



Application of Android-Based Interactive Multimedia and Local Wisdom on non-fiction text material for Fourth Grade students

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Abstract

This research is motivated by the incomplete understanding of students in non-fiction text material because a teacher only uses the lecture method in delivering the material. The purpose of this study was to determine the increase in student learning outcomes in non-fiction text material using interactive media non-fiction texts in Kediri Raya. The method used in this research is Classroom Action Research with 2 cycles of learning with the stages of planning, implementing action, observing, and reflecting. The results of this study have shown an increase in student learning outcomes in the first cycle with an average of 83.18 and the percentage of completeness in the first cycle of 86.36% and this increased in the second cycle obtained an average of 94.54 and the percentage of completeness in the second cycle value is 100%. Thus, it can be concluded that learning non-fiction text stories through interactive media of non-fiction texts in Kediri Raya can improve the learning outcomes of fourth grade students of MI Assalafiyah Pule Kediri.

Keywords: *Learning outcomes, non-fiction texts, interactive media non-fiction texts of Kediri Raya.*

INTRODUCTION

Indonesian is one of the subjects taught from elementary school or Islamic elementary school to university. According to Chaer (2014) Language is a symbol or intermediary to communicate and cooperate between humans. Therefore, since elementary school students are required to be able to learn the language well.

One of the skills expected by students, especially elementary school students, is to have good language skills, because language skills are the most important capital for humans. In Indonesian subjects, there are four language skills that must be possessed by students, these skills include listening, speaking, reading, and writing. These four aspects of language are interrelated with one another. Therefore, in following the learning process, you must understand the Indonesian language subject matter. In learning Indonesian, the teacher must also be able to choose the right learning method.

The teacher in designing learning is very influential on student learning outcomes. Teachers must be able to choose the right learning media for students in Indonesian language subjects. According to Arsyad (2012) learning media are tools that carry messages or information in the form of ideas, ideas or opinions conveyed by teachers to students. The use of learning media is important because it can help in



the learning process so that learning objectives can be achieved properly. This is in line with the opinion Muslih (2016) Muslih (2016) learning media is a tool or intermediary used by teachers to facilitate the teaching and learning process, and make students more active in learning. With this Indonesian language learning, using learning media can help students imagine that they will imagine themselves being in the scope of society or their daily life, because the material studied in Indonesian is about non-fiction texts.

One of the Indonesian language materials is the non-fiction text of local wisdom found in KD 3.7. Exploring new knowledge found in non-fiction texts. Non-Fiction is any informative work (often in the form of stories) in which the author is in good faith responsible for the truth or accuracy of the events, people or information presented. So non-fiction texts are texts that contain facts, realities, or things that actually happen in everyday life such as biographies, history, reports, articles, theses, theses, dissertations, papers, and so on.

Based on the results a teacher interviews at Madrasah Ibtidaiyah Assalafiyah Pule, they still use the lecture method and story text books outside of local wisdom as learning guidelines rather than using learning media when explaining the material presented. As a result, students will be bored if learning is too monotonous. Fourth grade students of Madrasah Ibtidaiyah Assalafiyah Pule in studying non-fiction text material. Therefore we need an alternative by teaching using fun methods, for example with interesting and appropriate learning media for smooth learning so that it can provide better changes in mastering non-fiction text material. To optimize students' abilities on the material, teachers have an important role in learning teachers can use learning strategies, techniques, models, approaches, methods or media in learning.

By using android based interactive media this aim to make it easier for students to understand when learning. According to Damariswara & Saidah, (2021) Android-based learning should not be arbitrary, it needs several conditions so that Android-based learning is effectively implemented. The use of media at the elementary level is important, considering that the age of elementary school students is included in the concrete operational stage. Dian Andesta Bujuri (2018) argues that the stage of cognitive development of elementary school-aged students, namely 6 to 12 years is a concrete operational stage, at this stage students have been able to form ideas based on thoughts that appear on objects or logical events around them or in other words students begin to think logically about concrete objects, so that the delivery of material will be more effective if assisted by a media that can hone the level of student activity and thinking independently.

Kediri Raya Local Wisdom Non-Fiction Text Application, is an application that is used for learning purposes related to one of the materials in Indonesian class IV elementary school subjects on theme 7. The Beauty of Diversity in My Country, Sub-theme 2. The Beauty of Cultural Diversity in My Country, Learning The Beauty of Diversity in My Country 1. The purpose of developing this application is as a forum to facilitate and attract learning interest for fourth grade elementary school students and to balance technological advances in this modern era.

