



Digital Comic Development to Improve Life Skills in Early Children

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Penelitian ini bertujuan untuk mengembangkan komik digital sebagai media pembelajaran agar meningkatkan kecakapan hidup anak usia dini. Pendekatan yang digunakan adalah penelitian dan pengembangan, dengan rancangan metode penelitian yaitu metode campuran, antara metode kualitatif dan kuantitatif digunakan secara terpadu dan saling melengkapi. Subyek dalam penelitian ini adalah siswa TK di TK Batik Kabupaten Kudus. Teknik pengumpulan yang digunakan adalah angket, observasi, wawancara, dan dokumentasi. Komik digital yang dikembangkan mengacu pada tahapan pengembangan yang dilakukan oleh Borg and Gall, yang terdiri dari empat tahapan yaitu studi pendahuluan, pengembangan, uji coba lapangan, dan sosialisasi dan sosialisasi produk. Media pembelajaran komik digital layak diterapkan dalam pembelajaran untuk meningkatkan kecakapan hidup anak usia dini. Secara kuantitatif penilaian ahli materi (3,87) termasuk dalam kategori baik. Penilaian ahli berdasarkan kesesuaian kurikulum, kebenaran isi dan cara penyajian materi termasuk dalam kategori baik, dan penilaian ahli media memperoleh skor (4,0) berdasarkan penilaian ahli media. pada pertimbangan produksi, desain visual, dan kualitas teknis diperoleh skor (4,0) dalam kategori baik. Sedangkan penilaian yang diberikan siswa pada tahap uji lapangan (3,88), uji lapangan lebih luas (3,99), dan uji operasional (3,91). Nilai tersebut menunjukkan bahwa media pembelajaran komik digital dikategorikan baik, yang berarti media pembelajaran komik digital media pembelajaran efektif digunakan untuk meningkatkan kecakapan hidup anak usia dini. Secara kualitatif, media komik digital sebagai media pembelajaran untuk meningkatkan kecakapan hidup dapat menarik perhatian siswa untuk belajar, memudahkan siswa belajar, dan merangsang siswa untuk lebih mudah mengingat materi.

Abstract

This research aims to develop digital comics as a learning medium to improve early childhood life skills. The approach used is research and development, with the mixed methods design, between qualitative and quantitative methods used in an integrated and complementary manner. The subjects in this study were kindergarten students at Batik Kindergarten, Kudus district. The collection techniques used were questionnaires, observations, interviews, and documentation. Digital comics developed refers to the development stages carried out by Borg and Gall, which consist of four stages: a preliminary study, development, field testing, and product dissemination and socialization. Digital comic learning media can be applied in learning to improve early childhood life skills. Quantitatively, the assessment of material experts is (3.87) in the excellent category. Expert's review is based on the suitability of the curriculum, the truth of the content and the method of presenting the material are included in the excellent category). The media expert's assessment obtained a score of (4.0) the media expert's review is based on considerations of production, visual design, and technical quality, with a score of (4.0) in the excellent category. While the assessment given by students at the field test stage (3.88), the field test is broader (3.99), and the operational test (3.91), the score shows that digital comic learning media is categorized as good, which means that digital comic learning media is effectively used to improve early childhood life skills. Qualitatively, digital comic media as a learning medium to enhance life skills can attract students' attention to learning, facilitate student learning, and stimulate students to remember the material more easily.



INTRODUCTION

Early childhood education plays a significant and decisive role in the next child's development because early childhood education is the basic foundation of a child's personality. Hibana (2002: 6) states that early childhood can be used as a mirror to see how successful children will be in the future. Children who get good service from 0 to 8 years old have high hopes for future success.

Along with various developments, early childhood learners demand teachers to teach more creatively and innovatively so that learning is not boring. It can help motivate ongoing developments. Thus, it becomes a requirement that the teacher looks for learning media suitable for early childhood development. In addition, teachers also have an essential role in conveying learning to early childhood, taking into account the stages of development in children.

Improving life skills for early childhood needs to be done so that children can meet basic daily needs such as eating alone without assistance, drinking, bathing alone, and wearing clothes and shoes without the help of others. Achieving these goals can be obtained through a learning process to provide meaningful basic concepts for children through authentic experiences that allow children to show activity and curiosity optimally.

