The Effectiveness of Interactive Learning Based on Quizziz Applications Among Students of Tourism and Hospitality Marketing

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Abstract: Various techniques and approaches are introduced to ensure the teaching process more interesting and efficient. In line with global progress, educators are beginning to be interested in integrating the R&D process with technological advances, such as; the same online application available for free or for free. Quizziz application is one of the methods in today's interactive learning. It is an alternative method that enhances student motivation in classroom learning. The purpose of this study is to look at the effectiveness of this method on students taking Tourism and Hospitality course to understand and remember the concept of marketing in tourism and hospitality industry. Besides that, through class through online can increase their desire to build student self-esteem. In this study, researcher involve third semester of Tourism Management students in Politeknik METrO Betong Sarawak which only have 15 students in the class to be the respondent for this study. Based on previous observations made through the knowledge test in the classroom, it was found that the results obtained by the student sample were at a poor level. The use of the Quizziz application portal in the form of personal trainings, reviews and online assignments has shown that students are increasingly stimulated and excited to learn the concept of marketing in tourisn and hospitality industry. The findings show that there is an increase in student achievement where the comparison between the Pre-Action Test and the After-Action Test towards these 15 students has showed good improvement. In addition, the findings from the questionnaire also showed that students also showed interest and interest in the teaching method. Therefore, this online teaching method is an effective alternative medium for teaching DTM5043 Tourism and Hospitality course.

Keywords: Teaching and Learning, Quizziz Application, Interactive Learning

1.   Introduction

The 21st century classroom and teacher pedagogy are closely intertwined. Educators should strive to embrace the development of technology and face lots of challenges. If they do not take any action and spend well with the technology created, they will miss a lot of chances in improving their teaching and learning method. Said and Ahamad (2017) mentioned that *Program Transformasi Sekolah 2025* (TS25) program is developed to ameliorate school management and teaching practices, which included the use of 21st-century learning styles, techniques, and tools in enhancing students thinking skills. In conjunction, the differentiation approach is one of the focused techniques in the TS25 modules along with the implementation of the i-Think program, active and cooperative learning (Azman, 2017). To ensure the learning process is more conducive to the needs of the 21st Century Learning, slowly teaching pedagogical changes need to be made. One of the platforms that can be used as a learning medium interactive is Quizziz.

The disadvantages of using improper teaching techniques also influence student's overall achievement. A lecture-based conventional teaching technique omit it still practicing. This also makes the topic less interesting, as well as engaging students cannot concentrate on learning process. But the use of this Quizziz app can be one of the interactive learning media that emphasizes pedagogy by involving the relationship between active student thinking and the content of the lesson that points out the attention, retention and the student. This approach also provides instant feedback that students can independently apply new knowledge to solve problems and they have more choices to do their assignment given by the lecturers.

Quizziz is easy to build by any lecturer. Quizziz is an online quiz question built by the course 's lecturer. It is just needed to sign up and have an account for free before building the question. Quizziz makes classes interesting when students answer online quizzes and the scores display continues on the front screen of the classroom. The scores before the quiz will be visible to the students and this will make the students become excited and focus due to the limited time. The quiz questions created by me and students will feel so excited during the teaching and learning process through the atmosphere interactive learning. This application can be used through various devices including computers, tablets and smartphones. Quizziz is a method of learning through interactive games that contain elements of competition. It encourages me and students to interact face-to-face in the class. Changes in the educational environment require educators to inject elements creativity in teaching. Lecturers are encouraged to conduct lesson sessions in the classroom by

performing interactive learning activities that engage students so that they can see them live the relevance of the lessons that followed (Ismail & Zaleha, 2016).

2.   Problem Statement

The setting for this learning style's study, 97% of practicing lecturers believe that students' performance can be enhanced when material is delivered in an individual's preferred learning style (Deligiannidi & Howard-Jones, 2015) and 94% of student teachers agree about variety style of learning method influence student performance in the class. (Papadatou-Pastou, Haliou & Vlachos, 2017). Only a few empirical studies have sought to shed light on the rather obscure picture (Marcus, 1977; Rogowsky, Calhoun & Tallal, 2015).

