THE CONCEPT OF DIGITAL COMIC INTEGRATING ECOLOGICAL VALUES AS THE HISTORICAL LEARNING MEDIA INNOVATION

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ABSTRACT

This research focuses on the study of digital comic media concepts in integrating ecological values as historical learning media innovations in the 21st century. The use of digital comics can be implemented in historical learning, so that it can provide a new atmosphere in learning history. The method used is the study of literature on theories and literature related to semiotic intelligence, ecological theory, and learning theories. The findings in this study explain that the concept of digital comic media does not only contain plots, storyboards, narratives, and characters in it, but about environmental images that show a symbol full of meaning that integrates ecological values on the importance of preserving the environment. The application of comic media in the classroom is not merely described through printed forms, but through digital access so students can independently access digital comics and more closely read and capture messages in comic stories.

KEYWORDS: digital comics, ecological values, history learning, innovative media.

INTRODUCTION

Comic is an entertainment medium that is popular with its wider community. The position can be aligned with various other entertainment media such as TV, film, or cinema. The readers are not only the children but also various groups of people because comics can communicate the information popularly that makes them easy to understand (Waluyanto, 2005: 51). Comic has the power to combine images with writing in which Scott McCloud states that it has images and symbols that are juxtaposed (contiguous or close together) to convey information so that it reaches the aesthetic response of the reader (McCloud, 2011: 9). Comic has the power to convey messages and values that can give the benefits for the readers' lives. In this modern era, comic is designed as attractive as possible by prioritizing the emerging topics, especially on environmental damage problems.

The issue of environmental damage needs to be considered as a problem that must be resolved immediately. The development of industrialization in Indonesia triggered the pollution rivers due to the waste produced by factories. It has the implications in the increasing number of natural disasters phenomena and epidemics caused by human attitudes. Human damage due to human behavior itself illustrates the lack of human concern for its environment (Rini, et.al, 2017: 138). Human concern for their environment can be interpreted by their behavior to maintain and preserve their environment. The concern is based on the awareness that every human have the implications not only for humans, but also the environment in which it is ecological intelligence (Supriatna, 2016: 24). Ecological

intelligence needs to be instilled through various ways for each individual using both media around humans and education since the goal of education is to change the human behavior.

Education is inseparable from learning process since it becomes an access to make the people know what they do not know. Through learning, education becomes more directed. In educational framework, ecological intelligence can be developed through historical learning using the Ecopedagogy approach. Ecopedagogy has a historical dimension that relates to the humans' positions as the actors of history; moreover, they are always related to the environment and other living things (Supriatna, 2016: 79). History subject is the subject that is in accordance with the environment by providing case studies from the past as a form of meaningful learning. Through history subjects, students can view the phenomena in the past and take the lessons not to do the same thing in the future. Thus, the subject is considered as the right medium to foster the environmental awareness.

The reality of learning history in the schools is still constrained since it is still considered boring and less attractive subject to students (Sayono, 2013: 9). Due to this fact, the role of teachers is encouraged to create the innovation in conducting the learning activities. Various learning media can be used to create fun and exciting learning. Various media can be done by the teachers even though they must choose the media that is still rarely used. As a result, the students' curiosity will be fostered students which later becomes a stimulus in learning. The medium of comic is one of the learning media that is still rarely used though it becomes a new innovation in learning process (Saputro, 2015: 2).

The reality in the field provides a few more description of the comic medium that is still rarely used by the teachers as a learning media. Therefore, the authors are interested in examining the concept of using digital comics as a medium that can be implemented in learning, especially in historical learning to foster students' ecological intelligence.

METHODOLOGY

This research used library research or library research. Library research utilizes library resources to obtain the research data. It us more than the field research that only uses the literature as an initial introduction to obtain the data in the field. Broadly speaking, library research limits the research activities since it only carries out the library collections without conducting field research (Zed, 2004: 2). Furthermore, library research must pay attention to the stages in researching the literature, methods in collecting library data, reading and processing library materials, and preparing media or other equipment in collecting data. The stages are used to facilitate the researchers in obtaining the data. (Khatibah, 2011: 38).

