The New York Times | http://nyti.ms/28QCGT5

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Teacher and Tech: Making the Most of Learning Technologies

By JAMES E. RYAN   JUNE 22, 2016

Learning technologies offer great potential to improve education, but whether that potential will be realized depends on three key factors, which have less to do with technology itself and more to do with the people using it.

First, we need to ensure that we don't lose sight of the "learning" in learning technologies. As we develop and adopt learning technologies we need to keep in mind what we know about how students learn. We know, for example, that they learn at different rates, that it is critical to master a topic before moving to the next when learning is sequential, that students who are engaged are likely to learn more and learn more deeply, and that active learning is more likely to engage students than passive learning.

It follows that technologies that help teachers personalize learning even more than they already do and that tailor learning to the pace and interests of students are likely to have bigger payoffs than those that do not.

Second, we need to recognize that we are really facing an adaptive challenge, not a technical one. At the moment, the digital tools most likely to be adopted are the ones that are least disruptive to the status quo and fit readily into existing school models. They offer a quick, technical fix but, according to research by SRI International, have little impact on student learning.

If we are to realize the full potential of learning technologies, we have to be thinking about fundamental questions like how we organize classes and schools, how we use time, how we think of the role of the teacher and what we expect students to learn. These are not technical questions but questions about organizational behavior and the role of teachers and principals.

A good place to start is with teachers and principals themselves, by asking a simple question: What would you really love to do that you are unable to do now? The answers should help guide the design of learning technologies.

We also have to provide support for teachers, including professional development, that will be critical to getting the most out of learning technologies.

Finally, we must be committed to impartial, third-party evaluations of learning technologies. We need to know what is working and for whom. But we cannot rush to judgment. We need to balance our sense of urgency with patience and deliberation, recognizing that fundamental change takes time.

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