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Gamification Techniques for Academic Assessment

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Title: Gamification Techniques for Academic Assessment

Format: Interactive Teaching Session

Abstract:

Students from the millennial generation have come to expect highly developed and engaging academic tools - including those used to assess their performance. Keeping up with these expectations can be a daunting task for educators. However, the creative use of gamification, customization and on-demand supplemental material can potentially lead to a more engaging assessment experience. This presentation will focus on the topic of gamification and the millennial generation. The audience will participate in an open dialogue about how gaming and other engaging approaches can play a role in the summative assessment process.

Proposal:

Objectives:
During this presentation, participants will:

- gain an overall knowledge of the challenges teachers face when evaluating students of the millennial generation.
- see the results of a study that evaluated an automatic hint-based testing system and understand student opinions about it.
- participate in a discussion about engaging approaches to assessment.

Audience:
This presentation will be beneficial for faculty who want to explore unconventional assessment techniques that promote active learning.

Activities:
The format of this presentation will include projected slides, an interactive software demonstration, and a collaborative discussion.

Description:
Most current college students belong to the millennial generation - the first to grow up with computers in their homes and convenient Internet access (Smola and Sutton, 2002). These students have a depth and duration of

experience with technology that differs vastly from previous generations. Consequently, their workflow is different. Millennials are accustomed to conducting multiple tasks simultaneously with the support of technology (Blackburn et. al. 2013). They use computers and mobile devices to supplement almost all their activities.

Educators have responded to this paradigm shift by incorporating multiple modalities into curricula. Instead of traditional lectures, flipped classrooms (Mull, 2012) and gamification (Apostol et. al. 2013) are on the rise. These techniques are being used to accommodate students who have become accustomed to a different style of learning. Students respond well to these approaches as evidenced by studies conducted by Enfield (2013) and Strayer (2012). Teachers are developing new ways to engage Millennials in the spirit of Ignacio Estrada, who famously said: "If a child can't learn the way we teach, maybe we should teach the way they learn." While classroom instruction and assignments undergo a technological renaissance, little has changed regarding quizzes and exams.

Should the assessment of these students follow the same structure as those of previous generations? Harris and Hodges define assessment as "the act or process of gathering data to better understand the strengths and weaknesses of student learning" (1995). Since students are exposed to different ways of learning, modern educators should adjust their evaluative approach as well as their instructional approach. Rawson and Dunlowski (2012) suggest that the act of testing is more than a means to evaluate learning. Testing can be used to improve learning, specifically when students are provided feedback.

This presentation explores and evaluates unconventional approaches to student assessment. Our goal in this line of inquiry is to identify a combined learning and evaluative activity that will lead to more effective knowledge acquisition. We will present our findings using an automated hint-based testing system, and we will invite audience members to share their experiences with unconventional assessment approaches.

References

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