



Development of Non-Fiction Text Digital Learning Media in Narrative Writing Skills for Fourth Grade Elementary School Students

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ABSTRACT

This development research was carried out improve the learning outcomes of Indonesian students learning non-fiction text material in narrative writing skills in fourth grade students. This type of research is a Research and Development with Pretest-Posttest One Group Design, using the 4D development model which includes four stages, namely Define, Design, Development and Dissemination. Research respondents of this research are fourth grade. The instrument used a validation questionnaire, observation, practicality questionnaires and learning outcomes tests. Results of this research indicate that the validation of the material obtained 89.4% and the validation of the media obtained 100%. The practicality of the teacher's questionnaire got a percentage of 95%, while the student questionnaire got a percentage of 98.6%, the results of teacher and student observations obtained a percentage of 92.85% and 95%. The effectiveness based on giving pretest and posttest to students totaled 25 students with an average pretest result of 79.52 while the average posttest was 91.96. The result of the t-count is -11.085 and the probability of 0.000 which shows that there is a significant difference in the value of the narrative writing skills of fourth grade elementary school students using the development of non-fiction text digital-based learning media.

INTRODUCTION

In the era of globalization, the rapid development of technology cannot be prevented from growing several advances, including advances in transportation equipment, sophisticated machinery and communication tools. They were all created, as an effort to fulfill human needs. Technological developments are created to help ease and simplify human work if it can be functioned properly. This progress can support efforts to progress in the field of education as a support for learning media. For this reason, education must be implemented as well as possible so as to produce quality education and increase the quality of human resources. Technological developments have an impact on the education sector (Nurrita, 2018). Media can be used as a means of providing educational material delivered by teachers to students

The implementation of Information and Communication Technology in educational institutions is now a must, because the application of Information and Communication Technology can be an indicator of the success of an educational institution. Not a few teachers / lecturers take advantage of technological advances by using the internet as online learning or other terms online learning. A new trend in the world of e-Learning today is known as digital-based Mobile Learning, the use of portable media such as smartphones, iPhones, PCs, tablets to access online learning systems is being discussed and used in developed countries such as the United States and developing countries, no exception in Indonesia. E-Learning is a process and activity of implementing web-based learning (web-based-learning), computer-based learning, virtual classrooms or digital

classrooms. The use of digital media to support the teaching and learning process is felt to increase flexibility in teaching and learning activities. However, it is necessary to assess its essential value, function and benefits so as not to cause harm to its users. According to Subekti (2016), digital media can not only prepare up to date information but also out of date information. Digital media users need to be aware of this, including being aware of the "instability" of digital media. Because the information is currently available, it may not be available the next time.

The use of digital media has reached all groups, including the elderly, young and even elementary school children, who have touched the use of digital media. Schools can take advantage of the functions and uses of digital media in supporting learning activities. This means that schools have a role in delivering and in the corridor in reaching the level of development by going through a process to get certain results. With the learning that goes through a certain process it can support the maturity process of students' thinking patterns. Learning that uses digital media is called mobile learning. Digital media in learning is learning that utilizes information and communication technology that can be used without being bound by time. For digital media-based learning, of course, it requires the role of human resources as a support for innovation. Ariyati (2020) explains that the 4.0 era requires humans with good competence, especially in the field of technology. However, good skills in information technology need to be supported by superior language skills. Language skills including reading, writing, speaking, and listening have a major role in facing the 4.0 era. This happens because with good language skills a person will be able to understand the information that comes well. Language skills including reading, writing, speaking, and listening have a major role in facing the 4.0 era. This happens because with good language skills a person will be able to understand the information that comes well. Language skills including reading, writing, speaking, and listening have a major role in facing the 4.0 era. This happens because with good language skills a person will be able to understand the information that comes well.

The implementation of learning in the language curriculum cannot be separated from the concept of perspective or approach to linguistics. The linguistic approach has a major influence on the concept and implementation of language learning. The concept and implementation of language learning can basically be divided into formal and functional approaches. The curriculum in Indonesian subjects is developed based on a functional approach (Siddik, 2018). The principles of the functional view give birth to the basic theory used in language learning. In the basic theory of language learning, it is stated that language learning is essentially a social fact as a means of communication. For this reason, learning a language is learning to communicate in various social interactions. Rafli & Lustyantje (2016) states that learning communication is a process of conveying intentions to others which can be in the form of expressing thoughts, ideas, ideas, opinions, etc. This can be manifested in the form of language in the form of words, sentences, paragraphs, and discourses.

