GAMIFICATION IN LEARNING ENGLISH FOR ACADEMIC PURPOSES: DESIGNING ASSESSMENT FOR LEARNING USING KAHOOT WITH UAE UNDERGRADUATE LAW STUDENTS

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Abstract - The purpose of this paper is to describe a reflection on integrating a web-based learning tool (Kahoot) for the purpose of real time formative assessment and share lessons learned by a university instructor teaching EAP to L2 learners in the undergraduate Law program at a UAE university. The participants in the study are 80 undergraduate Law program students enrolled in a customized Academic English course-ENG100 (A). The Law program is delivered in Arabic; hence, its undergraduate students are exempted from the university's English Language proficiency requirements. However, these students face the challenge of taking this customized EAP course to complete the general education requirements. The study investigates the advantages and limitations of using Kahoot with this profile of students and examines how the effective strategies implemented improve summative assessment outcomes. Quantitative data were not collected on the effectiveness of the interventions applied. Data was collected by means of teacher and students' reflection journals, focus group interviews, and semester course evaluation. Qualitative analysis of findings suggest that Kahoot- an online learning game fosters students' intrinsic motivation. Moreover, findings reveal a marked increase in active learning, student engagement, self-efficacy, self-directed learning and improvement in summative assessment outcomes after integrating Kahoot.

Keywords - Kahoot, EAP, formative assessment, summative assessment

I. INTRODUCTION

Abu Dhabi University's (ADU) General Education program offers two Academic English courses to undergraduate Arab students like the Law students as requirement core courses. The first level Academic English course ENG 100 (A) is offered to freshmen as it is designed to prepare first year Law students,who are mostly Emirati, with only a few from other Arab countries, with English academic writing skills.Since the undergraduate Law program is run in the Arabic language, students enrolling in the Law program are exempted from the admission requirement for English language proficiency of an overall IELTS average band 5 or the equivalent in other international standardized tests. However, these students still have to take academic English courses, which have been added to the first year Law program curriculum to meet the requirements of the Commission for Academic Accreditation (CAA). The CAA ensures that private higher education institutions and programmesof the United Arab Emirates (UAE)meet international standards. First year undergraduate Law students find this course demanding since they need to gain linguistic and communicative skills to meet the course learning outcomes. In addition, the fact that these learners are enrolled in an Arabic undergraduate program plays a significant role against their motivation in an EAP classroom. How to facilitate these learners' acquisition and motivate them to improve their academic writing skills presents a major challenge to academic writing teachers.How could a 21st classroom environment help instructors with this challenge?At the institutional level, assistive educational technology and e-learning or m-learning have been supported financially, logistically, and technically in (ADU) and other private and governmental universities in UAE. ESL/EAP classrooms of the UAE have been integrating ICT for the past decade and will continue to take strides with this direction so as to implement the 21st century classroom characterized by educational technology and activity learning.This research probes into the efficacy of a web-based tool called Kahoot, applied as formative assessment, and investigates how this technology for formative assessment creates active learning environments that result in more successful summative outcomes.

An overview of current literature shows that few studies have been conducted so far on the use of gamification in general and Kahoot in particular in the UAE context. Only a scant number of peer-reviewed studies on English language teaching and learning refer to Kahoot at the tertiary level of education in the United Arab Emirates context. In fact, a few exist at the college foundation level (Alvarado, N; Coelho, D and Dougherty, E 2016, Solas, E.C and Wilson, K 2015). Studies investigating Kahoot are mostly concerned with students' experience. In fact, little attention is directed toward the impact on course learning outcomes and whether they are enhanced by using Kahoot.