RESULT AND DISCUSSION

Early Development of Comics in Indonesia

Comics are media that can be a means of human communication in daily life. Humans are the creatures that need the interaction viewed through visual, audio, and audio-visual forms. Comics

exist as a communication medium in a visual form (Pravitasari, et. Al, 2017: 2). The diversity of images and stories offered in comics makes it useful as the medium for conveying diverse information or messages, one of which is a didactic message to ordinary people (Maharsi, 2011: 21). The early development of comics in Indonesia certainly results in the pros and cons in society. Many people think that comics give a message in the form of non-dramatic pornographic elements that do not educate. However, in other suburbs, comics have a positive role, namely a medium to develop people's habits to read. For children who drop out of school, comics are a vehicle for connecting Indonesian people to the written art (Bonneff, 1998: 99).

Comics have a long history since their inception in Indonesia. Comics in the Kompas issue have tried to describe ways in July 1971. Election of Religion Organizations use illustrated brochures to proclaim religious education. For madrasah purposes, PT. Melody published the story of the prominent role of Muslims in Indonesian society, as well as the development of the term "Syurga di telapak kaki ibu". This shows that comics have two functions, namely entertainment and educational functions (Bonneff, 1998:66-67).

The presence of comics with educational values, which is viewed from the history of previous comics, has undergone a change in stereotypes. Previously, comics were considered as 'poison' because the message was considered not to have educational value. However, at the present, comics are an educational media that can be used from kindergarten to college. The position of comics is recognized because it is able to provide value in the field of human education leading to mental, reasoning, and spiritual intelligence (Maharsi, 2011:22).

The development of comics is also influenced by the globalization. Advances in technology and information are driving the development of comics even in Indonesia. The first digital comic appeared in the 1980s with titles is Silhouette Software Redhawk (1986) which mixed visual comic narratives with the gameplay mechanism of an adventure video game (Goodbrey, 2015:2). Its development then grew rapidly to become a popular form of webtoon comics today.

The Concept of Digital Comics with Ecopedagogy Approach in History Learning
As a focus for the field of education, teachers should be responsible for both good and bad education. In order to realize that education needs to become more advanced, teachers need to be held accountable for their jobs and need to attend training to learn skills to educate students. There are many areas of education in developing and poor countries where teachers need to step up to improve the quality of education they offer students.

Comic-based learning is the use of an alternative form of media in addition to traditional teaching techniques. Comic-based learning is an easy form of teaching for educators to use in the classroom. Digital comics are easy to read, fun for students to use, and attractive to young students. The designs of digital comics can be done using special software on computers. Comics can be designed by

teachers to contain information they want students to learn. Teachers take numerous images and put them in the form of a comic to display teaching materials to accompany traditional styles of teaching like lectures.

In the 2013 curriculum, environmental aspects become the particular concern since the principle of curriculum development has relevance to life's needs. Education should not separate students from their environment by developing curriculum based on the principle of the relevance of education to environmental needs. Hence, the students have the widest opportunity to study their environment as curriculum content and the opportunity to implement it in the society life (Kemendikbud, 2012:11-12).

Comics represent objects

Comics, cartoons and caricatures are interpretive and representative images that use symbols to convey a message quickly and succinctly, or an attitude towards certain people, situations, or events. Comics, cartoons and caricatures usually only reveal the essence of the message that must be conveyed and pour it into simple images, without details, using symbols, and characters that are easily recognized and understood quickly (Farthing, 2014: 2).

Furthermore, comics can be a means to preserve cultural heritage or historical heritage sites as visual communication media, means of promotion, and education about historical sites among the students (Soedarso, 2015: 505). The contribution of comic media in addition to being a useful medium increases students' interest in learning, but can also provide a unique visual form that can help students understand historical heritage sites both in terms of history and the shape of the building clearly.

Comics as an innovative media

Comics become a media innovative and effective because it can provide motivation and improve the quality of learning through visual communication that can be understood well by the students (Ambaryani & Airlanda, 2017: 20). Comics provide more encouragement to students' learning abilities. Not only the cognitive domains of students, but in the aspects of affective and psychomotor because students can represent ideas and unite information that is separated in juxtaposition picture and text on comics (Hamim, et. Al., 2016: 539).