Learning in the industrial revolution 4.0 era, learning must emphasize and utilize technology, so that the learning process becomes easier and can improve student learning outcomes. Technology that is increasingly advanced and developing will of course have an effect on the world of education, including in terms of learning Septra Nery (2021). Devices with the Android operating system are currently owned by almost every student, this statement is supported by the results of UNICEF

research in Indonesia in 2013 that smartphone ownership in Indonesia continues to increase Handayani & Rahayu (2020) This is the basis of the researchers' thinking to develop android-based learning media.

Android-based interactive multimedia Non-fiction text of Kediri Raya Local Wisdom designed using the Construct 2 Engine application. According to Saidah & Damariswara (2021) Multimedia is a combined media that is integrated from various media packaged into digital files (computerized) and serves to send messages to the public, while what is meant by interactive is communication carried out in two or more directions by communication components. This application produced can be used as a support in thematic learning for grade IV Madrasah Ibtidaiyah or Elementari School. This media can be used classically in the classroom or used as a medium for independent learning by students. So that the use of the product is not limited to use in the classroom, but can be used anywhere and anytime.

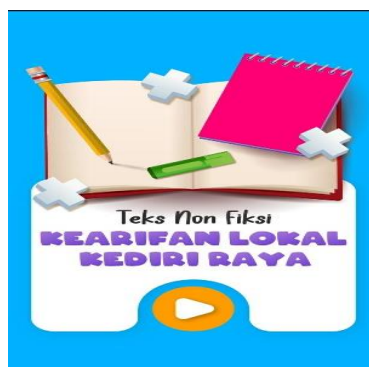


Figure 1. Media Display of Kediri Raya Local Wisdom Non-Fiction Texts.

This application contains local wisdom in Kediri Raya, namely Kediri, Blitar, Tulungagung, Trenggalek, and Nganjuk. In this application there is an explanation of non-fiction text material from each local wisdom in Kediri Raya, besides this application is also equipped with a quiz in each material, this application is made as attractive as possible by combining illustrated images that will make it easier for students to understand non-fiction text material for each region. The application can be used on smartphones and gadgets, the application can be downloaded on the Google Play Store application, after the Kediri Raya Local Wisdom Non-Fiction Text application is installed it is ready to be used.

Interactive Multimedia can improve student learning outcomes, this is in line with research Sutarno & Mukhidin (2013) with the title "Development of Interactive Multimedia-Based Learning Model Measurements to Improve Learning Outcomes and Independent Learning of Middle School Students in Bandung City" that the interactive multimedia-based learning model with the principle of learning technology students' interest in learning is increasing, the learning process is felt to be interesting. The similarity with this research is that they both use interactive media in improving student learning outcomes and the difference from this research lies in the subjects chosen, namely science subjects.

Research that is in line with research that uses interactive media, namely Nanda Faradita's (2018) with the title "Application of Interactive Multimedia to Increase Activities and Science Learning Outcomes at SDN Tawang Sari" can be said that the role of using multimedia can increase science learning activities and outcomes. The equation in this study uses interactive media and can improve student learning outcomes, but the difference in the study is that the subjects tested are science.

This is also in line with the research of Damariswara & Saidah (2021) with the title "Practicality of Android Applications for Class 3 Elementary Fairy Tale Materials Based on Local Wisdom and Language Games" with android applications which are the result of developing Android-based interactive multimedia in Indonesian subjects. The similarities in this study are using android in using interactive media and the subjects chosen are the same as Indonesian, but the differences in this study only test the practicality of android.

Based on the description above, the researcher is interested in conducting a study by conducting Classroom Action Research (CAR). This research was conducted with the aim of knowing student learning outcomes on non-fiction text material using the Kediri Raya Local Wisdom Nonfiction Text application media.

RESEARCH METHOD

This type of research is Classroom Action Research. Classroom Action Research is a special strategy used by teachers in improving the quality of teaching and learning activities and is very much needed by teachers in the context of self-development and at the same time to take care of promotions and promotions to functional positions of teachers Iswari et al (2017). The procedure design in this study used 2 cycles with the stages of planning, implementing action, observing, and reflecting.

