



# Utilization of the Kahoot Games Application for Understanding Economic Learning in High School Students

Grida Saktian Laksito<sup>1\*</sup>, Rabi Hamisu Kankarofi<sup>2</sup>

<sup>1</sup> Faculty of Business, Economics, and Social Development, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia

<sup>2</sup> Department of Mathematics, Yusuf Maitama Sule University, Kano, Nigeria

\*Corresponding author email: [gridasaktianlaksito@gmail.com](mailto:gridasaktianlaksito@gmail.com)

---

## Abstract

Learning Economics is one of the lessons that need to be well understood by students. With the existence of the economy, students will have a basis for starting and managing the economy and businesses that will be built. Still, there are problems with students of SMAN 1 Majalaya, where they lack enthusiasm and feel less active in learning economics lessons. There needs to be an improvement in learning methods so that their interest in and understanding of basic economics increases, one of which is by utilizing the Kahoot Games application. This study used a quantitative approach to test the oneway ANOVA hypothesis with a total of 42 respondents who were students of class XI IPS 3 at SMAN 1 Majalaya. The results of the study explain that the use of the learning activity application using the Kahoot Games application has increased students' understanding of the importance of the economy in the daily lives of students so that participants who are Majalaya 1 Public High School students will easily understand basic economics lessons and begin to manage their finances properly.

*Keywords:* Kahoot Games, Media Learning, Motivation

---

## 1. Introduction

Learning Economics is one of the lessons that need to be well understood by students. With the existence of the economy, students will have a basis for starting and managing the economy and businesses that will be built. Still, in general, students at SMAN 1 Majalaya feel less enthusiastic and felt less active in learning economics lessons. This can be seen from only a tiny proportion of students who think actively in asking and answering questions in education, both when studying the material and when practicing solving practice questions, and tend to wait for explanations from the teacher.

Students who are less active in learning because of the limited learning media used by the teacher in class. Many students are not enthusiastic about participating in learning, so the assessment results are not optimal because students do not understand the learning material (Rulianah et al., 2022). If the lack of student interest in learning is left alone by the teachers at the school, it will have an impact on learning outcomes that are less than optimal, namely, many students who have not reached the Criteria Completeness Minimum (CCM) with a minimum score of 70. They are feared to have a wasteful life and not manage finances well. Therefore, learning innovations must be developed to attract students' interest in learning. This can be done by learning that involves students in each process using current, exciting media and according to needs.

One of the contemporary media that can motivate students' interest in learning and can be used as a learning medium is Kahoot Games. Kahoot is a game-based learning tool used in classrooms and other learning environments (Adnyani et al., 2019). The Kahoot platform is a multiple-choice learning game accessed using a web browser or the Kahoot app. Kahoot can be used to assess student understanding. (Kaur & Naderajan, 2019). Kohnke and Moorhouse (2021) Kahoot is a game-based technology solution for beginners in e-learning to encourage engagement and active learning in the classroom.

Fun learning is one of the benchmarks that motivate students to improve their knowledge and skills in lessons. The fun learning process obtained from games can increase the positive effect because it fosters learning motivation in students (Virvou et al., 2005). The entire class will participate in a live game-based class response system displayed on a screen with multiple-choice questions in which students respond to questions using smartphones, tablets, and computers. In addition, using Kahoot also makes students more concentrated, cooperative, and comfortable in learning

and increases learning motivation (Chaiyo & Nokham, 2017). Teachers can save time and paper while working more productively with children using this software (Hidayad et al., 2023). When learning to use Kahoot Games, only 9% of students could not use and complained about using Kahoot. However, most students responded well and expressed pleasure with the learning experience. They say that Kahoot energizes the classroom, encourages the exploration of ideas, and makes learning enjoyable, all of which seem to lead to greater understanding and motivation (Hidayad et al., 2023).



**Figure 1:** Map Location High School 1 Majalaya

Seeing some of the obstacles at SMAN 1 Majalaya in dealing with innovation and assessment learning, teachers must innovate in using the latest digital applications to facilitate the learning process. In this research, the Kahoot application can help SMAN 1 Majalaya students learn, especially economics. The Kahoot application's use has been widespread during the pandemic, the COVID-19 transition period, and until now. The Kahoot application in the learning process is straightforward to use, and SMAN 1 Majalaya is very helpful for learning and improving learning, so the Kahoot application has a role that has a very positive impact on the economics learning process at SMAN 1 Majalaya.

