THE STUDY OF LITERACY CULTURE THROUGH ANDROID-BASED WEBTOON APPLICATION AS AN EFFORT TO IMPROVE ENGLISH CAPABILITY OF HIGH SCHOOL STUDENTS IN PANDEMIC TIMES

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Webtoon is a type of comic currently in demand by young people (students). If it is used properly, webtoon can be used as one of the teaching media in learning English. In addition to improve English competence, the efforts to foster literacy culture in students are grown here. With the development of android-based mobile phones that are easy to use by students, researchers combine android-based application with webtoon learning media to improve students' English competence and literacy. The problem in this research is how to increase reading interest in high school students through android-based interactive learning media during the pandemic. This study aims to develop android-based interactive learning media through webtoon application as an effort to improve the English language skills of high school students through literacy culture during the pandemic. This study also aims to foster reading interest in high school students through smartphone technology. The subjects of this study were high school students. The research method used is triangulation method which includes data triangulation, inter-researcher triangulation and theoretical triangulation. The data collection techniques used were interview, observation and documentation which were analyzed with descriptive qualitative analysis techniques. The results showed that the respondents' English skills and reading interest increased with the use of the webtoon application. Based on the results of the study, it can be concluded that the use of android-based webtoon application makes students not only learn the existing material, but can also increase their reading interest.

Keywords: readability, teaching material, Flesch Formula

INTRODUCTION

The rapid progress of technology cannot all be dammed with conventional things. These technological advances have an impact on many aspects of life, including today's children or students who can be called the millennial generation. Today's millennial generation has considered technology as their "primary need". It is proven by every child or student currently owning and operating their respective gadgets in their lives. Most of them use

android-based gadgets where they can find the information they want quickly beyond the information they can get at school. They can easily and quickly get android applications (apk) that can fulfill their information needs effectively, such as: browser applications, youtube, dictionaries, books, games, various kinds of social media applications, and many more various kinds of android applications that they can download on the android playstore.

In the era of globalization, everyone is required to be able to live in the rapid flow of technology and information. One aspect that is very urgent so that humans can survive in life is education. In the era of globalization, humans need education in order to develop their potential, in order to create the qualified resources. Education in this case is a process, so that students have the knowledge (cognitive), attitudes (affective) and skills (psychomotor) for the provision of life in the midst of society.

Knowledge grows and develops when a person faces new experiences. Someone builds and modifies the initial knowledge that has been obtained to solve the problem of the experience. UU no. 20 of 2003 confirms that education is defined as a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state.

The paradigm shift in character education learning has changed the focus of learning from teacher-centered to student-centered. Learning provides a more harmonious situation between teachers and students by providing opportunities for students to play an active role and construct the concepts they learn. Student-centered learning has the aim of making students highly motivated and independent learning abilities and are responsible for developing knowledge, skills, and attitudes.

One of the characteristics of an intellectual is those who are able to ground their ideas with a pen. In other words, they are intellectual figures who move the masses through literacy culture. According to Putri (2018) literacy culture writers are the second generation of intellectuals after previously being dominated by teachers. Furthermore, literacy culture is a reflection of the nation's progress. Anthropologists, such as Lucian Levy-Bruhl, Claude Levi-Strauss, Walter Ong, and Jack Goody view literacy (language) as the starting point to distinguish primitive society from "civilized" society (Laily, 2012).

The problem is how to use the existing technology to strengthen the character of high school students through literacy culture. The purpose of this study is to develop interactive learning media through webtoon application as an effort to improve the English competence of high school students through literacy culture. In addition, it also aims to foster reading interest in high school students through smartphone technology. The urgency of this research is presidential regulation no. 87 of 2017 concerning character strengthening education (PPK) 2013 curriculum which contains five values, namely religious, nationalist, integrity, mutual cooperation and independence.

Previous research

Humans are intelligent beings both Intelligent Quotient (IQ), Emotional Quotient (EQ) and Social Quotient (SQ). This can be achieved perfectly if humans get education through information maximally. In the family environment, children are conditioned from an early age to be in contact with print media, be it newspapers, magazines, or books. Information literacy is a

person's ability to search, collect, evaluate or interpret, use, and effectively communicate information from various sources. Mastery of information literacy will keep away from stupidity, because when they have a problem people know where to look for information to solve the problem. The low interest in reading is very influential on people's information literacy skills.

