

USING KAHOOT TO INCREASE STUDENTS' ENGAGEMENT AND ACTIVE LEARNING: A GAME BASED TECHNOLOGY TO SENIOR HIGH SCHOOL STUDENT

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Abstract

Students, particularly in senior high school often state that they like instructors who employ active learning strategies to get students engaged with the class topic. Sometimes, large teaching classes are difficult to get students to participate in classroom activities and assess whether they are truly learning or not. It is why providing a game is an appropriate way to create a fun and interactive engagement for students to learn and comprehend the information. "The value of games as a vehicle for teaching concepts while inspiring students is now well accepted at almost all levels of education" Becker (2001). Kahoot is known as a technology-based instructional tool, it is a popular eLearning tool that easily can be used to add vitality, student engagement, and meta-cognitive supports with limited instructor or student training required. This study aims to analyze the use of Kahoot in engaging students' active response in learning English. This is a classroom action research. Descriptive analysis is conducted to gain the students action and response during teaching and learning processes proposed by Kemmis and McTaggart in Hopkins (2008). The subjects of this study are twelve grade students of SMAN 1 Serawai, Kabupaten Sintang.

Keywords

Kahoot, game-based learning, eLearning tool, student engagement

1 INTRODUCTION

Recently, development of internet environment and emergence of new media makes it easier for people to access an online reviews and leads to a massive amount of reviews in various forms. The idea of using online games in engaging students in the process of active learning is not new. Over the past several years, educators have been increasingly incorporating various games into their teaching curriculum in an effort to create a fun and engaging learning environment for students. Although this can be very challenging and time consuming, interactive, collaborative and competitive games tend to motivate and encourage student participation in the learning process. Over the years, the format for classroom games has changed drastically. There are many more options that incorporate the use of technology and interactivity. "The value of games as a vehicle for teaching concepts while inspiring students is now well accepted at almost all levels of education" (Becker, 2001, p. 23). It assumed that games are appropriate media in engaging students' activeness from beginning until higher level. The online game Kahoot satisfies all of these practices. It serves as a formative assessment review, it is repetitive in a sense that it can be repeatedly played over and over, and it serves as a virtual

word wall as the vocabulary terms can be prominently displayed on the smart board (Dellos, 2015).

Each learner is naturally different in many respects, so it can be assumed that learners will vary in their skills of evaluation criteria depending on these individual differences. For example, highly-motivated learners have shown a decreased interest in decorative illustrations, whereas low-motivated learners have provided positive feedback to pedagogic illustrations within materials. In current years, instructors have been confronting a technological training revolution driven by the use of digital technology to deliver an instruction (Clark & Mayer, 2008). Kahoot is a tool that delivers and presents questions to students. It is set up as a game that students can play either individually or in groups. Instructors provide students with multiple-choice questions, which are projected on a classroom screen. Students can create a unique username that they like. They can answer these questions with their own personal electronic devices (e.g., laptop, smartphone, or tablet) and receive points for both response accuracy and promptness. After each question is answered, the correct answer will be displayed as well as a scoreboard of the highest

point learners. At any time, instructor can track student progress and scores.

In my classroom, I have conducted this Kahoot with my students in a private course as a means to review previously taught material for instance in first step identifying adjectives, nouns, and pronoun and to prepare them for further tests. I have noticed that most of my students tend to enjoy this eLearning activity in the course; however, I wonder sometimes when we play games or do activities if they are grasping the content of the material in the process. Some students appear to learn more when they are competing in this game while others seem like they are possibly distracted. As a whole, the feedback I have received from students regarding the benefits of the review games we play has been positive and many students suggest that we play them more often. This article provides instructors with foundational information about Kahoot and suggests ways to use it to engage students and promote an active learning environment.

2 LITERATURE REVIEW

Kahoot Definition

Kahoot is a technology-based instructional tool with limited research conducted to date within the classroom setting. Finding a link between its use and students' grammar retention may have positive implications on teaching and learning grammar. Here, the games focused on grammatical content ranging from irregular verbs forms, question formation, and passive voice, reported speech, conditionals and subjunctives. This type of content is usually rather sensitive because these structures frequently create problems for students. Through this study I hope to analyze the effectiveness of the online game Kahoot as a tool for increasing grammar acquisition for students. The purpose of this paper is to describe the effectiveness and the use of the online game Kahoot on the grammar acquisition and focus of students in senior high school. (Dalton and Grisham, 2011) suggest that using technology to teach promotes active learning and interest. Technology can be flexible enough to differentiate instruction based on student need and interest.

