

Will education technology be the next growth sector?

By Eileen Rudden | WEB PUB DATE OCTOBER 15, 2014 OCTOBER 15, 2014



KATHERINE TAYLOR FOR THE BOSTON GLOBE/FILE 2014

Beyza Boyacioglu videotaped a conversation between Harvard University Professor

Laurel Thatcher Ulrich (left) and Christina Hodge of the Peabody Museum for a massive open online course, or MOOC.

Massachusetts' innovation economy is a well-recognized engine for economic growth in the Commonwealth. Its higher ed sector is world renowned, and its K-12 school system leads the United States in student outcomes. Education curriculum and program developers have long thrived here.

Now the education technology ecosystem is growing from the convergence of these unique Massachusetts' strengths. It has the potential to provide major growth in jobs to the Commonwealth, and new time-saving or quality-enhancing products and services for learners.

The "ecosystem" is home to more than 250 early stage startups, several dozen venture-funded companies and dozens of growth stage companies, many private. The companies range from Doink, an app that students use to create their own videos using green screens, to Listen Current, which provides NPR content and lesson plans to teachers and students. They range from EverTrue, enabling colleges to connect with alumni over social media, to QStream, which was developed at Harvard Medical School and can be used to train sales forces on new products. New educational programs range from the Startup Institute, a post graduate program to transition college graduates to roles in the startup sector, to edX, with the potential to transform higher education.

Houghton Mifflin Harcourt has long been headquartered here in Boston, Cengage recently moved its corporate headquarters here, and McGraw Hill has opened up its R&D here. Scholastic's development site is here. Pearson and MacMillan both have major operations here. Our education nonprofit sector has been exporting curriculum and instructional approaches for some time, whether it is from the Museum of Science, FIRST, Facing History and Ourselves or YearUp. Google in Cambridge is the headquarters for Google PlayEdu; Amazon acquired local company TenMarks, and Microsoft is making a renewed push in education.

The industry has been growing here, fueled by our world class university faculty and students, and supported by the strong K-12 educators. Many of them recognize the possibility to improve education using this new generation of digital tools and approaches. They are "practice- innovators," eager to improve student learning, enhance their roles as educators and save time and money. Just as the life sciences boom was fueled by universities and early adopting hospital and medical provider systems, edtech will need support from early adopter educators.

The sector is promising. What does it need to grow even faster? So far, the support of this sector has been privately funded, with local tech leaders founding LearnLaunch. We are serving as a connector, bringing support and services to the participants. Here are my personal recommendations based on two years working with the education technology innovators.

- Support should come from the Commonwealth economic development agencies, such as the Economic Development Office. A grant to measure the sector's current size, potential growth rate, and key bottlenecks to growth would be a great start.

- The Executive Office of Education could convene educators and entrepreneurs interested in more formalized collaborations between colleges, schools and innovators. This action would broaden recognition of the possibilities for this sector, and help create a broader community of practice.
- The Department of Elementary and Secondary Education should support the development of personalized learning by encouraging schools and districts that pioneer “blended learning.” Rhode Island created a challenge competition for schools to introduce “personalized pathways” and has now inaugurated the FuseRI initiative in blended learning. The Massachusetts Business Alliance for Education, in its “New Opportunity to Lead” report, recommends the creation of a Learning Redesign Challenge, to encourage the development of school models that change use of time and staff to personalize learning.
- Massachusetts schools must upgrade their school tech infrastructure. The Legislature helped by passing a \$38 million matching grant bill in August to help K-12 schools build the wireless infrastructure needed to support student and teacher use of edtech tools which improve student engagement and achievement. Local schools should move forward, and the state should plan its next support initiative.
- Industry collaboration to raise our profile. All technology businesses are competing for talent. The converged content and technology companies want to attract more engineers, instructional designers, and experienced sales people to the field. We need to showcase the excitement of our industry. Edtech companies are mission driven: they want to improve student learning. They offer growing businesses to fuel careers and to improve educational outcomes.
- Investment for early stage companies. Local investors are increasingly looking at and investing in edtech. Investors have most interest in higher education and direct to consumer offerings. While we have great examples of startups like Panorama moving to Boston, promising companies which don’t find investment move elsewhere. Should there be a fund recognizing the interplay between investment and economic development, like exists in Maryland?
- We should build a broad coalition to address this opportunity for Massachusetts, to improve student achievement, create school models for the 21st century, and to grow a new industry from our unique advantages as a state.

Eileen Rudden, a partner at LearnLaunch, served as chief of college and career preparation for Chicago Public Schools.