Learning activities are designed to provide learning experiences that involve mental and physical processes through interactions between students, students and teachers, the environment and other learning resources in order to achieve learning goals (Asnawi, et al., 2016). In addition, teachers have a very vital and fundamental role in guiding, directing, and educating students in the learning process. Thus, being able to select process criteria, materials and the final results to be achieved with the

characteristics of the learning media used. According to Majid (2011) a teacher is obliged to prepare a complete teaching plan, not only teaching materials, but also media that are adjusted to the allocation of time and student needs as a support for more meaningful learning for students. Digital media in which there are feature facilities in the form of audio and visual. In the form of visuals, for example a camera can be used as a media for taking pictures in the form of photos obtained from the activities of each student. Seeing the reality that is happening today, many people ranging from old, young and children like photo or selfie activities when there are certain activities. In this research, the digital media in question can be in the form of a cellphone or laptop. This documentation can be used to support learning which shows that learning is gained from experience. The implementation of digital photos in teaching writing helps students get higher scores than students who are taught using a story introduction (Harintama, et al., 2015)

With developments in various fields, language acquisition is needed to be used as a provision for the future in everyday life to increase students' ability to tell narrative stories. In today's digital era, language learning is not only in a traditional context by using the lecture method, but can be supported by taking advantage of developments in science and technology. One of which is digital media in the form of a cellphone or laptop can be used as a positive thing in the world of education, namely as a learning medium. However, the initial findings of learning at Bright Kiddie Elementary School still use conventional media which are deemed less effective and efficient, and less attractive. So, in this study the researchers developed web-based digital media. Learning at the elementary school level contains a variety of materials to achieve student completeness. The current curriculum is the 2013 curriculum. Thematic learning is believed to be an effective learning model, because it is able to accommodate and touch in an integrated manner the emotional, physical, and academic dimensions in the class or school environment (Kemendikbud, 2013). The use of this learning model is proven to be successful in stimulating and increasing the memory capacity of students in the long term.

Integrated learning as a concept is a learning approach that links and combines teaching material both in one subject or between subjects to provide meaningful learning to students and is adapted to the needs and demands of the social environment (Asnawi, et al., 2016). The fourth grade material content includes the themes of the beauty of togetherness, always saving energy, caring for living things, various jobs, my ideals, the beauty of diversity in my country, the area where I live, and the richness of my country. Thus, the development of web-based digital media in learning is very important. So that students can take advantage of the media for learning and learning designs that are more innovative, to increase the effectiveness and efficiency of learning. Also, it's easy to understand and get meaningful learning. Learning outcomes in Indonesian are an increase in the quality of language in accordance with the expected goals. According to Sudjana (2017: 32) the results of learning Indonesian is the process of forming communication skills in students after undergoing the learning process.

From the initial interview, a fourth grade elementary school teacher in the city of Surabaya indicated that the writing ability of students being taught was dominantly low, this was because the learning process both at school and assignments that accommodated new writing skills were given conventionally. The media used so far is in the form of conventional images affixed to paper. Students who do not have printed

images must search and print them first. This shows an ineffective and efficient learning. So that to achieve student learning outcomes in the receptive aspects of writing skills are important and need to be achieved, this is because these aspects are related to other aspects of language skills. Digital-based learning media in learning and giving Indonesian language learning tasks the receptive aspects of writing skills are productive, effective and efficient. With the existence of digital media-based learning media, it is considered to be able to improve writing skills. So that researchers in this case attempt to find patterns of digital media use with features that are easily accessible to elementary school students. With the background of the conditions above, the researcher found an interesting problem to study with the research title " So that researchers in this case attempt to find patterns of digital media use with features that are easily accessible to elementary school students. With the background of the conditions above, the researcher found an interesting problem to study with the research title " So that researchers in this case attempt to find patterns of digital media use with features that are easily accessible to elementary school students. With the background of the conditions above, the researcher found an interesting problem to study with the research title "Development of Learning Media Based on Digital Non-fiction Texts in Narrative Writing Skills in Fourth Grade Elementary School Students".

In developing creativity in writing narrative essays, a supportive learning media is needed (Taufiqurrahman, et al., 2019). The learning media is expected to be able to develop creativity in processing sentences and increase students' vocabulary. Learning to write is still considered boring by students which results in students' interest and ability in writing not developing optimally.

