

Development Of Digital Comic Media For Effectively Learning The Theme Of My Heroes Based On Local Wisdom Of Bondowoso In Class Iv Students At Sdn Prajekan Kidul 1 Bondowoso

Siti Nurul Qomariah¹, Hari Satrijono², Dyah Ayu Puspitaningrum³

Primary School Teacher Education, Jember University, Tegal Boto Campus, Jl. Kalimantan No.37, East Krajan, Sumbersari District, Jember Regency, East Java 68121
sitinurulqomariah@yahoo.com

Abstract: This research is backgrounded by student's lackness in understanding of knowledge that exist in student's environment such as the history of regional heroes or monument. Also, lack of using learning media as a tool to assist teachers in learning activity. Accordingly, it needs learning media development to overcome that problem. The purpose of this study is to describe the process and determine the validity, effectiveness, and practicality of digital comic media development theme of my hero based on Bondowoso local wisdom for 4th grade at Prajekan Kidul 1 Elementary School. This research type is R&D (Research and Development) Borg and Gall model, which consists of 10 stages. However, this study only use 8 stages named the test of effectiveness. The subject of this research is grade 4 students at SDN Prajekan Kidul 1 Bondowoso. Data collection methods are test and hackets. The data that obtained in this study is analyzed using product validation, relative effectiveness rate, and practicality. Based on the validation result of product, it is known that the product is included in very viable category. Learning result of classes taught by using digital comic media are more effective than calsses that did not use digital comic media. Student's response to digital comic media falls into excellent category. So, based on the discussion above is the development of comic digital media is very valid, effective and practical used in learning activity.

Keywords: development, digital comic media, Bondowoso local wisdom

INTRODUCTION

Education is an important thing for every individual to develop aspects within themselves, both in terms of cognitive, attitude and psychomotor skills. According to National Education Syndik Law Number 20 of 2003 (in Suriansyah, 2011) education is a conscious and planned effort to create a learning atmosphere and learning process so that students

actively develop one's potential to have religious spiritual strength, self-control, personality, intelligence, noble morals and skills needed by oneself, society, nation and state. According to Djamaluddin (2014), education is a human effort to develop his personality in accordance with the values of his society and culture. From this definition it can be interpreted that education does not only build and develop cognitive aspects but also other aspects. Therefore, to achieve this goal there are elements that play an important role in the learning process which are interconnected with each other so that they have an equally important position in the learning process, one of which is learning media.

The learning process is an activity or activity that involves two parties, namely the teacher as facilitator and students as learning objects which include an intermediary in the form of learning media and learning resources that can support the delivery of learning material. Hamid, et al (2020) argue that learning media is anything that can convey messages through various channels, can stimulate students' thoughts, feelings and desires so that it can encourage the

creation of a learning process to add new information to students so that learning goals can be achieved effectively. Good. So, it can be interpreted that learning media is a supporting tool for teachers to make it easier to convey messages or learning materials in teaching and learning activities so that learning activities are more interesting, fun and not monotonous.

The use of learning media is quite necessary for teachers in the learning process in order to increase students' understanding of the material presented by the teacher. According to Apipudin (2017), selecting good learning media contains the 7M elements, namely 1) easy, 2) cheap, 3) interesting, 4) effective, 5) encouraging, 6) effective, and 7) beneficial. Based on the results of interviews and observations with class IV teachers at SDN Prajekan Kidul 1, teachers use thematic textbooks as learning materials that are still

general or more likely to explain life outside where students live, so that students' understanding of the material being studied is lacking. In reality, students also need contextual understanding related to the area and life around them. One of them is my 5 heroes theme book, examples of material about heroes and historical figures used are not available in the student environment. And there is no teaching media that can help students recognize and learn about regional heroes and history that occurred in the student environment.

The discussion above is supported by the statements of several class IV students at SDN Prajekan Kidul 1, namely

that students do not know or recognize regional hero figures or the history that occurred in the Bondowoso area, for example Kiai Santawi and the history of the death carriage monument. Students are more interested in learning and quickly understand the material if they read material that has interesting pictures such as comics. Another interview result is that Bondowoso local wisdom-based learning media has not been implemented in class IV, students do not understand the meaning of heroism, for example they do not apply attitudes of love for the country, honesty, responsibility and other heroic attitudes in everyday life, for example in responsibility in life. doing homework. In class IV, which is a high level class, the process of character or attitude formation should have been instilled in students and started to be practiced in order to get a better future. Based on these conditions, it becomes the basis for developing learning media based on local wisdom to support learning and increase students' understanding of local potential from an early age. According to Ridwan (in Juniarta, et al. 2013) local wisdom or what is usually called *local wisdom* can be understood as a human effort to use his mind to act and behave towards things, objects or events that occur in a certain space. It is hoped that the existence of learning media based on local wisdom can make learning more meaningful.

