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### THE EFFECT OF UTILIZING ASSEMBLR ON STUDENTS' READING INTEREST IN 5TH GRADE STUDENTS OF SDIT WIDYA CENDEKIA

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#### Abstract

*This study aims to determine the reading interest of grade 5 students at SDIT Widya Cendekia before and after using assemblr media, and to determine the influence of Assemblr media on reading interest of grade 5th students at SDIT Widya Cendekia. This type of research is quantitative using experimental research methods with the form of pre-experimental research type one group pre-test post-test design. The population in this study were 16 bilingual 5th-grade students at SDIT Widya Cendekia AY 2022/2023. The sampling technique used is saturated sampling because the population is relatively small, namely less than 30. The number of samples used is the entire population, namely 16 students. Data collection techniques are observation, interview, questionnaires, and literature. Based on the results of the analysis, The average of each indicator and the pre-test and post-test results show that students' learning interest has increased. Additionally, in tests, it explains why the t-distribution table's pre-test stage and post-test stage t-values are 2.81 and 2.131, respectively, with a significance value of  $0.000 < 0.05$ . According to the decision-making foundation in the sample t-pairs, it can be deduced from the -table  $> t$ -value that  $H_a$  was accepted and  $H_o$  was denied, indicating that there was a connection between the usage of augmented reality media and students' interest in reading at SDIT Widya Cendekia.*

**Keywords:** Reading Interest, Assemblr, SDIT Widya Cendekia

#### INTRODUCTION

An essential component of human life is education. This is so that human intelligence can be developed and have the potential to promote the independence of life, which is a field that education contributes to. This is in accordance with Law No. 20 of 2003 Chapter II Article 3, which states that the goal of National Education is to develop students' potential to become human beings who believe in and fear God Almighty, have good morals, noble, knowledgeable, capable, creative, independent, and become a functional and responsible citizen (Munib, 2015: 162).

The quality of the human resources produced increases with the level of education offered.

This is in line with Henderson's assertion that education is a necessity for people and a course of action that cannot be ignored because it helps the next generation grow into better individuals with developed skills and personalities (Munib, 2015: 29).

To compete with other nations in the globe given the current rapid development of science and technology, a nation must raise the standard and quality of education. One of them is educational instruction, which must keep pace with advances in science and technology. The use of process technology in education is anticipated to increase student interest in creating learning materials and their freedom and convenience. Teachers must be able to foster an environment that is energetic, imaginative, creative, and exciting for learning to take place in addition to being in tune with the times (Fitriyani, 2017: 2).

A number of factors can affect how well the learning process goes. These elements may either be encouraging or discouraging. Slameto claimed that a variety of factors affect learning in this approach. He added that there are two categories into which these things can be divided: internal factors and external ones. While external factors are those that are present outside the learner, internal factors are those that are present inside the learner. Physical, psychological, and fatigue issues are examples of internal factors. Family, school, and community issues are among the external factors (Slameto, 2010: 54).

Interest is described by Hilgard in Slameto (2010: 57) as a persistent propensity to pay attention to and remember a variety of activities. Someone who is interested in anything will consistently notice it along with pleasure. The interest of students in their education should be taken into consideration as one of the many elements that influence learning. Interest is one of the psychological aspects, or internal factors, that Slameto says affect learning (Slameto, 2010: 57).

In the article *Interest Co-Relational With Student Study Performance In IPS Subject Grade IV (Four) In State Elementary School 1 Pagerwangi Lembang* by Hidayat (2013: 102), the author claims that without interest, nothing can be done and that when someone has interest, he will pursue his interests. Interest is the unspoken sensation of enjoying and being interested in something or an activity. The acceptance of a relationship with something outside of oneself is what constitutes interest, and the more significant or intimate the relationship, the higher the interest (Slameto, 2010: 180).

One requirement for the learning process to be successful is for the teacher to employ instructional materials that pique students' interest in learning and encourage them to keep studying (Fitriyani, 2017: 2).

The creation of media as one of the necessary elements of the learning process plays a significant role in raising the standard of instruction. Students' interests and thoughts will be more quickly piqued by learning material.

Everything related to software and hardware that can be used to transmit the contents of instructional materials from learning resources to learners (individuals or groups) and that can pique their interest in learning and their thoughts about learning in order to make learning more efficient both inside and outside of the classroom is referred to as learning media (Elpira, 2015:95).

The Augmented Reality-based Assemblr application is one of the interesting learning media to use among the many others. The use of augmented reality involves simultaneously projecting two- and three-dimensional virtual representations of the real world into a real

environment (Mustaqim, 2017). Games are frequently created using this application. In Indonesia, this technology is still incredibly uncommon. Due to the fact that this technology is still not widely understood, this application is still not widely used.