II. LITERATURE REVIEW

For the sake of engaging learners, educators seek opportunities to integrate gamified methods in classrooms. A wide array of research provides evidence in support of using games as a teaching

strategy due to their positive impact on students. (Iaremenko, 2017).The learners' motivation and classroom behavior are impacted by the game's various advantages ranging from being fun and providing immediate feedback to using progress indicators and fostering engagement and competitiveness. Gamification motivates students through a magic formula of fun and meaningful learning that can be attributed to the design elements of the game varying from points and levels for rewarding and ranking to incentives and badges to challenge and excite. (Dicheva, Dichev, Agre&Angelova, 2015; Dabbagh, et al. 2016).This begs the question as to how applicable is gamification to language learning. According to Wright, Betteridge &Buckby, 1984, games in the context of language learning generate contexts in which the language learning is useful and meaningful. In the context of this action research, language learning that manifests itself in being useful and meaningful is a paramount goal. The stumbling stone is that the students are enrolled in an undergraduate Arabic Law program where learning Academic English is a university requirement.

At the offset of launching the course in the Law program, the course designers incorporated formative assessment tools such as BlackBoard discussion board, web-quests, quizzes and writing assignments and projects to provide feedback throughout different intervals within the course. As the primary factor that influences the efficacy of assessment for learning, constructive and timely feedback is essential to the success of learning (Cassady, et.al., 2001). Iwamoto, et.al., 2017 state that "The quicker, clearer, and more relevant the feedback for formative assessment, the higher the likelihood that students will apply that feedback to the information learned and modify knowledge and understanding that may not have been completely mastered."

One online game that supports effective formative assessment in the language learning classroom is a free web-based application named Kahoot. With this application, practice quizzes are either developed by the instructor or can be selected from a repository of quizzes. Students are awarded points for getting the correct answers. In addition, students are able to check their responses immediately. Woo 2014 emphasizes that game-based learning has the advantage of stimulating both visual and verbal elements of our processing, making it an effective tool for learning. In actual fact, assessing what has been learned maybe the essence of formative assessment and gamification has a strong potential of fulfilling such objective. However, promoting learning through active and meaningful application of knowledge gained should also be given paramount attention. The current study is inspired by this trajectory, and therefore explores the efficacy of using Kahoot as a formative tool to not only investigate its usefulness in increasing summative assessment outcomes but to find out how it can influence students' attitudes towards learning.

III. PURPOSE AND SIGNIFICANCE OF THE STUDY

EAP Law students as L2 learners confront many writing challenges in the usual one-size-fits-all learning environment.With the abundance of information and educational technology platforms, changing the methods of teaching is vital since online learning allows more individualized and modeled learning. The need to move from assessment of learning to assessment for learning becomes the key to a more successful learning experience.Kahoot does not aim to replace existing student-centered methods. With Kahoot, however, ICT-intimidated tertiary L2 English instructorsare provided with a new approach to teaching academic writing. Kahoot's simplicity breaks the barriers to e-learning and encourages instructors to become innovators in e-learning. The key factor behind this research study is related to the increased need of transforming the educational approach in a highly technological environment, and to equip undergraduate students of Arab majors with better academic English writing abilities in a limited period of time. Gamification using Kahoot has potential for being more motivating for the millennial learner.

This study uses an action research approach to examine the effect of using Kahoot on students' academic writing summative outcomes. Its significance lies in meeting three goals:

1. contribute to the existing literature on Kahoot and its application in undergraduate EAP courses within the context of UAE's higher education.
2. encourage the use of Kahoot in English language classes as a possible method of addressing the academic writing difficulties that students of Arabic undergraduate programs face.
3. provide a teaching method that could enhance students' motivation and autonomy and address individual needs.

IV. RESEARCH QUESTIONS

The present study aims at answering the following research questions:

1. Can a web-based learning tool such as Kahoot increase summative assessment performance of Academic English for L2 learners in an Arabic undergraduate program?
2. How does Kahoot when applied as formative assessment create active learning environments that result in more successful course outcomes?

The researchers believe that integrating Kahoot in an EAP classroom for L2 learners exclusively for

formative assessment, will result in higher summative scores.