According to previous research, the use of comic media based on local wisdom is very effective in developing student learning outcomes and getting responses from both students and teachers. The differences between previous research and the research to be conducted are in terms of visual comic media and the form of products packaged in digital comic form (*website*). It is hoped that the existence of digital comic media based on Bondowoso local wisdom can help students develop knowledge about Bondowoso local wisdom and obtain supporting tools or sources in understanding the material contained in textbooks. Based on the description that has been presented, research will be carried out with the title "Development of Digital Comic Media with My Hero Theme Based on Bondowoso Local Wisdom for Class IV Students at SDN Prajekan Kidul 1".

Education is an important thing for every individual to develop aspects within themselves, both in terms of cognitive, attitude and psychomotor skills. According to National Education Syndik Law Number 20 of 2003 (in Suriansyah, 2011) education is a conscious and planned effort to create a learning atmosphere and learning process so that students

actively develop one's potential to have religious spiritual strength, self-control, personality, intelligence, noble morals and skills needed by oneself, society, nation and state. According to Djamaluddin (2014), education is a human effort to develop his personality in accordance with the values of his society and culture. From this definition it can be interpreted that education does not only build and develop cognitive aspects but also other aspects. Therefore, to achieve this goal there are elements that play an important role in the

learning process which are interconnected with each other so that they have an equally important position in the learning process, one of which is learning media.

The learning process is an activity or activity that involves two parties, namely the teacher as facilitator and students as learning objects which include an intermediary in the form of learning media and learning resources that can support the delivery of learning material. Hamid, et al (2020) argue that learning media is anything that can convey messages through various channels, can stimulate students' thoughts, feelings and desires so that it can encourage the creation of a learning process to add new information to students so that learning goals can be achieved effectively. Good. So, it can be interpreted that learning media is a supporting tool for teachers to make it easier to convey messages or learning materials in teaching and learning activities so that learning activities are more interesting, fun and not monotonous.

The use of learning media is quite necessary for teachers in the learning process in order to increase students' understanding of the material presented by the teacher. According to Apipudin (2017), selecting good learning media contains the 7M elements, namely 1) easy, 2) cheap, 3) interesting, 4) effective, 5) encouraging, 6) effective, and 7) beneficial. Based on the results of interviews and observations with class IV teachers at SDN Prajekan Kidul 1, teachers use thematic textbooks as learning materials that are still

general or more likely to explain life outside where students live, so that students' understanding of the material being studied is lacking. In reality, students also need contextual understanding related to the area and life around them. One of them is my 5 heroes theme book, examples of material about heroes and historical figures used are not available in the student environment. And there is no teaching media that can help students recognize and learn about regional heroes and history that occurred in the student environment.

The discussion above is supported by the statements of several class IV students at SDN Prajekan Kidul 1, namely that students do not know or recognize regional hero figures or the history that occurred in the Bondowoso area, for example Kiai Santawi and the history of the death carriage monument. Students are more interested in learning and quickly understand the material if they read material that has interesting pictures such as comics. Another interview result is that Bondowoso local wisdom-based learning media has not been implemented in class IV, students do not understand the meaning of heroism, for example they do not apply attitudes of love for the country, honesty, responsibility and other heroic attitudes in everyday life, for example in responsibility in life. doing homework. In class IV, which is a high level class, the process of character or attitude formation should have been instilled in students and started to be practiced in order to get a better future. Based on these conditions, it becomes the basis for developing learning media based on local wisdom to support learning and increase

students' understanding of local potential from an early age. According to Ridwan (in Juniarta, et al. 2013) local wisdom or what is usually called *local wisdom* can be understood as a human effort to use his mind to act and behave towards things, objects or events that occur in a certain space. It is hoped that the existence of learning media based on local wisdom can make learning more meaningful.