Learning materials based on augmented reality can help students learn more effectively because they provide an interactive, real-world representation that can be viewed from all angles. Students that use augmented reality can view more compelling graphics. This is consistent with study results from Ariatmanto (2016) that showed improved student learning motivation.

An application with the concept of augmented reality has been created thanks to recent technical advancements. The fact that this program displays 3D images makes it ideally suited for the demands of pupils. The Assembler EDU application is one of them. Both the play store and the app store provide a free download of this program. In Ryza (2017), this application claims that "This platform is a blend of Lego and Pokemon GO," as stated by Assemblr CEO Asyadiq. The purpose of Assemblr is to assist users in producing 3D material that may be seen in augmented reality. The outcomes can be made publicly available in the real world. (Ryza, 2017).

The following are some of Assemblr EDU's benefits: 1) 3D visuals and animations work best to grab viewers' attention and pique their curiosity, especially in the case of young kids; 2) Assemblr makes difficult-to-understand concepts feel more real by presenting them in-person in the classroom; 3) Unlimited resources; Assemblr has made available educational materials that are free to use. Models, diagrams, simulations, and the majority of the necessary information can be found in the school-taught disciplines; 4) The AR Editor and the scan-to-see functionality, which foster creativity, offer countless opportunities for having learning activities happen in two directions and making learning moments more meaningful (Assemblr, 2018).

True reading cannot happen without comprehension; reading is about understanding and being able to process what we perceive on a meta-cognitive level. We never really master reading, but instead continue to develop our skills and background information throughout our careers. Reading development does not stop at a certain age (Tankersley, 2003:86). It implies that a reader requires a variety of learning processes in order to fully understand the reading information.

Reading "may occur with different processes in different ways," according to Grabe (2009: 18–19). The bottom-up model, the top-down model, and the interactive model are three popular reading theories.

Grabe claims that "the bottom-up approach" causes readers to build text from the smallest units (letters, words, phrases, sentences, etc.) in a way that is so natural that readers are not even aware of how it works. An previous name for this procedure was decoding.

The narrative text for the study is chosen by the researchers. A narrative text seeks to resolve issues by telling a story with difficulties or problematic situations. The narrative mode, or the collection of techniques used to convey the narrative through a narrative process, is a crucial component of the narrative text. Using a story, narrative texts aim to amuse or entertain their audience.

One English teacher was instructing class V at SDIT Widya Cendekia on November 16, 2022, according to the findings of preliminary observations made by researchers. There were 24 students in class V at SDIT Widya Cendekia. Researchers' observations after speaking with English teachers who teach in SDIT Widya Cendekia's class V. According to Mr. Teddy, the

English teachers there continue to use textbooks and powerpoint presentations as teaching aids, particularly when instructing students on how to read narrative prose. Despite the fact that Assembler can create 3D graphics with narrative storylines embedded in them that can improve students' interest in reading narrative texts, none of the teachers there are aware of Assemblr media, which is based on augmented reality.

Because of this, the researcher wishes to understand more about the learning preferences of fifth-grade children by stimulating them with interactive Assemblr media rather than merely reading narrative text from books as is customary.

Based on this background, the researcher wishes to carry out a study titled "The Effect of Utilizing Assemblr on Students' Learning Interest in 5th Grade Students of SDIT Widya Cendekia" to determine whether using Assemblr media increases students' learning interest.

## METHOD

This research is quantitative research using experimental methods. According to Sugiyono (2013), the experimental method is a method used to look for the effect of certain treatments on others under controlled conditions.

The experimental method is divided into several designs, one of which is the pre-experimental design used in this study. In its application, the pre-experimental design only consists of an experimental group or no control group. In this study, pre-experimental was used in the form of one group pre-test post-test design, namely by giving tests before and after giving treatment to a group.

The research paradigm of the one group pre-test post-test design as proposed by Sugiyono (2013) is as follows:

O1 : pretest value (before treatment)

O2 : posttest value (after treatment)

The population in this study was 16 bilingual grade 5 students at SDIT Widya Cendekia AY 2022/2023. The sampling technique used is saturated sampling because the population is relatively small, less than 30. The total sample used is the entire population, 16 students.

Data collection techniques used are observation techniques, interviews, questionnaires, and literature. Observations were made through researchers observing students while in class. Interviews were conducted with English subject teachers to gather information regarding class conditions and problems that often occur. In addition, questionnaires were given to students before and after treatment to measure student responses to variable X in this study.

The X variable in this study is the use of Assemblr and the Y variable is students' reading interest. In measuring motivation, researchers used a motivational questionnaire adopted from research in a thesis entitled " Pengaruh Pemanfaatan Media Augmented Reality terhadap Minat Belajar Siswa pada Mata Pelajaran Tematik Siswa Kelas IV Tema Peduli terhadap MakhluK Hidup di SDN 07 Kota Bengkulu "

(Raudhatul, 2020) which has been tested prerequisites in the form of validity and reliability by modifying the Y variable. This questionnaire consists of 20 questions using a Likert scale which is available in 5 optional answers with a value range of 1-5.

