Abstract

The rise of technology has influenced the education field much. It creates the popularity of online material which can help students in the teaching and learning process. One of it is a web comic, a comic or cartoon published on the internet for everyone to view can be a unique gateway medium to explore visual narrative or story. It is one of the online materials which can attract students especially teenager to read and comprehend the message without feeling bored and realize that they study English. This study aimed to find out whether using Islamic Web Comics is effective in teaching English especially reading comprehension at Islamic secondary school in the Indonesian context. This study is a quasi-experimental with pretest and posttest design; two homogenous groups were selected as experimental and control group. Descriptive analysis and Independent t-test were used for analyzing the data obtained. The result showed that the mean score of the post-test score of the experimental class was 70.88 and control class was 64.69. It was obtained that t-test result was 2.26 higher (2.26 > 1.99). It means Islamic Web Comics as visual aid was more effective in teaching English especially reading comprehensions than animated video presentation.

Keywords: Reading Comprehension, Islamic Web Comics, visual teaching aid.

Abstrak

Kemajuan teknologi telah banyak mempengaruhi bidang pendidikan. Ini menciptakan popularitas materi online yang dapat membantu siswa dalam proses belajar mengajar. Salah satunya adalah webcomic, komik atau kartun yang diterbitkan di internet untuk dilihat semua orang dan bisa menjadi media gateway unik untuk menjelajahi narasi atau cerita visual. Ini adalah salah satu materi online yang dapat


Introduction

Reading can be defined as perceiving a written text in order to understand its content. The text is a piece of naturally occurring of spoken and written record identified for purposes or definable communicative function. Text comprehension is related to reading skill, as reading is one of the important skills is broadening the reader’s perspective, and giving them a chance to see the world ad opportunities. Reading comprehension means understanding the meaning of various kinds of text by identifying the factual information, main idea, supporting detail, purpose, words meaning, cohesion device and reference.

Knowing the fact that English is used in larger field and sciences also informed mostly in the form of written and printed text using English, people need to have the ability to read well as the responsibility of their passion. That is why mastery reading skill is very important. Many teaching and learning methods have been used on the teaching and learning activities, but there are many students encountered difficulty in reading skill. The poor comprehend of students because they are lack of fluency in lower order processes. Because of that, the teacher needs to master factors such as students, materials, teaching media, technique, and method of teaching. All of these can help the students learn more enjoyable. Sometimes students assume reading is not interesting activity. It is just a matter of wasting time. As the result, they got nothing in the process.

In this era, using technology in education isn’t new. The challenge for our education system is to leverage technology to create relevant learning experiences that mirror students’ daily and the reality of their future. We live in highly mobile, almost the students have gadget for their daily life even they have a lot of applications in their gadget. Some study has investigated the use of online material and website. Yunus et al. on their study found that many teachers had a positive perception on the use of digital comics and thought that it had many advantages in encouraging students to learn.\(^2\) Another study from Lazarinis et al. who evaluate some comics’ creator tools in developing e-comics for creating teaching material\(^3\). At this time, Students have grown up with and become accustomed to interacting with the visual stimulation of television, computers, and video games. This situation creates positive possibilities for technology to be used effectively as part of the process of gaining learning experience.\(^4\) Considering the important of teaching reading comprehension, as the teacher must more innovative and creative in creating teaching media so the students also can use their gadget more useful and now there is so much applications/media that can use as media in the teaching-learning process.

One of the media technologies that can be used in the learning process is digital comics. The digital comic is revolved around the idea of transforming the art of telling stories into digital images. One form of a digital comic is Web Comics. Web Comic is comic which is transposed onto the internet.\(^5\) Web Comics are comics and cartoons published on the World Wide Web for everyone to view and comics as a unique gateway medium to explore visual narrative.\(^6\) Because comics are such an image-driven medium, drawing is often the skill most emphasized. While using digitized and Web Comics in the classroom is a new challenge for today’s educators because by the nature of teaching media such as text and images combine with the strengths of computer technology and the internet.

Web Comics can help readers to get the right visualizations and use technology especially the student’s gadget more useful. Marianthi et al said that


reading *e-comic* (Electronic-Comic/Web Comics) from the internet freely will help students analyze various different kind of information provided and also help them to have better comprehension. From this activity they will analyze further about every piece of information that they get and want to communicate to others- words or pictures.\(^7\) Web Comics can increase the students’ ability of reading comprehension. Multimedia as the utilization of word and picture as in web comics is found to have a positive effect in comprehension of a text.