Based on these issues, it is generally found that students have a lack of understanding that will lead them to lack of focus and interest in the classroom. The course of Tourism and Hospitality Marketing is one of the core courses for Tourism Department's student in Politeknik METrO Betong Sarawak (PMBS). This course as a whole is theoretical and can reduce student's interest in the classroom. According to Rahiman and Shukor (2017) students are less interested when the courses taught are theoretical and less challenging. Based on the observations of the achievements towards Tourism and Hospitality's student in PMBS, it shows a poor result of only 42% of students graduating compared to other topics. In addition, this course is important for students to enhance their entrepreneurship knowledges. Thus, improvement studies should be conducted.

The need and importance of this research is seen as a way to see the success of the teaching method through interactive application based on the application of Quizziz towards Tourism and Hospitality Marketing students in PMBS.

2.1   Research Objectives

a)   Identify the level of student achievement in the effectiveness of interactive learning based on application of Quizziz in the topic of Concept of Marketing for the Tourism and Hospitality Marketing's course.
b)   Examine students' perceptions of the effectiveness of interactive learning based on Quizziz applications in enhancing students' understanding of marketing segmentation topics in Tourism and Hospitality Marketing course.

2.2   Research Questions

a)   How well are the students achieving the effectiveness of interactive learning based on Quizziz applications in the topic of Concept of Marketing for the Tourism and Hospitality Marketing course?
b)   Will interactive learning increase the students' interest in learning the topic of Concept of Marketing for the Tourism and Hospitality Marketing course?

3.   Methodology

This study used an action research design to see changes in student achievement in the topic of Concept of Marketing for Tourism and Hospitality Marketing course through Quizziz applications. Quizziz is a method of actively assessing students in the classroom. This is an interactive learning method where each student will try to answer the question they will find and will be told the answer directly. Each student in the class will be seen in terms of understanding, self-confidence and speed of thinking.

3.1   Sampling

The study participants consisted of 15 students from the 3rd year Diploma in Tourism Management students in Politeknik METrO Betong Sarawak for December 2019 session. Rationally, these students were chosen because of their performance in Quiz 1 which was not as good as the other classes previously.

3.2   Research Instrument

Pre-Action Test
The Pre-Action Test consisted of 20 questions aim to test students' knowledge and understanding of the topic being studied which was the concept of marketing. The objective is to obtain insights and early observations of mastery topics of Concept of Marketing among students.

After-Action Test
The After-Action Test was given to a sample of students to see students' achievement at the end of DTM5043 Tourism and Hospitality Marketing course.

Feedback form

The Questionnaire was used to obtain data on the students' interest in interactive learning during the lecture. This form has 5 questions adapted from Salha's (2014) study. Through the questionnaire, the use of these costs can be reduced because it does not take long to answer (Fauzi et al., 2016).

3.3   Research Method and Procedures

Students passed the pre-test to see their knowledge and understanding of the topic of marketing segmentation. The section on students' ability at the beginning of this study was conducted at the Politeknik METrO Betong Sarawak in a 120-minutes teaching session. The scoring section refers to the range of scores students have for each question.

- Assigning a game on Quizzes:
- Click on 'Assign HW' to assign a quiz to the students in the my class.
- Add a deadline by when the students need to complete the quiz.
- Once I enter the deadline, go ahead and host the game. Clicking on 'Host Game' will take me to a page with the game link that I need to share with my students in my class so they can play the game on their own device.
- Students who joining the game via the link or the LMS can opt for the settings they would like to include in the game.
- Students can access and also attempt the same assigned quiz multiple times. The scores for each attempt are captured under the quiz report.
- I can also see the progress of students as they answer questions on the live dashboard. Access the game's report in my reports section. Both live and assigned games are available under reports.

4.   Findings
4.1   Demography of Respondents

This section describes the general demographic profile of respondents consisting of gender, age, race, language and state origin. Table 1 shows that 5 (33%) respondents were male and 10 (67%) female. The majority of respondents were those aged 19 years (87%) and the rest were 20 years (2%). For nation status, 5 (33%) were Malays, 1 (7%) Chinese, 6 (40%) Iban, 2 (13%) Bidayuh, and 1 (7%) Kadazan. As for the status of spoken language, 30 (75%) are using Malay, 4 (10%) English, 2 (5%) Chinese Language and 8 (20%) Tamil. Table 1 also shows the origin of respondents that is comprised of 10 states throughout Malaysia.

