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USING KAHOOT IN THE CLASSROOM

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Synopsis:

Engaging 21st century learners in the classroom can be challenging. Not every strategy delivered in the classroom resonates with the learner. Incorporating Game-Based Learning (GBL) into the classroom can be effective at keeping students engaged and motivated to learn because it involves the use of the student's own personal screen device, which students already love to use. The answer may be one engaging GBL tool called Kahoot, which is examined here.

Using Kahoot in the College Classroom

Abstract

As college professors, engaging 21st century learners in the college classroom can be challenging. Strategies in the classroom aimed at holding the attention of students, motivating students to be active participants, fostering cognitive skills, and increasing student's retention of knowledge are some of the key components professors try to employ for the benefit of college learners. However, even with the best of intentions on the part of the professor, not every strategy delivered in the college classroom resonates with the college learner. As such, the question becomes "How do we hold the attention of our students in the traditional lecture-style classroom when students find the screens at their desks more intriguing than the professor in the front of the classroom?" The answer could be in something called Game-Based Learning (known as GBL). Incorporating GBL into a lecture-based college course can be effective at keeping students engaged in the lecture material because it involves the use of the student's own personal screen device, which college students already love to use. Specifically, one GBL tool found to be particularly engaging in the college classroom is a quiz-based system and application called Kahoot. In the coming pages, I will discuss GBL, Kahoot, and finally, my first-hand experiences of using Kahoot in my classroom.

Game-Based Learning (GBL)

Game-based learning (GBL) marries subject matter with fun, interactive digital games to enhance learners' knowledge, retention of subject material, and motivation (Chang, Liang, Chou, & Lin, 2017). GBL is a truly useful niche of twenty-first century education, which is characterized by learner-centredness, on-demand services, student engagement, and technology-incorporated teaching and learning (Naik, 2017). Further, GBL has been found to be useful in enhancing academic achievement, classroom interaction, and motivating students at all levels of education, from K-12, as well as in higher education (Wang, 2015). Participating in GBL in the classroom creates engaged learners, which in turn deepens concentration, mastery, and application of new material learned (Ke, Xie,, & Xie, 2015). Creating an engaged learner can be thought of as the key to effective learning because this indicates that the learner is fully occupied in the learning environment and is therefore able to focus on the learning task at hand (Huang, Johnson, & Han, 2013). GBL does just this – it creates an engaging learning environment, which translates to effective learning. One such tool, which falls under the umbrella of GBL, is an interactive quiz show called Kahoot.

What is Kahoot?

Kahoot is a free, online quiz platform GBL that is constructed like a gameshow whereby the professor plays the role of gameshow host and the students play the role of gameshow contestants. Kahoot is user-friendly on both sides of the platform: it is easy for the professor to upload or create a quiz, and it is easy for students to sign into the application and connect with the professor's quiz. The professor has the option of choosing

pre-made quizzes from the Kahoot site, or, the professor can create his/her own unique quizzes to serve students' needs. Quizzes are created in a multiple choice question and answer format, with a minimum of two multiple choice responses and a maximum of four multiple choice responses for students to choose from when game play begins. Once the professor has successfully created or uploaded a quiz, the professor deploys the quiz on a large screen in front of the classroom, at which point a game pin is displayed. The student contestants can then visit the Kahoot site (www.kahoot.it) where they are instructed to enter the game pin. Students enter the game pin and are then asked to enter a nickname, which serves as their identifier during game play. Upon submission, the student's nickname is then displayed on the large screen in the front of the classroom, indicating that the student has successfully linked their own personal device to the professor's game. Once the professor sees all students' nicknames appear on the screen, the professor can then begin the game. Once the game begins, quiz questions appear, one at a time, and students will have anywhere from 5-20 seconds (pre-determined by the professor during quiz creation) to select an answer to the question from the multiple-choice options displayed. In this gameshow, students are competing against their peers in the classroom while suspenseful gameshow music is playing. The object of the game is not only for students to guess the correct answer to the quiz question, but to answer the question the *fastest* against their peers and before the gong sounds, indicating that the time given to answer the question has elapsed. Students do their best to select the correct answer to the multiple-choice question on the device they brought to class, selecting the shape of the answer that corresponds to what they believe is the shape next to the correct answer on the professor's screen at the front of the room. Just after the gong sounds, time is up and the correct answer is displayed

on the professor's screen. The professor can use this moment in the game to explain why the answer on the screen is the correct answer to the question, before resuming game play with the class. Prior to moving on to the next multiple-choice question, the top five scoring leaders' nicknames are displayed on the screen, giving the student contestants the opportunity to know if they rank among the fastest and best contestants in the class. Game play continues until all questions have been answered in this fashion, with the overall winner of the Kahoot game highlighted at the conclusion of the game.

