

Blended: Using Disruptive Innovation to Improve Schools, Horn and Staker

Personalized Learning

There are several notions of what personalized learning is,²³ but when we say it, we mean learning that is tailored to an individual student's particular needs—in other words, it is customized or individualized to help each individual succeed. The power of personalized learning, understood in this way, is intuitive. When students receive one-on-one help from a tutor instead of mass-group instruction, the results are generally far superior. This makes sense, given that tutors can do everything from adjusting their pace if they are going too fast or too slow to rephrasing an explanation or providing a new example or approach to make a topic come to life for a student. Also, tutors usually persist until their students fully comprehend the material. A personalized approach also implies that students can receive a one-on-one learning experience when they need it, but can also partake in group projects and activities when that would be best for their learning.

Studies show the power of this kind of personalized learning for maximizing student success. One of the first studies to draw attention to personalized learning was Benjamin Bloom's classic "2 Sigma Problem" study, published in 1984, which measured the effects of students learning with a tutor to deliver just-in-time, customized help. The striking finding was that by the end of three weeks, the average student under tutoring was about two standard deviations above the average of the control class. That means that the average tutored student scored higher than 98 percent of the students in the control class.²⁴ A more recent meta-analysis by Kurt VanLehn, which revisits Bloom's conclusion, suggests that the effect size of human tutoring seems to be more around 0.79 standard deviations than the widely publicized 2-standard-deviation figure.²⁵ Even with this revision, however, the impact is hugely significant.