V. RESEARCH DESIGN

The project used an action research approach to explore how the integration of Kahoot as a means of formative assessment maximizes opportunities of active learning and lead to higher summative outcomes. The Data was collected by the following means:

1. short interviews held with a focus group consisting of 10 randomly picked first year Law male and female students taking the course in Fall 2016-2017. Kahoot is consistently used as the main formative assessment tool and as a revision for summative assessments during this semester.
2. the course file comprehensive review evidence of Learning outcomes attainment from one male and one female section taught during (Spring 2015-2016) is reflected upon in comparison with the comprehensive review of one male and one female section taught during (Fall 2016-2017).The male and female sections of both semesters had the same syllabus, lecture content, PowerPoint slides, YouTube videos and animations, and discussion topics during in-class pair and group work. However, during the Spring semester, Kahoot was not used as a formative assessment tool. Group work, pair work, classroom discussions were the main formative assessment tools used in that semester. Hence, the study aims to reveal how Kahoot as a web-based formative assessment tool compares to the traditional non-gamified style of formative assessment in terms of impacting summative assessment performance. The ENG 100(A) course has the following five course learning outcomes (LOs).

LO1. Use the three main types of a sentence structure, i.e., simple, compound and complex
LO2. Apply major writing mechanics such as capitalization, punctuation, and grammatical accuracy
LO3. Demonstrate an understanding of paragraph structure and paragraph types
LO4. Comprehend and apply crucial writing concepts of unity and coherence in academic writing
LO5. Develop a well-organized academic essay using the skills of process writing

3. a reflective journal was conducted by the course instructor to reflect on the performance of students while using Kahoot and after using it.

All data were analyzed qualitatively in accordance with what is salient to active learning. Active learning denotes to student-centered strategies that increase students' achievement of course learning outcomes. (Freeman, et al. 2007, Chaplin, 2009). Active learning is defined as "the process of having students engage in some activity that forces them to reflect upon ideas and how they are using those ideas" (Michael, 2006). Active learning involves meaningful application of knowledge acquired within the context in which it will be used. This in turn enables learners to meaningfully apply the information and have ownership over their learning. According to current research on active learning in a student-centered classroom, the following two characteristics have been identified in Table 1. The characteristics represent the scope of themes within which Kahoot's efficacy as a formative assessment tool is examined.Indicators used to reflect on each theme have been identified to conduct the qualitative analysis.

Active learning characteristics	Research indicator used
1. Enhanced student academic performance.	Comprehensive Review Results based on summative scores.
2. Maximized student engagement and a more positive attitude toward learning.	Group work dynamics and discussion group. Student Evaluation of Teaching (SET). The instructor's journal and focus group feedback.

Table 1

DISCUSSION AND CONCLUSION

The study provides an insight into a student-centered classroom experience in Abu Dhabi, UAE context. The qualitative analysis resulted in interesting findings stemming from the impact of using Kahoot as a formative assessment in the EAP classroom. The common theme discovered is the importance of active learning in the design of a student-centered classroom, which was evident in the findings gathered to answer the study's two research questions.

The qualitative data was analyzed within the two factors characterizing active learning. The findings confirmed that the Kahoot classrooms transformed the lecture classes into student-centered classes with maximized opportunities for active learning. The students' attainment of course learning outcomes (CLOs) during Fall2017in male and female sections are overall higher than those of the CLOs attained by male and female sections of Spring 2016. Table 2 highlights data drawn from the Comprehensive Review Results that measure course learning outcomes attainment of CLO4 and CLO5 since they were measured by the two major summative assessments: Midterm exam in week 7 and the Final Exam in week 14.

CLO's	Male 2016	Male 2017	Increase	Female 2016	Female 2017	Increase
CLO4	79	90	11+	78	86	8+
CLO5	72	78	6+	72	75	3+

Table 2

The comparison shown in Table 2 clearly depicts the increase in summative assessment outcomes in both male and female sections. A higher increase of summative results is observed in male sections in comparison to female sections; an aspect worth investigating in subsequent research.