According to previous research, the use of comic media based on local wisdom is very effective in developing student learning outcomes and getting responses from both students and teachers. The differences between previous research and the research to be conducted are in terms of visual comic media and the form of products packaged in digital comic form (*website*). It is hoped that the existence of digital comic media based on Bondowoso local wisdom can help students develop knowledge about Bondowoso local wisdom and obtain supporting tools or sources in understanding the material contained in textbooks. Based on the description that has been presented, research will be carried out with the title "Development of Digital Comic Media with My Hero Theme Based on Bondowoso Local Wisdom for Class IV Students at SDN Prajekan Kidul 1".

RESULTS AND DISCUSSION

The results obtained from developing digital comic media with the theme My Hero based on Bondowoso local wisdom for class IV students at SDN Prajekan Kidul 1 Bondowoso are as follows.

1. Digital Comic Learning Media Development Process

The research was carried out with the initial step, namely visiting SDN Prajekan Kidul 1 as a place for carrying out the research with the aim of conducting interviews before conducting the research. In this activity, researchers conducted interviews with grade 4 teachers to find problems in learning that could be used as research. Then, researchers collect information from various sources such as research journals and the internet regarding the research to be carried out. Next, consult with your supervisor and class teacher to get suggestions that will be useful in research.

The next stage is to create a development plan in the form of a research proposal. After planning was carried out, the researcher carried out the initial stages of creating a product design which included preparing the application to be used and materials for digital comic media. The application for creating comic designs is IbisPaint The design format in this digital comic learning media is the cover page, foreword, basic competencies, character introduction, material about Raden Bagus Asra, Santawi, and Gerbong Maut in comic form, and about the author.

After the product design is carried out, the next step is the product validation stage. Product validation was carried out by 3 validators, namely design expert validators and material experts by Elementary School Teacher Education lecturers and practitioner expert validators by class IV teachers at SDN

Prajekan Kidul 1 Bondowoso. The following are the results of product validation by the validator:

Tabel 1 Data of product validation results

No. Question	Validator 1	Validator 2	Validator 3	Rate
1-25				
Total	99	102	118	106

$$Valpro = \frac{srt}{smt} \times 100\%$$

$$Valpro = \frac{106}{125} \times 100\%$$

$$Valpro = 84,8\% \text{ (very worthy)}$$

Based on the results above, the digital comic media developed is in the very valid category. Therefore, digital comic media is suitable for use as a learning medium and for research trials. The following are the results of improvements to digital comic media after validation.

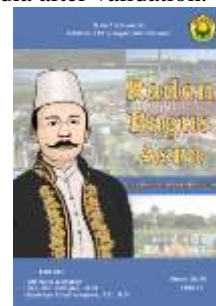


Figure 1. Cover of the comic Raden Bagus Asra

The use trial was carried out on class IV students at SDN Prajekan Lor 1 with 15 students as respondents. The trial was carried out by filling out a student response questionnaire regarding the use of digital comic media based on local Bondowoso wisdom.

Based on the results of the trial use, it is known that the average score was 93% for YES answers and 7% for NO answers. So, digital comic media does not need any further revision because each statement point has reached an average value of 80%.

2. Test the Effectiveness of Digital Comic Learning Media

The effectiveness of developing digital comic media can be seen from the results of the t-test scores and the relative effectiveness level (ER) obtained by comparing the results of the learning scores of control class and experimental class students. The t-test can be calculated using the following formula.

$$t = \frac{M_2 - M_1}{\sqrt{\frac{\Sigma x_1^2 + \Sigma x_2^2}{N(N-1)}}$$

Meanwhile, the relative effectiveness test (ER) can be obtained using the following formula.

$$ER = \frac{MX_2 - MX_1}{\left(\frac{MX_2 + MX_1}{2}\right)} \times 100\%$$

2.1. T-test calculation

The data from the pretest-posttest results were then analyzed using a preparation table to be calculated using an independent sampling technique. The data obtained in preparation for t-test data analysis was then entered into the independent sampling t-test formula. The following calculation results were obtained:

$$t = \frac{M_2 - M_1}{\sqrt{\frac{\Sigma x_1^2 + \Sigma x_2^2}{N(N-1)}}$$

$$t = \frac{42,25 - 22,125}{\sqrt{\frac{634,5 + 234,625}{24(24-1)}}$$

$$t = \frac{20,125}{\sqrt{\frac{869,125}{552}}} = \frac{20,125}{\sqrt{1,574}}$$

$$t = \frac{20,125}{1,255}$$

$$t = \pm 16,035$$

Based on the calculation results above, a score is obtained t amounting to 16,035. The t results are consulted in the t -table for a significance level of 0.05 with df 46, namely 1.684. So from the result t -test which has been calculated, the t value is greater than the t -table ($16.035 > 1.684$). Therefore, it can be concluded that the use of digital comic media based on Bondowoso local wisdom is more effective than learning using thematic books.

