

Implementation of Worwall Based Media to Improve Understanding of Science Subjects in Grade IV of MIS Nurul Iman

Wahyuti Situmeang¹

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Corresponding Author

Wahyuti Situmeang, Elementary School Teacher Education Study Program, Universitas Muhammadiyah Sumatera Utara

Email: wahyutisitumeang@gmail.com

Abstract

This study aims to improve the understanding of grade IV students of MIS Nurul Iman in the subject of Natural and Social Sciences (IPAS) through the implementation of Wordwall-based learning media. Initial observations showed that students had difficulty understanding the material and teachers still predominantly used the lecture method. This classroom action research (CAR) was carried out in two cycles with 24 students as subjects (12 males and 12 females). The research instruments include teacher and student activity observation sheets. The data analysis technique used is quantitative descriptive. The results of the study showed a significant increase in student understanding. In cycle I, only 7 students (21.35 %) were active or above the Minimum Completion Criteria (KKM), while 17 students (38.20%) were less active. In cycle II, the number of students who were almost active or had reached KKM increased to 24 students (86%). This proves that Wordwall-based learning media is effective in improving student understanding.

Keyword :

Wordwall Learning Media, Students Understanding, IPAS

1. INTRODUCTION

Education is an activity that is not foreign in everyday life. Education is a process of activities carried out by students to get the desired results from the learning process in changes in the soul and body of students to become more critical and easier to understand an action or problem. According to Aristotle (Barella Yusawinur et al., 2024) Education has an important role in producing ethical and moral individuals, education also plays a role in building a stable and advanced society . The purpose of education according to A. Tresna Satrawijaya (Sujana, 2019) everything that includes job readiness, skills in solving a problem in free time as the hopes of all different students. Meanwhile, Implementation is the process of implementing or executing a plan, policy, program, or strategy in practice. According to Usman (Rosad, 2019) , implementation is not just an activity, but a planned activity in achieving the objectives of the activity. The implementation used is using interactive technology-based learning media, which has great potential in creating interesting learning experiences and can improve students' understanding in learning. The media used is *wordwall media*. *Wordwall* media is a digital platform that allows users to create various types of creative and interactive learning activities, such as: quizzes, games, and text-based exercises. With this *wordwall media* , teachers can provide learning that can be used in context both in class and online. According to (Utami et al., 2023) wordwalls can make it easier for students to understand lesson materials in class or online, and are easy to use to find out student learning achievements. Meanwhile, according to (Utami et al., 2023) the use of wordwalls as an alternative learning media, which can help teachers in increasing students' creativity and interest in learning.

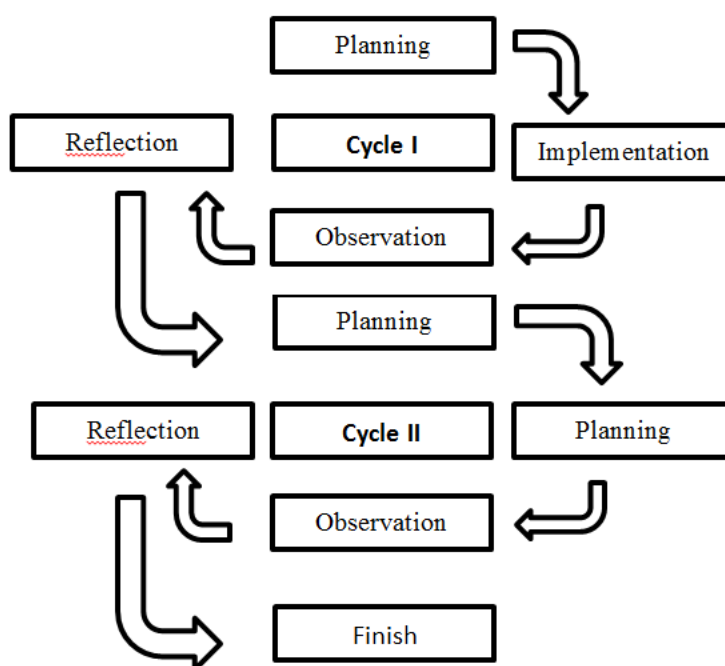
The development of innovative and creative learning media is currently being utilized to develop the world of education. One of them is to support science learning as a learning medium. This is certainly based on several obstacles, the first obstacle is the lack of student motivation, especially in learning Natural and Social Sciences (IPAS) because students assume that learning IPAS is very difficult because there is a lot of material that must be understood. This can be seen from the results of student activities related to IPAS learning, and the results are that most students still have difficulty. The second obstacle is the teaching staff, so far teachers have only acted as material deliverers without paying attention to student responses to the