Kahoot! is an online game that teach and tests student's knowledge of course content. Go to <https://getkahoot.com> and click on the tab that says "GET MY FREE ACCOUNT." It will provide the role of the teacher (i.e., instructor) or institution, create a username, supply your e-mail address, and select a password. To use Kahoot! each time, if you log in as a teacher you will need to decide if you would like to create a new one or duplicate a prior one. If you decide to create a new Kahoot!, you must specify whether it is a discussion question, a survey, or a quiz; if you choose to duplicate a Kahoot!, you can edit any of the prior questions as needed. The game is free for both

teachers and students, and simply requires a multimedia tool to participate (Siegle, 2015). A laptop, cellphone, or google chrome works for running the Kahoot website. Teachers can create quizzes using multiple choice questions presented in a game-based format to students. The quizzes contain questions that have up to four possible choices, and questions can contain various multimedia contents such as pictures videos (Siegle, 2015). On top of the number of answer choices, it also provides teachers with the ability to select the amount of time that the students have to respond to each question (Siegle, 2015). The students join the game via a specific generated game code and are able to create their own nicknames to be displayed on the game screen. If a name is inappropriate for school use the teacher can simply click on the name and the student is kicked out of the game (Siegle, 2015). Furthermore, Kahoot is easy to use in its game like format and is gaining popularity across the country (Singer, 2016). (Singer, 2016) reports that of the approximate 55 million elementary and middle school students in the United States, about 20 million of them are using Kahoot to some extent. Kahoot uses educational trends to capitalize on their popularity. These educational trends include gamification and student engagement. The makers of the video game rely on student engagement and interest to keep the popularity of the game spreading (Singer, 2016).

Kahoot Application

How to play Kahoot in the class:

- 1) The teacher shared the course content questions in the classroom with the Kahoot online question-and-answer technique to repeat and reinforce the topics for the last 20 minutes of each lesson. Below is a description of how to handle lessons with the Kahoot application in the classroom. Choose Kahoot that you want to play: Teacher logs into his/her Kahoot account on the computer connected to the projection. The link is already written in the description in Kahoot descroction above.
- 2) Reflect the game with projection: Game is projected on the board by the computer connected to the projection in a way that all classrooms can see. Students are asked to have their usable devices (tablet, mobile phone and computer) ready in advance. All devices that have access to the internet can be used. Mobile applications for mobile phones and tablets of Android and IOS operating systems are also available.
- 3) Students join the game: Students do not need to sign up. They can directly play the game. A randomly created password is shown on the screen of the teacher connected to the projection. The password given after how the students will join the game is explained will

be valid for this session only, and a new password will be created for each game. Students are expected to log in on kahoot.it, write their password and then write their "nicknames" for the game and enter the game. The names and number of the students who entered the game are shown on the screen of the teacher

- 4) Obtain feedback for the question: Information about the general level of the class was obtained. The number of students who gave the correct answer to the question asked. The information bar that indicates the number of students who chose each answer choice also gave the number of students who answered the question incorrectly or confused the answers. In this case, teacher has the right to start a classroom discussion or to review the topic. The reason why these questions are answered wrong is discussed after each activity. Moreover, the students could see whether they answered the questions correctly, their scores and their position in the ranking. The rankings of the students were shown in the scoreboard when clicked on Next.
- 5) Scoreboard: First five players were shown on the scoreboard respectively after each question. Lower rankings were not shown regardless of the number of students in the class. Each question is worth up to 1000 points. As the timer works, scores start to decrease accordingly with the time. The faster the questions are answered, the higher the obtained scores are. The scoreboard shows the points collected until that moment, Teacher must click on (Next) button to move to the next question. The student who clicked on (End) button and won was seen. The name of the winner students is seen on the board in a big font and this motivates the students more. At this stage, the students are asked to evaluate their experience for the final feedback.