Another digital media used in teaching reading is Animated Video Presentation. In general, the animation is defined as the pictures that appear and can move. An animated video is one in which drawings or cartoon appear to move. Khalidiyah defined animated film as a quick display of a sequence of static images that create the illusion of motion, while Presentation is the combination of text and pictures to present a certain topic.\(^8\) Video Presentation is a combination of words or phrases and pictures to make a film or a short and simple presentation. From the statement above, it can be concluded that the Animated Video Presentation is the combination of word or phrases and a moving picture which transposed into the video to make a short film and simple presentation.

Animated Video Presentation used in this study is made by Powtoon. The *powtoon* application is almost the same as Powerpoint, the common application in our ears. Presenting picture and text simultaneously may result for stronger encoding when information is processed through both visual and verbal channel instead of only one channel. Children recall of the story improves when the narration is accompanied by an illustration. While the writer, Shiu, and Chow showed about the advantages that they are useful for learning. They also said that *Powtoons* are more effective in promoting some student learning outcomes over others, suggests lengthening and enriching of the content of those *Powtoons* with difficult topics to enhance students’ understanding.\(^9\)

It can be concluded that teaching aids have several functions as a tool to deliver knowledge, create a conducive situation of learning, and enhance the students’ psychological mood to join the learning activities. Teaching aids should be able to cover the components of reading which include vocabulary, 


grammar, punctuation, and the way construct sentences, paragraph, and texts. Media used in teaching reading would not be effective if they are not interesting and attractive. It would be hoped that it can motivate students to read and pay attention to the material. It would create a fun learning in English. Therefore this study is interested in finding out whether using Islamic Web Comics is effective in teaching English especially reading comprehension at Islamic secondary school in the Indonesian context.

**Theoretical Review**

Reading is a conscious and unconscious thinking process. The reader applies many strategies to reconstruct the meaning that the author is assumed to have intended. The reader does this by comparing information in the text to his or her background knowledge and prior experience. Reading is a highly strategic process during which readers are constantly constructing meaning using a variety of strategies, such as activating background knowledge, monitoring and clarifying, making predictions, drawing inferences, asking questions and Summarizing. Strategies are used in combination to solve problems, to think about text and to check understanding, an active attempt on the part of the reader to understand a writer’s message.\(^\text{10}\)

From that definition, reading can be regarded as a complex process, means to get information from the printed page, it is receiving ideas and impression from the author via printed page. It can be said that reading is interpreting sign, letters, or symbols by taking meaning. In other words, reading is interpreting graphic symbols, which involves an interaction between the writer and the reader through the text. In a very short and proper definition, reading is an interaction between a reader and the text.

Teaching reading comprehension can be more meaningful by applying media or teaching aid. A teaching aid is a tool used by teachers, facilitators, or tutors to help learners improve their reading skill, comprehend the text, analyze the fact, or idea, and relieve the psychological problem in learning like anxiety, fears, or boredom since many teaching aids are interesting, enjoyable and fun. Harmer said that “As language teachers, we use a variety of teaching aids to explain language meaning and construction, engage students in a topic or as the basis of whole activity”.\(^\text{11}\)


Transferring knowledge and education not only needs intellectual skill and subject knowledge but also the teacher should ensure that the content matter is understandable by the student in a simple and easy manner yet in a short time. Teaching Aids are therefore used to enhance learning skills in a systematic manner and retaining them in the mind of learners for a longer time duration. It can be anything that a trainer or a teacher uses to assist in teaching process; it can be a device, object, equipment, machine illustration, simulator or other items that improve the teaching or learning process.

Kinds of teaching aid are many. It can be visual, audio or combination both audio and visual. The easiest and popular one is visual aid and one of them is comic. Comics are Literature that is a thin booklet composed of paper, bound with staples. Comics usually are published with multiple stories or in a series. While according to Hayman and Pratt defend what the call a “pictorial narrative” definition of comics. They also propose the following definition of comics that is x is a comic if x is a sequence of discrete, juxtaposed pictures that comprise a narrative, either in their own right or when combined with text. Comics are juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer. The comic is a magazine especially for children containing stories told mainly in pictures while the comic strip is a sequence of drawings telling a story, usually printed in the newspaper, etc. Thus, it can be concluded that a comic contains a sequence of comic strips that are arranged into an accepted order. Comics are a genre of popular literature. The plot is represented by both visual and textual means. The story is, similarly to film, divided into particular pictures. The text is condensed into bubbles and panels and is attached to the pictures.