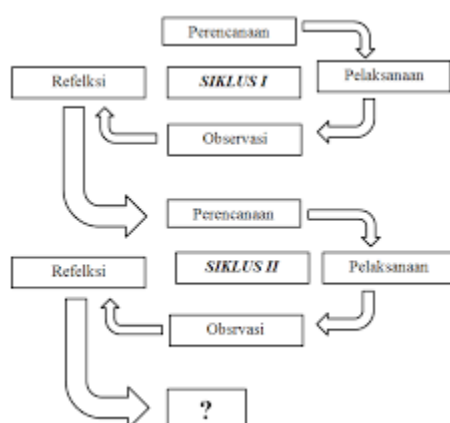


Figure 2. Research procedure flow

The subjects and settings in this study were the fourth grade students of Madrasah Ibtidaiyah Assalafiyah Pule Kediri in the 2021/2022 academic year, totaling 22 students, consisting of 8 male students and 14 female students. The reason for choosing this research location is because the learning method used at Madrasa Ibtidaiyah Assalafiyah Pule Kediri is still monotonous in Indonesian subjects, so I am interested in doing Classroom Action Research using interactive learning media based on Android.

In this study, the research results obtained data by looking for the class average value and the percentage of students' complete learning outcome by calculating the number of each score or total score divided by the number of students who have a score, then multiplied by 100. So you can use the following formula:

1. Calculating the class average

$$X = \frac{\sum Ns}{\sum s} \times 100$$

Information :

X = Class average score

$\sum N_s$ = total student test scores

$\sum s$ = Number of student taking the tes.

2. Calculating the percentase of completeness of student learning outcomes.

$X = \frac{R}{N} \times 100 \%$

X = percentage of student learning outcomes completeness

R = The number of students whose scores are above the completeness of learning outcomes

N = Number of students

RESULT AND DISCUSSION

Cycle I

This research begins with the first cycle of learning. This learning was carried out on Thursday, March 10, 2022. In the first cycle the researchers carried out learning activities with initial planning, namely limited face-to-face learning, carried out 2 learning sessions through interactive media non-fiction texts of Kediri Raya. In the first cycle, student learning outcomes were obtained using formative tests.

Table 1. Obtained Cycle I Value and Percentage

Score Multiple	Students	Persentase
60	1	4,54%
70	2	9,09%
80	12	54,54%
90	3	13,63%
100	4	18,18%
Total	22	100%
Average		83,18
Completeness		86,36%