Data analysis techniques in this study used descriptive analysis techniques used to describe the results of the questionnaire data analysis. In addition, an inferential statistical analysis test was carried out in the form of a hypothesis test. This test was conducted to determine whether there was an effect of using Assemblr on students' reading interests.

## RESULTS AND DISCUSSION

The research was conducted on November 29, 2022. From this research, data were obtained through a motivational questionnaire as follows:

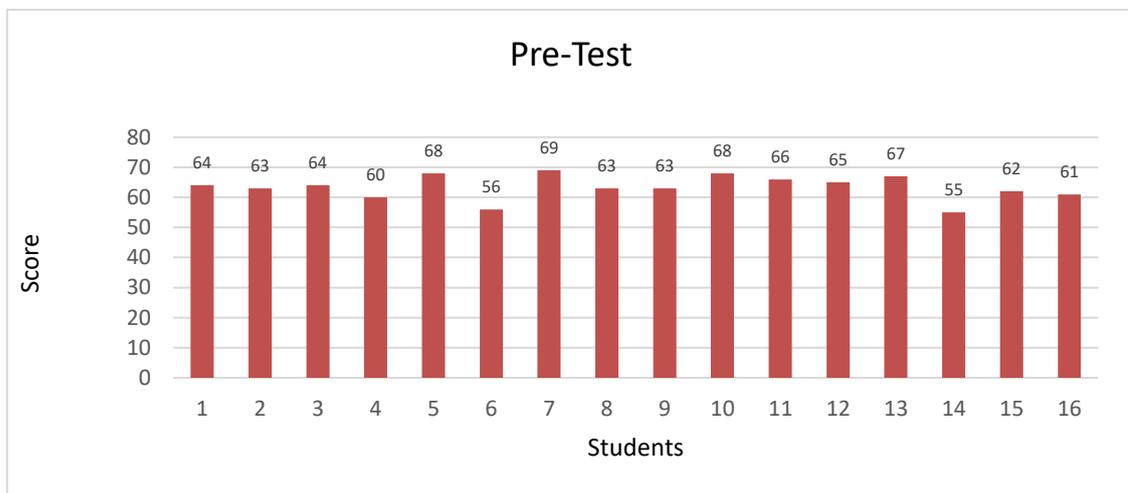


Figure 1. Pre-Test Score Diagram (Source: Primary Data, 2022)

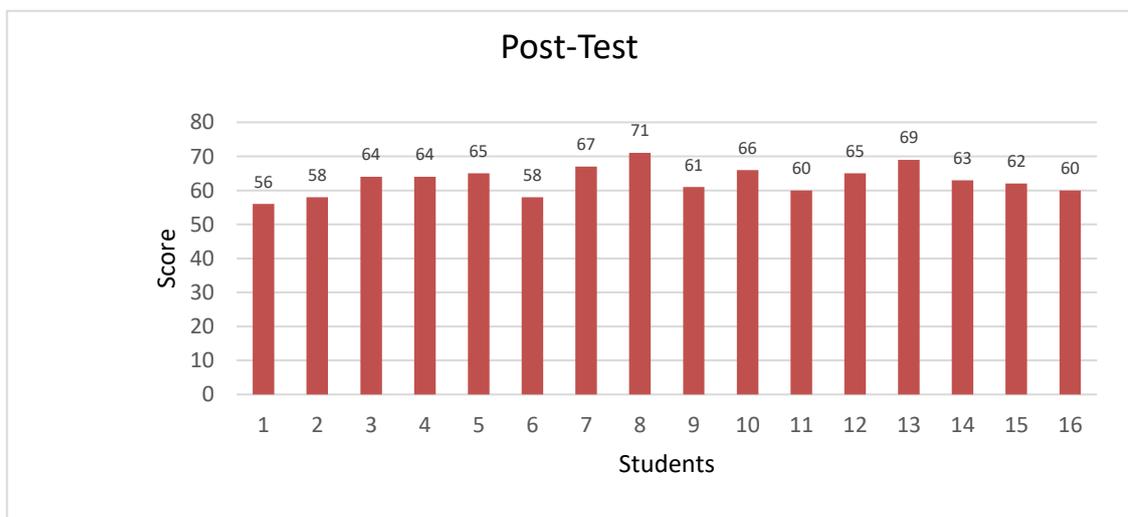


Figure 2. Post-Test Score Diagram (Source: Primary Data, 2022)

From the two diagrams above it can be seen that the test results varied among the 16 students both pre-test and post-test. Based on these data, there were changes in test scores, some experienced a decrease in scores after being given treatment, but some experienced an increase in scores in the post-test/after being given treatment.