learning delivered. Teachers also do not utilize learning media enough to support the learning process to increase so that the level of basic competency achievement can be maximized. Teachers should be able to utilize appropriate learning media, so that every learning process delivered by the teacher can be understood by all students. This *wordwall learning media* uses a website apk media that has been adjusted to the template so that it can help teachers more easily create creative and interactive teaching media, so that students do not only focus on listening to the teacher explaining but are also involved in the learning, so that students can more easily and quickly understand the learning material delivered by the teacher.

Based on the background mentioned above, the identification of problems in this study are: 1. Lack of application of teaching media in delivering materials, due to limited facilities provided by the school, 2. Lack of students' ability to understand the material, because teachers only focus on using lecture methods so that students get bored easily and have difficulty understanding learning materials, 3. Lack of appropriate media used by teachers during the teaching process, because the media used by teachers is still not varied enough, teachers only use picture media in learning books, 4. Lack of learning time limits so that students do not have enough opportunity to understand the learning delivered by the teacher, 5. Lack of parental involvement in the child's learning process at home which can affect the level of student understanding, especially in doing assignments that are not well understood by students at school. so that the formulation of the problem of this study is, (1) How is the level of student understanding before using wordwall-based media (2) How is the level of student understanding after using wordwall-based media. (3) How is the level of student and teacher activity after using wordwall-based media, so that the objectives of this study are as follows: (1) To determine the level of student understanding before using wordwall-based media. (2) To determine the level of student understanding after using wordwall-based media. (3) To determine the level of student and teacher activity after using wordwall-based media. Based on the description above and considering the importance of students' lack of understanding in learning, students in class IV MIS Nurul Iman, the author is interested in raising this problem by taking the title "*Implementation of Wordwall -Based Media to Improve Understanding of Social Sciences Subjects in Class IV MIS Nurul Iman*". Based on this background, this study can explain how teachers can improve students' understanding in learning Natural and Social Sciences (IPAS).

2. RESEARCH METHODOLOGY

This study uses Classroom Action Research (CAR) which the researcher conducted consisting of two cycles. Each cycle is carried out according to the indicators to be achieved by the researcher, namely to improve student understanding after an action is carried out. This study uses a model from Arikunto which consists of four stages, namely: planning, implementation (acting), observation (observation), reflection (reflection). The subjects in this study were grade IV students of MIS Nurul Iman Tanjung Morawa in the 2024/2025 academic year. The number of subjects in this study was 24 students consisting of 12 girls and 12 boys. Data collection methods are carried out through test techniques, observation of student activities. Data collection techniques used are: (a) Tests, observation of student activities. The test method is used to obtain data on students' science learning outcomes before the study, during the study and after the study was carried out. The observation used is observation of student activities, namely observations made by observers using guidelines as observation instruments. The instruments used in this study are: observation sheets, tests. Observation sheets are used by researchers as guidelines for conducting observations or observations in order to obtain accurate data in observations. Activity observation sheets are also used to monitor and evaluate each action so that observation activities are not separated from the context of the problem and research objectives. The test is used to see how much students understand the science material being taught. The following is the design of Classroom Action Research according to Arikunto:



3. RESULT AND DISCUSSION

Research result

Based on the results obtained in the research process using these 2 cycles, they are as follows:

Cycle I

Results of Observation of Student Activities in Cycle I

Student Activity Observation	Score	Maximum Score	Percentage	Criteria
Cycle I	489	768	63%	Enough

From the table above, it can be seen that the total value of student activity in Cycle I was 489 with a maximum score of 768 or a percentage of 63% in the sufficient category, but improvements still need to be made in the next cycle so that the application of *wordwall- based media* in improving student understanding in class IV MIS Nurul Iman can be in accordance with what was previously planned.

