Will gamification replace paper tests?

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Gamified assessments can provide richer data for a more holistic analysis of students' skills and progress

Nearly everyone remembers the stress of taking a test in school. In-class exams have the power to make even the most dedicated of students quake with fear, not to mention the damage they can do to the egos of struggling learners. For some students, the stress causes their minds to go blank, while others experience physical symptoms like headaches and nausea.

In fact, around 40 percent of students regularly report experiencing moderate to severe anxiety over tests. Unfortunately, that stress isn't limited to students in higher grades. Even elementary school students can struggle with fear and performance anxiety on standardized tests. No surprise, then, that teachers and schools are increasingly rethinking their assessment methods, seeking ways to evaluate student performance without causing undue stress.

Fortunately, there are other methods of assessing students–methods that greatly reduce anxiety levels while simultaneously improving performance. One method getting a lot of attention is gamification, which involves incorporating elements of game playing, such as establishing ground rules, scorekeeping, and engaging in friendly competition with other students. Recent studies have shown that gamification in education can increase assessment scores by nearly 15 percent.

So, what does gamification involve? And what are the challenges of implementing a gamification strategy?

Making assessment fun

Gamification isn't entirely new. Traditionally, schools have employed such gaming elements as flash cards, scavenger hunts, and vocabulary games to liven up the learning process. Turning learning into a game helps lower the pressure associated with test taking and alleviates the tedium involved in rote memorization.

But now, new digital tools and applications are taking gamification to a more creative and interactive level. And when it comes to technology, the upcoming generation of students are likely to be far more conversant than their teachers could ever hope to be.

What's more, schools are starting to integrate the games into actual class time, rather than reserving these gaming activities for study halls and homework. Classroom-targeted games range from smartphone-based quizzing apps to fully immersive role-playing games (RPGs) with complex storylines, individual avatars, achievement badges, and leaderboards. For younger students, there are interactive games to help them learn the alphabet or recognize colors. Many of

these games generate automated reports for teachers to assess relevant skills and identify areas for improvement.

Gamification technology can also get students out of their seats and learning kinesthetically. Kinesthetic learning tools help engage students who are struggling to pay attention in class. Kinesthetic platforms are especially good for students with ADHD because they give the students something enjoyable to focus on, and incorporate natural, fun movements into lessons and assessments.

VR-based technologies allow students to get up and walk around the classroom writing things on virtual walls rather than being confined to their desks. Specific VR programs send students on virtual scavenger hunts or require them to collect stamps on digital passports as they navigate the virtual terrain. Other options provide augmented or mixed-reality games in an immersive environment. These platforms capture data about both fine and gross motor skills in a fun and unobtrusive way.

Can Gamification Replace Traditional Tests?

The truth is, traditional pen and paper assessments will probably be around for a long time yet. They're too deeply seated in the school system to go easily. Still, standardized tests have come under heavy fire for being inefficient, inaccurate, and downright discriminatory.

Gamified assessments can go beyond simply assessing general knowledge of a subject, especially for younger grades. Active learning games can train students to focus better. Unscored quizzes can give students a chance to gauge their own progress without the pressure of thinking about how each assessment will affect their overall grades. Whole-body games can help students with fine motor skills, visual perceptions, and reaction times.

So, while schools may continue to use traditional assessments, gamified assessments can play a supplementary role, providing richer data for a more holistic analysis of students' skills and progress.

Gamification Challenges in Education

Not everyone is thrilled to jump on the gamification bandwagon. Teachers and school administrators are concerned that students already spend an inordinate amount of time on digital devices. And some educators worry that gamified learning will become more about fun and less about actual education. But the fact remains that students today respond to technology, and it makes sense to use that understanding to create learning programs that meet students where their interests are.

On the whole, educators seem to be coming around to the advantages of gamification. In a recent study, more than 50 percent of experienced U.S. educators agreed that gamification is a tool worth embracing. And that's important, since the teachers are the ones who will be implementing these technologies and finding ways to maximize their educational value. Gamification has huge potential. Where normal assessments fail to bring a whole-child approach to education, gamified assessments can allow teachers to monitor progress in every area and plan lessons accordingly, while also allowing students to enjoy the learning process. In whatever form teachers and schools can embrace it, gamification represents a very promising avenue for educators to pursue.