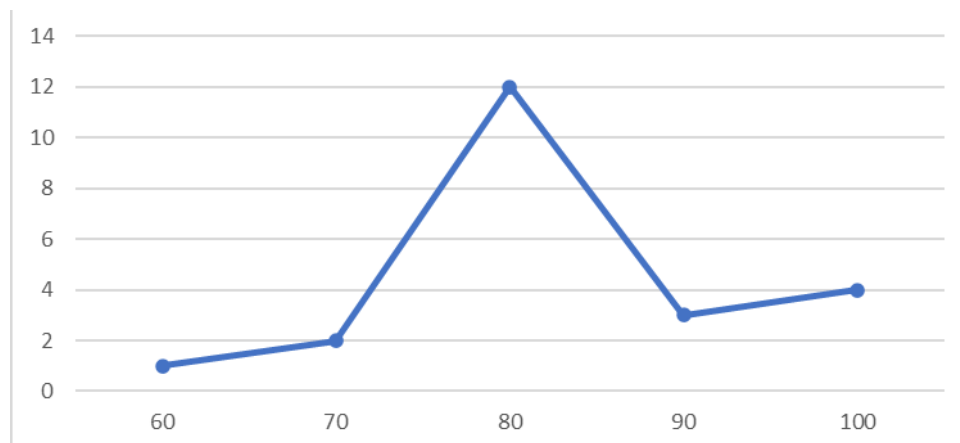


Figure 3. Cycle Evaluation Value 1

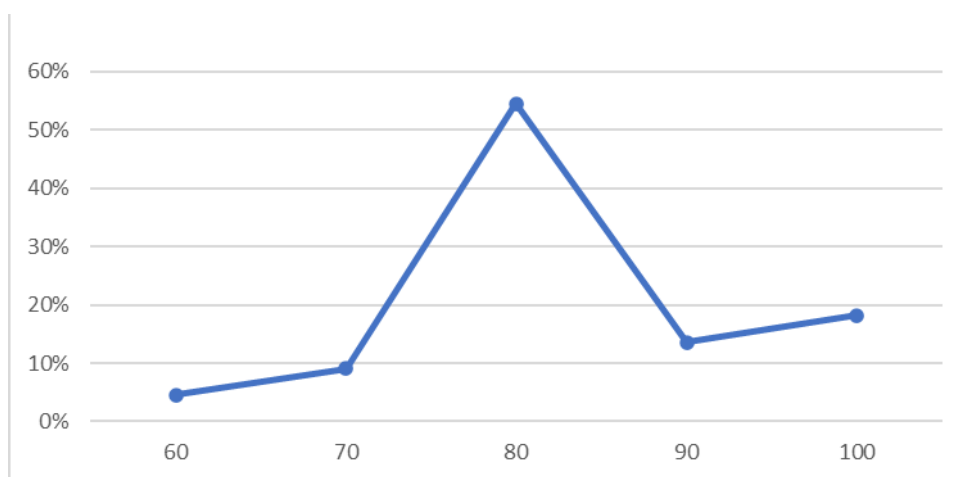


Figure 4. Percentage of Completeness Evaluation Results Cycle I

The research data in the first cycle of student learning outcomes, as many as 19 students scored above the KKM with an average grade score of 83.18 and the percentage of completeness obtained was 86.36%.

Cycle II

The results obtained from the first cycle were student learning outcomes, there were still some deficiencies encountered, such as: there were some students who were not careful in working on evaluation questions. From the experience gained in cycle I, there are obstacles that need to be corrected in cycle II to improve student learning outcomes by taking actions such as: a) students are always reminded when working on evaluation questions that they must be more thorough and not in a hurry, b) provide special guidance for students who still cannot complete the evaluation questions. Cycle II was conducted on Tuesday, March 22, 2022 through interactive media non-fiction texts of Kediri Raya. In the second cycle, the researcher plans to make improvements by taking into account the shortcomings in the first cycle. The following are the results of student achievement scores from the formative tests given.

Table 2. Obtained Cycle II Value and Percentage

Score Multiple	Students	Persentase
60	0	0%
70	0	0%
80	1	4,54%
90	10	45,45%
100	11	50%
Total	22	100%
Average		94,54
Completeness		100%

