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Webtoon Comic Media to Improve Reading Comprehensions for Students with Hearing Impairment in Special Primary Schools

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A B S T R A C T S

Students with hearing impairment have difficulty understanding abstract words, so many students with hearing impairment have difficulty understanding the text they read. Therefore, an effort is needed to improve their reading comprehension skills through visual learning media, namely comic media. This study aimed to determine an increase in the reading comprehension ability of students with hearing impairment after using webtoon comic. The method used is an experimental method with a one group pre-test-post-test design. The data collection technique used a test by distributing a google form containing ten questions related to the story read. The sample consists of 5 students with hearing impairment. Based on the results of research, the use of webtoon comic media can improve reading comprehension skills, this can be seen from the increase in scores obtained by each student. The increase occurred because students with hearing impairment were helped to understand the sequence of stories through the webtoon comic they read. So, it can be concluded that the webtoon comic media can improve the reading comprehension ability of students with hearing impairment.

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1. INTRODUCTION

Students with hearing impairment are students who experience disturbances in their hearing organs resulting in hearing impairment, ranging from mild to very severe levels which are classified into deaf and hard of hearing (Hernawati, 2007). The direct impact of deafness is on the language aspect. They experience obstacles in understanding abstract words, so that their reading ability is very low. In essence, reading is a process of understanding the meaning contained in reading material. Understanding the reading means being able to capture the contents of the reading. By reading we can add information about what is happening in the world (Amna *et al.*, 2013). Reading is very important in learning because it is the basic capital for students to gain knowledge. Therefore, a learning media is needed that can help deaf children to understand the text they read.

The notion of media in the teaching and learning process tends to be interpreted as graphic, photographic, or electronic tools to capture, process, and rearrange visual or verbal information (Nofiaturrahmah, 2018). The use of comic media here is intended to make it easier for students to understand learning, in line with research on digital comic that can change real images with animated images (comic), so that children can see their learning experiences and all of this makes it easy for children to understand the material being studied, (Sarah, 2018).

There are studies related to improving the reading ability of deaf children. One of them is a study entitled "The Use of Comic Media in Improving Reading Comprehension Skills in Deaf Students in Class D3 SDLB-B Sukapura Bandung". Fajrin (2014) explained the results of his research that there is an effect of using comic media in improving the reading comprehension ability of deaf students, seen from the results of research on all samples which show an increase. This can be seen from the achievements in the indicators including 1) mentioning the title of the story, 2) explaining the events that occurred according to facts, 3) mentioning the place where the story takes place according to facts, 4) mentioning the messages contained in a story.

The second study on "The Effectiveness of Comic Media on Reading Comprehension in Grade IV Elementary School Students" conducted by Untari & Saputra (2016) showed an increase in students' reading comprehension, this can be seen from the average increase in the score to 81.33 after given comic media. Currently, there are many studies that discuss the use of comic as an effort to improve the reading ability of children with hearing impairment.

However, there is no research that webtoon comic media to improve reading comprehensions for students with hearing impairment in special primary schools. So that researchers are interested in using webtoon comic as a medium to improve reading comprehension skills for children with hearing impairment.

The purpose of this study was to determine the improvement in reading comprehension skills using webtoon comic for students with hearing impairment in Special Primary Schools. The method used is an experimental method with a one group pre-test post-test design. The result is that by comparing the results of the pre-test and post-test, there is a change in the reading comprehension of students with hearing impairment after being given the webtoon comic media treatment. This is because webtoon comics include visual media, visual media is very helpful for makes it easier to build children's perceptions so that every child has the same perception in each learning material (Cahyono, 2019).

