Implementation of Games Based Learning Educandy Learning Media in Mathematics Lessons to Increase Student Learning Motivation

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Abstract

The process of learning mathematics is often said to be rigid, conventional, boring and lack of learning media used, thus making students less motivated in following the learning process. The purpose of this study is to determine the effect of the implementation of educandy learning media on student learning motivation. This study used qualitative research methods, which include observation, interviews and documentation. The results showed that the implementation of the use of educandy can increase student learning motivation.

Keywords: educandy, math, learning motivation

A. Introduction

Along with the development of technology, as a teacher must quickly adapt and be able to utilize technology to support the teaching and learning process in order to make learning active, effective, interesting and meaningful. So far, from the results of observations, there are still some teachers who use conventional methods in the learning process, especially mathematics learning. So that the use of these methods makes learning boring, less interesting and students tend to be passive.

Indeed, learning methods are factors that affect student learning. With a good learning method will help students in the learning process and of course it will be easier to accept lessons (Octavia, t.t.). The task of a teacher must be to be able to choose learning media that are in accordance with the material to be delivered, student characteristics, learning objectives, environmental conditions and the nature of learning. In addition to learning methods, the use of learning media is also influential in the learning process. Learning media is one of the useful tools to facilitate the task of teachers and students in understanding learning material (Ferdianti &; Anwar, 2023).

Technological, social, economic developments that are growing very rapidly can support the use of learning media. One of the widely used learning media is flexible learning media, which can be used anywhere and anytime. Learning media that students really like is game-based learning media. With an attractive appearance and having educational value can increase student motivation (Apriyani &; Sirait, t.t.). In addition to the use of learning media, teachers must also choose learning methods that are not boring as well, for example Game Based Learning. This method when combined with the use of internet-based media will certainly increase the enthusiasm for student learning.

The learning process that is carried out in an inspiring, interactive, fun, challenging and motivating manner will provide space for students to develop their knowledge. One of the fun and challenging learning is to use the application educandy. Educandy is a web-based educational game that is included in the context of learning games, but more varied, exciting, so that users do not feel bored (Irvan &; Arni, 2022).

B. Methods

The method used in this study is qualitative method. Qualitative research is research that explains in detail about ongoing activities or situations. Data collection techniques are observation, interviews and documentation. Observation is directly observing the behavior and interaction of students in research. The interview aims to record opinions, emotions and matters related to students. The documentation in this study is to analyze evidence in case studies that is not found in observations or interviews (Fadli, 2021).

C. Results

In diagnostic assessments, the results show that students prefer game-based learning. In this study, the appropriate media and methods are *game-based learning* methods and learning media using *the educandy* application. Educandy is an e-learning application that can be used by teachers and students. Educandy can help teachers review the material that has been learned. Educandy has three main features, namely word, matching pairs and quiz question. In this study, teachers chose to use the quiz question feature in accordance with the material to be reviewed.



Figure 1 educandy display

Based on observations made, student motivation in learning mathematics increases. When learning students are more focused and receptive to lessons because students are directly involved in the learning process. The results showed that students were more active in attending lessons, especially when working on questions. Students are able to involve themselves to work together in problem solving efforts, provide ideas and be able to explain the answers that have been done.



Figure 2 do the pretest

Based on the results of interviews with students, students feel happier if learning uses games, especially if the games use technology. Students feel more excited if learning is done differently from previous learning. By using educandy students do not feel themselves carrying out learning. This can be said to be learning while playing. Learning like this can make learning interesting, fun and active so that learning objectives will be achieved and make learning meaningful for students.



Figure 3 interviews student

D. Discussion

Low learning motivation can be caused by the lack of teacher creativity in delivering material with optimal use of media so that students will quickly feel bored and pay less attention. Therefore, teachers need to know the characteristics of each student. The selection of media and learning methods must also be in accordance with the characteristics of students. In diagnostic assessments, the results show that students prefer game-based learning. In this study, the appropriate media and methods are methods *Game Based Learning* and learning media using applications *educandy*.

Learning that uses *Game Based Learning* can be an alternative teacher in restoring student interest or motivation to learn. As explained by isti (Septianing et al., 2024). Learning-based *Game* can make students more happy, enthusiastic, challenged so that cohesiveness and teamwork will be formed. This is in accordance with the character values shown in the Pancasila student profile.

Before being given the pretest questions, the teacher divided them into several groups. Each group does the questions by collecting as many points as possible and in the shortest time. With

that, of course, students will focus more on doing the questions, be more thorough, practice the ability to answer questions with fast time and the right answers, and will form the character of teamwork.

The use of educandy in learning is considered to be able to increase student motivation, it is in line with the journal written by Slamet (Wibowo, 2021) The use of Educandy can give a positive response because it will make it easier for students to remember, receive and understand the material presented. Learning that uses educandy will be more effective in evaluating and motivating students compared to using other media (Widiastuti et al., 2021). With this application, practice questions become more fun and do not make students pessimistic in doing problems.

Students also feel that they are competing with other groups so that student morale will increase. Students will also think critically in solving problems, because the game is designed in educational games based on high order thinking skills so that it can help students improve critical thinking skills.

The implementation of game-based learning provides several advantages including students can play a direct role in learning, students are easier to understand the material, students will be active during learning, create a pleasant atmosphere, increase a sense of solidarity and cohesiveness between students, and make it easier for teachers to help students foster enthusiasm for learning (Anggraini et al., 2021).

E. Conclusion

Based on the results of the study, it can be concluded that the use of educandy learning media can increase student motivation, this is evidenced by observations, when student learning is more focused and easy to accept lessons because students are directly involved in the learning process so that it can be stated that student motivation in learning mathematics increases. In addition, the interview results explained that students feel happier if learning using games, because it can help students improve critical thinking skills.

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G. Conflict of interests

Teachers still use conventional methods in the mathematics learning process. So that the use of these methods makes learning boring, less interesting and students tend to be passive. Learning objectives are sometimes not achieved.

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