

## CHAPTER FIVE

### DISCUSSION, RECOMMENDATION AND CONCLUSION

#### 5.1 Introduction

The final chapter of this research summarizes the finding and provides a recommendation to improve the digital comic. As mentioned before, this research determines the usability of a digital comic. Then, section 5.2 discusses the findings from the study, while section 5.3 explains the contributions and implications of the study, followed by the study's limitations in section 5.4. Lastly, in section 5.5, the avenue for future research will also be recommended if other researchers want to extend the research. Hence, this chapter concludes the overall study regarding the objectives, findings, research conclusion, and recommendations for future study.

#### 5.2 Key Finding of The Study

##### 5.2.1 Suitable framework for developing digital comic of Form 5 Al-Quran and Sunnah Education subject

To identify suitable framework for developing digital comic, the researcher used literature review. Based on the study obtained, the researcher has chosen a theoretical

framework proposed by Ekram & Zaffwan (2016) based on the combination of Cognitive Theory of Multimedia Learning Mayer (2001), A.D.D.I.E model, McCloud's (1993) Principle of Comic and Flipbook pro to develop digital comic of Form Five Al-Quran and Al-Sunnah Education subject.

This theoretical framework is parallel with the previous study by Abdul Murad (2013). He developed a theoretical framework to produce digital comic storytelling based on the subject of Malay Language for Special Needs classes. He adapted the A.D.D.I.E model supported by John Dewey's Constructivist Theory concepts of Mastery Learning (1933) and Thematic Approach. Besides that, a study from Ekram & Zaffran (2016) developed a theoretical framework and methodology for the development of motion comics on the subject of History, which is based on the combination of Cognitive Theory of Multimedia Learning Mayer (2001), A.D.D.I.E model, McCloud's (1993) Principle of Comic and Infinite Canvas by McCloud (2000).

Moreover, Kristiani & Wardani (2017) proposed a theoretical framework and methodology for the development of interactive comic media for Mathematics subject focusing on fractional material for class 5 SD, which referred to the adoption of Jerome Bruner's (1967) Discovery Learning, Research and Development (R & D) and Sugiyono's Theory (2006).

## **5.2.2 Steps to develop the digital comic of Form 5 Al-Quran and Sunnah Education**

### **Subject**

The availability of innovative learning media in schools was still limited, especially in the subject of the PQS. Therefore, the development of digital comic media on the topic of Pengajian Hadith for Form 5 Ibnu Rusyd students of SMA Al-Ihsan in this research was suitable for use in learning by following the A.D.D.I.E model procedure. The A.D.D.I.E model used was a learning model that can improve student learning outcomes (Cahyadi, 2019; Ulum et al., 2020). A.D.D.I.E has five phases consisting of analysis, design, development, implementation, and evaluation and breakdown into three stages. These phases were explained as follows.

The analysis phase includes several stages: analysis of needs, which includes identified problems, students' needs and analyzed digital comic maker tools, such as hardware and software applications. The planning of digital comic media on the design phase was started from determining the material developed in a digital comic designed by drawing and sketching the comic manually first. This was followed with an image scanned process, continued with the process of a colored comic using Adobe Photoshop. It was then digitized using the Flipbook pro application and lastly designed the questionnaire for students. The development phase was the realization stage of the design phase.

The development phase was carried out in several stages such as making the media for both applications that was finally joined into digital, making the interface, testing process to test whether the application will run properly and get the validation made by media expert and teacher to get input, suggestions and revision for improving the digital

comic. After the validation was done, the implementation phase was carried out through the WhatsApp group of among 33 Form 5 Ibnu Rusyd students of SMA Al-Ihsan during their online learning to test the usability of the digital comic to meet user needs. Lastly, the evaluation phase was carried out to improve the result of the development product. Improvements are made starting from the development phase based on criticism and suggestions from experts and improvements from the implementation phase based on criticism and suggestions from students' responses.

However, various studies used the A.D.D.I.E model to develop digital comics. For example, based on a previous study, Kadek & Citra (2021) developed a learning media on socio-cultural diversity in digital comics. The model used was the A.D.D.I.E (Analyse, Design, Development, Implementation, Evaluation) model. Moreover, research by Adnyani et al. (2021) applied the research and development (R&D) method using the ADDIE development model with the following stages: (1) Analyse, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation (Tegeh & Kirna, 2013).

Furthermore, Suri et al. (2020) used the development research method through the A.D.D.I.E model covering five stages: analysis, planning, development, implementation, and evaluation. However, this research is only in the development stage because the goal is only to make android-based e-comic products. Moreover, a study by Bonita et al. (2020) used the method of developing digital comic learning media using the A.D.D.I.E method (Analyse, Design, Development, Implementation, and Evaluation) for APHP (1st grade student in Agribusiness Processing of Agricultural Products Major) SMKN 1 Sukaluyu.

Therefore, the data from the implementation of digital comic media in online learning is in the form of descriptive-qualitative data.

Moreover, a study by Neni et al. (2020) explored how the feasibility of science comics is developed in fourth grade science learning about animal diversity. This study used the research and development method based on the A.D.D.I.E development model (Analysis, Design, Development, Implementation, and Evaluation). This finding indicates that the science comics are feasible and can be used by students as a learning instruction.