2.2. Calculation of relative effectiveness level (ER)

After the t test value is obtained, the next step is to calculate the relative effectiveness (ER) to find out how effective digital comic media is on the learning outcomes of control and experimental class students.

$$ER = \frac{MX_2 - MX_1}{\left(\frac{MX_2 + MX_1}{2}\right)} \times 100\%$$

$$ER = \frac{42,25 - 22,125}{\left(\frac{22,125 + 42,25}{2}\right)} \times 100\%$$

$$ER = \frac{20,12}{\left(\frac{64,375}{2}\right)} \times 100\%$$

$$ER = \frac{20,12}{32,19} \times 100\%$$

$$ER = 62,5\% \text{ (high effectiveness)}$$

Based on the results of the relative effectiveness (ER) calculation, it can be concluded that the learning outcomes of the experimental class taught using digital comic media were 62.5% more effective, when compared to classes that did not use digital comic media.

3. Test the Practicality of Digital Komk Learning Media

The practicality of the product can be seen through the results of class IVB students' responses at SDN Prajekan Kidul 1 Bondowoso to the media after the lesson was completed. Based on the calculation results, an average of 98% was obtained for YES answers. So it can be stated that the development of digital comic media based on local Bondowoso wisdom is included in the category of very good/very practical for use in learning.

CONCLUSION

The product developed is a digital comic media based on local wisdom which discusses the heroes and historical monuments of Bondowoso City, namely Raden Bagus Asra, Santawi, and the death carriage monument. Validity, effectiveness and practicality of digital comic media with the theme of my hero based on Bondowoso local wisdom can be seen from the results of validation by validators, learning outcomes and student responses. Bondowoso local wisdom-based digital comic media has gone through the validation stage with a score of 84.8% in the very worthy category. The results of the assessment scale in the use trial on class IV students at SDN Prajekan Lor 1 obtained a result of 93% so that the development product was said to be suitable for carrying out effectiveness trials. The relative effectiveness results obtained a score of 62.5% with a high effectiveness category. It can be said that the learning outcomes of classes taught using digital comics are more effective than classes that do not use digital comic media. Meanwhile, the level of practicality as measured by student responses obtained a result of 98% in the very good/very practical category.

SUGGESTION

Based on the results of research on the development of digital comic media, suggestions that can be given are:

a. For student

Digital comic media can be used in classroom learning activities, the material presented in digital comic media based on Bondowoso local wisdom can increase students' knowledge in knowing and understanding local history in the form of the history of heroes and monuments in Bondowoso City.

b. For teachers

Digital comic media is very important to apply in learning to help students learn about local wisdom around them. Teachers as facilitators can develop existing learning media by adding other information that is appropriate to students' conditions. Attractive media displays also help students increase student motivation to learn.

c. For school principals

Digital comic media can be used as an example of a development product used in classroom learning activities. The school should be able to develop other teaching materials to be used in learning

d. For other researchers

This research should be used as a reference for future similar research. And it can be used as information or comparison material to carry out similar research.

BIBLIOGRAPHY

- Suriansyah, A. (2011). Foundations of Education. In *COMDES*. http://idr.uin_antasari.ac.id/6633/1/Buku_Basic_Education.pdf
- Djamaluddin, A. (2014). Philosophy of Education. *Istiqra': Journal of Islamic Education and Thought*, 1(2), 129–135. <https://jurnal.umpar.ac.id/index.php/istiqra/article/view/208/181>
- Hamid, M. A., Ramadhani, R., Juliana, M., Safitri, M., Jamaludin, M. M., & Simarmata, J. (2020). *Instructional Media* (T. Limbong (ed.); 1st ed.). We Write Foundation.
- Apipudin. (2017). *Teaching Materials Approach and Learning Media*. MINISTRY OF EDUCATION AND CULTURE.
- Juniarta, H. P., Susilo, E., & Primyastanto, M. (2013). Study of the Local Wisdom Profile of Gili Island Coastal Communities, Sumberasih District, Probolinggo Regency, East Java. *ECOSOFIM (Economic and Social of Fisheries and Marine)*, 1(1), 11–25.