**Reinventing Education To Teach Creativity And Entrepreneurship**

Written by: [Jennifer Medbery](http://www.fastcoexist.com/users/jennifer-medbery)

We don’t need to memorize things any more, but we still need teachers to guide our students toward

As you read this, students all over the country are sitting for state standardized exams. Schools spend up to 40% of the year on test prep, so that, shall we say, no child is left behind. Schools’ futures and funding depend on the number of students who fall into performance bands like “Advanced," “Proficient,” and “Approaching Basic” based on bubble sheets and number two pencils.

This piece is part of a [Collaborative Fund](http://collaborativefund.tumblr.com" \t "_blank)-curated [series on creativity and values](http://www.fastcoexist.com/section/the-future-of-collaboration%22%20%5Ct%20%22_blank) written by thought leaders in the for-profit, for-good business space.

But this is not the rant you think it is.

Let’s get one thing straight from the beginning: As a former high school teacher, I’m not opposed to standardized testing. Common assessments are a critical way of maintaining high expectations for all kids. Great teachers want benchmarks to measure progress and ensure that they are closing the gap between students in their classroom and the kids across town. What you measure should matter. The problem is, most American classrooms are measuring the wrong thing.

Schools used to be gatekeepers of knowledge, and memorization was key to success. Thus, we measured students’ abilities to regurgitate facts and formulas. Not anymore. As Seth Godin writes, “If there’s information that can be recorded, widespread digital access now means that just about anyone can look it up. We don’t need a human being standing next to us to lecture us on how to find the square root of a number.”

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Given this argument, many entrepreneurs see a disruptive opportunity to “democratize” education, meaning that everyone now has a platform from which to teach, and anyone can learn anything anywhere anytime. Ventures like [Udacity](http://www.udacity.com/%22%20%5Ct%20%22_blank), [ShowMe](http://www.showme.com/%22%20%5Ct%20%22_blank), [LearnZillion](http://learnzillion.com/%22%20%5Ct%20%22_blank), and [Skillshare](http://www.skillshare.com/%22%20%5Ct%20%22_blank) increase the efficiency of the learning market by lowering barriers to knowledge acquisition.

Yet there is an inherent bias in the promise of these new platforms that favors extraordinarily self-directed learners.

But by itself, this “any thing/place/time” learning won’t lead to the revolution we seek. We also have the responsibility of unlocking the potential of every student because the world needs more leaders, problem-finders, and rule-breakers. Teachers are perfectly positioned to take on this challenge.

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The primary purpose of teaching can now shift away from “stand and deliver” and becomes this: to be relentless about making sure every student graduates ready to tinker, create, and take initiative.

Sarah Beth Greenberg, a visionary elementary school principal in New Orleans, describes this as the balance between the art and science within teaching. The art is in the relationships you build with kids, and the science is purposeful assessment that generates real evidence of student growth.

Which brings me back to my original point. Accountability is a good thing, but only when you are measuring what matters.

Dan Meyer is right when he [describes today’s curriculum](http://www.ted.com/talks/dan_meyer_math_curriculum_makeover.html%22%20%5Ct%20%22_blank) as “paint-by-numbers classwork, robbing kids of a skill more important than solving problems: formulating them.” Imagine a world where the math textbook was replaced with open-ended, thought-provoking opportunities to [question the world around us](http://www.101qs.com" \t "_blank). In these classrooms, students would learn how to think, how to find problems, not just plug in numbers to solve them. What if quizzes measured kids’ ability to question, not answer?

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Our schools should be producing kids who tinker, make, experiment, collaborate, question, and embrace failure as an opportunity to learn. Our schools must be staffed with passionate teachers who are not just prepared to foster creativity, perseverance, and empathy, but are responsible for ensuring kids develop these skills.

Most importantly, in these schools, old-fashioned gradebooks and multiple-choice tests aren’t good enough. Teachers need better tools to track several dimensions of student progress. Kids are more than just test scores. The narrative is important, and teaching demands a new type of CRM (classroom relationship management) to capture anecdotal notes and evidence of student growth. Teachers must become disciplined and analytical about identifying students’ strengths and skill gaps, continuously turning classroom data into a plan of action.

Schools like this exist in the dozens, but we need them in the hundreds of thousands:

* [Science Leadership Academy](http://www.scienceleadership.org" \t "_blank) in Philadelphia uses a project-based learning model, where the core values of inquiry, research, collaboration, presentation and reflection are emphasized in all classes.
* [Big Picture Learning schools](http://www.bigpicture.org" \t "_blank) across the country are built on the foundational principle that there is no canon of information that all students must know, an idea that flies in the face of the current Common Core standards movement.
* High schoolers who want to design software that changes lives can do so at the [Academy for Software Engineering](http://www.avc.com/a_vc/2012/03/academy-for-software-engineering.html%22%20%5Ct%20%22_blank) in New York City when it opens this August.
* And the school to which I’ll send my own kids hasn’t opened yet either. [Bricolage Academy](http://www.bricolageacademy.org" \t "_blank) is a proposed new public elementary school in New Orleans. While the name conjures up images of the streets in the historic French Quarter, the name is borrowed from the French verb, bricoler, to tinker. Incubated in 4.0 Schools’ innovation lab, Bricolage’s founding principal recognizes that technology and increasing diversity will continue to influence our society in unpredictable ways and thus, a school must continually adapt so that students are prepared for the world they will enter as adults.

But we’re shortchanging kids if we aren’t relentless about measuring outcomes in these new models. Teachers are the linchpins here. They’re much more than just motivational coaches, they must become results-oriented diagnosticians of student learning.

In a world where the sheer volume and accessibility of information is growing exponentially, perhaps what’s most remarkable is that to create, tinker, and take initiative in this new world doesn’t always require high-tech gadgets. Take nine-year-old [Caine Monroy and his cardboard arcade](http://www.cainesarcade.com" \t "_blank) for example. Monroy has shown the world that all you need is a little ingenuity and a cardboard box.

Imagine a world in which all teachers were relentless about fostering that same creativity in all of their students.