Often teachers in learning use makeshift media by giving lots of lectures and assignments to be done, causing boredom. So in every lesson, engaging, creative and innovative learning media are needed to motivate children to learn. Digital comics are expected to encourage children's learning. Life skills are necessary for everyday life in early childhood, home, school and the surrounding environment. Then with digital comics, It is hoped that it will motivate children to learn through examples of stories in the comics.

This is the opinion of Riska, Dwi and Syaichudin (2010). Comics have advantages as learning media: (1) The ability to create interest, (2) Guiding an interest in reading that attracts students, (3) With teacher guidance, it functions as a bridge to grow reading interest, (4) Makes it easier for children to grasp abstract things, (5) Developing an interest in reading in other fields, (6) The entire course of comic stories leads in one direction, namely goodness. Based on interviews with teachers and school principals, digital comic media has never been developed, even though children are familiar with gadgets (children are familiar with computer technology).

Comic media is one visual media that can present more exciting material, increase motivation, and offer material more concretely so that children can more easily absorb the material. This is in line with the results of Levie and Levie's study (Lysus Firdaus, 2006) that visual stimulus produces better learning outcomes for tasks such as remembering, recognizing, recalling, and connecting facts with the concept of an image or symbol that evokes the emotions and attitudes of students. Facilitate the achievement of goals to understand and remember information or messages contained in pictures, help students who are weak in reading to organize information in text and remember back (Sukiman, 2012)

Aspects of life skills for independence by the characteristics of early childhood development, namely being able to pour water and drink by themselves, being able to eat, being able to wear and undress, being able to wash their own hands, being able to go to the restroom and clean themselves, brush their teeth with guidance, and put their toys or utensils in their place. One of the main factors that support the independent learning process in children is the child's interaction with the environment. Thus children become skilled, creative and independent in carrying out tasks to meet their personal needs.

The problems in this study are formulated (1) how to develop digital comics as a learning medium that can improve early childhood life skills education?, (2) how do students respond to digital comics? and (3) effectiveness of digital comics as a learning medium can improve early childhood life skills education? The research objectives (1) describe the usage of digital comics as learning media to improve early childhood life skills, (2) describe students' responses to digital comics developed, and (3) describe the effectiveness of digital comics as a learning medium in improving life skills early childhood.

Learning in early childhood prioritizes the principle of learning through play. According to Dearden (Moeslichatoen, 2004:24). Playing is a non-serious activity, and everything is in action itself, which can provide satisfaction for children. Meanwhile, according to Hildebrand (Moeslichatoen. 2004:24), playing means practising, exploiting, engineering, and repeating any exercises that can be done to transform. So it can be stated that learning in kindergarten teachers act as mentors, motivators and facilitators.

For that, the teacher must prepare the environment and the media in teaching and learning. The optimal implementation of creative, effective, and fun learning is inseparable from the characteristics of child development, teaching principles and curriculum that suit children's needs. For this reason, a teacher must know and understand all aspects of early childhood development, including religious and moral values, physical-motor development, social-emotional development and independence, language development, and cognitive development.

Life skills are skills a person possesses to have the courage to face life's problems and everyday life without feeling pressured. Proactively and creatively seek and find solutions so they can finally overcome them. (Depdiknas. 2003:6). Life skills are a form of skills or skills that can support the life of a human being so that they can survive in any condition and even continuously improve their quality of life. Life skills for early childhood should be integrated between educational institutions and at home. The integration of this education will provide a stronger foundation for children to grow and develop through their exemplary character and personality and uphold the values that exist in society.

An individual's life skills result from socialization that is obtained early on in the family, school, and community environment. Of the breadth and variety of child development environments, more and more factors influence the achievement of a child's life skills. Through these life skills, children will also be able to solve all problems more wisely and without frustration. And in reality, on the ground, there is a difference between children who have been touched by the concept of life skills and children who have never received life skills. Children who have received life skills are proven to have better intelligence than those who do

not. Elementary schools need emotionally mature children, not dependent on the adults around them and can face whatever problems come their way. In elementary school, they should be able to go to the bathroom by themselves, wear their clothes, eat by themselves, and be responsible for their schoolwork.

The importance of learning media as a form of the rapid development of technology is believed to be able to solve all problems even though it often forgets the root of the problem. Education is no exception; many believe technology answers all educational issues (Darmawan, 2012). The technology referred to here is the media of digital comics. Along with the times, comics are not only in print form. Technology is developing so rapidly that digital media is a new medium for producing and distributing comics. Digital comics This development uses internet media in its use and its publication. Using a website, the developed comic type is relatively cheaper than the printed version of the cartoon. (Maharsi, 2011).