Cycle II

Results of Observation of Student Activities Cycle II

Student Activity Observation	Score	Maximum Score	Percentage	Criteria
Cycle II	654	768	86%	Very well

From the table above, it can be seen that the total value of student activity in Cycle II is 654 with a maximum score of 768 or a percentage of 86% in the very good category. Based on the results of observations in Cycle II, it has shown that student activity in the learning process has increased. Students have understood the material well that has been taught by the teacher, it can be seen from the students that they already have the courage to re-explain the learning material that has been studied and dare to ask the teacher about material that is still not understood by the students. Level of Understanding in understanding the learning material, re-explaining the learning material and also students are able and dare to conclude the lessons that have been studied. In the implementation of Cycle II, the implementation of *wordwall media*

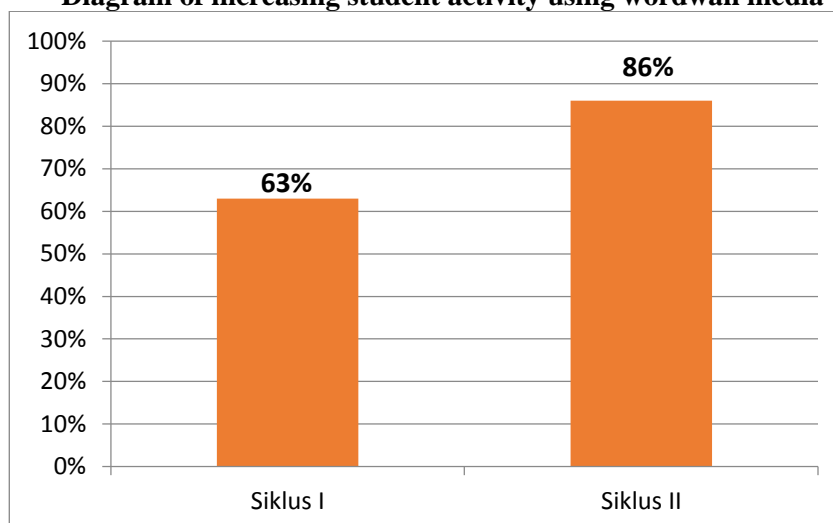
has been maximized overall. In this case, teachers can maintain existing results and are required to increase learning motivation with new learning models or media to stimulate students to be more enthusiastic in learning.

Increasing student activity with wordwall media in Cycles I and I 1

Student Activity Observation	Score	Maximum Score	Percentage	Criteria
Cycle I	489	768	63%	Enough
Cycle II	664	768	86%	Very well
Improvement	175 (22.78 %)			

From the table above, it can be seen that there was an increase of 175 (22.78%) from the student activity observation sheet in Cycle I and Cycle II, where in Cycle I it obtained a score of 489 with a percentage of 63%, while in Cycle II it obtained a score of 664 with a percentage of 86%. And it was found that the increase in student understanding by only focusing on textbooks in learning in Cycle I, students who were active or above KKM were 7 students (21.35%), while those who were less active were 17 students (38.20%). And in Cycle II, it showed that all students were almost active or had reached KKM, increasing by 24 students (86%).

