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Backup Education?

Too many teachers see education as preparing kids for the past, not the future.

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A disturbing voice has emerged in the questions that teachers ask after my talks. Reacting to my discussing the need to delete things from the curriculum in order to make room for topics about the future, teachers almost invariably ask some version of the following: "But what if the technology breaks down? What will our kids do then?" For example: "The power went down in a store the other day and the workers couldn't make change." "Just the other day our bus broke down on the highway." "Didn't you read about the cyber-attack in Estonia?"

Teachers who ask these questions and voice these opinions often get applause from their colleagues in the audience, making them think they are right in holding these attitudes. But these questions make me (and the students on my panels) realize that we have a real problem.

Of course technology will break down. And *of course* some people may not know what to do until it's fixed.

So why is the teachers' attitude a problem?

It's a problem because what the teachers are really saying is this: "We don't trust the technology of today, or the future. We don't trust the world in which you kids are going to live. We believe the way we did it in our time was the "real" way, the only reliable way, and that's what we want to teach you kids – "the basics." (That's why they all applaud the idiotic video showing people on a stopped escalator just standing there calling for help.)

Confusing "Methods" with "Basics"

Unfortunately, thinking that many of the things we have students learn and memorize – from the multiplication tables, to the long division algorithm, to making change, to the state capitals – are "the basics" is confusing the "best method" of the moment with what is actually important to know. The reason we memorized so many of these things in the past was only because there was no handy/speedy way to look them up. But the "best methods" to the basics change over time.

For example, telling time is a "basic." At one time the best method we had was the sundial. Now we all just strap a machine to our wrist.

Math "basics" are the meaning and proper use of addition, subtraction, multiplication and division, not the methods (i.e. algorithms) we use to perform those functions. Currently our best method for math is a calculator that we always have easy access to (perhaps strapped to our wrists as well).

Communication, too, is a basic skill, with reading and writing merely the best methods of the moment. Now both reading and writing are both very *useful* methods, which, to be clear, I think we need to teach until better ways emerge for getting the same information. But once all books are recorded, the Web reads itself, and every child and adult has a text scanner in his or her cell phone that can read any printed text aloud, should we still spend all those years teaching our kids phonics?

Writing is merely a method for recording thoughts. Not long ago neat cursive penmanship was the best method we had for this, because it was faster than printing and universally legible. Now we have better methods, such as phones, recording machines, IM, and keyboarding. As our kids all get their own phones and laptops, do we really need to teach them the old ways?

"Backup" Education

What the teachers described earlier are advocating that we teach our kids is not "the basics," at all, but rather a "backup" education of old methods — ones that are now useful only in unlikely emergencies. Those who continue to teach kids things they need to know only when stuff breaks down are doing those kids an enormous disservice. There is rarely a need to go back to the old ways, even when technology breaks down. Typically we are inconvenienced a bit, then we fix what is broken and move on.

The real issue lies in the fact that by continuing to teach the "backup" stuff, there is no room to teach for the future. Within the working lives of our

students, technology will become a billion times more powerful, likely more powerful than the human brain. What will serve our kids better in 20 years – memorized multiplication tables or fundamental knowledge of programming concepts? Long division algorithms or the ability to think logically and to estimate? The ability to write cursive handwriting or the ability to create meaningfully in multimedia? (And that's just for elementary school – the same applies to the higher grades as well.)

Irony

The irony is that by the time today's elementary students get to the work force, many of the breakdown scenarios the teachers describe will be structurally unable to occur. Making change, for example, will likely be gone altogether, as cash is replaced by our automated cell phone wallets. And while the dystopic scenario of everything breaking down at once (and only those with pre-twenty-first century skills surviving) may make a good movie, it is incredibly unlikely to happen. (If it does, we'll have larger issues than kids' not knowing the multiplication tables.)

Those teachers who want to give their kids a backup education can't understand or accept that the world of their students is diverging incredibly quickly from their own. They don't understand that their well-intentioned instinct to "protect" their kids actually has the opposite effect — it prevents their kids from learning what they need to know to succeed in the twenty-first century (more on what this is in future columns.)

Obviously, not all teachers believe backup education is the right way to go. But enough do, judging from the applause I hear, to seriously put our children's future at risk. So if the issue of "backup" education comes up in your neighborhood, resist it with all you've got. Our kids' future depends on it.

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