Relevant previous research conducted by Jingjit (2015) on problematics did not understand the concept of material well so that it was unable to stimulate creative thinking. With these problems, a solution was sought by learning to use serial image media to improve the ability of narrative text. With these problems and solutions, results are achieved The implementation of multimedia to deliver learning material through an integrated mode (text, images, and sound) can increase student achievement in terms of vocabulary knowledge but not the depth of vocabulary knowledge.

Similar research by Irwindy, et al., (2017) on the problem of the lack of depth in English vocabulary which is motivated by the lack of developing multimedia, inappropriate material with programs, inadequate use of commercial multimedia and the language used in Roman based alphabets With these problems, learning solutions using multimedia are sought. With the problematics and the implementation of these solutions, the results were (1) the students' ability to write narrative text using serial image media was higher than the song media. It can be seen from the average student learning outcomes taught by serial image media ($x = 81.80$), while being taught by song media ($x = 70.60$). (2) the ability to write narrative text of students who have high creative thinking skills is higher than those who have low creative thinking skills. This can be seen from the learning outcomes of students with high creative thinking skills ($x = 81.92$), while students with low creative thinking skills ($x = 70.50$). (3) there is an interaction between the use of instructional media and the ability to think creatively with the students' ability to write narrative texts in elementary school 060842, grade five. It can be seen from the significance of the use of learning media for students' creative thinking abilities in learning 0.038. (3) there is an interaction between the use of instructional media and the ability to think creatively with the students' ability to write

narrative texts in elementary school 060842, grade five. It can be seen from the significance of the use of learning media for students' creative thinking abilities in learning 0.038. (3) there is an interaction between the use of instructional media and the ability to think creatively with the students' ability to write narrative texts in elementary school 060842, grade five. It can be seen from the significance of the use of learning media for students' creative thinking abilities in learning 0.038.

Based on previous studies, it shows that, an increase in learning outcomes in narrative writing is supported by the use of multimedia. So in this study, the researcher chose the title development of learning media based on digital text non-fiction in narrative writing skills in fourth grade elementary school students because with digital media students are expected to have well-structured narrative writing skills and can be used by teachers as a more attractive Indonesian language learning tool that involves student activities and optimization of learning outcomes.

RESEARCH METHOD

General Background

This research is a type of research and development Research and Development (R and D), which is a study that is applied to produce certain products and test the effectiveness of the products produced (Sugiyono, 2016). The product to be developed is non-fiction text digital media. There are two concentrations that will be examined in this study, namely the development of media and the quality of digital-based learning media with non-fiction text in narrative writing skills in fourth grade elementary school students.

The research design used a 4-D model. The 4-D (Four D) development model is a model which stands for Define, Design, Development and Dissemination. This model was developed by Thiagarajan, et al. (1974). The 4-D development model consists of four main stages, namely define, design, develop and disseminate. These methods and models were chosen because they were coherent, clear and in accordance with the research objectives to produce a product in the form of digital-based narrative writing learning media.

Sample

The research subjects of developing learning media based on digital text of non-fiction in narrative writing skills were 25 students of grade four at Bright Kiddie Elementary School, Wiyung District, Surabaya City, 2020/2021 academic year.

Instrument and Procedures

This type of research is development research to product development. Development research used to products and get the effectiveness of the products (Astutik & Prahani, 2018). The instruments and procedures used in this study were 1) The validation sheet as an assessment given by the validator by giving a check (√); 2) This teacher and student questionnaire sheet (check list) is used to obtain data on the practicality of the media in supporting learning activities. Observation sheets and questionnaires will be implemented to teachers and students who contribute to media trials; 3) A questionnaire sheet (check list) is used to obtain data on the effectiveness of the media in students' writing skills activities. Questionnaire sheets will be used to obtain student response data to the benefits of using media developed in student writing activities; 4)

the evaluation sheet includes the pre-test and post-test used to obtain writing skills as a result of student learning without using the developed media and listening skill data as student learning outcomes after using the developed media.

The detailed procedures of the research stages are (1) define consisting of initial analysis, student analysis, concept analysis, analysis of learning objectives; (2) the design consists of the preparation of tests, the process of determining the format of the instructional media, the initial design process; (3) develop, at this stage it was carried out in November 2020. The development stage was carried out to produce non-fiction digital text media in Indonesian language learning, narrative text material in fourth grade elementary school. The level of media validity is obtained from the validation results of material experts and media experts. The acquisition of media practicality scores comes from measuring the results of teacher and student responses when using the media through observation, while the effectiveness is obtained from teacher and student questionnaires, and measurement of learning outcomes in the form of pre-test and post-test. At the development stage, validation, trial and revision activities are carried out; (4) disseminate, this stage by disseminating the results of the development of instructional media to teachers as a solution in improving students' narrative writing skills.