METHOD

This research's ultimate goal is to realise the digital comic model as a learning medium to improve early childhood life skills education. The approach used in this study is the research and development approach. The output generated from this research is a learning media product in the form of digital comics for life skills material _ Early childhood. The development of digital comic media was carried out using the research and development model developed by Borg and Gall, which consists of ten research steps, known as "The R & D Cycle" (Borg and Gall, 2007). Of the ten steps, product development procedures are grouped into four development stages consisting of 1) introduction, 2) development, 3) field testing, and 4) product dissemination and socialization.

Data collection techniques used in this study are. 1) questionnaire or questionnaire is used to collect data on teacher and student responses to comic learning media using a Likert scale 2) Non-participant observation is based on the process of collecting data because the researcher is not directly involved in the respondent's activities. 3) Free interviews without using guidelines that are arranged entirely and systematically. The interview guide used only outlines the problems in digital comic learning media products. 4) Documentation is the initial step of research in the preliminary study stage before developing a product design.

Preliminary studies are carried out before product development as a basis for the design development product. Stages Preliminary study, namely:

1. Literature review to examine relevant research theories and results with the research that will be carried out, namely regarding the development of learning media
2. Field studies are where researchers conduct surveys, examine the characteristics of research subjects, and see the possibilities if the research product is applied.

Data analysis in this study was carried out with qualitative and quantitative analysis techniques. Qualitative data obtained during the research process are recorded and then described descriptively, and

conclusions are drawn. At the same time, a quantitative analysis was carried out to process the data in the form of assessment scores of material experts, media experts, and students.

RESULT AND DISCUSSION

Develop a digital comic that contains life skills for early childhood presented in an exciting presentation. With a compelling presentation, it is hoped that it will create a feeling of joy for children to learn while playing and motivate children to be more creative. Peter Kline's opinion (Angkowo and Kosasih, 2011) states that learning will be effective if it is carried out in a pleasant atmosphere. If children have a high interest in education, the material presented is easily absorbed by children. Digital comics are a new learning media for children, so that children will like this media, and thus children will be motivated to learn.

Application of digital comic media in learning life skills for early childhood is expected to develop various aspects of development, namely cognitive, affective and psychomotor aspects. In the mental part, a child can reason from stories in digital comics. The affective element of that story is that some comics contain life skills and characters that can indirectly shape a child's personality from playing digital comics. From the psychomotor aspect, children playing digital comics with a laptop or computer develop finger, hand, and gross and fine motor skills.

Digital comic development is done by analyzing the objectives in its development, analyzing capabilities, carrying out development procedures and conducting expert validation. The goal to be achieved in developing digital comic media is to produce amusing digital media appropriate for life skills learning materials. Digital amusing media This was created with the hope of being able to increase motivation and help children learn. Digital comic press, developed as a multi-media in this study, is used to present the visualization of early childhood life skills to be more concrete and exciting. This is in line with the opinion of Ahmad, Rifai, and Sujana. (2011), that the value of multimedia lies in its ability to attract attention and interest in quickly conveying certain types of information. Presentation of material in digital comics arranged in illustrated pictures equipped with narrative text and dialogue.

Studies Introduction The process of learning life skills for early childhood begins with initial observations revealing that early childhood life skills learning activities in Batik Kindergarten teachers are less creative in using media. The media used is only pictures that are worn out and very simple. Very conventional learning through stories or lectures with this simple media. Such knowledge is less attractive for children to take part in education.

The results of interviews with teachers and school principals revealed that children have not been able to follow school rules properly, such as coming by taking off their shoes, putting their bags on the shelves that have been prepared, returning toys that have been used, screaming when they cannot do the tasks given by the teacher. Stories with pictures and demonstration methods used by teachers make children bored. So

that students do not feel bored in participating in learning at school and increase children's motivation and interest in reading, engaging media is used, namely digital comics.

