

The Effectiveness of the Use of Digital-Based Educational Comic Media in Improving Reading Interest in Elementary School Students

Anesa Surya^{1*}, Jenny Indrastoeti Siti Poerwanti¹, Muhammad Ismail Sriyanto¹

¹ Elementary Teacher Education, Sebelas Maret University *Jalan Brigjend Slamet Riyadi 449, Surakarta, Central Java, Indonesia 57146*

¹ anesasurya@staff.uns.ac.id

Abstract: This research aimed to obtain information about the effectiveness of digital-based educational comic media in improving reading interest of elementary school students. This research is a the experimental research with design the one group pretest posttest. The research subjects were the students of SDN Jogorogo 3 and SDN Talang, Ngawi Regency in the 2018/2019 academic year. The data collection techniques using questionnaires and data analysis techniques using t-test. This research discusses the increase in reading interest based on the N-Gain scale which is grouped into several indicators. The results showed effectiveness of the use of digital-based educational comic media in improving reading interest in elementary school students.

Keywords: *digital-based educational comics, reading interest, elementary school*

INTRODUCTION

In order to foster reading interest and improve students' reading skills, the government developed a School Literacy Movement (GLS) program, which is the ability to access, understand, and use things intelligently through various activities, including reading, seeing, listening, writing or speaking. Literacy emphasizes skills and all the potentials that exist in individuals in understanding to read words (*Depdiknas*, 2016). The Education Development Center (EDC) states that literacy is more than just reading and writing. The development of reading skills as a predictor of letters and vocabulary knowledge, as well as the requirements for literacy, is one of the most important academic assignments children do during their elementary school years (Mctigue, Solheim, Walgermo, Frijters, & Foldnes, 2019; Walgermo, Frijters, & Judith, 2018). Reading is considered the most important skill of the four language skills (Koch, 1974). Therefore, various aspects of reading have been investigated in recent years (Al-nafisah & Al-shorman, 2011). Reading interest itself is high desire or interest accompanied by one's efforts to carry out reading activities (Herlinyanto, 2015; Rahim, 2008).

Reading literacy skills in Indonesia are apprehensive. In 2011, the Progress in the International Reading Literacy Study (PIRLS) placed Indonesia in the 44th position out of 45 participating countries. In addition, the Programme for International Student Assessment (PISA) placed Indonesia in the 64th position out of 65 participating countries in 2012 (Aini, 2018; Martavia, Thahar, & Yasnur, 2016; Wahyuni, 2009). The survey results of the United Nations (UN) underbouw agency, UNESCO (United Nations Education Society and Cultural Organization), also found that the reading interest of Indonesian society was really low, even the lowest in Asia (Triatma, 2016). The Central Bureau of Statistics (BPS) in 2012 also stated that Indonesians prefer watching television with a percentage of 91.68% and listening to radio of 18.57% compared to reading newspapers, which is only around 17.66%. This proves that the reading interest of Indonesian students is very low, so that their reading skills are far below the average of international students.

We can overcome these problems by developing a learning media that can be used to increase students' reading interest. One of the learning media that can be used to overcome students' low reading interest is to present digital-based educational comic media in accordance with the characteristics of students. There is a research stating that out of 90 elementary school students in grade 1 - 3 surveyed, around 75 children like pictorial readings in the form of comics and picture stories such as Doraemon and Spongebob rather than just reading books that only contain text (Leonard, Artawan, & Anang, 2003). This is because comic is an interesting visual media containing funny and interrelated serial images that makes students feel unsaturated in reading.

Based on the description above, training for making digital-based educational comics for elementary school teachers is needed to motivate them in making simple reading through digital-based educational comics. This will help students in improving their reading interest.

METHOD

This research is the experimental research with design the one group pretest posttest. The population in this research were elementary school students in the Jogorogo District, Ngawi Regency, Central Java Province in the 2018/2019 academic year. The samples in this research were the students of SDN Jogorogo 3 and SDN Talang, Ngawi Regency, Central Java Province. The data collection technique used was the reasoning-skill questionnaires. The validity of reasoning-skill questionnaires uses content validity. Reasoning-skill questionnaire reliability using Cronbach Alpha. The data were analyzed using N-Gain. Before the research was carried out, the students were given a pre-test. After the action was taken, the teachers were given a post-test (Sugiyono, 2015).

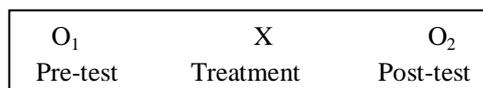


Figure 1. The research design is one-group pretest-posttest.

The data obtained in this research were quantitative data. The data were taken from the pre-test and post-test of reasoning of planes. Then, the data obtained were analyzed using N-Gain. The analysis was carried out with the following formula.

$$g = \frac{\text{Post-test score} - \text{pre-test score}}{\text{ideal score} - \text{Pre-test score}}$$

The value categories after calculated with N-Gain (Sugiyono, 2015) can be seen in Table 2 as follows:

Table 1. Normalized N-Gain

<g>	Categories
> 0.7	High
0.3 ≤ (<g>) ≤ 0.7	Medium
< 0.3	Low

RESULTS AND DISCUSSION

The results of the study discussed the effectiveness of using digital-based educational comic media to increase reading interest. The results of the N-Gain analysis can be seen in Table 2 as follows:

Table 2. Normalized N-Gain Sample

Sample	Mean Scores		<g>	Criteria
	Pre-test	Post-test		
1	36	79	0.67	Moderate
2	42	86	0.75	High
Overall	78	165	0.71	High

Based on Table 2, the criteria for the students' reading interest based on sample groups tend to be high due to the implementation of the use of digital-based educational comic media. The results can be seen from the N-gain value of sample 1 of 0.67 or in the medium category and the N-gain value of sample 2 of 0.75 or in the high category. Thus, it can be averaged that the N-gain value of students is 0.71 or in the high category. This increase was significant with the research of Unty and Deni (Purnama & Ardianto, 2015) that the implementation of digital comics could improve student achievement.