Data Analysis

Media development data are obtained from media that have been validated by media experts and material experts. The results of the media assessment are concluded in a qualitative descriptive form using a Likert reference in Table 1.

Table 1. Material and media validation rating scale.

| Score | Criteria |
|-------|-------------|
| 1 | Not good |
| 2 | not good |
| 3 | Pretty good |
| 4 | Good |
| 5 | Very good |

(Sugiyono, 2016)

The data generated from the validation are in the form of scores. The score is then calculated using the following formula:

$$p\% = \frac{\text{number of scores from data collection}}{\text{maximum score}} \times 100\%$$

(Riduwan, 2013)

Table 2. Validation percentage criteria.

| Average Score | Category |
|---------------|---------------------------|
| 0% - 20% | Very less |
| 21% - 40% | Less |
| 41% - 70% | Enough |
| 71% - 80% | Good / Worth it |
| 81% - 100% | Very Good / Very Worth it |

(Riduwan, 2013)

The feasibility of learning media based on digital non-fiction text if, on average, the validation of media and material gets $\geq 61\%$ of the eligibility percentage criteria table. The following is a table of eligibility percentage criteria. Observation data were obtained from observations of teacher and student activities during the implementation of online learning using zoom. The result of the observation is in the form of a score using the Likert reference.

Table 3. Observation rating scale.

| Score | Criteria |
|-------|-------------|
| 1 | Not good |
| 2 | Not good |
| 3 | Pretty good |
| 4 | Good |
| 5 | Very good |

The scores obtained from observations are then processed using the following formula.

$$p\% = \frac{\text{number of scores from data collection}}{\text{maximum score}} \times 100\%$$

(Riduwan, 2013)

Percentage of observations is used to determine the implementation of the learning process when using non-fiction text digital-based learning media. After the percentage results are obtained, they are interpreted based on the following criteria table.

Table 4. Observation percentage criteria.

| Average Score | Category |
|---------------|---------------------------|
| 0% - 20% | Very less |
| 21% - 40% | Less |
| 41% - 70% | Enough |
| 71% - 80% | Good / Worth it |
| 81% - 100% | Very Good / Very Worth it |

(Riduwan, 2013)

Non-fiction text digital-based learning media is said to be practical if the average result of the observation of the implementation of learning gets $\geq 65\%$ of the observation percentage criteria table. The data from the questionnaire were obtained through a questionnaire from the responses of teachers and students to non-fiction text-based digital learning media. The scale of measuring the questionnaire data uses the Guttman scale reference. The Guttman scale is depicted in the following table

Table 5. Student questionnaire rating scale.

| Answer | Score |
|--------|-------|
| Yes | 1 |
| Not | 0 |

(Riduwan, 2013)

The score obtained from the questionnaire results, then processed using the following formula.

$$p\% = \frac{\text{number of scores from data collection}}{\text{maximum score}} \times 100\%$$

(Riduwan, 2013)

The percentage of the questionnaire was used to determine the responses of teachers and students to non-fiction text digital-based learning media. After the percentage results are obtained, then interpreted based on the following criteria table.

Table 6. Percentage criteria for student questionnaires.

| Average Score | Category |
|---------------|---------------------------|
| 0% - 20% | Very less |
| 21% - 40% | Less |
| 41% - 70% | Enough |
| 71% - 80% | Good / Worth it |
| 81% - 100% | Very Good / Very Worth it |

(Riduwan, 2013)

Non-fiction digital text-based learning media is declared effective if the average result of the questionnaire or questionnaire responses to the use of Android-based mobile learning media gets $\geq 60\%$ of the percentage criteria table for student and teacher questionnaires.

Analysis of Test Result Data. Research on the development of digital-based non-fiction text-based learning media in narrative writing skills in fourth grade elementary school students in the form of quantitative using a one-group pretest - posttest design. The one-group pretest - posttest design pattern is described as follows.