The next stage after preparing the media is validating material and media experts. Evaluation in terms of material refers to the aspect of content consideration, which consists of conformity with the curriculum, the content's feasibility and the presentation method. This assessment relates to simplicity, balance, line, space, texture and colour. Setyosari's opinion (Sadun Akbar and Hadi, Sriwiyono, 2011) states that media must pay attention to suitability with learning objectives, practicality with learning characteristics, media selection must pay attention to the suitability of media with learning objectives, suitability of media with the attributes of the learner, the suitability of the media with the learning environment, the ease and implementation of using the media, can be a source of learning, the efficiency of the media in terms of time, effort and cost, safety for students, the ability of the press to activate students, the ability of the media to develop a pleasant learning atmosphere, as well as media quality.

Assessment of technical quality aspects includes the ability of the media to motivate students, make it easier for students to remember the material, and the presentation of the media makes the material more exciting and easy to use. The results of research on the development of learning media digital comics Early childhood life skills are described based on Borg and Gall's development steps, which are grouped into four stages: preliminary study development, field testing and dissemination and dissemination of the final product.

The validity of material experts is done by providing media products and their assessment sheets from the first stage, material expert assessment. Digital comic media life skills obtained a score (of 3.67). Based on quantitative data conversion guidelines to qualitative, according to Eko Putro, Widoyoko (2009) is included in the excellent category, even though it is included in the good category suggested by material experts to be revised. There are still some errors in the preparation of the media. Thus, material experts advise that there are several revisions to the product before being tested. The second stage is material expert assessment. Digital comic media life skills obtained a score (of 4.06). Based on quantitative data conversion guidelines to qualitative included in the excellent category, there is an increase in score.

Based on the developed media product research provisions, The media is said to be feasible if at least it is in a suitable category. Then the product is said to be possible in terms of material. This is reinforced by the statement of material experts that the product is feasible to try out. The validity of media experts is done by providing media products and their assessment sheets. Based on the assessment results above, media products get an average value of 3.8 if this value is converted based on guidelines for converting quantitative data to qualitative data.

The results of the media assessment in the first stage are then analyzed and considered for revision to improve the product. Namely, the second stage of the evaluation is carried out. On expert appraisal of the second media stage, the average score obtained increased to 4.2. Based on conversion guidelines, digital comic media has been revised into an outstanding category and is worthy of being tested.

Field test on digital comic media performed on group children B Batik Kindergarten in Kudus district. The trials were carried out in two stages: limited field and operational.

1. Limited field test

First, by taking a sample of five Batik Kindergarten children in group B as respondents. Students selected as samples have moderate and low levels of high intelligence. Determination of respondents based on the consideration of the teacher and the head of the Kudus Batik Kindergarten. Respondents were accompanied by a digital comic class teacher who was already on a laptop with the help of an LCD projector. Respondents operate digital comics with the help of teachers and researchers. Based on the questionnaire results, an average score was obtained (3.88), so the digital comic media developed was in a suitable category. In addition to observations during the limited test, statements were made during the operational test. The comments and suggestions of media experts are as follows: (a) The narration should be adjusted to the language of early childhood (TK), (b) The colours are not sharp, and the colour choices tend to be soft, (c) There should be pictures of the atmosphere in the class

Second. Small Group Trial by taking a sample of ten Batik Kindergarten children in group B as respondents. Students selected as samples have moderate and low levels of high intelligence. The determination of respondents is based on the considerations of the teacher and the head of the Batik Kindergarten. Respondents accompanied by class teachers were given digital comics already on their laptops with the help of LCD projectors. Respondents operate digital comics with the help of teachers and researchers. Based on the study's results, the average (3.99) was obtained, and the digital comic media developed was in a suitable category.

2. Operational trial (Classical test)

Operational (classical) product trial phase involving group B Batik Kindergarten children. Respondents in this class consisted of 15 children. Like the previous stage in this functional test, students were guided by teachers and researchers to learn. Then the child is asked to provide an assessment of the product. The results of the respondent's evaluation of the operational test are as follows:

Obtained the average value of the respondent's assessment (3.91). Based on the quantitative to qualitative data conversion table, the digital comic media developed is in a suitable category. In addition to the questionnaire, observations were made during the field test. Observation results in operational trials show that students are interested in learning to use digital comics. Based on the results of the interviews during the trial process, several children and the accompanying teacher said they were happy. This is because, in addition to learning life skills material and character formation, children also develop gross and fine motor skills. Children know computers (laptops) and learn to play with the keyboard with their fingers. In the same way, during the limited trial, the children said they liked playing digital comics and showed positive responses.

