

Article Series on Learning Impact

New Paradigms for Teaching and Learning

Is it the role of technology to lead the transformation toward student-centric learning or is it merely to serve as a catalyst toward change?

According to a lively panel discussion on that topic at the recent Learning Impact 2013, it's a little of both.

"I kind of think the shift has already happened," said Tim Beekman, president and co-founder of SAFARI Montage. "Technology is already a given for our students. It's not a question of whether they're going to use it or will it succeed. It's done. Go to any school, go to any classroom, go to any home, they are embedded in the technology. The teachers have grasped the technology that we've provided them in the K-12 space. I think that the attitudes of the school boards in K-12, the environment around them, and the ability to accept that change is the big issue. I think there are more human blockers than there are technology blockers."

"I think as technologists and as platform providers, the best that we can do is put technology in service to the frameworks that evolve," countered Douglas Gastich, vice president of business development and strategy for Learning.com. "We're in a funny world these days where we are seeing some of the technology lead. The question I would pose is: is this a problem that technology can solve? And if not, my thinking would be that technology should transport it to the evolving frameworks."

The panel discussion was preceded by a presentation by Yong Zhao, presidential chair and associate dean for global education in the University of Oregon's College of Education. With tongue in cheek, Zhao said one metric he uses for measuring the success of the current education system is keeping people's children out of their basements after they graduate from college.

"If you look at the data, you will see that we're not doing a very good job of keeping people's children out of their basements. Education, for a long time, has not been about diversity. It has been about reducing diversity. Education has always been about attaching value to knowledge and talents. And for those talents we deem valuable, we teach them. That's outcome."

Comparing higher education to the process of making sausage, Zhao said institutions have been all about suppressing creativity and homogenizing individuals because we could predict what the future society would need in the way of skilled workers. "In the industrial age, as you know, we needed lots of people with similar skills. But the problem with our changing economy, that promise, that pipeline is broken."

1 www.imsglobal.org

Institutions today need to move from preparing future employees to enhancing entrepreneurs, he added. "Entrepreneurship now is termed as a spirit. A type of ability that you do not wait for someone to solve your problem. If you don't have a job, create one. Today, if you're waiting for someone to give you directions, as if you are a simple employee, you are not employable. If you can break down a job into procedures and directions, machines can do that or they can be done much cheaper

overseas. Everyone needs to become creative, confident, and take risks. Those are entrepreneurial qualities. But our traditional education doesn't do any of those things. In fact, traditional education, the sausage-making model, is about suppressing all of those things."

Zhao said his goal is to help every child using technology to create a personalized global learning academy which will be determined by them. Challenging the audience, he said: "Whatever you are creating, whatever you are using, I would hope that you would have a chance to think about: does your system enhance everyone's ability? Does it encourage even the kindergartners to market their knowledge and their products to people globally? To keep our children out of your basement, help them find their passion, their voice and be great at what they are interested in. They have to learn to create jobs, not just to find jobs."

To bring about that kind of change, Beekman said, is going to be at least a five to 10-year process. "I think we're at a point where we realize that to do the change we are talking about, we're going to have to facilitate that change with a plan, with a structure, with a strategy. Also, in the U.S., we talk about bandwidth and access in K-12. It's extremely poor. There's a roadmap here, but it's a difficult one."

Mohit Bhargava, president of LearningMate Canada, pointed out that by the time new technologies are



Yong Zhao (right) and fellow panel members at Learning Impact 2013.

formalized, embedded into curriculums. teachers are instructed on how to use them, they are hopelessly out of date. "This whole question about: 'Why don't you teach me with blogs?' and 'Why don't you teach me using the way I learn?' I think those questions are being driven from this proliferation of consumer devices in the enterprise. And those consumer experiences are driving the expectations of the education experience. Our teachers are not immune to this. Our teachers have the same phones. They're on YouTube. They are subject to the same pressures, the same influences that our students are experiencing. [Education] might be three days late to the party, but they're still there. I think what we need to find is a framework and a structure, a willingness to change. We have to get to someplace where we say: irrespective of the tools that we use, let's focus on the outcomes."

Education may be one of the last sectors where lots of technologies have been implemented, said Zhao, but no one has ever really defined the functions of teachers in the learning process. "We still think of teachers as the holders of the knowledge and the transmitters of that knowledge. You can't teach any better than something I can find online. My question is: if you can Google everything, why do you need a teacher? The answer is: the teacher gives children the reason to Google. I think in most of education, we haven't done that. We also still think that a school should be arranged by one teacher in charge

of a group of kids. I just want to caution us that we're seeing a grass roots movement; the country is actually going the wrong direction with [Secretary of Education] Duncan, with [President] Obama. They have completely got it wrong, basically. They're trying to do the teacher evaluation, producing test scores to assess how much the teacher knows, how much they affect. This is all kind of nonsense. You don't need all of this. A new teacher is the one who can aspire, who can curate information, not the ones who necessarily know a lot more. I hope the industry and other people can rise up and re-think the role of a teacher to not replicate what the machine can do better and try to make human beings do it."