**Table 1**: Profile of Student's Demographic

	Frequency	Percentage (%)
Gender		
Male	5	33
Female	10	67
Age		
19 years old	13	87
20 years old	2	13
Nations		
Malay	5	33
Chinese	1	7
Iban	6	40
Bidayuh	2	13
Kadazan	1	7
Spoken Language		
Malay	7	46
Chinese	0	0
Iban	6	40
Bidayuh	1	7
Kadazan	1	7
State		
Sarawak	14	93
Sabah	1	7

1st Objective: Identify the level of student achievement in the effectiveness of interactive learning based on application of Quizziz in the topic of Concept of Marketing for the DTM5043 Tourism and Hospitality Marketing's course.
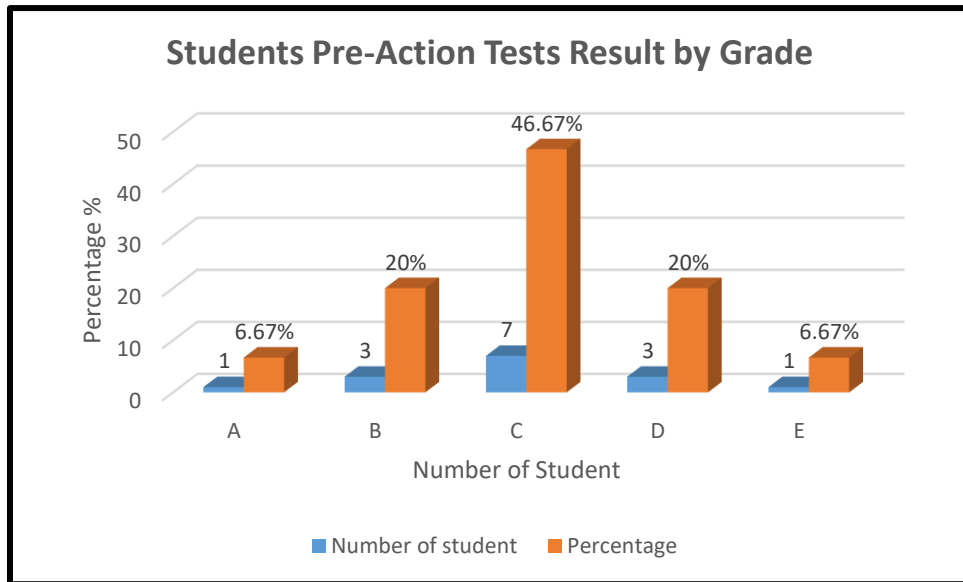
Picture 1. Students Pre-Action Tests Result by Grade

Based on the data analysed for the pre-test that showed in picture 1, it was found that only one students (6.67%) had grade A, 3 students (20%) had grade B, 7 students (46.67%) had grade C, 3 students (20%) had grade D, and one student (6.67%) had grade E.
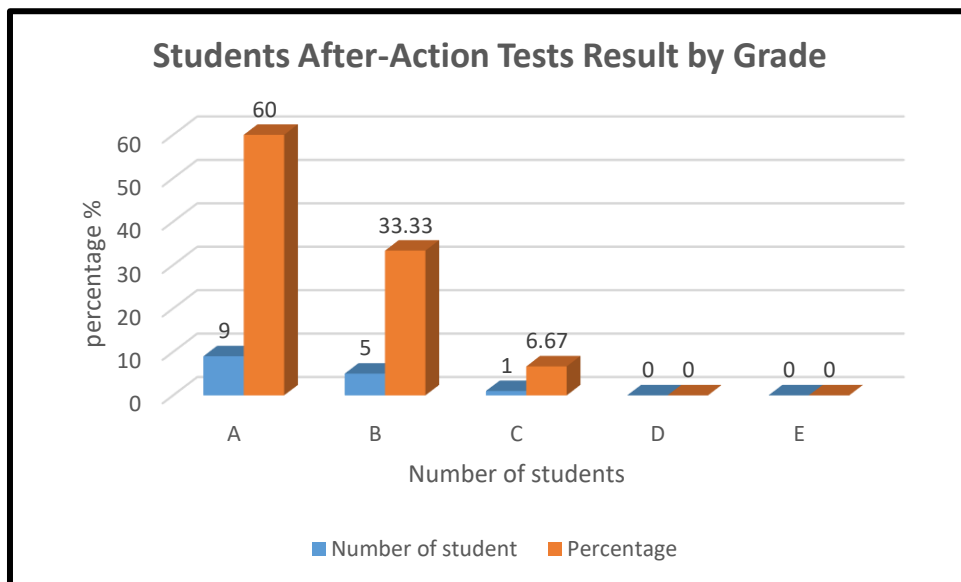
Picture 2. Students After-Action Tests Result by Grade

Whereas the Post-test evaluation through Quizziz Application after teaching session using the interactive method showed that the student's knowledge level towards the concept of marketing was very good comparing to the student's result before the interactive method which is Quizziz Application was started. Based on picture 2, Students After-Action Tests Result by Grade shows that 9 students (60%) had grade A, 5 students (33%) had grade B and one student (6.67%) had grade C and non of them got D and E grades for this post-test.