There are 5 indicators (Laksono, & Sukartiningsih, 2017; Shaleh & Wahab, 2004) in the questionnaire to find out students' reading interest. These indicators include: Concentration, Time Use, Reading Motivation, Reading Emotions, and Reading Efforts. The normalized N-Gains on the 5 indicators of reading interest are presented in Table 3 as follows.

Table 3. Normalized N-Gain

Indicators	Mean Scores		<g>	Criteria
	Pre-test	Post-test		
Concentration	54	88	0.73	High
Time Use	68	87	0.59	Moderate
Reading Motivation	58	93	0.88	High
Reading Emotion	72	90	0.64	Moderate
Reading Effort	68	89	0.6	Moderate

Based on the results of data analysis in Table 3, it is known that a significant increase occurred in the indicator of reading motivation equal to 0.88 or in the high category using the N-Gain method. The time use indicator also experienced a significant increase with N-Gain of 0.73 or in the high category. Meanwhile, other indicators are classified in the moderate category. Furthermore, the results of the N-Gain analysis can be seen in the diagram in Figure 2, as follows:

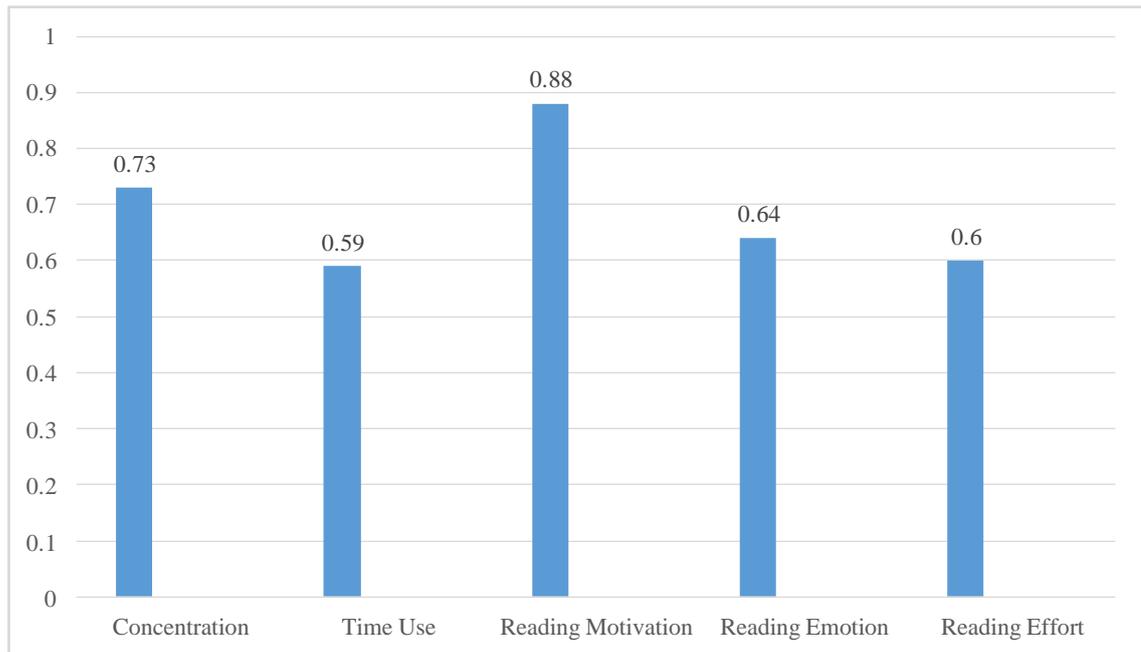


Figure 2. Categories of Reading Interest Indicators Based on N-Gain

Based on Table 2 and Figure 2, in the face of the fact that the use of digital-based educational comic media is effectively used to increase students' interest in reading. Comics can make teaching fun (Setiyani, 2019). The results of this study are also relevant to research conducted by Putri, Fida, & Wasis (2018), Putri et al. (2018) showing that the use of media digital comics (android) can increase the success of learning both math and science skills.

CONCLUSION

Based on the research findings, it can be concluded that there is effectiveness of the use of digital-based educational comic media in improving reading interest in elementary school students. The application of digital-based educational comic media in learning can improve students' reading interest. This is evidenced by the criteria for the N-gain value in the sample of elementary school students in the Jogorogo District, Ngawi that tend to be high after the application of digital-based educational comic media to learning. Therefore, it is recommended for educators to be able to apply digital-based educational comic media in learning activities. Thus, training to make digital-based educational comics for elementary school teachers is needed to motivate them to make simple reading through digital-based educational comics. This will help students in improving their reading interest. The results of this study can also be used as reference materials for developing digital-based educational comics media.

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