Trina Trimm Angelone, COO and founder of VSCHOOLZ, said this is the first time in the history of K-12 that children are actually driving the changes in education. "We did not mandate that those changes happen from the top down by providing tools. The tool is an every-day common resource and the kids are demanding: 'We don't want textbooks. I can't sit for eight hours a day in the old school as we know it.' So the consumer, the student himself, has had a serious impact on changing what we consider the 'traditional school' environment."

One thing that technology has managed to provide, and not until recently, is the opportunity for group learning in a K-12 environment. Bhargava said he did not believe such a thing was possible until he witnessed such an event about three months ago by sitting in on a second grade classroom in Tennessee.

"I witnessed higher level learning that we don't see in colleges," he said. "And that was entirely enabled by these iPad devices, networked and Internet connected, and learning resources that were curated by the teacher. Different students in the classroom were looking for different things about Abraham Lincoln and George Washington based on whether they wanted to do a Web search, whether they wanted to read something, look at a picture or look at a video. And then they came together and built this personality of who was George Washington and who was Abraham Lincoln. And they did this together. They were learning collaborative skills,

exhibiting each of their talents and preferences for learning in a social environment. But the goal was shared. The teacher established the goal. The teacher curated the content. The teacher motivated them."

If not to lead, then enhancing the learning experience should clearly be a goal of technology, said Travis Willard, COO of Its Learning. "We've allowed technology to extend our learning day using drop-box type of technology. And we've got to meet districts and teachers and administrators where they are. Start at more of the extended learning and travel into more of this personalized, studentcentric realm. Then, hopefully, we can meet people where they can find their own path, their own way to get into that. Because if they don't support it, and we've seen numerous instances where we try to put technology into a school district and it just meets a roadblock. If they don't feel like they have some ownership or some of their own way of describing their experience, then it probably won't succeed."

Zhao told providers they should do more than pander to the existing needs of school districts and higher education institutions. They should challenge them and provide a new vision for the future of education. They should create a new need, he said, and not just support existing needs.

Following technology standards as are provided by the IMS Global Learning Consortium has allowed for the scaling of content in the New York City Public Schools, said Kathy Walter, executive director of NYC's Office of Product Development.

"We have 1,800 schools, we have 1.1 million students, and more than 90,000 teachers," she said. "As you can imagine, that's bigger than a corporation, bigger than many small cities, bigger than the town I grew up in. The point is, when you have something that big that you're working with, we also have one of the most innovative groups working within our school district under the iZone. The way that we initially got involved with IMS Global, we were one of the first school districts that put into our RFP language that said the content providers and

partners that we were working with needed to make sure they were using IMS standards. Our island platform has 14 content vendors all integrated on one platform. That's really great and we're doing a lot of interesting things in a lot of our high schools, but it's very difficult to do that for all 1,800 schools.

That's why I love what I do. That is the challenge I face every single day, figuring out how we can have conversations exactly like this one today, then go back to New York City and figure out how do we make this happen for 1,800 schools? And if we can figure out how to do it in NYC, then I think all of us can figure out how to do it."

Walter added that once teachers become students in learning and adapting some of the new technologies, they should be given the same student-centric rights being extended to those in their classrooms.

"There's this notion of the teacher and there's technology," she said. "Depending on where teachers are, and how quickly school districts can adapt to it, and I would argue the same thing on the higher learning side, how quickly universities can adapt to it, we have to make sure that the technology is ready regardless of what the classroom looks like. We definitely are all very passionate about education and

we're all very passionate about directions it can go. However, we are not the only ones who are leading these districts. As technology partners to all of this stuff happening, we also have to balance that out with how can we actually make that happen regardless of the decisions that are made in the classroom, regardless of how student-centric they are."

Zhao argues against trying to change teachers because he said the process takes too long. "The first thing, I think we need to offer is a lot more tools to students. Technology is supposed to be a tool to bring more democracy. It's a liberating tool, to allow more individual autonomy, to allow more individuals possibilities.

"But my bigger challenge for you is this: whatever technology tool you develop, you have to deliver education that's better than can be delivered in a remote school in Tanzania. None of the technology is needed to learn long division faster. I was able to learn it in my little village in China. I learned how to read. I learned how to speak English. I learned how to do math. But I could not learn how to become a Justin Bieber. I might have had the talent, but I did not have the tools. Whatever investment you put into your schools, we have to produce something that's different."

About IMS Global Learning Consortium

IMS Global is a nonprofit organization that advances technology that can affordably scale and improve educational participation and attainment. IMS members are leading suppliers, institutions and government organizations that are enabling the future of education by collaborating on interoperability and adoption initiatives. IMS sponsors Learning Impact: A global awards program and conference to recognize the impact of innovative technology on educational access, affordability, and quality. For more information visit www.imsglobal.org or contact info@imsglobal.org.

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