
Gamification in Accounting Learning: Can It Increase Student Motivation and Interest?

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Abstract

The research aims to determine the increase in students motivation and learning interest in using the gamification learning method. The research method used was a one group design experiment. The data source was obtained from research conducted on March 9, 2023 at one of the tenth grade vocational high school levels majoring in Accounting and Institutional Finance at a school in the city of Bandung by distributing questionnaires to students with closed answer forms. The results of the study show that learning using the gamification method can increase students' motivation and interest in learning. This is evidenced by the decrease in the level of saturation in the learning process. The gamification method shows lower results, namely 27.71%. Meanwhile, in learning using conventional methods the saturation level reaches 33.71%. That is, the gamification method affects the enthusiasm of students who are able to reduce their boredom in learning activities. The valid value gets the full value, which is equal to the number of research subjects involved. This indicates that the gamification method affects students motivation and interest in reducing learning saturation.

Keywords: gamification, learning, accounting, motivation, interest.



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Introduction

Low motivation and interest in learning have an impact on students' cognitive results and achievement (Tasya & Abadi, 2019). Factors that contribute to this condition are generally influenced by difficulties in understanding learning materials (Firda et al., 2022). This causes students to lack concentration during learning, unable to receive learning materials well, and subsequently affecting their learning outcomes (ARIANTI, 2019). This reason should be the basic concern for teachers to constantly encourage their students to develop their activities, enthusiasm, and initiative in their involvement in learning. In this case, the teacher becomes an important factor in realizing an interactive learning process that is easy to follow by students so that they can be active in responding to learning activities (Sayekti & Purwaningsih, 2023).

The success indicators of a student can be seen from their high interest in learning and motivation (Sidik et al., 2020). Therefore, efforts to improve motivation and interest in learning are essential to measure students' competencies, because high motivation and interest in learning will affect their activities and seriousness in paying attention to the teacher's explanations, expressing opinions and asking questions, as well as their perseverance in completing given tasks.

Improving students' motivation and interest in learning is an effort to create a conducive learning climate and optimal cognitive achievement, so that students can achieve the minimum completeness criteria (KKM) target (Triyanti, 2022). In this case, the gamification method becomes one of the important indicators that can improve the activity, motivation, interest in learning, and learning outcomes of students in the learning process.

Conventional learning models have been frequently used by teachers, and sometimes this makes students less interested in learning. As demonstrated by research conducted by Wardana & Sagoro, 2019, the results showed that the implementation of the gamification method was significant, as evidenced by the

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increase in each cycle. In learning activities, the percentage of improvement reached 14.30%, then learning motivation increased by 9.22%, and learning outcomes increased up to 27.13%.

Previously, in the research conducted by Wira et al., 2021, the topic of improving motivation with the gamification learning method was studied, and the results showed that the application of the gamification learning model was able to create a non-boring and interesting learning atmosphere. In line with the research conducted by Paradise et al., 2021 which stated that the implementation of the gamification method showed a positive effect on increasing learning motivation.

Learning in the classroom often becomes a boring experience for students. Sometimes, they lose interest and enthusiasm to learn when they have to sit in the classroom and listen to lectures endlessly. This condition can have a negative impact on students' learning outcomes and make them lose confidence in facing difficult lessons. To overcome this, educators must find ways to make learning more interesting and interactive.

One of the learning methods that is still popular today is the lecture method. Nevertheless, some studies show that the lecture method can increase students' learning fatigue, especially if it is done repeatedly. Some teachers have considered using more interactive and creative lecture methods in class. Some techniques used include integrating gamification elements into lectures, using interactive media, or introducing activities that actively involve students in the classroom.

Therefore, it can be concluded that the use of more interactive and creative lecture methods can increase students' activity and motivation in learning (Sintema, 2020). The use of techniques such as interactive media or gamification can be an effective alternative to overcome student boredom in the classroom. As educators, we must continue to find ways to make learning more interesting and effective for students, so that they can achieve optimal learning outcomes.