## 2. Materials and Methods

### 2.1. Materials

This research activity was conducted on December 12, 2022, at SMAN 1 Majalaya, Jl. Panyadap Magazine No. 2, Panyadap, Kec. Solokanjeruk, Bandung Regency, West Java 40376, and the respondents in this research are 42 students who are in Class XI IPS 3.



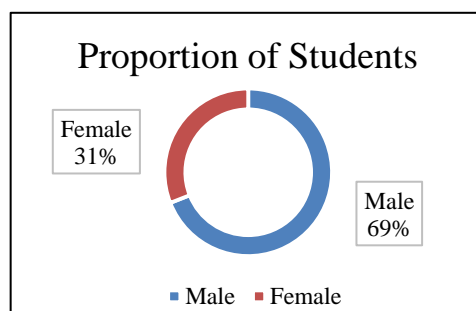
**Figure 2:** High School 1 Majalaya

### 2.2. Methods

The research was conducted in 3 meetings, namely Monday, December 12, 2022, which was the first meeting to work on learning about basic economics regarding financial management using the lecture method. Sources of information for students were obtained through textbooks and lectures from the teacher. Then on Wednesday, December 14, 2022, the second meeting, learning using the Kahoot Games application learning model. Furthermore, on Monday, April 19, 2022, economic learning was evaluated using the Kahoot application by giving prizes to students with the highest and fastest grades. Furthermore, researchers will use quantitative data from student responses to learning using the Kahoot Games application using Anova testing. The data is then processed using the Statistical Package for the Social Sciences version 14.

### 3. Results and Discussion

This study involved 42 students from class XI IPS 3 at SMAN 1 Majalaya with economics subjects. The proportion of gender in the class for boys was 29 people with a percentage of 69%, and female students with as many as 13 people with a ratio of 31%.



**Figure 3:** Proportion of Students High School 1 Majalaya

Through the Kahoot.com page, teachers can carry out several activities, including registration (signup), entering a personal page (log-in), and selecting available features, quizzes, discussions, and surveys. After choosing one of the features, the teacher can enter a list of questions along with the answers, the duration of time to answer, and the score for each correct answer. The questions that have been entered can be stored, modified, deleted, added, and used in the assessment process repeatedly without any usage restrictions.

Each group of questions has a PIN, which students will enter when the assessment is carried out after the game ends, then Kahoot! Automatically displays scores for all participants, which can be downloaded and saved privately. Based on the results of observations during the learning process, students carry out various learning activities. First, students will be given instructions on using the Kahoot application, such as filling in a name and entering a pin. The teacher will provide work on questions about economics subjects through modules and videos and practice questions, as shown in Figure 4.



**Figure 4:** Proportion of Students High School 1 Majalaya

#### 3.1. Anova Analysis

Data analysis was carried out quantitatively using the Anova test, including the normality test of the results before and after evaluation and the mean difference test. Normality testing was carried out using the Kolmogorov-Smirnov test. Testing was carried out with the help of SPSS software, and the results are presented in Table 1.

|                              |                | <b>Descriptive Statistics</b>     |                                  |
|------------------------------|----------------|-----------------------------------|----------------------------------|
|                              |                | <b>Before Learning Evaluation</b> | <b>After Learning Evaluation</b> |
| <b>N</b>                     | <b>Valid</b>   | 42                                | 42                               |
|                              | <b>Missing</b> | 0                                 | 0                                |
| <b>Mean</b>                  |                | 79.86                             | 85.43                            |
| <b>Std Deviation</b>         |                | 6.741                             | 4.712                            |
| <b>Skewness</b>              |                | -0.477                            | -0.600                           |
| <b>Std Error of Skewness</b> |                | 0.365                             | 0.365                            |
| <b>Kurtosis</b>              |                | -0.590                            | 0.113                            |
| <b>Std Error of Kurtosis</b> |                | 0.717                             | 0.717                            |