Comics provide new experiences in modern learning in the classroom. Pleasant learning causes a positive response from students to grow which directly impacts on increasing interest in learning, activities following learning activities, which in turn have an impact on improving learning outcomes. Digital trends can encourage students to independently access comics as new learning media (Wahyuningsih, 2011: 108).

Environmental-themed comics can be applied through environmental learning in history. Environmental history learning emphasizes more on the human culture aspect consisting of behavioral aspects and environmental problems which are caused by human behavior itself. The role of historical learning as a medium for ecological approaches is as a roadmap to find the roots of actual environmental problems. The media that can be used are comics that provide realistic and interesting portrayals (Ahmad, 2013: 79-82).

Comics connects theory and practice

Tatalovic (2009: 12) argues that presenting digital comics with environmental content can show environmentally friendly images that are poured into realistic comic forms. Thus, it encourages the readers to feel directly and involved in the role of secret agents in carrying out the mission of preserving the environment. To create a comic that is appealing, artistic touch must be cast well by combining perspective and imagination in creating comics that have a place or environment theme since realistic images can encourage the readers to create real fantasies in their minds (McCloud, 2006: 175-176).

The concept of comics in history learning is not only about conveying theory into a visual form, but rather being a bridge between theory and practice for students. Comics describe environmental problems, both in terms of their history and their current development to students. Therefore, they can develop a critical sense that encourages the students to solve the actual problems about their environment directly (Silva, et. Al., 2017: 40).

Comic as the conveyor of information and knowledge

The application of comics in learning receives good responses from students. Farinella (2018: 3) in his survey showed that comics and text have the same quality in conveying knowledge. Meanwhile, comics are better in attracting interest and motivation in learning. The research conducted by Yuliana, et. Al (2017: 137) states that comic is one type of reading preferred by the students. Based on the results of a preliminary study conducted by Yuliana show that 86.36% of students enjoyed reading comics or illustrated stories. The data show that comic media can be used in learning process because the students can find new things in the learning process through comic media.

Comic is easy to understand

Supriyadi (2011:213) explains that based on teacher perceptions, a visualization of caricatures or cartoons is still difficult for the students to understand. Thus, the additional texts are required to make the students more understand the intent and message of what is delivered. Comics can be applied in learning, as stated by Barthes (1986: 9) that humans can analyze to read signs or symbols which are then interpreted and create interpretations. It can be concluded from Barthes' theory that students have the ability to analyze images that are contained in comics due to their the elements and symbols (Supriyadi, 2011:17). Based on the nature of comic learning media has a simple, clear, easy to understand by students (Novianti, 2010).

Based on a field study conducted by Alfiyani (2015: 2), the data obtained show that historical learning is a difficult subject to understand. The results of Alfiyani's research show that the application of comics as learning media is considered to be good because it meets the criteria (easy to understand), valid, practical, and effective. Applicatively, digital comics can use the ecopedagogy approach in raising the public awareness, especially the younger generation towards the environment. Comics can be implemented in the classroom to provide a new interpretation for students about the learning material that has been delivered and providing a good interpretation of the image of the environment (Bolton-Gary, 2012: 392).

Students can understand comics well with pictures and texts that are juxtaposed through individual semiotic abilities. there is a semiotic theory in understanding elements and elements in comics. In semiotics, sign can take the form of words, images, sounds, gestures, and objects (Barthes, 1970). Semiotics method basically operates on two levels of analysis. First, analysis of individual signs, such as type of sign, sign structure or mechanism, and meaning of individual signs; Second, the analysis of signs as a group or combination, which is a collection of signs - signs that make up what is called a text. Text in the simplest sense is "a combination of signs (Manurung & Amanda, 2010).

CONCLUSION

Comics are the beginning to experience development from time to time. They become the media of entertainment that tend to be negative until it is popular and educative. The development of educational comics also began to develop and became a medium that was implemented in schools. Comics have several conceptions as historical learning media in developing ecological intelligence, namely comics can be a media preferred by the students compared to text media. Comics provide more understanding and depiction that are practically used in learning, and comics act as a means of preserving cultural heritage and historical heritage site.

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