Based on the literature review of Accounting subject in vocational high schools (SMK), there is still a gap that learning has not been able to meet expectations (Wakhinuddin & Purwanto, 2023). The most common issue currently found is the low motivation and enthusiasm of students, as well as the lack of varied and attractive learning media (Widiyanto et al., 2022; Sari & Fazda Oktavia, 2021), especially the perspective of Accounting subject that is perceived as difficult to understand (Rahmawati & Nurlaili, 2019). Interaction between students and teachers should be collaborative and enjoyable, therefore the learning process requires an interesting and interactive method that combines game elements in a lesson to create learning motivation (Irwan et al., 2019). This research identifies the specific influence of gamification method in accounting learning. Learning using gamification method is expected to increase students' motivation and interest in learning, so that it can minimize the decline of cognitive learning outcomes and learning achievement.

Method

The research conducted was a one-group design experiment. The main focus was on developing the quality aspect of the Basic Accounting learning process regarding the Bad Debt Provision approach.

The research subjects were high school students in the 10th grade majoring in Accounting and Financial Institutions at one school in the city of Bandung, with a total of 35 students consisting of 32 females and 3 males. In this study, the material of allowance for doubtful accounts was used as the object of research as well as the medium for carrying out learning activities.

The data was collected through a questionnaire distributed to the students on Thursday, March 9th, 2023. The questionnaire consisted of closed-ended questions that provided several ranked answer choices from a scale of 1 to 5. The use of closed-ended answers was employed by the researcher by asking questions regarding the assessment of conventional learning methods and gamification learning methods on this range of numbers. The questionnaire generally contained questions about the learning methods preferred by the students.

The research plan consists of implementing a gamification method using the Truth or Dare game as the main component to deliver the material on provision for doubtful debts in accounting. The game is divided into five randomly selected groups, with each group consisting of seven students. The game uses Truth or Dare cards, a Spin Wheel, and special cards as the media for delivering the material. Each card contains a question related to the material, which can be answered either as a multiple-choice or open-ended question. The group representatives must answer the question correctly, and each correct answer will earn 30 points. The game also includes a penalty called "Boom," which deducts points from the group. At the end of the game, the top three groups with the highest scores will receive rewards.

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The implementation of the gamification method was carried out in a classroom during a scheduled
 Description:

- SJ = Sangat Jenuh (Very Bored) TJ = Tidak Jenuh (Not Bored)
 J = Jenuh (Bored) STJ = Sangat Tidak Jenuh (Not Bored at All)
 N = Neutral

lesson. The researcher observed the students' responses and actions during the learning process. In the reflection phase, the teacher discussed the challenges, obstacles, and evaluation of the learning process, which can be used in future lessons.

The data obtained from the questionnaire will be processed based on the calculation of the average score of the motivation and learning interest indicators of the students, the data on the comparison of learning methods will be classified into categories of very high, high, neutral, low, and very low. In addition, to test the validity and statistical output values, the SPSS (Statistical Program for Social Science) testing technique will be used.

Results and Discussion

The research shows that learning using gamification methods can increase students' motivation and interest in learning, and this method has an effect in reducing boredom during learning activities. Based on questionnaire data, calculations show that the average level of boredom in learning using gamification methods is lower, at 27.71%, while in conventional learning methods, boredom levels reach 33.71%. This indicates that gamification methods have an impact on student motivation and interest.

Table 1. Learning Boredom Statistics

Statistics		
Kejenuhan belajar		
N	Valid	35
	Missing	0
Mean		3.71
Range		4
Minimum		1
Maximum		5
Percentiles	100	5.00

The statistical output shows the validity of learning boredom in gamification methods calculated using the SPSS (Statistical Program for Social Science) testing technique. The validity value gets a whole value, which is equal to the number of research subjects involved.

Table 2. Learning Boredom Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SJ	1	2.9	2.9	2.9
	J	4	11.4	11.4	14.3
	N	8	22.9	22.9	37.1
	TJ	13	37.1	37.1	74.3
	STJ	9	25.7	25.7	100.0
	Total	35	100.0	100.0	

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Table 2 shows that the frequency of student boredom using gamification methods shows high results in the “Not Bored” (TJ) category. In this case, gamification methods affect student learning activities by providing encouragement to participate in interactive learning activities such as paying attention to explanations, expressing opinions, and asking questions about things that students do not understand.