### **5.2.3 Validation of the Digital Comic of Form 5 Al-Quran and Sunnah Education subject**

The development of digital comic of PQS has been validated by experts and students. The findings revealed the mean score of 3.27 by media expert and considered suitable to be used as learning media for the Form Five Al-Quran and Sunnah Education subject. The teacher's validation of the digital comic showed the mean score of 4.93 indicating strongly feasible. Moreover, the student's mean score of 4.39 highlight positive responses that the students agreed that this digital comic can used to facilitate their learning of the PQS subject. It is hope that thus digital comic can be used as an alternative for teachers to attract the student's attention and motivation in learning this subject.

Based on the data analysis and discussion above, it can be concluded that digital comic developed was suitable to be used in PQS learning. This can be seen from the assessment results by media experts and teachers who showed that digital comics are good,

deserve to be tested and used in the PQS learning process. Furthermore, based on student responses in questionnaires, digital comics received positive responses from students.

This result is consistent with a previous study by Promono (2020), whereby it shows that the digital comic based on the assessment of media experts obtained an average rating of 4.42. Based on the conversion guidelines Sukardjo (2012: 98), it has an average value of 4.42, which falls in the category of "Strongly Feasible". Meanwhile, student responses towards the digital comic as a media learning got an average rating of 3.92 from an ideal score of 5. Therefore, it proved that students were interested to learn English using a digital comic.

Besides that, prior studies from Laila Rossana et al. (2019) found that the feasibility test on the use of digital comic media obtained the following evaluation: media experts 93.6%, linguists 100%, material experts 93%, and practitioners 84.5%. Besides that, the results of limited trials showed positive responses from students by 85.20%. Therefore, the results of this study conclude that PBL-based digital comics are appropriate for use in accounting learning.

The result was also supported by Very Hendra & Donaya Pasha (2021), who found the percentage of validation test design experts and material experts based on digital comic developed was 81.667% and 83.571%. This shows that the media developed is suitable for use as learning media.

Another noteworthy finding by Ni Kadek & Citra Wibawa (2021) proved that the average validity score of digital comic media obtained from material experts is 4.80, while teachers have an average validation score of 5.7 with very good qualifications. Based on

the results of this analysis, it can be said that digital comic media developed on the topic of socio-cultural diversity are declared valid and suitable for use in student learning.

The next finding indicates that the science comics are feasible and can be used by students as a learning instruction. The result is parallel with research that has been conducted by Neni Hermita et al. (2021). Finally, based on the data obtained from the results of media validation on the display aspect, the overall total average rating score is 3.3, which falls in the "Valid" validity category.

Additionally, this finding also supports Bonita Firdiana (2020) that the average percentage of eligibility of digital comics from student respondents was 88.17%, falling in the category of "very feasible." Thus, based on the implementation of online learning and interviews, students are interested in using digital comics.

Therefore, these findings also support the results documented by Saputri & Qohar (2020), who obtained from the student's responses questionnaire result sheets with a percentage of 91%, which falls in the "Very Good" category. Therefore, based on the result, it can be said that the research has successfully produced a valid, practical and effective learning media.

Digital comics in learning can also raise student interest and participation in learning so that they are suitable to be used as learning media (Harismawan, 2020). Digital comics were chosen because they have advantages that are worthy of being used as a learning medium. First, digital comics can place human faces or funny characters on certain subjects through written and visual interactions, thereby creating emotional relationships between students and various characters in the comic story. Second, digital comics can be

applied to all subjects. Third, digital comics can attract students' attention regardless of age. Fourth, the content of digital comics is colorful, using a writing style that is not as complicated as the book (Hao et al., 2020; Kanti et al., 2018).

Referring to the results, discussion and previous research studies, it was concluded that the digital comic developed for the PQS subject on Pengajian Hadith was declared valid and suitable to support online learning in the digital era of the Covid-19 pandemic. This is evidenced by the positive response of the media expert validation result with a mean score of 3.27, the mean score of the teacher is 4.93 and 4.39 mean score of student's responses.

### **5.3 Contributions and Implications of The Study**

The digital comic developed by the researcher was used to measure the usability of digital comics on students' academic success. The students were Form 5 Ibnu Rusyd students of SMA Al-Ihsan, the lesson was a PQS subject, and the topic was "Pengajian Hadith." The students answered the questionnaires after using digital comics during their online learning, where the results were analysed using SPSS. Regarding the discussion, a digital comic on the topic of Pengajian Hadith developed was suitable as a learning medium for Form 5 Ibnu Rusyd students, which can be applied especially during the online learning process on this 2020-2021 pandemic year with more interesting and enjoyable way.

The contributions from the study are believed to help Form 5 Ibnu Rusyd students of SMA Al-Ihsan learn the PQS subject on the topic Pengajian Hadith with more interaction, relaxation, and fun. Therefore, this digital comic is different from the digital

comic developed previously because no one has developed a digital comic based on the PQS textbook. In the study of İlhan (2016), there are similar findings, such that students want the comics to be used in courses where they have learning difficulties or do not find fun. Hence, the digital comic is suitable for this course as a media learning.

