**Student assessment technology: Can AI help reform testing?**

Student assessment technology is the use of artificial intelligence (AI) or automation technologies to produce real-time evaluations of student work. It can also help make a student's education more personalized to their needs and decrease the amount of time a teacher spends grading.

The [disruption to standardized testing](https://cronkitenews.azpbs.org/2021/08/30/the-results-are-in-standardized-test-scores-fell-during-pandemic-year/) in the education sector due to the COVID-19 pandemic for longstanding benchmarks like the ACT, GMAT and SAT presents an opportunity for AI-enabled assessment to demonstrate its value. In addition to improving the accuracy of the assessment when compared to paper-based testing, it also has the potential to free up teachers to spend more time engaging students.

Assessment technology offers the most benefits when it's part of a secure, connected classroom that supports virtual and in-class learning. This article takes a closer look at these benefits and how teachers can make the most of them.

**Student assessment technology can enable engagement**

Engagement is critical to helping students master the various subjects they're taught in the classroom and evaluating their success. However, it's also something that's difficult to measure or understand as educators can only dedicate so much time to working with each student.

Student assessment technology that employs AI can help address these challenges because it has the potential to tailor education for each student while making it easier to measure and understand levels of engagement. Adaptive tests (like the [modern computerized GRE](https://www.ets.org/gre/revised_general/about/structure/)), machine learning and computer testing software can identify patterns of student success or shortcomings, allowing teachers to design lesson plans accordingly. A more personalized experience for the student can help further improve engagement.

AI-based assessment enables teachers to dive deeper into data to get a better picture of overall student performance, spot larger patterns for whole classes and track individual student learning progressions. This empowers teachers to better adjust the learning experience on a student-by-student basis, as the student assessment technology helps pinpoint specific struggles. This can shed light on how teachers might alter their teaching practices and classroom activities, as well as the level of complexity of the subject matter itself.

AI-enabled assessment technology enables the creation of personalized learning plans by identifying areas of strength and weakness because the testing is guided by standardized, established metrics and benchmarks.

**AI and automation can free up teachers' time**

Another benefit of using AI in assessment technology is automation (like that used by [Scantron](https://www.scantron.com/assessment-solutions/educational-assessment/k-12/" \t "_blank) machines), which carries the crucial benefit of releasing teachers from spending a great deal of time scoring tests by hand. Additionally, with some online learning programs, a teacher doesn't necessarily have to manually adjust a student's personalized learning path. These platforms can switch back and forth from testing to teaching modes (for example, as a student answers a question incorrectly, the program asks them to view a video lesson about the particular question). With more advanced levels of AI integration, machine learning can use student responses during testing to automatically adjust digitized curricula to fill in gaps of knowledge by adding lessons in areas of weakness, and reassess students as needed, all while keeping track of their retention over a longer period.

AI-based assessment can also be used to develop a personalized homework system or guide preparations for exams with suggestions that cover specific areas within a larger subject where a student may need additional review based on individual assessments. This is another example where student assessment technology can help provide more personalized learning and free up time for educators without compromising teacher/student interaction.

**Assessment solutions can integrate with broader technology strategies**

Student assessment technology works best as part of a broader strategy to integrate technology, such as [virtual classroom platforms](https://www.verizon.com/business/resources/articles/k12-virtual-learning-use-case/), into educational environments. These interactive audiovisual platforms provide simple, productive and fast one-touch virtual classroom experiences that connect teachers and students on compatible devices through cloud-based video, audio and web conferencing.

Virtual classroom environments enable students and educators to connect in a convenient and collaborative virtual teaching space, regardless of location. Learning and teaching groups can use quality video conferencing to engage students. Administrators can leverage rich analytics and dashboards—along with student assessment technology—to understand and enhance the quality of education, delivering personalized learning to improve overall student achievement without compromising security and privacy.

Adding AI-enabled student assessment solutions to the classroom is about more than just knowing whether a student has learned what they need to know. The goal of student assessment should always be to guide students in understanding where they could improve and where they're strong, so they can successfully progress through a modern, responsive learning environment.

Learn more about student assessment technology, as well as remote and virtual K-12 education solutions that can [transform the classroom](https://www.verizon.com/business/solutions/public-sector/education/k-12/) and deliver a more tailored learning experience for students.