

# The Teacher's Role in Personalized Learning

by Robert Weisser



Teachers are not, and cannot be automatons handing out information to students. They are leaders, guides, facilitators, and mentors. They encourage students when they struggle, and inspire them to set and reach for their goals. They are role models, leading by example and giving direction when necessary. A computer can give information, but a teacher can lend a hand, or an ear, and discern what's necessary for a student to succeed, and to want to succeed.

—Jeff and Katie Dunn, co-founders of edtech website Edudemic

Are teachers destined to become superfluous as their responsibilities are increasingly taken over by adaptive technology? Will MOOCs—in which a single instructor teaches thousands of students instead of a few dozen—become the standard for all future classrooms?

No.

Adaptive software now comes packed with all sorts of decision trees, databases of activities and modules, and assessment-feedback loops. Apps are created almost daily that extend the flexibility and power of the software. Yet, effective personalized learning still depends on human contact with an alert, open-minded

teacher who understands students' proclivities and the curricular possibilities, and who can usher students directly toward the appropriate learning path (whether tech-based or not). It is the human who can inspire students to try and fail, and try and finally succeed.



## **Technology Has Always Been With US**

We sometimes forget that any device that we use to make our work easier is "technology." Typewriters were once on the cutting edge of communication technology; before that, quill pens were essential to office work. Likewise, for education, the humble book was for centuries the best friend of the teacher. Before books, there were parchment scrolls; before scrolls, clay tablets.

Despite all of these changes, teachers maintained their positions in education. They had to adapt themselves to each new technology: learn how to use it and how to make it fill the needs of their students. True, change occurred a lot slower in the distant past than it does today. Although that consideration may make it harder for teachers to adapt now,



it does not require teachers to hang up their lesson plans.

## **How Can Teachers Adapt?**

Although it is easy to overgeneralize the differences between teaching styles pretechnology and post-technology, it is more appropriate to view teaching on a continuum, regularly absorbing and utilizing new influences. Interaction and collaboration between teachers and students did not just pop into existence when the first PCs hit the education market; they are characteristics of good instruction down through history.

One of the major impacts of adaptive technology has been to free teachers from much of their data-gathering duties (creating and grading formative assessments) so that they can spend more time helping individual students develop higher-level thinking skills. This means that teachers can focus more on one-on-one or small-group functions, such as the following:

- Coaching and Support. Teachers guide their students' choices of sources to explore (both online and traditional), and help them synthesize the wealth of information they discover.
- Collaboration. Teachers act as partners in students' learning process so that students gain skill and confidence in organizing their work and accomplishing the goals that they have been involved in setting.
- Communication. Teachers spend less time imparting knowledge by lecturing and more

time engaging students in dialogue so that they think critically about what they are learning. This stimulates interaction amongst the students and leads to more in-depth understanding.

Bernard Bull, a 2015 Inspiration in Educational Innovation award winner, goes into this subject in greater detail. In his 2014 blog post "How Teachers Are Replacing Technology & Technology Is Replacing Teachers," he first lists ten ways that technology is replacing teachers, including self-directed learning, skill acquisition through online videos, and online knowledge bases about all kinds of subjects. This trend is undeniable, he states: "What people previously depended upon teachers to learn, they are now learning without or with less dependence upon them." He then continues: "Yet, the opposite is true as well. Great teachers are playing a more important role than ever before."

He concludes his post with a list of ten ways that teachers fill roles that adaptive learning software can't fill:

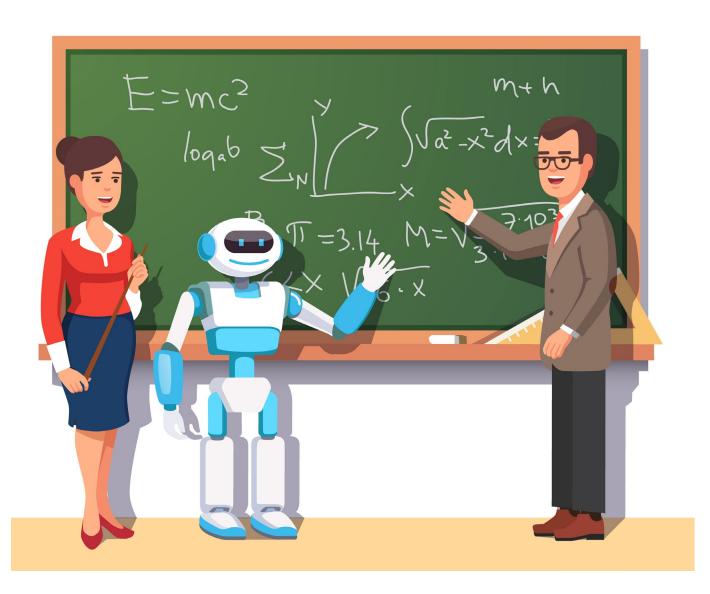
- Mentoring students
- Designing teaching and learning technologies
- Encouraging, comforting, and challenging students
- Developing students' social skills and emotional intelligence
- Providing nuanced narrative assessment of student achievement



- Connecting with other professionals to learn best practices
- Evaluating how to better spend time with students
- Being role models for students
- Coaching students on navigating life in a digital world
- Showing students the possibilities of human interaction

# **The Way Forward**

Tony Bates, who researches and writes about distance learning and e-learning, has delved deeply into how adaptive learning software can complement or replace teachers. In his 2016 blog post "Automation or Empowerment: Online Learning at the Crossroads," he emphasizes that although the tug of war between human and technological teachers is not new, the present is a particularly important time.





Bates argues that adaptive software is most effective as a complement, rather than as a replacement, for human teachers. He claims: "The main challenge for computer-directed learning such as information transmission and management through Internet-distributed video lectures, computer-marked assessments, adaptive learning, learning analytics, and artificial intelligence is that they are based on a model of learning that has limited applications. Behaviourism works well in assisting rote memory and basic levels of comprehension, but does not enable or facilitate deep learning, critical thinking and the other skills that are essential for learners in a digital age."

His take is that teachers must develop in their students high-level intellectual and practical skills, which requires the construction and development of knowledge, analysis, evaluation, and application of that knowledge. This sort of teaching cannot be readily automated because it depends on a relationship between knowledge experts and learners. And while recognizing that the roles of teachers will change dramatically, he closes by saying that "the role of a human teacher, instructor or guide will remain absolutely essential."

#### Conclusion

The need to help students reach their potential and become effective members of society is a difficult task that seems to grow more complex each year. Although adaptive software and e-learning have been taking on more of the informational and data analysis role of education, there remain large areas of the field that require human interaction for the best outcomes.

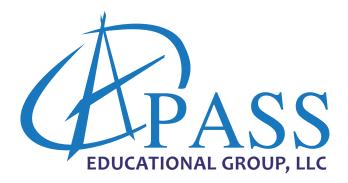
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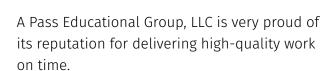
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