Diagram of increasing student activity using wordwall media



Wordwall -based learning media in class IV MIS Nurul Iman

Student activity in learning Natural and Social Sciences (IPAS), has increased with the implementation of *wordwall -based learning media*. This can be seen from the percentage of student activity in cycle I 63% and in cycle II 86%. This classroom action research (PTK) was conducted in class IV MIS Nurul Iman with 24 students. The study aims to improve student understanding using *wordwall*- based media. This media is a media that aims to improve student understanding in learning. So that with this learning media, it can provide stimulus to improve students' understanding in Natural and Social Sciences (IPAS) subjects. The research results were obtained from teacher and student activity observation sheets and student worksheets. This classroom action research was carried out in two cycles. Based on the results of the observation sheet, teacher and student activities in Cycle I and Cycle II experienced an increase in the learning process. The results of observations of teacher activities using *wordwall -based learning media* obtained a percentage of 75% with sufficient criteria, while in cycle II there was a significant increase by obtaining a percentage of 97.5% with excellent criteria. Based on the results of the student activity observation sheet in cycle I and cycle II, there was an increase in the learning process. Where the results of student observations in cycle I obtained a percentage of 63% which was in sufficient criteria, while in cycle II there was a significant increase by obtaining a percentage of 86% which was in very good criteria.

Understanding Learning Media

Media is a tool used to convey and channel messages to recipients, so that recipients can carry out the learning process efficiently and effectively so that a conducive learning environment is created, and learning is understood more quickly by students and attracts students to learn further. Media is a service that combines the needs of technology and communication, as well as the need for something sophisticated, because media has a very large role in the teaching and learning process. (Mahardika et al., 2021). Meanwhile, according to (Arsyad A, 2021) Oemar Hamalik, learning media is a tool, method, or technique used to make communication and interaction between teachers and students more effective in the education and teaching process at school. So that learning media can be an important point in learning. Media can be interpreted as a tool that can be used to convey messages to achieve learning goals. So it can be concluded that learning media is anything that can be used to convey messages or learning materials that can stimulate students' interest, attention, feelings and thoughts in teaching and learning activities to achieve learning goals.

Learning Media Objectives

The purpose of learning media is none other than to convey messages through various channels, such as: stimulating students' thoughts, feelings, and desires, so that they can encourage an effective learning process and add new information to students. (Ani Daniyati et al., 2023). The purpose of learning media according to (Angely Noviana Ramadani et al., 2023) is to improve the enjoyable teaching and learning process. Thus, the learning objectives of learning media are:

1. Providing learning media that suits students' needs, where learning resources suit the characteristics of students, institutions or social environments.
2. Helping students in obtaining teaching materials other than textbooks which are difficult to obtain.
3. Cultivate attitudes and skills in technology to make students interested in using or operating certain media.
4. Creating an interesting learning situation for students.
5. Clarify information or learning messages.
6. Make it easier for teachers in the learning process.

Function of Learning Media

According to Hamalik (Indriyani, 2019) there are five functions of media. The functions of the media are as follows:

1. To create an effective learning situation, where learning that was theoretical becomes functional.
2. Media is an integral part of the learning system
3. Learning media is important to achieve learning objectives
4. Media can speed up the learning process and help students understand the material in class
5. Learning media is very useful in improving the quality of education.

Understanding Wordwall

Wordwall is a digital platform that allows users to create various types of interactive learning activities, such as: quizzes, games, and text-based exercises. By using wordwall media, teachers can create interesting and interactive learning materials for students, which can be used in various contexts both in the classroom and online. According to Ma'rifah & Mawardi in (Arista Selly Maharani, 2024) wordwall is an attractive website on a browser that aims to be a source of learning, media, and an active and enjoyable assessment tool for students. Meanwhile, according to (Utami et al., 2023) wordwall can make it easier for students to understand lesson materials in class or online and is easy to use to find out student learning achievements. It can be concluded that word wall media is very good to use as a learning medium to improve student learning outcomes and can be developed into a learning medium that can be played by students according to the learning that has been adjusted.

4. CONCLUSION

Based on classroom action research (CAR) conducted by researchers on class IV students of MIS Nurul Iman, it can be concluded that:

1. *Wordwall* -based learning media in class IV of MIS Nurul Iman, many students still did not

understand what the teacher explained because the teacher did not use interesting learning media to see the increase in students' understanding in the learning process.

2. *Wordwall* -based learning media in learning Natural and Social Sciences (IPAS) in class IV MIS Nurul Iman went very well, making students more active in learning and better understanding the material presented by the teacher.
3. Student activity in learning Natural and Social Sciences (IPAS) has increased by using *wordwall-based learning media*. This can be seen from the percentage of student activity in cycle I 63% and in cycle II 86%.

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