In the learning process, student enthusiasm using gamification methods shows a positive response and learning can be followed well, but there are also students who tend to be more enthusiastic during conventional learning methods. Thus, researchers compare student enthusiasm during learning using gamification methods with conventional methods, and the data obtained from the questionnaire can be seen as follows:

Table 3. Enthusiasm Comparison

<i>Gamification Method</i>			Konvensional Method		
Category	Frequency	%	Category	Frequency	%
Very High	17	48,6	Very High	14	40
High	11	31,4	High	8	22,9
Neutral	4	11,4	Neutral	9	25,7
Low	1	2,9	Low	2	5,7
Very Low	2	5,7	Very Low	2	5,7

Based on Table 3, it is known that the frequency in the “Very High” category of gamification methods shows a higher number than conventional methods. This means that learning using gamification methods tends to be dominated by students in increasing their motivation and interest in learning.

Gamification methods in learning can reduce the level of boredom experienced by students during the learning process. In learning using gamification methods, learning material is transformed into a form of games or activities that are interesting. Students can take quizzes, solve puzzles, or even play simple games related to the subject matter. Through more active and interesting interactions like this, students will feel more interested and engaged in the learning process, thereby increasing their involvement and participation.

In line with the research conducted by Mumpuni, Intan Primaniar; Sagoro, 2018, which proved that learning using gamification methods can increase the percentage of the average score of learning motivation, with an increase of 6.35%. Student motivation and interest in learning show high numbers when learning uses interesting and varied media. This becomes a stimulus for students to be able to follow learning optimally. The results of the study conducted by Ilmadi et al., 2019 stated that the use of gamification methods is very effective in increasing student learning motivation. Julianto & Ekohariadi, 2020 in their research also stated that the implementation of learning using gamification methods affects students' interest in learning because the methods used are varied and interesting, thus increasing student learning motivation.

Long and monotonous learning can cause boredom in students, thereby disrupting the learning process. However, gamification methods have been proven effective in reducing student boredom levels during the learning process. As Ramdani, 2018 revealed, playing games can reduce student boredom in learning activities. This is because students tend to get bored with monotonous learning methods when teachers do not give students the opportunity to actively participate in continuous learning.

In addition, the use of gamification methods can also motivate students to learn more diligently. When they successfully complete a challenge or achieve a certain score in the game, they will feel more confident and enthusiastic about continuing to learn. Thus, gamification methods can help increase student motivation and performance in the learning process.

Durak, 2018 stated that diverse and non-monotonous learning methods are needed to reduce student boredom. This statement is in line with research conducted by Huang et al., 2018 which showed that if

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gamification is applied in the learning process, it can provide positive results regarding its effect on student learning boredom.

By looking at the many studies and literature supporting the use of gamification in learning, it can be concluded that gamification can be an effective alternative to increase student motivation and involvement in the learning process. Therefore, the use of gamification should be considered as one of the strategies in designing effective and interesting learning for students.

Conclusion

Implementing gamification in accounting learning improves students' motivation and interest in learning. This is evidenced by the increased enthusiasm of students towards learning using gamification method, as well as the decrease in the level of boredom in the learning process. The level of boredom of students towards gamification method shows a lower result, which is 27.71%. Meanwhile, in conventional learning methods, the boredom level reaches 33.71%.

The frequency of students' boredom using gamification method shows a high result in the category of not bored. In the learning process, students' enthusiasm using gamification method shows a positive response and learning can be followed well, but there are also some students who tend to be more enthusiastic during conventional learning. Thus, the comparison of students' enthusiasm during learning using gamification method and conventional method obtained from questionnaire data shows that the frequency in the Very High category of gamification method shows a higher number than the conventional method. This means that learning using gamification method tends to be dominated by students in improving their motivation and interest in learning.

By looking at the many studies and literature that support the use of gamification in learning, it can be concluded that gamification can be an effective alternative to improve students' motivation and engagement in the learning process. Therefore, the use of gamification should be considered as one of the strategies in effective learning design.

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