Advantages and Disadvantages

Some of the advantages and disadvantages of the use of Kahoot are: It is free online game, students can log in without downloading the application, easy for instructors to learn, music and colors are added to give student excitement and energy, increase student engagement, review, and save students' results; it allows students to take quizzes multiple times and compete against themselves for better scores; and a setting to allow instructors to adjust the response time from 5 seconds to 120 seconds, in short, It was fun and it made me study before coming to the class, which made me feel self-confident, getting a higher score among friends so it let them study harder and actively participate in the competition. There are also some disadvantages about Kahoot! In which educators

and students should be aware of that there is a limit on the number of characters you can use in questions and responses; and educators cannot ask open-ended questions or receive open-ended responses, limited internet access will affect the learning process, students must have the facilities at least the gadgets and internet.

3 RESEARCH DESIGN

The design of this study is a classroom action research (CAR) which aims at solving problems experienced by the classroom teacher to increase the student engagement and activeness in learning grammar by using Kahoot game. "Action research is a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or education practices, their understanding of these practices, and the situations in which these practice are carried out" stated by Carr and Kemmis (in McNiff, 1998). In conducting the research the writer carried out the action in the form of three cycles. It comprises four steps: planning, implementation, observation, and reflection. The procedure of this research will be implemented in three cycles and two meetings in one cycle.

3.1 Sample of the research

The study was conducted at SMAN 1 Serawai which the participants were the twelve grader students. It is located in Sintang Regency. The writer was trying to solve the problems faced by the English teachers where the students mostly got difficulties in grammar especially in the use of structure in a sentence. By conducting this research in the school, it is expected that the writer can solve the problem faced by the English teacher in teaching English especially in grammar skill.

3.2 Research Procedure

This study carried out in a cyclic process. It comprises four steps: preliminary study including fact-finding and analysis, planning, implementation, and observation, and reflection. In the preliminary study, the writer observed the students' activities in classroom to find problem associated with students' grammar ability (fact-finding). And then the writer analyzed the problems. The next step is planning. In the planning stage, the research instructional media, research technique, a lesson plan, and prepared instructional media, research instruments, and criteria of success are designed. When implementing the plan, the writer should concerned carrying out the teaching and learning process as it is designed in the planning stage. In the observation stage, she will focus on the students' activities. And finally, while in reflection stage, she could concentrate in making judgment whether or not the action should be stopped. The

action is continued to next cycle if the criteria set were not achieved.

3.3 Technique of data collecting

In collecting data, the writer used observation checklist, recording, field note, photographs of teaching and learning process and test (Sentence structure test). Based on those, the data achieved and the writer gained some findings answering the research questions in the study

3.4 Technique of data Analysis

In relation to the problem formulation and form of the research, technique of data analysis is in qualitative form of analysis where the writer analyzing the students' grammar ability achievement and specifically describe the activities processes by using Kahoot. From those recordings of teaching process, the writer described every event during the teaching process including the description of the result will be written down in the explanation of the result in cycle of research.

4 DISCUSSION

The study tends to provide an insight into a student centred experience in SMAN 1 Serawai. The qualitative analysis in this study intended to describe the result from the impact of using Kahoot as a media in in the teaching and learning English Grammar in the classroom.

There are three creation options offered by Kahoot!: multiple choice quizzes, discussion questions, or surveys.

Quizzes

In our classrooms, we have used graded and ungraded quizzes to assess knowledge, comprehension, and retention (1) after completion of reading assignments, (2) following lectures, and (3) to review material from several units. Kapp, (2012) stated that for a successful educational game is needed the right context, the right cognitive activities, meaningful challenges, and feedback. Kapp stated that the "gamification" of education supports learning and knowledge acquisition. To make business law more engaging and help students apply theoretical legal concepts to real life scenarios.

Students can also create their own Kahoot! quizzes as an assignment or to study for a test. Kumar (1999) reinforces this methodology when he notes that computer games as educational tools have an intrinsic motivation factor that encourages curiosity and creates the impression that students are in control of their own learning. Indeed, students remarked that they enjoyed this assignment because they were creatively using technology within a learning environment (Kumar, 1999).