2. THEORITICAL FRAMEWORK

2.1 Understanding Students with Hearing Impairment

Students with sensory hearing impairment are students who experience obstacles or disturbances in their hearing organs, resulting in hearing loss or impaired hearing. Hearing loss is a general term that indicates a hearing disability from mild to severe. These levels are classified as deaf and hard of hearing. A deaf person is someone who has a hearing disability that hinders the success of processing language information through his hearing with or without the use of a hearing aid. Whereas a deaf person is someone who usually uses a hearing aid, the residual hearing is quite possible for successful processing of language information. In other words, if the deaf person uses a hearing aid, he can still catch the conversation through his hearing (Hernawati, 2007). Based on the above opinion, it can be concluded that students with sensory hearing impairment are students who experience hearing loss/loss which is generally classified into deaf and hard of hearing. The disorder is caused by damage to some or all of his hearing organs, thus requiring special services in his education.

2.2 Reading Comprehension Ability

Reading comprehension is essentially a process of building an understanding of written discourse. This process occurs by matching or linking schemata of knowledge and experience that have been previously possessed with the content of information in the discourse so that an understanding of the discourse that is read is formed. In this reading process, readers use several types of understanding, namely literal understanding, interpretive understanding, critical understanding, and creative understanding somadayo in (Amna *et al.*, 2013).

a. Literal Understanding

The first level of reading comprehension is literal comprehension. This understanding is obtained by understanding the meaning of words, sentences, and paragraphs in the reading. Literal reading ability is the ability of the reader to recognize and capture the contents of the reading that are explicitly stated. That is, the reader only captures information that is literally printed (appears clearly) in the reading. In this literal understanding, there is no deepening of understanding of the contents of the reading.

Literal understanding is an understanding that is focused on the parts that are directly written in the reading, so that in its implementation it does not require high-level thinking skills. Questions that are suitable for this level of understanding include questions that use the question words what, who, where, when, how, and why. The elements in literacy reading skills according are as follows: (a) Word recognition skills, (b) Sentence recognition skills, (c) Paragraph recognition skills, (d) Ability to recognize elements of detail, (e) Ability to recognize elements of sequence, (f) Ability to answer the questions who, what, when, and where, (g)The skill of restating elements of sequence.

b. Understanding Interpretation

The level of reading comprehension after literal comprehension is interpretive comprehension. Understanding this interpretation is more profound than literal understanding. Reading interpretation is reading between lines to create interference. Reading interpretation is a process of tracking ideas conveyed indirectly. Reading interpretation includes: making conclusions, for example about the main idea of the reading,

causal relationships, as well as analysis such as finding the author's purpose in writing the text, summarizing the contents of the reading and interpreting figurative language.

c. Critical Understanding

In critical reading, a reader is not only able to understand the literal content of the reading and interpretation, the reader is also able to understand the content of the reading critically, meaning that the reader is required to analyze or examine in depth and evaluate the content of the text he reads.

d. Creative Understanding

The last level of reading is creative comprehension. Creative reading ability is the highest level of a person's reading ability. That is, the reader not only grasps the explicit meaning, the meaning between the lines, and the meaning behind the lines, but is also able to creatively apply the reading results for their daily interests.

2.3 Comic Learning Media

The term media comes from the Latin medius which means middle, intermediary, or introduction. According to AECT (Association of Education and Communication Technology) quoted by basyaruddin in (Sarah, 2018) "media are all forms used for the process of distributing information." Meanwhile, another understanding of media is any tool that can be used as a channel for messages to achieve learning objectives.

Learning or the phrase that is better known before "teaching" is an effort to teach students. learning is a combination composed of human elements, materials, facilities, equipment and procedures that influence the achievement of learning objectives. Meanwhile, according to the Big Indonesian Dictionary, learning is a process, method, action that makes people or living things learn hamalik in (Fajrin, 2017).

Based on the previous definition, it can be concluded that learning media are media that can be used in the learning process, as well as a means of carrying messages from learning sources to recipients of learning messages (students), so that they can help teachers convey material to their students and achieve learning objectives.