01 X 02

Information:

O1 = Score *pretest* (before treatment)

X = *Treatment* which is given

O2 = Score *posttest* (after treatment)

(Sugiyono, 2016)

The formula for calculating the t-test

$$t = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N(N-1)}}$$

Information:

Md = *the mean* from the difference between pretest and posttest (post test - pre post)

xd = deviation of each subject (d -Md)

$\sum x^2 d$ = sum of squares deviation

N = subject on sample

db = determined through N-1

(Sugiyono, 2016)

RESULTS AND DISCUSSION

This research produces learning media that makes it easier for students to learn Indonesian language learning materials in writing narrative in the fourth grade of elementary school. This research produces a media that is deliberately designed and developed to support the learning process. There are two types of media in learning. First, the media is designed, namely learning media that is designed and developed for learning. Second, media that are not designed for learning whose existence can be found or used for learning. This research and development includes several stages, namely Define, Design, Development and Dissemination. The 4D development model developed by Thiagarajan, et al. (1974) includes four main stages, namely Define, Design, Development and Dissemination. This study used a pretest - posttest one group design research design with pretest and posttest treatments conducted with the research subjects of fourth grade elementary school students on nonfiction text material. The pretest results show the results of the students before using the media and the posttest shows the results of the students after using the media. The results of this study are known from the results of comparing the pretest - posttest. From these results the researchers re-evaluated the impact of learning by measuring the achievement of product development goals. The pretest results show the results of the students before using the media and the posttest shows the results of the students after using the media. The results of this study are known from the results of comparing the pretest - posttest. From these results the researchers re-evaluated the impact of learning by measuring the achievement of product development goals. The pretest results show the results of the students before using the media and the posttest shows the results of the students after using the media. The results of this study are known from the results of comparing the pretest - posttest. From these results the researchers re-evaluated the impact of learning by measuring the achievement of product development goals.

Media is something that is used to convey messages as well can stimulate thoughts, feelings, attention, and the willingness of students so that they can encouraging the teaching-learning process that is deliberate, purposeful, and under control. The teacher realizes that without the help of media, learning materials difficult for students to understand, especially complex material. Hence, role media in the learning process is very helpful for teachers in explaining material (Sutri, 2015). Non-fiction digital text-based learning media is an application used for learning Indonesian about non-fiction text on narrative writing skills that displays learning content by collaborating pictures, writing, assignments, games and attractive designs so that students are interested, enthusiastic and enjoy the learning process (Asirika & Refnaldi, 2017). This nonfiction text digital-based learning media is made with the PHP (Hypertext Preprocessor) application. In the development research developed, the researcher presents data and discussion classified based on the formulation of research problems that discuss the feasibility of digital-based learning media products with non-fiction text from the point of validity, practicality, and effectiveness which are adjusted to the research design using the Four-D development model.

The Validity of Non-fictional Text-Based Digital Chasing Media

Before being used for research, the instruments used were validated first by an expert validator. The results of validation by the validator are presented below:

Table 7. Results of validation of research instruments by expert validators.

| Validated Instrument | Score (%) | Predicate |
|----------------------|-----------|-----------|
| Material Validation | 89.4 | Very good |
| Media Validation | 100% | Very good |

The results of the validation by the media expert validator obtained a score of 40 from a maximum score of 40, so that the percentage was 100%. The details of the score obtained from the validation results of the presentation assessment aspect are 20, the programming aspect assessment score is 8, and the implementation aspect assessment score is 12 percentage results of 100%, can be categorized as very good qualifications based on the Likert scale reference in determining the criteria for the validation results in this study (Riduwan & Sunarto, 2011). The instrument developed is declared valid or invalid using an instrument in the form of a validation sheet which will be filled in by an expert in their field called a validator to find out the shortcomings of the instrument being developed and whether it is suitable for use (Yusup, 2018).

The validity of the feasibility of the developed learning media was carried out to determine the feasibility level of non-fiction digital text-based learning media. The quality of this media aspect has been validated by several experts, namely material experts validating material and media experts validating media quality. Based on the results of the validity of draft I, there are several scores on the validity instrument that must be corrected according to the validator / expert's suggestion. Then, based on suggestions from the validator, there were also several aspects of the instrument that were corrected. The revision results resulted in draft II and all validators stated that the media was suitable for use. Indicator that a the instrument has been valid is the expert already accepting instruments, both in content nor the format, without any improvement back (Yusup, 2018). The consideration of choosing the right learning media can also affect the results of the learning carried out (Munsi, 2020). Media learning is a supporting tool in teaching and learning activities namely in the form of means that can provide visual experience to students in to encourage motivation to learn, clarify, and simplify the concept complex and abstract is becoming more simple, concrete, and easy to understand. Thus, learning media serves to add to the attractiveness of learning and develop students' understanding.