Testing the normality of pretest and post-test scores using the Skewness and Kurtosis Test. Based on the Skewness and Kurtosis Test criteria, the data is normally distributed if the Skewness and Kurtosis ratio is between -1.96 and +1.96. As for calculating the Skewness and Kurtosis ratio values with the formula for the value of skewness or kurtosis divided by their respective standard errors. The pretest and posttest values will be generally distributed if the importance of the two ratios is between two specific values, depending on the level of significance used. For example, if a significance level of 0.05 is used, the data will be normally distributed if the skewness and kurtosis ratios are between -1.96 and +1.96. Based on the calculation, it is obtained that the Skewness ratio before the learning evaluation is -0.477 and after the learning evaluation is -0.600, then for the Kurtosis ratio before the learning evaluation is -0.590. After the learning, the evaluation is 0.113. At a significance level of 0.05, the Skewness and Kurtosis ratios are between -1.96 and +1.96, so the scores before and after learning evaluation are typically distributed. Furthermore, because the before and after-learning evaluation scores were normally distributed, a hypothesis test was carried out for the difference in the mean pretest and posttest values (different tests) using the one-way ANOVA test. Based on the results of the before-learning and after-learning evaluation, which were then processed with SPSS, the results are shown in Table 2.

**Table 2: One Way Anova**

|                       | ANOVA          |    |             |       |       |
|-----------------------|----------------|----|-------------|-------|-------|
|                       | Sum of Squares | df | Mean Square | F     | Sig.  |
| <b>Between Groups</b> | 330.524        | 17 | 19.443      | 0.005 | 0.023 |
| <b>Within Groups</b>  | 579.762        | 24 | 24.157      |       |       |
| <b>Total</b>          | 910.286        | 41 |             |       |       |

Based on the results of research that have been done regarding the use of the Kahoot application in increasing understanding of basic economics subjects using the one-way ANOVA method, a significance value of 0.023 is obtained and an alpha value of 0.05 so that a significance  $value < \alpha = 0.05$ , it can be stated that  $H_0$  is rejected, which means that Utilization of the Kahoot Games Application can affect students' understanding of basic economics subjects at SMAN 1 Majalaya.

#### 4. Conclusion

Learning activities using the Kahoot Games application have increased students' understanding of the importance of economics in the daily lives of students so that participants who are Majalaya 1 Public High School students will easily understand lessons about basic economics and begin to manage students' finances in meeting all their daily needs. -the day. It is suggested that this introductory economics lesson should be renewed in terms of learning methods and accompanied and fully supported by parents so that they can get used to adopting wealth-saving behavior and sorting out which needs and which desires are expected to be able to regenerate the habits of Indonesia's younger generation.

#### References

- Adnyani, K. E. ., Adnyana, I. ., & Murniasih, N. . (2019). Teacher and Students' Perception on Using Kahoot! for English Learning. *3rd International Conference on Innovative Research Across Disclipness (ICIRAD)*, 62–67.
- Chaiyo, Y., & Nokham, R. (2017). The effect of Kahoot, Quizizz and Google Forms on the student's perception in the classrooms response system. *2017 International Conference on Digital Arts, Media and Technology (ICDAMT)*, 178–182. <https://doi.org/10.1109/ICDAMT.2017.7904957>
- Hidayad, F., Agustin, A., & Bambang Purwanto, M. (2023). The Effectiveness of Online Assessment Platforms in EFL Classroom: a Students' Perception on Using Kahoot Application. *Jurnal Scientia*, 12(1), 2023. <http://infor.seaninstitute.org/index.php>
- Kaur, P., & Naderajan, R. (2019). Kahoot in the English language classroom. *South East Asia Journal of Contemporary Business, Economics and Law*, 20(6), 49–54.
- Kohnke, L., & Moorhouse, B. L. (2021). Using Kahoot! to Gamify Learning in the Language Classroom. *RELC Journal*, 53(3), 769–775. <https://doi.org/10.1177/00336882211040270>
- Rulianah, N., Prabowo, A., & Sukono. (2022). Improving Students' Learning Achievement Through Cooperative Learning and Padlet Application in Class XI MIPA 3. *International Journal of Ethno-Sciences and Education Research*, 2(4), 147–151.
- Virvou, M., Katsionis, G., & Manos, K. (2005). Combining Software Games with Education: Evaluation of its Educational Effectiveness. *Educational Technology & Society*, 8, 54–65.