Smith categorized comic into some models. The first is Comic Strip, a comic in the style that appears in a newspaper. These comics utilize panels, having a minimum of one and usually a maximum of three or four. While these 'strips' may center on the same cast of characters in each strip, the accompanying stories are often meant to stand on their own (i.e. they do not require the reader to be aware of previous strips to understand the current one). Humor is the primary genre, and most strips are written and drawn by a single creator (Example: Darby Conley’s Get Fuzzy).

---

13 A. Smith, Teaching with Comics, p. 3-4.
Second is a comic book, basically a comic strip that runs on for a number of pages (22 is the industry standard). Comic books are typically part of a serial story, and frequently require the reader to have knowledge of past issues. The super-hero genre is most commonly found in this style of comic. (Example: Detective Comic’s Superman).

The third is a Trade Paper Back, a collection of comic books all bound together in one edition. Usually, these ‘trades’ are organized around a single story that may expand over several issues. The next is graphic novel; it is similar to a trade paperback. It is constructed in a similar manner, more durable, more book-like and contains a story from start to finish though, again like trade paperbacks, the characters of a graphic novel may appear in further works. Where graphic novels differ is that their stories are usually highly complex and, when coupled with the content, are directed at adult audiences. Further, like the story, the art of a graphic novel is often more freely artistic (less paneled). i.e. Frank Miller’s Sin City books.

The last is Web Comic, a digital comic which published on the internet. Like many things the world over, comics has also been transposed into the internet. While Duggan said Web Comics are comics and cartoons published on the World Wide Web for everyone to view and comics as a unique gateway medium to explore visual narrative. Because comics are such an image-driven medium, drawing is often the skill most emphasized.14

Another name of Web Comic is digital comic. A digital comic is a comic that is primarily viewed on an electronic device. Digital comics (also electronic comics) are comics released digitally, as opposed to in print. Digital comics commonly take the form of mobile comics. Web Comics may also fall under the “digital comics” umbrella. Azman et al defined that digital comics are the comic papers that evolve in digital technology. With portable gadget, hundreds of comic files and pages can be digitally shared and downloaded in premium websites with less price compared to printed comics.15

From the definition above, the writer gives the conclusion that Web Comics are digital art that accessed by a digital operation like gadget and computer through the website on the internet. Web Comics and e-comics are almost the same and included of Digital Comics because those not printed and accessed from the website which uses technology.

The strengths of comics in education according to Yang are many such as: a) Motivating: Due to human’s natural attraction to pictures, comics can capture and maintain the learner’s interest; b) Visual: Pictures and text mutually tell a story. It is resulting in an emotional connection between students and characters of a comic’s story; c) Intermediary: Comics can scaffold to difficult disciplines and concepts, can give reluctant readers the non-threatening practice and to experienced one’s inspiration and confidence for more challenging texts; d) Popular: Comic books promote media literacy, encouraging students to “become critical consumers of media messages such as contemporary lifestyles, myths, and values; e) Development of thinking skills: Analytical and critical thinking skills can be developed through comics, Answering of deeper questions about the combination of visual and textual force students to get familiarized with these two means of expression, uncovering the deeper meaning of a work and offering a profound insight.\(^{16}\)

Knowledge Management International Conference (KMICe) 2014, 12 – 15 August 2014

Another popular teaching aid is an animated video presentation. These media combine visual and audio. In general, the animation is defined as the pictures that appear and can move. An animated film is one in which puppets or drawings appear to move. The animation is the process of creating a continuous motion and shape change illusion by means of the rapid display of a sequence of static images that minimally differ from each other, while the presentation is the combination of text and pictures to present a certain topic.\(^{17}\) Video Presentation is a combination of words or phrases and pictures to make a film or a short and simple presentation\(^{18}\). From the statement above can be concluded that the Animated Video Presentation is the combination of word or phrases and a moving picture which transposed into the video to make a short film and simple presentation. Animated Video Presentation in this study is the Animated Video Presentation that used from the Powtoon application website. Mershand stated “PowToon is Web-based animation software that allows you quickly and easily create animated presentations with your students by manipulating pre-created objects, imported images, provided music and user-created voice-overs.”\(^{19}\)

\(^{17}\) Karnataka State Open University. Multimedia and Animation. (Registrar Karnataka State Open University, 2014).
Methodology Research

This study applied quasi-experimental design. In taking the sample, the writer used a cluster random sampling technique. The sample of the study was the tenth-grade students of MAN 2 Klaten, X Science 4 as the experimental class consist of 34 students and X science 3 as the control class consists of 35 students.