The results of the validation by material expert validators obtained a score of 68 out of a maximum score of 76, so that it is equivalent to 89.4% in the percentage criteria. The details of the score obtained from the validation results of the content assessment aspect are 25, the effectiveness aspect score is 22, the communicative aspect assessment score is 13 and the interactive aspect assessment score is 8, the percentage result is 89.4%, can be categorized as very good qualifications based on the Likert scale reference in determining the criteria for the validation results in this study (Riduwan & Sunarto, 2011). The size of a product can be said to be of quality if it has met several aspects of product quality. Products developed in this development research based on the validation test of expert validators have shown that all aspects tested have a product validity score of Very Good. This statement is in accordance with the opinion expressed by Nieveen (1999) that a product can be said to be of quality if it meets the aspects of product quality, among others (1) validity (validity); (2) practicality; (3) effectiveness. Non-fiction text digital-based learning media in narrative writing skills in four elementary school elementary school students are declared valid and can be used in

learning activities based on the results carried out by a team of validators / experts in their fields by obtaining a usable media category.

Practicality of Non-fiction Text-Based Digital Chasing Media

The practical assessment of non-fiction digital text-based pursuit media products in Indonesian language learning, non-fiction text material in fourth grade elementary schools was carried out online using the Google form application, this was due to the covid-19 pandemic and recommendations from the government that learning was not carried out directly so that researchers did it directly. online, the researcher asked observers for help to observe the practicality of non-fiction digital text-based pursuit media when used in learning. The following are the results of teacher and student observations derived from observer assessments:

Table 8. Recapitulation results of media practicality.

| No. | Rated aspect | Total score | Percentage | Information |
|-----|------------------------------------|-------------|------------|-------------|
| 1 | Results of Implementation learning | 51 | 92.85% | Very good |
| 2 | Results of Student activities | 76 | 95% | Very good |

The results of the implementation of learning assisted by observers obtained a score of 51 out of a maximum score of 76, so that it obtained a percentage of 92.85% with very good qualifications. While the results of student activities assisted by observers get a score of 76 out of a maximum score of 80, so that they get a percentage of 95% in very good qualifications (Riduwan, 2013: 41). This shows that digital-based learning media with non-fiction text in writing skills for fourth grade elementary school students are practically used in learning to write narratives (Herlina, et al., 2019). In addition, the learning media developed can be said to be practical if it makes it easier for users to use or use the product (Rasyid, 2016).

The Effectiveness of Non-fictional Text-Based Digital Chasing Media

Assessment of the effectiveness of non-fiction digital text-based chasing media products in Indonesian language learning, non-fiction text material in fourth grade elementary schools was carried out online using the Google form application, this was due to the covid-19 pandemic and recommendations from the government that learning was not carried out directly so that researchers did it directly. online, by doing the pretest and posttest, giving responses to teacher and student questionnaires.

Table 9. Results of recapitulation of media effectiveness.

| Rated aspect | Total score | Percentage | Information |
|--|-------------|------------|-------------|
| Teacher Response Questionnaire Results | 38 | 95% | Very good |
| Student Response Questionnaire Results | 986 | 98.6% | Very good |

The total score obtained for the effectiveness of the teacher's questionnaire response when using the media is 38. The total score is divided by the maximum score (40), with the percentage obtained that is 95%. While the total score obtained for the effectiveness of the student response questionnaire when using the media is 986. The total score is divided by the maximum score (1,000), with the percentage obtained that is 98.6%. This shows that the medianon-fiction text digital-based learning in writing skills for fourth

grade elementary school students that is, it is effectively used by students in learning to write narrative. There are three factors that influence the success of the teaching and learning process in the classroom. The first factor is the teacher. He must have the ability to manage the class well and make the classroom interactive and interesting. Second, students or students are another factor that affects the successful implementation of the teaching and learning process. If there are no students, there will be no teaching and learning process because the teacher does not have students with whom to share knowledge. The last factor is the material and media used in the teaching and learning process. The material needs to be understood by students easily. The material is contextual to student life. In delivering the material, better to use the right method or strategy to increase student understanding (Laraswati & Suhartono, 2016). The findings in this study are relevant to research conducted by Jingjit (2015) and Irwindy (2017).

