

OPEN LETTER

To the Obama Administration

From: Marc Prensky

That the Huffington Post's Inaugural Ball was, in part, dedicated to showing off new educational technologies is a welcome signal to and from your administration. But before any technology can really help our kids' education, we need to reform both what we teach and how we teach, in a fundamental way. The surest road to failure for our students would be to "fix" education so that it does the same work it did in the twentieth century, with some extra equipment, rather than change our education fundamentally for the twenty-first century.

We talk about how futile it is to throw money at an auto industry that is so far behind the times, or at a financial industry that is doing the fundamentally wrong things, without demanding radical reforms. Our educational system is an even worse case. Things have changed so much in the last 30 years that we have reached the point where our students are no longer the ones that our systems were designed for, and that our teachers were trained to teach. Just throwing money in the form of technology—as good as that technology is and will become—will not help. Reform is needed for the technology to work.

Take our current curriculum. It is, on all levels, from kindergarten through high school, hopelessly outdated for the twenty-first century, and ought to be completely re-thought, adding many subjects that didn't exist in the past, and many future-oriented skills that are currently untaught. Since our curricula are not only full, but overloaded, in order to make room for such things we must drop others—many of which are near and dear to educators' hearts.

Ask yourself this: What should we eliminate to make room for nanotechnology, bioethics, programming, genomics, and proteomics? How can we make room in our teaching for the desperately needed skills of ethical behavior, critical thinking, decision making, problem solving and judgment? Where do we fit our teaching of goal setting, planning, self-direction and self-evaluation? Of communicating and interacting with individuals and groups using technology? Of communicating with our ever-more powerful machines? Of communicating with a world audience? Where should we put our teaching of creative thinking, designing, playing, and our helping kids to find their own voice? Where do we teach our students to be proactive, to take prudent risks, to think long-term, laterally, and strategically?

Our concepts of "age-appropriateness" in education need to be completely re-examined, in ways that have, up till now, hardly even been discussed. We need to recognize that our children and students are capable of using and understanding much more sophisticated tools than have ever been used in the past—tools that are sometimes beyond the ken of our educators.

Our kids who start school today will compete in the world more than a decade, and in some cases almost two decades, from now. Do we do them any favors by helping them compete better on the skills of yesterday? Twenty years from now, will today's kids be better off with

a solid knowledge of the long division algorithm (which “better teaching” today’s curriculum might, conceivably, give them), or with a solid foundation in problem solving (which we really don’t provide)? Will they be better off writing neat cursive handwriting with perfect spelling, or writing computer code? We may not have room for both.

Equally important is *how* we teach, and this brings us back to the technology. The primary mode of teaching in our country is still the lecture-explanation to the whole class by the teacher. With only a few exceptions, students today have rejected this approach completely. “My teachers just talk and talk and talk” say kids, over and over again from Maine to Idaho to California, Florida and the Midwest. “It’s not Attention Deficit — I’m just not listening” reads their classic t-shirt.

No amount of technology will help this problem. The most technology can offer to a lecturer is pictures and video, which is no improvement at all. In a lecture-based classroom bored students with laptops use them to Facebook and play games.

But a new pedagogical paradigm has arisen in the education world, starting mostly in charter schools and other pockets. Schools and teachers have begun to *let students learn on their own (and from each other) with their teachers’ guidance*. Known alternatively as inquiry-based learning, problem-based learning, case-based learning, or learning by doing, it is Deweyism brought back to the life it should have had.

It is this pedagogy that technology really assists, and all our teachers should be moving to it as quickly as possible. While it involves giving up some traditional “control,” the payback comes in student engagement and success. And when done well, learning becomes a true partnership between teachers and students. The students do what they do well, which is use technology to connect, to find information and to create presentations in multiple media. Teachers do what they do best, which is to ask the right questions, provide context, control quality, and ensure rigor. Students and teachers learn from each other. Unfortunately, most of our teacher training schools are totally unprepared for this pedagogy, and are still preparing teachers for the ways of the nineteenth and twentieth centuries.

This is where your administration can have the greatest effect on education. If you define a new curriculum oriented to the twenty-first century, and it encourage all teachers to move quickly to the “new” pedagogical paradigm, our kids will be better than the rest of world—not just at answering test questions, but at creating, and at solving real problems on their own and with their peers. If all we get are better ways to do the same old stuff, even if test scores rise in the short term, in the long term we all lose.

Marc Prensky is a worldwide speaker and writer on education and technology. His latest book is “Don’t Bother Me Mom—I’m Learning,” His forthcoming book “Partnering With Your Digital Native Students” will appear this Spring from Corwin. He can be reached at www.marcprensky.com.