Comparative analysis of Test Before-Action and Test-After action clearly shows an increase in the mean of test effectiveness. The mean range score for the pre-action test was 48.33 and the mean range for the post-action test was 68.667. Levels of mean from the test through Quizziz application improvement can be interpreted based on Table 2 Level mean which shows the mean in excellent condition.

Table 2: Level of mean.

Analysis	Pre-test	Post-test	Mean
Mean	48.33	68.667	15.334

2nd Objective: Examine students' perceptions of the effectiveness of interactive learning based on Quizziz applications in enhancing students' understanding of marketing segmentation topics in Tourism and Hospitality Marketing course.

Table 3: Students' Perceptions of the Effectiveness of Interactive Learning Based on Quizziz Applications

No.	Item	Mean	Level
1	I am passionate and have a high interest in learning interactive learning (Quizziz Application).	4.133	High
2	I always take interactive learning (Quizziz Application) to enhance my understanding of the lessons after attending college.	4.000	High
3	I'm more interested in self-study through interactive learning (Quizziz Application) before and after attending the class.	4.200	High
4	Electronic learning materials or softcopy in e-learning can draw my interest in learning from just printed or hardcopy materials.	4.067	High
5	I'm interested in trying something new, especially in interactive teaching.	4.200	Very High
6	I have a passion towards ICT.	3.467	Moderate
7	I do not want to be far behind from education technology.	4.670	High
8	I'm always excited about the latest use of ICT.	4.733	High

It was found that the students showed an interest in interactive learning and were in excellent standing with an overall mean range 3.467 – 4.733. This high mean score can also be seen in the demographic aspects of the Z-generation students who are highly technologically knowledgeable. Therefore, it is proposed that education institution cultivates more efforts to inculcate interactive learning among students so that student can achieve excellent result.

According to (Adnan, Ali & Ahmad, 2015) the information system software is a tool or programs that allow users to communicate with computer systems through the transmission of information.
Through this finding it can be proven that the application interface developed is user friendly. This is in favor of statement (Azmi, Raman & Zakria, 2017) that are some of the features that should be present in the design of the application web-based is the use of more typography large and thick, emphasizing application data visualization and minimalist web design.

5.   Suggestion And Recommendation
As a result of this analysis, the view towards interactive learning by using Quizziz Application that has been conducted in the Tourism and Hospitality Marketing course can be one of the best approaches that help students effectively in learning process which was based on increasing marks or achievement through test-before-action and post-action tests. Whereas the analysis of the findings from the questions indicate that there is an opportunity for improvement especially in answering the question in a short period.

Therefore, the interactive learning medium needs to be tailored to the appropriate location or space based on the student's background and to avoid strict procedures. Therefore, it requires the cooperation and creativity of educators in outlining tools that can be used to facilitate classroom education. In addition, continuous promotion of interactive learning should take place. Furthermore, polytechnics can hold contests to encourage students access to interactive learning specially on how to market their products in Tourism and Hospitality Marketing course.

This Quizziz Application is just one of many other applications available on the internet that researchers may never know. Therefore through this kind of study, it is hoped that there will be a study introducing other better applications especially in teaching and learning process while also studies to analyse the use of this application in more details such as the effectiveness of its use and other angles. I hope with the introduction study of Quizziz Application in Tourism and

Hospitality Marketing course will make it more widely known, and further utilizing its use in the research and development process especially the related courses that have theoretical.

6. Conclusion

In conclusion, based on the objectives of this research, it is clear shows that Quizziz Application can make the learning process easier and can be accessed through phones as long as have internet connection. Students are not just easier to understand, but even more active and excited.

The rapid development of information and communication technology have strong connection with media usage in the field of education to assist educators and students in the process of effective teaching and learning environment. The use of media technology is very important in the modern era because it benefits the education of the nation and can shape knowledgeable nation in our country.

In the context of education in public schools, the usage of technology in education is a must to improve methods and existing approaches to more systematic teaching and learning process and efficient. The use of technology media in research and development is highly recommended for educators and students to increase student's understanding towards the courses that they take.

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