To obtain the data pre-test and the post-test were applied. The test was constructed to comprehension and was based on the curriculum 2013 which is used in this school. The test is multiple choices that consisted of 30 questions items with 4 alternative choices. The genre of the test is about story text include narrative and recount.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>O1</td>
<td>X1</td>
<td>O2</td>
</tr>
<tr>
<td>G2</td>
<td>O1</td>
<td>X2</td>
<td>O2</td>
</tr>
</tbody>
</table>

As the above table suggests, G1 and G2 stand for two groups engaged in this study. O1 refers to pretest, O2 refers to posttest, and X1 and X2 stand for the different teaching media applied, including Islamic web comics and animated video.

The materials used in this study are eight Islamic Web Comics designed by the writer which has been adapted from the English learning materials in class 10 and based on the 2013 curriculum used. Islamic Web comics are made by using Pixton application website. All of the Islamic Web Comics designed by the writer has been uploaded on the website https://sites.google.com/view/english-webcomics. While the control group taught by using Animated Video Presentations designed by the writer using Powtoon with the same content as used for Islamic web comics. Cooperative learning with Cooperative Integrated Reading and Composition (CIRC) technique was applied in the giving treatment in teaching reading comprehension. Cooperative learning is an instructional method where students interact with and help each other to solve problems, complete a project or task to maximize their learning to achieve mutual goals. In CIRC activities there is an interaction among the students there. It can motivate the students in learning English. The extensive interaction from the CIRC activities helped students expand fluency and comfort with English.
Finding and Discussion

Based on the hypothesis test done, it showed that the alternative hypothesis was accepted and the null hypothesis was rejected. To do this hypothesis test, at first, two independent t-tests were conducted to compare the results of the pretest for the two groups to make sure that there is no significant difference between the groups before they got treatment in the experiment. Then two paired t-test was applied to compare the result of pretests and posttest for the two groups to see whether there was any difference between their performance of each group on the pretest and posttest. In the end, two independent t-tests were conducted to compare the results of the experiment and control group. It could be seen from the explanation below:

Comparison of experiment and control groups before having treatment

<table>
<thead>
<tr>
<th>Group Statistics of pretest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
</tr>
<tr>
<td>Score</td>
</tr>
<tr>
<td>Exprmnt</td>
</tr>
</tbody>
</table>

The descriptive data analysis of pre-test reading comprehension in experimental class the students got scores 40 up to 80. Based on the scores can be found that the mean of the test is 56.97, the mode is 40, the median 57 and the standard deviation is 13.02. While in control class the students got scores 40 up to 80, the mean is 57.34, the mode is 50, the median is 57 and the standard deviation is 10.18. It is clearly showed that the two groups were almost at the same level of proficiency. The results of the analysis are displayed in the following table.

Independent Samples Test for control and experimental on pretest

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>Equal variances assumed</td>
<td>F</td>
</tr>
<tr>
<td>Exprmnt</td>
<td>Equal variances not assumed</td>
<td>4.792</td>
</tr>
</tbody>
</table>

4,792
The above table shows the result of the independent t-test for control and experimental group before treatment, it can be seen the mean difference of the two groups (.372) and the p value (p=.895>.05) which clearly shows that the groups are almost the same or, at most, there is not a significant difference between them.

Based on the results of the two groups, the writer concludes that participants in this study could be interpreted they were at the same reading comprehension proficiency level.

**Comparison of experiment and control groups after getting treatment**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>Experimental</td>
<td>34</td>
<td>70.8824</td>
<td>12.68682</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>35</td>
<td>64.6857</td>
<td>9.95511</td>
</tr>
</tbody>
</table>

The descriptive data analysis of post-test reading comprehension in experimental class the students got scores 50 up to 93. Based on the table frequency can be found that the mean of the test is 70.88, the mode is 57, the median 70 and the standard deviation is 12.69. While in control class, the students got scores 50 up to 93. Based on the table frequency can be found that the mean of the test is 64.68, the mode is 60, the median 63 and the standard deviation is 9.95.
Comparison of pretest and posttest on control group

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Std. Deviation</td>
<td>Std. Error Mean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1 Pretest_C</td>
<td>-7,34</td>
<td>6,286</td>
<td>1,062</td>
<td>-9,502</td>
<td>-5,183</td>
</tr>
<tr>
<td>Posttest_C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the result above, the control group had made meaningful progress during treatment. The mean score of this group on pretest and posttest was 57.34 and 64.68 respectively. The p-value is smaller than .05 (p=.000 < p=.05); therefore it can be concluded that the group had made progress compared with the outset of the study.

