
Adaptive and Personalized Learning Experiences

Executive Summary

“Adaptive learning” or “adaptive training” refers to a system in which learning experiences are tailored to the individual. Usually, when you hear about adaptive learning, it’s in the context of a computer-based system that adjusts the difficulty or format of learning material based on the learner’s mastery. However, adaptive learning techniques can also be applied by instructors. In fact, the impetus for adaptive learning technologies is often attributed to Benjamin Bloom (yes, that Benjamin Bloom), who in 1984 suggested that implementing tutoring and mastery learning could improve learning outcomes by two standard deviations. His problem? These approaches weren’t scalable. Not every student in a class could have their own personal tutor. This is referred to as Bloom’s “Two-Sigma Problem.”

Adaptive learning technologies attempt to address the Two-Sigma Problem by providing each individual learner personalized content and feedback much like a human tutor would. Unlike human tutors, technology-based instruction is scalable. As a result, every student in a class could theoretically learn as efficiently as possible.

Adaptive learning has been studied extensively in K-12, higher education, and military training contexts. However, it hasn't been available for implementation broadly until recently. Historically, developing an adaptive learning system requires a lot of modeling and development time and resources. Also, because these systems tend to be domain specific—that is, they are custom designed to train one thing—they have not been a good financial investment for a lot of organizations. Recent innovations in machine learning have reduced the burden of developing these technologies considerably. Today, adaptive learning technology is more likely to be a good investment for a corporate workplace.

This report seeks to further The Learning Guild's goals of providing research, data, and insight from the learning and development community. We conducted an online survey during the summer of 2021 to understand how adaptive learning is impacting the corporate learning industry. Our goals were to answer the following questions:

- To what extent are adaptive learning technologies being used today?
- Do training functions have the sorts of problems that adaptive learning technology could solve?
- What do L&D professionals know about adaptive learning, and what questions do they have?
- What are the perceived challenges with implementing adaptive learning?

In this report, we describe our survey results. We also try to debunk some myths about adaptive learning, and provide some answers to questions many of you have about this emerging trend in workplace learning.

To download the full report, click here: <https://bit.ly/2YHxWtg>