Learning is a communication process, namely the process of conveying messages from the source of the message through the media to the recipient of the message. Etymologically, media comes from Latin, is the plural form of the word "medium" which means "middle, intermediary, or introduction". The media has a very important role, namely a means or device that functions as an intermediary or channel in a communication process between the communicator and the communicant. With this learning media the teacher can explain the material easily and can stimulate the thinking of students so that the material received by students is easy to understand (Rahayu, 2018). Learning during the current pandemic is distance learning which functions to avoid crowds so that it can prevent the transmission of Covid-19 during the pandemic (Firman, 2020; Rahman, 2020). One of the efforts to overcome distance learning is by technology-based learning.

Research on learning has been done by previous researchers in learning English where the results were able to improve students' English competence (Ratnasari et al, 2018; Raulan, 2018). Yoon (2015) also conducted a study on readers' reactions to webtoons through their smartphones with the aim of understanding user behavior in order to develop a webtoon rating system with users' laughter reactions when they read the webtoon via their mobile phone (Sukmadinanta, 2005). The results of his research found that there was a reaction of

users' laughter to the webtoon rating system. Another research conducted by Dian (2017) is about Mobile Webtoon Development in Game Programming Courses at the State University of Surabaya. The purpose of this study was to obtain the description of the validity of the Mobile Webtoon and to determine student responses to game programming learning and to measure student learning outcomes. The results of his research state that the Mobile Webtoon learning media can be said to be very suitable to be used as a student learning media.

By paying attention to previous studies, the researchers seek to make a difference by integrating offline webtoons and English subjects in the high school curriculum into the android application. With selected webtoons, researchers add instructions, materials, and practice questions that will also be inserted in the android application as an effort to learn more up-to-date interactive learning media.

Literacy culture

Understanding literacy is not only limited to reading and writing. In its implementation, creating works from reading results is the next process that is identical to literacy transformation in the context of renewable innovations. This literacy is a starting point in the formation of human civilization. Mcloud (1993) describes digital literacy as a form of the ability to understand and use information in various forms and from various sources, possibly with other media such as comics. Digital literacy is not just a technical ability to operate digital equipment adequately. Moreover, digital literacy includes a variety of cognitive skills needed to utilize and complete work in the digital field. The examples of the application of digital literacy are the internet browsing, working with databases, and chatting

using social media.

Information literacy is a person's ability to search, collect, evaluate or interpret, use, and communicate information from various sources effectively. The mastery of information literacy will keep away from stupidity, because when they have a problem, people know where to look for information to solve it. The low interest in reading is very influential on people's information literacy skills. No matter how great a library you have, you can't do much if the people don't like reading.

The rapid development of information technology has affected various fields of life and profession. This influence can have positive and negative impacts on an institution within the country. The existence of system changes in institutions and educational institutions is no exception for libraries which have a function as a provider of information for the entire academic community. The development of the current era of libraries is starting to lead to digital libraries, of course it has very big impact in terms of service. Now the librarian must be able to serve various 'new' requests, for example so that users can get faster access to the information they need. Today, along with its development, it is important to note that changes in digital technology will continue to lead to a concept known as the era of convergence.

Convergence referred to here is the increase in digitalization, different types of content (data, audio, voice, video) are placed in the same format and sent continuously (progressively) through various technologies (computers, mobile phones, television, etc.) or continued to different platform. In the era of convergence, everything has become part of the activities and needs for every student, and starts from the use of gadgets (devices in the form of laptops, tablets, ipads and smartphones). Of cour-

se, to meet these expectations, a librarian must be able to adapt to the development of information technology.

Information literacy is the ability to know when there is a need for information, to be able to identify, find, evaluate, and effectively use that information for issues or problems at hand (Asfar, 2016). It cannot be denied that there is a link between educational institutions and the intellectual world. Both are very interactive (influence each other) and interdependent (mutual dependence and need). One way to build a scientific tradition in the educational environment is to optimize the literacy culture among students.