To measure the effectiveness, the researcher also conducted a pretest and posttest. The method of application is that the day before learning the researcher asks students to remember interesting events, to be used as a narrative storytelling material / source, then used the next day during online learning. During the pretest trial process of writing narration to fourth grade students of Bright Kiddie Elementary School Surabaya, then students were given material reviews of narrative story texts and conveyed their learning objectives. Then, the researcher gave instructions to the students to make a story of experiences with the characteristics of a narrative story that has a storyline. The pretest trial was carried out on September 8, 2020 and the posttest trial was carried out on January 8, 2021, involving all 25 students of the fourth grade of Bright Kiddie Elementary School. The assessment of the results of narrative writing is based on intrinsic, content, organization, language and mechanic elements. The application or trial was carried out online using the Zoom application, this was due to the Covid-19 pandemic and a recommendation from the government so that learning was not carried out directly (online) via zoom. This is because of the world emergency, almost all aspects of the world are affected, including education. In Indonesia, 404 thousand schools have been forced to close. More than fifty million preschool, elementary, and higher education students must learn from home (Salkiah, 2020). Thus, the researchers applied online media.

Table 10. Student test results.

| Score | Learning outcomes | | Information |
|------------------------|-------------------|-----------------|-----------------|
| | <i>Pretest</i> | <i>Posttest</i> | |
| Lowest Value | 70 | 80 | |
| The highest score | 85 | 100 | |
| Classical Completeness | 72% | 100% | |
| Total value | 1988 | 2299 | |
| Average | 79.48 | 91.96 | |
| <i>N-gain</i> | 0.61 | | <i>moderate</i> |

Testing the normality of data on the difference in the value of narrative writing skills for fourth grade elementary school students in pretest and posttest using the development of digital-based learning media, non-fiction text aims to determine whether or not the difference in the value of narrative writing skills for fourth grade elementary school students before and after using digital text-based learning media

non-fiction (Sundayana, 2014). Testing the normality of data on the difference in the value of the narrative writing skills of fourth grade elementary school students in the pretest and posttest using the development of digital-based learning media for non-fiction text was carried out using Shapiro-Wilk, with the criteria if the probability value > level of significance ($\alpha = 5\%$), the data on the difference in the value of narrative writing skills for fourth grade elementary school students in pretest and posttest using digital-based learning media development of non-fiction text is declared normal (Sundayana, 2014; Priyatno, 2014). The results of testing the normality of data on the difference in the value of narrative writing skills for fourth grade elementary school students in the pretest and posttest using the development of digital-based learning media with non-fiction text can be seen in the following table:

Table 11. Normality test results.

| Information | Score |
|--------------|-------|
| Shapiro-Wilk | 0.934 |
| Probability | 0.106 |

Based on the following Table 11 can be seen that the normality test on the difference in the value of narrative writing skills for fourth grade elementary school students of pretest and posttest using the development of digital-based learning media with non-fiction text produces Shapiro-Wilk statistics of 0.934 with a probability of 0.106. It can be seen that the data test of the difference in the value of the narrative writing skills of the fourth grade elementary school students in the pretest and posttest using the development of digital-based learning media with non-fiction text results in a probability > α (5%), so according to Sundayana (2014) the difference in the value of students' narrative writing skills pretest and posttest using the development of digital-based learning media with normal distribution non-fiction text. This is also in accordance with the research conducted by Dewi (2020).

Testing the difference in the value of the pretest and posttest elementary school students' narrative writing skills using the development of digital-based non-fiction text learning media was carried out using the Paired T-Test with the criteria that if the probability $\leq \alpha$ (5%) then H_0 is rejected (Sugiyono, 2016; Priyatno, 2014), So it can be stated that there is a significant difference in the value of the narrative writing skills of the fourth grade elementary school students in the pretest and posttest using the development of digital-based non-fiction text-based learning media. The results of testing the difference in the value of the narrative writing skills of fourth grade elementary school students in the pretest and posttest using the development of digital-based non-fiction text learning media can be seen through the following table:

Table 12. Results of the pretest and posttest t-tests.

| Value of Writing Skills | Average | T-Count | Probability |
|-------------------------|---------|---------|-------------|
| Pretest | 79.52 | -11,085 | 0.000 |
| Post | 91.96 | | |