This section is the main section of the research article and is usually the most extended section. The research results presented in this section are “clean” results. Data analysis processes such as statistical

calculations and hypothesis testing need not be explained. Only the analysis results and the consequences of hypothesis testing need to be reported. Tables and graphs can be used to clarify the research results presentation verbally. Tables and charts should be commented on or discussed.

The discussion in the article aims to: (1) answer the formulation of the problem and research questions; (2) show how the findings were obtained; (3) interpret/interpret findings; (4) link the results of research findings with an established knowledge structure; and (5) generating new theories or modifying existing theories. The following is how to write the organizational format, which shows how to write specific things that cannot be separated from an article.

CONCLUSION

The material expert's assessment was 3.87, and the media expert's review was 4.2, included in the excellent category. At the same time, student assessments in the limited field test stage (3.88), more comprehensive field test (3.99), and operational test (3.91) in the field test stage are included in the excellent category. Thus, the digital media comics developed can increase students' motivation and interest in learning life skills, helping to activate students physically and emotionally and facilitating learning. Based on these conclusions, then recommended to kindergarten teachers that to improve early childhood life skills in education, they can apply digital comic media as a fundamental consideration that learning using digital comics can enhance early childhood life skills.

REFERENCES

- Anggreni, M. A. (2017). Kompetensi Guru Paud di Kelurahan Balas Klumprik dalam Mengembangkan Perangkat Pembelajaran. *Buana Pendidikan: Jurnal Fakultas Keguruan dan Ilmu Pendidikan Unipa Surabaya*, 13(23), 28-40.
- Ahmad, Rivai and Sujana, Nana. (2011). *Learning Media* . Bandung: Light New.
- Borg & Gall. (2007). *Education Research*. New York: Allyn and Bacon.
- Darmawan D. (2012). *Information and Communication Technology Education* . Bandung: PT. Rosdakarya youth.
- Eko Putro, Widoyoko. (2009). *Evaluation of Learning Programs: A Practical Guide for Educators and Prospective Educators*. Yogyakarta: Student Libraries.
- Hibana, S Rahman. (2002). *Basic Concepts of Early Childhood Education*. Yogyakarta: PGTKI Pres.
- Listyowati, A. (2018). Perkuliahan Berbasis Literasi Pada Mata Kuliah Kreativitas Dan Keberbakatan Di Angkatan 2016 Pg Paud Universitas PGRI Adi Buana Surabaya. *Buana Pendidikan: Jurnal Fakultas Keguruan dan Ilmu Pendidikan Unipa Surabaya*, 14(25), 14-20.
- Lysus Firdaus. (2006). Comics as a Media for Learning Arabic. *Journal of Al-'Arabiyah Vol 3 (No. 1 July 2006)* . Accessed from digilib.uin-suka.ac.id/view/subjects/jur=5Farbyh.html on 2 March 2015 at 17.00 WIB.
- Mahrsi, Indira. (2011) . *Comics: A Creative World Without Limits* . Yogyakarta: A NEW WORD
- Moeslichatoen, (2004) *Teaching Methods in Kindergarten* . Jakarta: Rineka Cipta
- Riska Dwi N and M Syaichudin. (2010). Development of Mathematical Learning Comic Media to Increase Understanding of Forms of Fractional Chapter Story Problems in Class V Students of SDN

Ngembung. Journal of Educational Technology
http://fip.unesa.ac.id/jurnal//TECHNOLOGY_DEVELOPMENT-media-komik-pembelajar-matematika for-meningkatkan-pemahaman-formasi-soal-cerita-bab-kapalan-padasiswa-class-v-sdn-ngembung. html// Retrieved February 23, 2016 at 10:42.

Sa'dun Akbar & Hadi Sriwiyana. (2011). Curriculum Development and Social Science Learning . Yogyakarta: Cipta Media.

Sukiman. (2012). Learning Media Development . Yogyakarta: Pedagogy.

Suhartono, S. (2015). pengembangan media poster digital terhadap hasil belajar mata pelajaran ips materi konektivitas antar-ruang dan waktu pada siswa kelas VII SMP Yos Sudarso Sidoarjo: poster digital media, learning outcomers, IPS. Buana Pendidikan: Jurnal Fakultas Keguruan dan Ilmu Pendidikan Unipa Surabaya, 11(21).