The types of learning media into four parts asyhar in (Sarah, 2018), namely (1) visual media, (2) audio media, (3) audio-visual media, (4) and multimedia. Broadly speaking, visual media can be divided into two components, namely non-projected and projected visual media. Nonprojector visual media include pictures, tables, graphics, posters, and cardboard. The visual media can translate abstract ideas into a realistic format, from verbal symbols into concrete forms. Meanwhile, projected visual media include cameras, OHP, Slides, digital images (CDRoom, photo CD, DVD-Rom and computer diskettes), and digital projection images designed for use with graphic presentation software such as liquid crystal display projection panels. (LCD) that the computer connects to the display. Comic is a combination of image and language. Reviews of the structure of comic cannot be separated from these two aspects. The two aspects complement each other, strengthen and explain (Untari & Saputra, 2016). The comic are one of the non-projected visual learning media because comic are a sequence of images that explain an event in a concrete form.

3. METHODS

This research is using experimental method. The data collection technique used pre-test and post-test with google form. The pre-test contains 10 multiple choice questions given to students before reading the webtoon comic media. It aims to determine the students' initial reading comprehension ability. After that, students were asked to read the webtoon comic that had been provided and fill in the post-test questions which contained 10 multiple choice questions. The results of the pre-test and post-test will be compared to determine if there is a change in students' reading comprehension ability by making success criteria.

This research was conducted in special primary school in Bandung, Indonesia. The name of the school Cinta Asih Special Primary School. The first step in this research is to determine the population and sample by interviewing the classroom teacher, there are 8 students with hearing impairments in this school. The sample needed is students with hearing impairment grades 4-6 who have low reading comprehension skills and obtained 5 people consisting of 3 male and 2 female.

4. RESULTS AND DISCUSSION

4.1. Demography

This research was conducted at the Special Primary School. This school has a variety of students with special needs. However, in this study only focused on deaf students. the population is 8 and the sample of deaf students in grades 4-6 is five students. percentage of boys 60% and girls 40%. Based on the results of teacher interviews, student objective state: 2 male students can read sentences. but one male student is still at the stage of reading syllables. 2 female students reading ability is still at the syllable stage. The reading comprehension ability of the five students is still low, students only pronounce the words they read.

4.2. Phenomena in the Learning Process

In the learning process, children with hearing impairments are very different. They find it difficult to communicate and understand abstract words. Therefore, learning strategies are needed that are tailored to students' abilities, namely by optimizing their visuals. The stages of learning carried out are as follows:

- (i) In the first session, the teacher prepared a google meet to help guide students.
- (ii) In the second session, the teacher explained how to fill in the pretest with sign language.
- (iii) In the third session, the teacher gave a webtoon comic media treatment by displaying it on google meet. After that, the students were guided to work on the post-test questions.
- (iv) The last is the evaluation stage, which is processing the results of the pre-test and posttest.

4.3. Pre-Test and Post-Test Result

Pre-test and post-test were given to students via google form. **Table 1** describes the number of students who answered correctly the questions in the pre-test and post-test activities. The number of pre-test and post-test questions given is the same, namely 10 multiple choice questions. **Table 2** shows the score of each student at the pre-test and posttest. The value of each correct question is one. after that the scores are compared to determine the gain. This gain is used as a standard in determining the success of the given treatment. Gain has a range of values for setting criteria. high criteria are obtained if n-gain > 0.70, average criteria are obtained if 0.70 > n-gain 0.30, and low criteria are obtained if n-gain < 0.30. There are several points from **Table 1** these results:

- (i) The result of question number one explained that in the pre-test there was only one student who answered the title of the story incorrectly but after the post-test all students could answer correctly.
- (ii) The results of question number two explained that all students in the pre-test and posttest could answer correctly about the place where the teacher and pupus met in the story.
- (iii) The results of question number three explained that in the pre-test there were three people who answered correctly about the reason the teacher came to Pupus's house. but after the post-test all students can answer correctly.
- (iv) The results of question number four explained that in the pre-test there was only one student who answered incorrectly about the reason pupus did not want to go to school. but after the post-test all students can answer correctly.
- (v) The results of question number five explained that in the pre-test there were three people who answered correctly about how pupus's teacher persuaded pupus to go to school. but after the post-test all students can answer correctly.
- (vi) The results of question number six explained that in the pre-test there were three people who answered correctly but after the post-test all students can answer correctly.
- (vii) The results of question number seven explained that in the pre-test there were two people who answered correctly about the message contained in the story but after the post-test all students can answer correctly.
- (viii) The results of question number eight explained that in the pre-test there were two people who answered correctly about the order of the stories but after the post-test all students can answer correctly.
- (ix) The results of question number nine explained that in the pre-test there were 4 people who answered correctly about the correct sentences according to the story, but after the post-test all students could answer correctly.
- (x) The result of question number ten explain that all students can answer correctly on the pre-test and post-test.

No.	Question	Pre-Test	Post-Test
1.	What is the title of that story?	4	5
2.	Where did the teacher meet pupus?	5	5
3.	Why did the teacher come to Pupus's house?	3	5
4.	Why does pupus not want to go to school?	4	5
5.	How did the teacher persuade Pupus to go to school?	3	5
6.	Did Pupus forgive the teacher?	3	5
7.	What is the message of the story?	2	5
8.	Which is the correct order of the story below!	2	5
9.	Which sentence is correct according to the story?	4	5
10.	Who likes to keep grandma's shop?	5	5

Table 1. Table of pre-test and post-test results.

Table 2. Result of pre-test and post-test scores of each student.

Student's name	Pre-Test	Post-Test	N-Gain	Criteria
Student 1	6	10	1	High
Student 2	9	10	1	High
Student 3	9	10	1	High
Student 4	7	10	1	High
Student 5	4	10	1	High

Based on the results obtained, it can be seen that all students experienced an increase in answering the pre-test and post-test questions. Especially on questions that are implicit in nature such as number 7 and number 8, this happens because the webtoon comic media helps students understand the sequence of events that occur in the stories they read, thus forming a complete understanding. This can be seen from the statement that the webtoon comic media can help understand the story given. This study shows the same results as the previous study "Effectiveness of Comic Media on Reading Comprehension Skills of Grade IV Elementary School Students" which resulted in an increase in students' reading comprehension, this can be seen from the average increase in grades to 81.33 after being given comic media (Untari & Saputra, 2016).

5. CONCLUSION

The conclusion of this study is that the use of webtoon comic can improve the reading comprehension ability of students with hearing impairment. The results showed that there was an increase in scores when students were given comic media treatment.

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7. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

8. REFERENCES

- Amna, P., Azwandi, Y., and Yunus, M. (2013). Meningkatkan kemampuan membaca pemahaman pada siswa tunarungu dengan menggunakan teknik skimming. *Jurnal Ilmiah Pendidikan Khusus*, *2*(3), 854-862.
- Cahyono, G. (2019). Perencanaan pembelajaran PAI berbasis media visual bagi anak tunarungu. *Journal of Islamic Education*, 2(1), 81-98.
- Fajrin, S.A. (2014). Pengunaan media komik dalam meningkatkan kemampuan membaca pemahaman pada siswa tunarungu Kelas 3 Sdlb-B Sukapura Bandung. *JASSI_Anakku*, *18*(2), 63-69.
- Hernawati, T. (2007). Pengembangan kemampuan berbahasa dan berbicara Anak Tunarungu. JASSI Anakku, 7(1), 101-110.
- Nofiaturrahmah, F. (2018). Problematika anak tunarungu dan cara mengatasinya. *Journal of Empirical Research in Islamic Education*, *6*(1), 1-15.

- Sarah, E. S. (2018). Pengembangan media komik elektronik untuk meningkatkan pemahaman konservasi kelautan anak usia dini. *Jurnal Pendidikan Usia Dini*, *12*(2), 231-240.
- Untari, M.F.A, and Saputra, A.A. (2016). Keefektifan media komik terhadap kemampuan membaca pemahaman pada siswa kelas IV SD. *Mimbar Sekolah Dasar*, *3*(1), 29-39.