With Covid-19, the duration of children's playing games started to change, where they started to spend more time at home during the distance education process. In the study, the participants stated that they started to play more at home. Another study by Mart and Kesicioğlu (2020) showed similar results. Their study mentioned that children play more and different types of games with their parents at home. Also, the statements of the participants signal the change in students' lives.

With distance education, the ways of spending time for students who spend more time at home have differed, compared to their formal education. To increase academic achievement, which is one of the main objectives of teaching activities, materials in education are recommended. Moreover, learning during this pandemic, teachers and students cannot interact well. Still, they must communicate with a remote system, making it difficult for students to understand the material provided by the teacher, especially material on PQS subjects. Most of the PQS subject topics are difficult for students to understand without an object that can be seen directly.

This study offers digital comic as an alternative teaching material to assist teachers in teaching and learning activities via conventional or online. The content of this digital comic media that has colorful cartoon images that can help to attract the students to read and understand the topic easily. The use of media in the learning process can motivate

student interest in improving student learning outcomes (Fitri et al., 2014; N. Hidayah & Ulva, 2017; Y. F. Hidayah et al., 2018). According to (Nafis 2016; Sukmanasa et al., 2017), digital comic media increased motivation, cognitive learning outcomes, and effective learning outcomes.

This digital comic can help students understand the topics presented as they can see the storyline of the content. Therefore, learning will be more effective than learning just by reading books. Moreover, this digital comic intended to help the visual learners through the use of visual literacy as visual images attract the attention of the readers (McVicker, 2018).

The Z-generation, or those born in the early 2000s, are those who were born at a period when technology was expanding so quickly and social media was just starting to emerge and grow in popularity. For Z-generation their world has become two realms of the world, namely the real world and the virtual world (Susilawati et al., 2021).

By using this digital comic as a learning tool and closely monitoring students are the best options for taking action. With the condition of easy access to information and knowledge through internet access among the Z-generation, digital comic can be the right platform to bridge the digital divide between learning process and digital technology for this Z generation.

Therefore, the development of learning media is expected to be able to provide a variety of learning resources for students and increase motivation in learning PQS subjects during the Covid-19 pandemic. One of the learning media that can be used to motivate students is learning media in the form of digital comics. In addition to that, another convenience of digital comics is the ease of access, because they can be read online via

cellphone or tablet anytime and anywhere, can be stored easily, and can be sent to various media sources (Hadhinoto & Oktavianti, 2020).

However, using this media can increase students' interest in learning because the material in this media is packaged into a story. This media also has different advantages from other media, such as moving backgrounds and interesting characters that have never been encountered in previous media. Referring to the need for using media that utilize the technology, teachers as educators are expected to be able to develop learning media that utilize technology to create interesting, fun learning and easier for students to learn. The use of digital comics in online independent learning has been proven to be effective in improving student learning outcomes.

#### **5.4 Limitation of The Study**

With this nowadays, education has been designed within the scope of online learning due to the Covid-19 pandemic ongoing, there are some limitations in this study. The first is that the researcher cannot do the observation to conduct field research, so it becomes an obstacle for the researcher to implement this study face-to-face with the students. Besides, including the sample size in this study is too minor, in which only one class of group consists of 24 students participated. Ideally, this study generally needs a bigger sample size by adding another participant group of classes to improve the level of accuracy. Besides, if the sample size is larger than 30, it is most appropriate for the study.

## **5.5 Suggestions for Future Research**

Hence, several recommendations were provided for future research. First, a larger sample can be included for secondary school students in developing digital comics to increase the level of accuracy of the study. This can be a necessity for future research to be able to expand again in taking samples.

Further research can be developed using different methods to comprehensively collect data, such as the ANNOVA model, Bergman & Moore (1990) model, etc. Considering this, it is necessary to make a comprehensive model for evaluating various educational applications to develop digital comics in education.

Besides that, further research can add other features such as animations and sound accompanied by interactive pictures and simple words that attract students' attention in this digital comic to make reading fun and easy to understand. This is parallel with digital comics that have a simple nature, presenting stories that contain messages that are easy to digest.

## **5.6 Conclusion**

This chapter conclude that the researcher was referred a theoretical framework proposed by Ekram & Zaffwan (2016) based on the combination of Cognitive Theory of Multimedia Learning Mayer (2001), A.D.D.I.E model, McCloud's (1993) Principle of Comic and Infinite Canvas by McCloud (2000) to develop digital comic of Form Five AlQuran and Al-Sunnah Education subject. Moreover, to develop the digital comic the

researcher was used A.D.D.I.E model procedure which consisted analysis phase, design phase, development phase, implementation phase and evaluation phase. The result showed that the usability of digital comic based on the student responses towards the digital comic obtained a mean score of 4.15 out of 5.00 which is concluded the digital comic developed for the PQS subject on Pengajian Hadith has been validated and suitable to facilitate the online learning activities in the physical classroom and especially during pandemic or natural disaster.

