

The Effect of Using Crossword Puzzle Educational Games on the Motivation and Academic Achievement of Grade XI Students at SMAN 10 Makassar

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Abstract

This study examines the influence of the Crossword Puzzle educational game on the learning outcomes and motivation of class XI Economics students at SMAN 10 Makassar. Data were collected through observation, interviews, and recording using qualitative methods and a descriptive approach. The research was conducted directly at the location of SMAN 10 Makassar, class XI IPS 5 with a total of 37 students. The research findings show that the use of Crossword Puzzles media increases student motivation and performance. Learning that was previously boring, but after using Crossword Puzzles, children become more active and enthusiastic. The use of Crossword Puzzles educational games improves learning outcomes, fosters a dynamic learning environment, and helps students understand the subject matter.

Keyword: Educational Games, Crossword Puzzles, Learning Motivation, Learning Achievement.

INTRODUCTION

The use of technology in education is increasingly prevalent in the increasingly digital era. One way to introduce technology to students is through the use of game-based educational materials. Because they can convey information in an engaging, entertaining, and interactive way, educational games have great potential as teaching aids. The purpose of educational media itself is to facilitate learning by explaining difficult concepts clearly and concisely (Musfiqon, 2012).

In general, educational media functions as a tool to support the learning process. Furthermore, anything that can be used to foster students' interest, curiosity, understanding,

and enthusiasm can be used as educational media. These studies, which deepen our understanding of the environment, people, the everyday world, and teaching/learning techniques, are very comprehensive and comprehensive. In contrast, Briggs (1977) defines educational media as tangible means for disseminating educational information or materials, such as books, films, videos, and other materials. The National Education Association (1969) further states that educational media, like hardware and pedagogy, are a type of communication that can be visual or auditory.

Educational games are a type of game-based learning resource. According to Nelly Indriani Widiastuti and Irwan Setiawan (Andriansyah, 2014) these games are designed to enhance learning, assist the teaching process, and utilize interactive multimedia technology to deliver material in an engaging manner. Besides being fun, educational games can help students become more intelligent and develop their critical thinking skills.

Based on observations at SMA Negeri 10 Makassar, facilities and infrastructure, especially learning media, are still limited, but student achievement is quite satisfactory. This is because learning methods tend to be conventional, such as lectures, discussions, and assignments, causing students to be less active and involved in learning. As a result, there are disruptions such as noise, conversations between friends, and lack of attention, which impact the quality of learning outcomes at the school.

Students are less motivated to learn when the learning process is less engaging and creative, leading to a lack of conceptual knowledge, poor critical thinking skills, and incomplete achievement of learning objectives. Education must foster critical thinking skills because they are crucial for human resource development. Because critical thinking involves more than just knowing a topic; it also involves evaluating and developing students' reasoning abilities (Anjarwati, 2016), critical thinking skills must be taught and utilized in the learning process.

Based on the problem identification and observations at SMAN 10 Makassar, the researcher's solution was to use educational media based on crossword puzzles. One type of educational game that has proven successful is crossword puzzles. Crossword Puzzles specifically designed for educational purposes, can improve students' understanding of the material, their ability to make logical decisions, and their problem-solving abilities. Furthermore, Crossword Puzzles can provide engaging learning activities that have the potential to increase students' enthusiasm for learning.

This research aims to develop more engaging, interactive, and innovative classroom teaching methods to increase student motivation and facilitate more effective understanding of the material. By utilizing game elements, it is hoped that education will become more engaging

and inspire students to actively participate in learning activities, positively influencing their learning outcomes.

In education, learning motivation is crucial. To ensure students learn effectively, teachers need a comprehensive understanding of student motivation. Students with strong motivation will be more active in learning and achieve higher levels of achievement. If students' motivation is strengthened, they will be more engaged and cooperative in their learning. Discipline and motivation significantly influence student learning outcomes based on the curriculum. "Achievement encompasses more than just grades; it also indicates how students' learning activities improve" (Nurkencana, 1986). Therefore, innovative and creative teaching strategies are needed to improve student motivation and performance.

Based on the description above, this study aims to analyze the effect of the use of the Crossword Puzzles educational game on the motivation and learning achievement of 11th-grade students in Economics at SMAN 10 Makassar. It is hoped that the results of this study can provide new insights into more effective learning methods, particularly in improving student motivation and learning achievement in Economics. Thus, this study can help teachers and education practitioners design more innovative and engaging learning strategies, creating a more enjoyable and productive learning atmosphere.