How I use Kahoot in the Classroom

As the professor, I encourage all of my college students to "Bring Your Own Device" (BYOD) to class. BYOD has become popular in twenty-first century higher education, as it makes the college classroom more interactive and allows students to learn otherwise rote material in new ways (Wang, 2015). Students are informed from the very first day of my class that Kahoot is a tool that will be used regularly in the classroom and the expectation is for the student to BYOD and to be prepared to participate in this GBL. It has been my experience that Kahoot works well when it is sandwiched into the lesson for the day. By this, I mean that for a 50-minute class, it has been favorable for me, as the professor, to lecture for 20 minutes, stop and play Kahoot for 10 minutes as a means of reinforcing and solidifying learning of the material just taught to the students, followed by another 20 minutes focusing on re-teaching or reviewing any areas of struggle or uncertainty, indicated by low success rates of response on the previous Kahoot questions. Using Kahoot in this manner holds students' attention, gives students a piece of the lecture in which to look forward (the time in the lecture when Kahoot is played), keeps students

motivated to learn, and keeps students engaged in the course material as they seem to value succeeding at the Kahoot game. Also, it should be noted that I always award the winner of each Kahoot game one bonus point, which will be added at the end of the semester to the total points they earned in the course. This further motivates the student to compete in the Kahoot game and to learn the lecture material, in the hopes of securing a bonus point, which can be of substantial benefit to their final grade in the course by the semester's end. As stated previously, during gameplay, the professor can pause in between questions to discuss with the class the reason why the correct answer to the multiple-choice question is indeed correct. Indeed, I employ this method in my class when playing Kahoot. As the professor, this gives me the opportunity to reinforce key takeaway points on the topic with the students and to eliminate any confusion the students may have had in choosing incorrect answer for the given question.

Is Kahoot a 'Hoot' in the College Classroom?

Before conducting formal research on this topic, I informally collected some feedback from my students, in regards to their perceptions of the using the Kahoot GBL quiz system in the college classroom. Overall, my students reported very favorable attitudes towards the incorporation of Kahoot in the college classroom. Students indicated to me that the anticipation of Kahoot as possibly being a part of the class lecture on a given class day actually motivated the student to attend class (especially if the class was an early morning class, such as a class beginning at 8:00AM). Students also reported that Kahoot helped them to learn the topic material better and motivated them in some cases to study and understand topic material before coming to class, in the hopes of having more of an

advantage to excel at the Kahoot game. Students also liked competing against their classmates because it gave the classroom more of a social aspect that often times can be missing in the classroom at the college level, or artificially created via strategies like forced group work in class. The majority of student feedback was extremely positive.

These testaments my from students parallel existing research studies in the literature on GBL, which report correlations between GBL and increased knowledge, higher-order thinking, student interest, and student engagement (Crocco, Offenholley, & Hernandez, 2016). Further, a study done by An & Cao (2017), found that the use of digital games in the classroom fosters collaboration among students, enables the instructor to assess student learning, and helps students to develop problem-solving skills. With this research in mind, I wanted to conduct my own research in the classroom to see if indeed testament reigned true to actual data results. As such, I developed a 'Kahoot Perceptions and Likability Survey,' a 17-question Likert-scale survey which asked my students to answer questions about their perceptions of Kahoot and their likability of Kahoot in my class. This survey was completed by my NTD 200 Nutrition and Culture course students (n=36), an undergraduate course where Kahoot was played weekly in class over the course of 15 weeks. All students' quiz responses were analyzed for frequencies using SPSS version 22. Results from this study showed that 100% of students either agreed or strongly agreed that Kahoot was fun to play in class, 97.3% of students agreed or strongly agreed that Kahoot was engaging to play and held their attention, 94.4% of students reported that playing Kahoot in class helped to increase their knowledge retention of course subject material, 94.4% of students reported that Kahoot motivated them to be an active participant in the class, 91.7% of students stated that Kahoot fostered their cognitive skills, 86.1% of

students enjoyed playing Kahoot because of the fact that they were able to use their media device to participate in class, 100% of students agreed that it is easy to learn how to play Kahoot, 88.9% reported that participating in the Kahoot game in class enabled them to achieve higher quiz scores throughout the semester, 94.4% of students reported that they looked forward to playing Kahoot in class on any given day, 97.2% of students felt that Kahoot can be applied to any class subject to enhance students' learning, but only 63.9% of students agreed that the possibility of playing Kahoot in class motivated them to attend an early-morning 8:00am class. Finally, I asked the students questions to analyze if playing Kahoot in the classroom helped to achieve the 5 student outcomes of the course that are listed on my NTD 200 course syllabus. On average, 92.7% of students either agreed or strongly agreed that playing Kahoot in class helped them to achieve student outcomes in the course. From these study results, it is apparent that Kahoot enhances and enriches both teaching and learning in the college classroom.

The biggest reported criticism of the Kahoot game, by some students, was that the combination of competing with peers, the fast-paced nature of the game, and the suspenseful game show music was too stressful to concentrate on the game questions and concepts. This indicates that perhaps the Kahoot game does not resonate favorably with every college learner, however, it seems like this was only an issue for a small percentage of students. However, from the feedback received from my students, the biggest complaint was that the Kahoot game was not used enough in the classroom. A majority of students indicated that they would have liked to play Kahoot at every class meeting time. From my viewpoint as the professor, it is my fear that using Kahoot every time in the classroom would create burn-out among my students. Wang (2015) supports this notion stating that it

is best to use Kahoot one to two times per week (at the most) in the classroom in order to prevent boredom among students in the classroom. In conclusion, Kahoot is a GBL quiz system that is easy for both students and professors to use, transforms the classroom into a fun learning environment, and seems to have many learning benefits for student participants. It is my recommendation that you give Kahoot a try in your classroom so that you can give a first-hand account of what a 'hoot' it is to play Kahoot!

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