Discussions and Surveys

In another exercise Kahoot can also be used to explicit responses from students related to opinions

or beliefs with no right or wrong answers. Student responses can then form the basis for further discussion. For example, in a recent class, we asked students to select who they were voting for in the upcoming 2019 national presidential election. Regardless of public opinion or peer pressure, students anonymously selected their candidate of choice. This in-class survey led to further questions related to the biggest problems facing our nation. Thus, by using Kahoot to survey the class, students' voices were heard and included in the larger classroom discussion. In this manner, the eLearning tool appeared to add energy to the classroom by provoking thoughtful classroom dialogue.



Figure 1. Example of Kahoot home page with the game pin.

From the figure shown, the students sign in using the web address <https://kahoot.it> to access the platform. Kahoot! can be used with smart phones, tablets, or laptop computers. Students can chose one device per person or select team mode to use one device per team. All they must do once they access the web address is enter the game pin displayed on the instructor's screen.

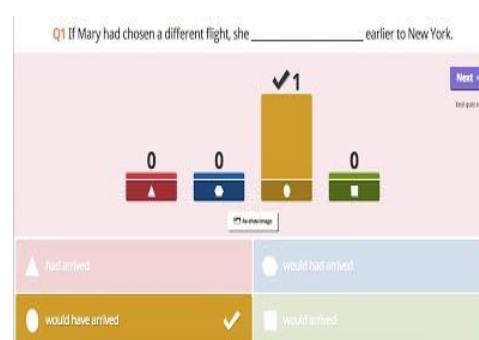


Figure 2. Example of Kahoot Bar graph displaying students' answer participation for responses.

Final scoreboard	
zac	9233
Amelia	8150
Livi	7216
Abi	6184
Iew Iew	5866

Figure 3. example of leader board displaying with points.

The figure above showed that once everyone has answered the question, or the time the instructor set for answering the question expires, the correct answer is displayed on the instructor's screen and the results shown in bar graph form (see Figure 2). The game keeps track of each student's or team's answers, awards points, and ranks players based on speed and accuracy. The top five leaders are displayed after each question (see Figure 3).

Overall, utilizing Kahoot! is a positive experience that impact to our classes with activity and focus and provided a way for all students. The immediate feedback demonstrating how many students got the right answer was invaluable. The results often contrasted with our impressions and assumptions about what the students knew and understood. Utilizing Kahoot! helps support student metacognition by providing immediate feedback. Kahoot also offers the opportunity to not only assess students' conceptual understandings but also support the construction of new knowledge and understanding through further explanation during or after the game. In essence, the responses suggest that students seek excitement in their learning and Kahoot provides them with this opportunity as it triggers their intrinsic motivation. When students care about what they are introduced to and find it meaningful to them, they will be motivated to learn. Besides, as proposed by Yahya, it is also important to bridge the gap between the students' present situation adjacent to exploring new pedagogies for learners (Yahya, 2019).

5 CONCLUSION

Teachers have to face the fact that a game based technology might be soon present in language classrooms. Learning happens every day, but it is sometimes hard, particularly in the case of delayed gratification or accomplishment. Games can add motivation to learning activities and as it should not be underestimated. Indeed, there have already been technological classes in educational institutions and this trend is very likely to develop. As well as the result of students' response in using Kahoot, in which as the alternative tool in engaging students active particularly teaching and learning grammar it shows us that Kahoot is an appropriate choice for teaching high school students by giving them the access to mobile devices, availability of Wi-Fi, and students' affinity for computer games. Such eLearning tools add positive energy, support concept exploration, and add fun to the classroom, which seems to translate into increased comprehension and motivation. Perhaps most significantly, the "A game as media" of learning increases student engagement by appealing to all students, even the most introverted, combining both a cooperative

fast-paced learning environment and friendly competition (Kapp, 2012).

It can be conclude that to some academics, especially eLearning games, are sometimes not believed to be the result of serious work or worthy of attention. Students' experience with Kahoot reinforces an effort and a desire to engage students, this eLearning platform can provide an engaging environment that supports learning and adds active participation in the class. The students who felt that collaboration was very important during gamification supported and helped each other in learning.

Moreover, combining a gamification approach with a blended learning method helped students to better understand the lesson. Students generally found it easier to remember information when it was presented in a gamified manner. Competition helped students to improve their active response and sustain them to learn topics that were difficult to understand.

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