The changes in pre-test and post-test scores occurred in almost all students, only students 3rd, 12th, and 15th who did not experience a change in score. The initial score of student 1 was 64 changed to 56, student 2 from 53 to 58, student 4 with a score of 60-64, student 5 with a score of 68-65, student 6 with a score of 56-58, student-7 with score 69-67, student-8 with a score of 63-71, student-9 with a score of 63-61, student-10 with a score of 68-66, student-11 with a score of 66-60, student-13 with a score of 67-69, student-14 with a score of 55-63, and student-16 with a score of 61-60. As for students who did not experience a change in score, namely student 3 with a score of 64, student 12 with a score of 60, and student 15 with a score of 62.

The results of calculating the minimum value, maximum value, mode, and average data in the pre-test and post-test are shown in the following table:

Table 1. Analysis of Pre-Test and Post-Test Center Symptom Data

Test	Data	Statistic
Pre-Test	Min	55
	Max	69
	Mode	63
	Mean	63.5
Post-Test	Min	56
	Max	71
	Mode	58
	Mean	63.5

(Source: Primary Data, 2022)

Based on the data analysis table above, there are differences in statistical data between the pre-test and post-test. For the minimum pre-test data, it is 55, while in the post-test, it is 56. Then the maximum pre-test data is at a score of 59, while in the post-test, it is 71. In addition, the data mode in the pre-test is 63, while in the post-test -test is 58. Meanwhile, the mean of both the pre-test and post-test is both at 63.5.

Additionally, an inferential analysis test using parametric statistical types was carried out to see if augmented reality impacted students' interest in reading in the Widya Tudur Reading SDIT topic. The t-test is used to evaluate the data's findings for influences and determine if the study's prepared hypothesis is true or not. The raw data on the learning interest scores of all students in the sample studies were examined using this analytic approach.

The results of a known test show that the computed value is 2.810, the t-table value for  $df = 15$  is 2.131, and the significance value is 0.0000.05. These values may be

used to evaluate whether the hypothesis is accepted or rejected. Inferring from the count value of the value-t table that  $H_a$  was accepted and  $H_o$  was denied based on the sample t pairings, it can be said that the use of Assemblr affected students at SDIT's interest in reading. Widya Academic.

According to the researcher, the employment of Assemblr might be utilized to increase the reading interest of reading subjects based on the processing of statistical data gathered and the firsthand experience and observations made by the researcher. Students typically have a positive attitude toward learning during this process, and the use of Assembly creates a fun reading environment and makes it easier for students to read through the book thanks to augmented reality explanations that are supported by concrete-looking images. This improves students' reading skills.

According to Fitha Armeinty Lino Padang, Ramlawati Ramlawati, Sitti Rahma Yunus, & Salma Samputri (2021), Assemblr EDU based on Augmented Reality can increase students' learning motivation. The media has developed into a topic that draws attention. Teachers can use Assemblr as a medium to offer study metrics through content points that are made as engaging as possible by the information that has to be presented to draw in students and boost their interest in learning.

The ability to establish a favorable and enjoyable reading environment, the reading content supplied, and the increased motivation of students to learn more about the accessible teaching materials are all advantages of this method of instruction using Assemblr for students.

## CONCLUSION

Based on the results of data analysis and discussion of Assemblr learning media, it affects increasing the reading interest of 5th-grade students at SDIT Widya Cendekia AY 2022/2023. This influence can be described through the calculation and analysis of the score descriptively. The analysis of the data found changes in pre-test and post-test scores. The changes in pre-test and post-test scores occurred in almost all students, with only three students who did not experience a change in their scores. On the other hand, there are differences in statistical data between the pre-test and post-test. For the minimum pre-test data, it is 55, while in the post-test, it is 56. Then the maximum pre-test data is at a score of 59, while in the post-test, it is 71. In addition, the data mode in the pre-test is 63, while in the post-test -test is 58. Meanwhile, the mean of both the pre-test and post-test is both at 63.5.

The average of each indicator and the pre-test and post-test results show that students' learning interest has increased. Additionally, in tests, it explains why the t-distribution table's pre-test stage and post-test stage t-values are 2.81 and 2.131, respectively, with a significance value of  $0.000 < 0.05$ . According to the decision-making foundation in the sample t-pairs, it can be deduced from the -table  $>$  t-value that  $H_a$  was accepted and  $H_o$  was denied, indicating that there was a connection between the usage of augmented reality media and students' interest in reading at SDIT Widya Scholar. Based on the aforementioned description, SDIT fifth-grade

students' utilization of augmented reality learning media affects increasing students' interest in reading.

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