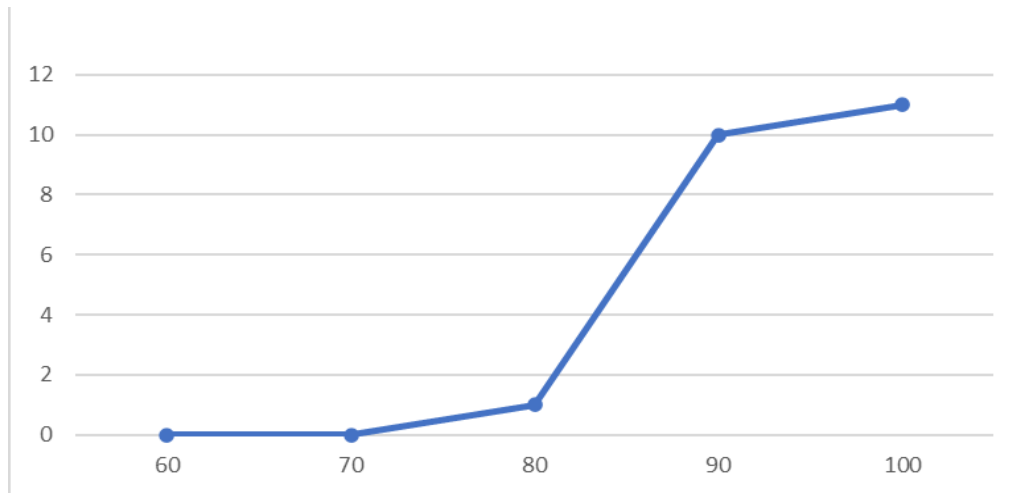


Figure 5. Obtained Cycle II Evaluation Score

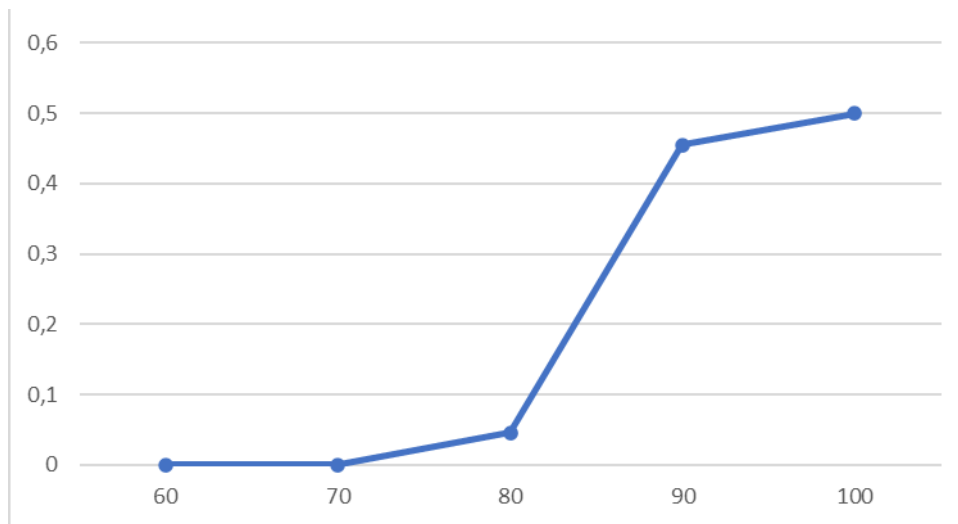


Figure 6. Percentage of Completeness of Cycle II Evaluation Results

Observational data in the second cycle, showed that students who scored above the KKM in the second cycle experienced an increase, so that the average class score was 94.54 and the percentage of completeness obtained was 100%. This research shows that student learning outcomes have increased from the previous cycle. This research, which was conducted at Madrasah Ibtidaiyah Assalafiyah Pule Kediri, obtained data and always increased each cycle. Evidence of increasing student learning outcomes through interactive media based on local wisdom of Kediri Raya can be seen in the following table recapitulation:

Table 3. Comparison of the average and percentage of completeness scores from pre-cycle to cycle II

Cycle	Grade Average	Percentage of completeness
Cycle I	83,18	86,36%
Cycle II	94,54	100%

The application of non-fiction interactive media in Kediri Raya on non-fiction material turned out to have an effect on student learning outcomes. It is evident from

the data described above, because with this interactive media it is an Android-based interactive media. According to Fitriati (2011) interactive learning media based on Android applications is a form of variation or development of books, modules, handouts and so on which are usually used by teachers in delivering learning materials. This is because books, modules, handouts or others have not been able to make students comfortable and able to study the material anywhere. The use of android is expected to improve learning outcomes and students do not feel bored.

Learning outcomes are students' success in obtaining grades or achievements after participating in the learning process. According to Sutrisno (2016) learning outcomes are a manifestation of the learning process and undergo changes in three domains, namely cognitive, affective, and psychomotor. There are several factors that influence learning outcomes according to Purwandari, (2017) internal factors and external factors that influence students in the learning process so that it will determine the quality of learning outcomes achieved by students. One of the external factors is the interactive media of Kediri Raya non-fiction text that can affect student learning outcomes. This is in line with research Sumardi (2019) by using that interactive media can improve student learning outcomes. In research Mureiningsih (2014) interactive learning media can improve student learning outcomes.

From previous research studies regarding interactive media can improve student learning outcomes, it has been proven that by learning using interactive media students will easily understand the material presented by the teacher and student learning outcomes will increase. From previous studies that interactive media can improve student learning outcomes even though in the previous study not all of them tested Indonesian language subjects, but learning Indonesian can also improve student learning outcomes.

The results of this study, especially in learning Indonesian using interactive media so that students are easy to understand a material, students do not feel bored and can improve student learning outcomes. This research is aimed at the school, both principals and classroom teachers as an alternative in learning Indonesian. That learning Indonesian in non-fiction text material using interactive media non-fiction texts of Kediri Raya can improve the learning outcomes of fourth grade students of Madrasah Ibtidaiyah Assalafiyah Pule Kediri in the 2021/2022 academic year carried out by researchers.

CONCLUSION

This research can be concluded that the learning of non-fiction text material through interactive media of non-fiction text of Kediri Raya can improve the learning outcomes of fourth grade students of MI Assalafiyah Pule Kediri. The interactive media of non-fiction texts of Kediri Raya is included in interactive media so that it is easier for students to understand and students are not bored when learning. Considering that this research was conducted for the first time and there are still some obstacles in this research including many fourth grade students who do not have their own gadgets, so they have to join their parents to access non-fiction text interactive media and when accessing interactive media the network is constrained. Therefore, it is hoped that future researchers can fix these obstacles.

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