Comparison of pretest and posttest on Experimental group

<table>
<thead>
<tr>
<th>Paired Samples Test of Experimental Group</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Std. Deviation</td>
<td>Std. Error Mean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1 Pretest_E</td>
<td>-13,91</td>
<td>5,451</td>
<td>,934</td>
<td>-15,81</td>
<td>-12,00</td>
</tr>
<tr>
<td>Posttest_E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the result above, the experimental group had made considerable progress at the end of the study. There had been a substantial change in the experimental group. The mean score of this group on was 56.97 prior to the experiment while it is 70.88 at the end of the study. The significant level of p=.000 < p=.05 is a witness as to how the experimental group had undergone significant progress. It can be said that the experimental group is more successful on the study.

Comparison of control and experimental group on the posttest

To answer the hypothesis Islamic Web Comics is effective in teaching English especially reading comprehension at Islamic secondary school in Indonesian context compared to Animated Video Presentations, independent t-test was administered on posttest score from both control and experimental group. The result as described in the table below:
Based on the independent t-test above, it is obtained the mean score of the experimental group on the posttest is 70.88 while that of the control group is 64.68. The mean difference between the two groups is 6.196 and since the p-value is $p = .025 < p = .05$, it can be said that the experimental group has performed significantly different from the control group on the posttest. In other words, using Islamic Web Comics in teaching reading comprehension was effective than using an animated video presentation.

The findings indicate that the students’ posttest marks signify that the students who had been exposed to performed better. According to the Integrated Model of Text and Picture Comprehension (ITPC) by Schnotz in Ahmed and Harun, it clarified that multimedia lead to learners utilizing multiple sensory modalities to comprehend a multimedia text such as the Web Comics. Hence, from the findings of the experimental group whose performance outperformed the control group, it is evident that the use of features of Web Comics such as the images, speech bubbles prompted the formation of mental representations which lead to the building of a mental model of what is read. This corresponds to the fact that comprehension of reading materials containing text and pictures is construction of mental representations based on tasks. Then, in the implementation of Web Comics is opened by students’ gadget while Animated Video Presentation must be related to the other equipment such as video player (LCD), the screen for the big class. Mayer added that utilization of words and pictures as in Web Comics found to have positive effects in comprehension.

---

of a text. Pictures assist students to construct meaning, organize information, identify the relation of ideas, visualizing and creating mental models.\textsuperscript{21}

Based on the explanation above, it can be said teaching reading comprehension by using Islamic Web Comics as a visual aid in the tenth grade of student MAN 2 Klaten is significantly effective and different from teaching by using Animated Video Presentation as teaching aid. Therefore, Islamic Web Comics is effective for teaching reading comprehension on narrative and recount text. It is proved by the acceptability of Ha because the students treated by using Islamic Web Comics in the experimental group achieved a better score than the students taught by using Animated Video Presentation in the control group.

**Conclusion**

Related to the conclusion on the result of this study positively indicates that there is positive effect using Web Comics in teaching reading comprehension. Some suggestions for the teaching and learning English are proposed as follows: *First*, the students have to stay focus on teacher’s direction in order to be able to practice and apply the group discussion used by the teacher. The students must have high motivation to follow the English lesson, especially in reading comprehension. The students are suggested to read the reading text accurately to find the difficult words to comprehend the text. Students should help each other to finish the reading task so each member can understand how to do the task. *Second*, teaching English is difficult, so to make the students interested teacher should use various media in the learning process. The teacher can choose appropriate media according to the situation and topic. Teachers can use Web Comics as a visual aid to teach reading comprehension and makes students achievements improved. The English teacher should give motivation to the students in teaching learning English. *Third*, the writer is hoped that he will be more experience in teaching learning process, especially in teaching reading comprehension. He also hoped this paper can be a little contribution to teach English reading.

BIBLIOGRAPHY