Based on the test results listed in the Table 12, it can be seen that the resulting probability is 0.000. This means the probability < level of significance ($\alpha = 5\%$), so H_0 is rejected. Thus it can be stated that there is a significant difference in the value of the

narrative writing skills of the fourth grade students of the pretest and posttest elementary schools using the development of non-fiction text digital-based learning media. The effectiveness of the product can be seen from the results of giving tests to students, so that learning outcomes are very important to measure learning effectiveness (Rasyid, et al., 2019). In this research and development, the effectiveness is seen from the results of giving tests given to students through the pretest and posttest using non-fiction text digital-based learning media. The test is in the form of uploading photos that can be used as story material and telling narrative. The non-fiction text digital-based learning media developed by researchers can support the function of the media as an intermediary learning resource in delivering information and understanding students. Munadi (2013) states that "learning resources" have the meaning of conveying, distributing, and connecting so that learning resources can be understood by students which make the process easier.

Judging from the average value, the average value of the narrative writing skills of pretest elementary school students before using the development of digital-based non-fiction text-based learning media was lower than the average value of posttest elementary school students' narrative writing skills using digital text-based learning media development non-fiction. In other words there are improvements / improvements. The value of posttest grade four elementary school students' narrative writing skills uses the development of digital-based non-fiction text-based learning media. Non-fiction text digital-based learning media in narrative writing skills in fourth grade elementary schools can strengthen student responses to understanding a material besides improving the quality of student learning that comes from experiences so that students are more active in learning. The statement by Mustaji (2013) that learning media has a function to simplify complex learning materials, explain a material object. On the other hand as a medium to clarify and facilitate the delivery of material, Non-fiction digital text-based learning media can be used as an innovative medium for meaningful Indonesian language learning and increase enthusiasm for learning by actively involving students. Non-fiction text digital-based learning media allows students to gain meaningful learning by finding new concepts that are relevant to David Ausubel's learning theory (Maulidta, 2018).

Based on the analysis of the results of data validity, practicality, and effectiveness of digital-based learning media with non-fiction text in writing skills for fourth grade elementary school students that were developed and tested, it can be concluded that in this study the developed media can increase enthusiasm and student learning outcomes. According to Ramadan & Indihadi (2020) that one of the efforts to improve the success of learning to write narrative text in elementary schools is the use of media when learning, because media can help understanding the material when learning. Not only that, media can also help students be enthusiastic in the learning process. Thus the teacher must be able to create fun activities when learning takes place, one of which is by using learning media aids. In addition, this media can also be used as a media to support online learning during a pandemic, where face-to-face learning cannot be done (Fitriany & Maureen, 2014). This non-fiction digital text based learning media can be a way to optimize the experience as a source of student learning. The use of media in the learning process aims to arouse interest in learning, provide motivation, foster curiosity about what he sees, and provide stimulation to students to participate in the learning process in class (Hidayah & Ulva, 2017).

CONCLUSIONS

Based on the results of the research and discussion previously described, the following conclusions can be drawn: (1) The validity of the material experts gets a percentage value of 89.4% with very good qualifications. Meanwhile, the percentage of validity of media experts is 92.5% with very good qualifications; (2) The practicality of the observation results to determine the response made by two observers to the teacher got a score of 92.85%. While the results of observations to determine the response made by 2 observers to students got a score of 95%. Based on the results of the questionnaire results of teacher and student responses to non-fiction text digital-based learning media in writing skills for fourth grade elementary school students developed with very good categories; (3) The effectiveness of the media on student learning outcomes in Indonesian language learning non-fiction text material in writing skills. The learning outcomes of the pretest students got an average score 79.52 with 72% classical completeness, while posttest student learning outcomes get an average score 91.96 with 100% completeness classification. The T-test calculation shows that the resulting probability is 0.000. This means the probability < level of significance ($\alpha = 5\%$). Judging from the average score, the average score of students' narrative writing skills in the pretest was lower than the average value of students' narrative writing skills using the development of non-fiction text digital-based learning media. Based on this, it can be concluded that there are differences in learning outcomes in the pretest and posttest classes after being given treatment using non-fiction text-based digital learning media.

This study developed a digital-based non-fiction text learning media in the form of a web with the Xampp program in the PHP programming language in narrative writing skills for fourth grade elementary school students, which includes learning instructions, learning objectives, learning materials, learning evaluation, games sorting pictures according to the story line, and developer profiles. For further researchers, they can develop similar learning media with improvements in various ways to get more optimal results, especially these media that can be used during online learning.

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