METHOD

This study employed a qualitative descriptive methodology. The research was conducted directly at the location of SMAN 10 Makassar, in class XI IPS 5, with a total of 37 students. The aim was to provide a comprehensive and in-depth understanding of the social phenomena or realities being studied. By using a qualitative approach, researchers can examine factors relevant to the problems faced by the research participants and examine the relationships between the phenomena studied. This approach emphasizes a comprehensive understanding of the context and dynamics in the field (Kusuma Ardi & Dessty, 2023).

The purpose of this three-day research at SMA Negeri 10 Makassar was to collect reliable and valid data on literacy and numeracy issues within the teacher and student community. The three main data collection techniques were observation, documentation, and interviews. The interviews were conducted to analyze more detailed information regarding the challenges teachers and students discussed in improving their literacy and numeracy skills.

The implementation phase of this program begins with a thorough planning process, which includes selecting learning media appropriate to student characteristics and the desired learning objectives. One of the chosen learning media is an educational game in the form of a

crossword puzzle, which is expected to increase student motivation and learning achievement. The next step is the creation of Crossword Puzzles learning media tailored to the economics subject matter, followed by its application in classroom learning activities. This implementation is expected to have a positive impact on increasing student interest in learning, particularly in economics.

RESULTS AND DISCUSSION

Results

1. Environmental Observation

On the first day, researchers conducted environmental observations to assess whether the school's environment was suitable and supportive for conducting research. These observations aimed to obtain a general overview of the environment's atmosphere and readiness to support research activities.

2. Class Observation

On the second day, the researcher continued by conducting observations in the classroom to understand the ongoing learning process. This observation aimed to determine the learning strategies and media used in the class. The learning process in the class still used conventional methods, such as lectures and assignments by the teacher. And the media used still relied on textbooks, as seen in the image above. And after the learning process was completed, the researcher was given the opportunity to introduce himself and the purpose of the observation and the media that would be used the following week.

3. Learning Media Application Stage

a. Material Explanation Stage



Figure 1. Explanation of the Material

In this meeting, the researcher first explained the learning material so that students could understand and master the topic to be discussed. The material presented relates to fiscal policy in the context of economics learning. The material presented focuses on fiscal policy in the context of economics learning. This explanation is designed to provide a comprehensive understanding of the main concepts in fiscal policy, such as its definition, objectives, and the instruments used in the policy.

b. Stage of explaining the rules of the game



Figure 2. Explanation of how to play the game

After completing the material explanation, the researcher continued with the implementation of learning media in the form of an educational game, a crossword puzzle. The steps were as follows:

- 1) The researcher divided the participants into groups of 12-13 people based on their roll number.
- 2) Participants sat in their respective groups.
- 3) The researcher explained the rules of the game.
- 4) The game began; the group that found the word the fastest earned an additional point.
- 5) The researcher awarded a reward to the winning group..



Figure 3. Crossword Puzzles Game Design

The image above illustrates the design of the crossword puzzle game implemented by the researchers in this study. The game design encompasses various aspects, including layout and structure, aimed at providing an engaging and educational experience for players.

c. Group Division Process



Figure 4. Group Division

After the researcher provided a detailed and clear explanation of how to play the Crossword Puzzle game, the next step was to divide the participants into three groups of 11 to 12 people each. This group division was carried out based on the attendance numbers that had been recorded previously. After that, each participant

was expected to immediately sit according to the predetermined group, so that each group could coordinate and work together in solving the crossword puzzle that had been prepared. With this organized division, it was hoped that each participant could be more focused and enjoy the experience of playing Crossword Puzzles in a more enjoyable atmosphere.

d. Crossword Puzzles Game Play Process



Figure 5. Crossword Puzzles Game Process

Each group member displayed great enthusiasm when searching for words related to fiscal policy in the crossword puzzle. They carefully examined the clues to find relevant words. This activity also provided an opportunity to deepen and better understand the term fiscal policy.

After identifying the words, the researchers asked participants to explain their definitions and meanings in detail. The goal was for participants to not only recognize the technical terms but also understand the concepts and their application in the context of fiscal policy, thereby deepening their understanding of the material being studied.



Figure 6. Word search by other groups



As with the previous group, the other group members also displayed great enthusiasm and zeal as they continued the crossword puzzle. With great attention and tenacity, they worked together to find words related to the fiscal policy material explained by the researcher.

e. Expressing Gratitude and Giving Rewards

After the crossword puzzle game was completed, the researcher took the opportunity to conclude the session with some closing remarks. With deep appreciation, the researcher expressed her deepest gratitude to all participants for their enthusiasm, active participation, and extraordinary involvement throughout the research process.

The researchers also expressed the importance of their contributions in creating an interactive and enjoyable learning environment, which in turn helped deepen understanding of the topics being studied. They emphasized that this process is not just a game, but rather a method designed to enhance understanding and collaborative problem-solving skills.

