a game-based learning company whose clients include IBM, Bank of America, Pfizer, the U.S. Department of Defense and the L.A. and Florida Virtual Schools, and is co-founder of Spree Learning Games, a new “curricular games” company. Marc holds an MBA from Harvard and a Masters in Teaching from Yale. Many of his writings can be found at www.marcprensky.com/writing. Contact Marc at marcprensky@gmail.com.