Within the scope of the second characteristic-maximized student engagement and a more positive attitude toward learning, the instructor's journal reflections on pair-work and teamwork dynamics, classroom discussions, and the focus group's responses were generally positive. The focus group consists of randomly picked 5 male and 5 female students of different levels of English language competency, and are enrolled in ENG 100 (A) during the Fall 2016-2017 semester. The students were asked two open-ended questions:

Question 1: What do you like most about the use of Kahoot in the Academic English course ENG 100(A)?

Question 2: In what way could the instructor make the use of Kahoot more useful for the students?

In what follows is the male and female students' quoted responses to the two questions asked during the focus group interviews:

For the first question, 7 students out of the 10 randomly chosen responded as follows:

- S1:"I thought the game was fun, we should have more."
- S2: "The game learned me a lot and not boring, I enjoyed it."
- S3:"Everyone was participating so I want to be better at grammar and participate more."
- S4:"Kahoot is fun app. I wanted my group to win."
- S5:"Although Kahoot was often used for revision, the app helped the information stick because it was said aloud."
- S8: "The best part is that the game tells me what I did right or wrong."
- S10: "The good thing is that the game was not played every class. It is mostly used for revision prior to quizzes, the midterm and the final exam."

Fun, collaboration, competitiveness, exam revision usefulness, and real-time feedback coming from the game not the teacher sums up the main points deduced from the focus group responses to the first interview question.

For the second question, the generally satisfied students made the following recommendations to yet further improve the use of Kahoot.

- S5: "I encourage teachers to play Kahoot games not just for revision because it creates a different atmosphere in class, a more alive atmosphere."
- S8: "The teacher can let the groups make the Kahoot game and test other groups. That can be even more fun."
- S9: "The teacher could ask the students what they want the Kahoot game to test them on. All on sentence structure, all on topic sentence, all on paragraph writing, all on vocabulary. Let us vote for the one to be in the Kahoot."

In essence, these 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. Ultimately, students' summative assessment scores are positively impacted. The instructor's reflections drawn from the class observations and the focus group highlight the fact that with the use of Kahoot students in the Fall 2016-2017 semester were noticeably keener on participating and competing than those of the previous semester where Kahoot was not played nor any form of gamification was incorporated for formative assessment. The instructor noticed that playing Kahoot resulted in sparking discussions among students. It was a safe haven for the shy students and an opportunity to shine for the more challenge-driven students. Hence, students' self-esteem is boosted. The enjoyment was guaranteed each time, and this made students look forward to the revision sessions rather than feel burdened or intimidated by them.Kahoot provided the instructor with a formative tool to check on students' understanding and track their performance. Students themselves are encouraged to become self-directed learners and take responsibility of their own learning as Kahoot provides them with real-time feedback

without the strains of teacher-student exchanges aimed at formative assessment. It is also noteworthy that incorporating Kahoot within a student-centered teaching approach had a positive impact on the instructor's evaluation scores. This study supports the view that the Kahoot game has a high potential for teaching and learning innovation in higher educational institutions.

RECOMMENDATIONS

Although the qualitative analysis of this study resulted in interesting findings stemming from the impact of using Kahoot as a formative assessment in the EAP classroom, there is a need for further research to dismantle the other potentials Kahoot has. Two of these areas that need more investigation and research are social skills and critical thinking. These can be tested through giving the students roles in designing their own Kahoot games based on what they study and give them the chance to research what to include in these games. Another skill that Kahoot can provide is independent learning. This can be tested through trying another feature of Kahoot which is "Challenge". It enables the instructors to assign tasks/games to the students to play at home and keep track of their achievements. Then, he/she could provide them with the method to do the same activities on different occasions and compare their results and find ways to diagnose their weaknesses and deal with them.

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