Next is the awarding of rewards. These rewards are not only intended to recognize student achievement but also to demonstrate appreciation for the effort and enthusiasm they have demonstrated. Rewards are given as a form of motivation to encourage students to be more enthusiastic in their teaching and learning activities. With these awards, it is hoped that students will continue to be motivated to improve the quality of their learning, as well as strengthen their self-confidence and commitment to educational goals. These rewards are also expected to encourage them to maintain their enthusiasm and persevere in the face of challenges in the learning process.

DISCUSSION

Based on the results of the research that has been conducted, the implementation of learning media in the form of educational games Crossword Puzzles in the Economics subject in class XI IPS 5 SMAN 10 Makassar showed a significant impact on improving student achievement and learning motivation. This finding emphasizes the importance of innovation in the selection of learning media that can overcome problems often found in conventional learning processes, especially in terms of arousing student interest and attention.



Increased student interest during the learning process is one of the most prominent results of using Crossword Puzzles media. Students who participate in game-based learning activities appear more engaged, enthusiastic, and focused during each lesson. This is, of course, a stark contrast to the situation before the introduction of Crossword Puzzles media, when the majority of students appeared disinterested in economics and found it boring. Previously, teaching consisted solely of lectures and discussions with little variation to maintain student interest, making the classroom learning process boring. While important, the lecture style used by most lecturers often failed to engage students, especially when they found the subject matter boring or too abstract.

The use of the educational game "Teki Teki Silang Ekonomi" (Economics Crossword Puzzle) successfully adds a new, more engaging and enjoyable dimension. As a game-based learning tool, "Teki Teki Silang Ekonomi" (Economics Crossword Puzzle) utilizes gamification strategies to create a more lively and participatory classroom environment. Students, in addition to passive listeners, actively participate in solving the game's challenges. This inspires them to actively seek answers to problems related to economics, deepening their understanding of the subject. In this context, instructional games serve as both entertainment and a useful tool to help students understand economic topics that are sometimes considered challenging or uninteresting.

Furthermore, the use of crossword puzzles offers a new experience in the learning process, which previously focused solely on textbooks as a source of material. While textbooks are crucial for imparting basic knowledge, students often find them uninteresting when used exclusively as a source of information. In this regard, Crossword Puzzles seems like a good alternative, offering challenges that pique students' interest in learning while presenting the material in a more engaging way. Learning doesn't have to be rigid and boring, as evidenced by the choice of media centered on educational games. To actively engage students in the learning process, educators can experiment with more innovative teaching techniques.

In this situation, the importance of selecting appropriate learning materials is also appreciated. Learning materials tailored to the needs and characteristics of each student will impact the overall quality of learning outcomes. In this regard, crossword puzzles have been proven to increase student motivation, thus benefiting their academic achievement. The right type of media can make classes more engaging, enjoyable, and interactive, encouraging students to participate and work harder to understand the material.

Furthermore, using learning resources like crossword puzzles provides students with opportunities for independent learning while collaborating in groups. Crossword puzzles



challenge students to think critically about choosing the right words, ultimately helping them understand the material more fully. Furthermore, students engage with each other while solving crossword puzzles, which enhances group understanding of the material. Furthermore, this provides teachers with the opportunity to provide more detailed and direct feedback on how well students are learning the material.

Overall, selecting appropriate learning media that meets students' needs plays a significant role in creating a more effective learning experience. It not only makes it easier for students to understand the material but also encourages them to be more active, creative, and engaged in learning. By utilizing media such as Crossword Puzzles, Economics learning in class XI IPS 5 SMAN 10 Makassar can be more enjoyable, engaging, and productive, as well as encouraging an increase in overall student achievement. Therefore, it is important for educators to continue to innovate in selecting and developing learning media that are appropriate to current developments and student needs, so that the learning process can be more optimal and produce better achievement.

CONCLUSION

This study shows that the use of educational game-based learning media, Crossword Puzzles, can have a positive impact on student motivation and learning achievement at SMAN 10 Makassar, especially in Economics. Before the implementation of Crossword Puzzles media, the learning process in class tended to be monotonous with lecture methods that made students less engaged. However, with the use of this educational game, students showed a significant increase in enthusiasm and enthusiasm for learning. Crossword Puzzles media not only helps in introducing the material in a more interesting and interactive way, but also encourages students to think critically and more thoroughly. This has a positive impact on material understanding and, in turn, improves their learning achievement.

The implementation of the Crossword Puzzles educational game creates a fun learning environment, which can overcome students' boredom with conventional learning methods. With students' active involvement in this game, they not only gain better knowledge but also find the learning process more enjoyable. This increased motivation certainly contributes to better learning outcomes.

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