Webtoon

Webtoon which is an acronym for cartoon website also commonly called world wide web + cartoon is an image that has a story or commonly called a comic and is published using the internet network. Webtoon originally came from Korea. Based on the existing images, webtoons are considered as part of the *manhwa* (a hallmark of Korean comics), just as *manga* is a typical Japanese comic.

Webtoon is a standalone Korean genre comic resulting from the combination of Korea's super-fast communication network with individual access to a computer. If YouTube provides UCC (user-created content) in the video field, then Korean internet companies such as Naver and Daum provide UCC in the *manhwa* field since the early 2000s.

The webtoon cannot be underestimated because in addition to trying to show the social conditions of a society, the webtoon also reveals psychological symptoms through the dynamics of the personality of the characters in the story which are seen through the behavior of the characters in helping to reveal the meaning of the

whole story. This is in line with the opinion of Baharuddin (2017) which states that the behavior that is reflected in the speech and actions of the character can be used as empirical data or facts that refer to the character's psychology.

METHODS

The research method used is the triangulation method. Triangulation is a research method by collecting and analyzing research data from various perspectives (Sadikin, 2010). The triangulation includes data triangulation, inter-researcher triangulation and theoretical triangulation.

Respondent

The respondents of this study were 39 high school students in the city of Semarang.

Instrument

Methodologically the researchers acted as an instrument. In addition, there is also an android-based webtoon that is used by researchers in delivering material to students accompanied by the provision of questionnaires.

Procedure

Data collection

Data collection techniques used were literature review, interviews, observation and documentation. Literature review was carried out in order to collect various kinds of information and materials. After that, the data was sorted according to the needs of product development.

Data analysis

The data obtained were then analyzed using descriptive qualitative analysis. The analysis used in this research was qualitative. This study fits well with qualitative research associated with various methods, perspectives, and approaches (Mackey et al, 2005).

RESULTS AND DISCUSSION

Through a qualitative research approach as described, there are five stages of research that the researchers did. The findings from the stages of research conducted by researchers include:

Data collection

The researchers and the team found that narrative text as one of the sub-topics of learning English in secondary schools in Indonesia has been inserted since the Competency-Based Curriculum (KBK) in 2004, the Education Unit Level Curriculum (KTSP) in 2006, Curriculum 2013, until now (Curriculum 2013 Revised Edition) in the process of extracting information and reviewing literature. The topic of narrative text is one part of genre-based text learning in the latest curriculum. Learning English in Indonesia is not based on classical learning which only refers to rigid theory and grammar, but rather the text (and its context) without ignoring the rules of the English being studied. Learning is more towards functional texts which some experts call part of language learning which leads to SFL/SFG (Systemic Functional Linguistics/ Grammar) theory. In the curriculum used today, there is the term "Core Competence" above the Basic Competence or Sub-Point in learning. The Core Competencies consist of aspects of divinity or religiousity, attitude/character/affective, knowledge, and skills. From the sequence of Core Competencies, it can be seen that character is the main thing above cognitive and psychomotor aspects.

Furthermore, the questionnaires were given to high school students in the city of Semarang. From the results of the questionnaire given, there are some special notes that the researchers consider before

designing the product. The following are the results of the questionnaires distributed.

English learning carried out in schools is considered unsatisfactory.

Most of the respondents stated that the current generation is experiencing moral degradation due to technological developments.

Almost all respondents agree that English learning media is made in the form of an android application in accordance with technological developments.

Some respondents suggested teachers to reproduce narrative stories in order to increase the vocabulary acquired by students. There are also those who suggest to include an example of a text with pictures so as to increase students' interest in learning English because they think it is easier to remember so that they not only understand the content of the story, but also they can recognize the characters.

Product design

Narrative text is a text that can provide moral value to its readers (Herlina: 2012). Narrative texts can be in the form of fairy tales, legends, folk tales, fables, myths, and so on. We encounter many stories from both local and foreign sources in books or websites (blogs). By looking at the suggestions from the previously distributed questionnaires, the research team with a lot of time selected and collected English webtoons from various sources. As a result, more than 50 webtoons were sorted to be developed in Android-based English learning media.

The development of technology in the era of the industrial revolution 4.0 is very rapid. Today's students prefer something instant. However, they still cannot find the right and appropriate English reading sources. Therefore, the researchers made a design that is simple and accessible for students to learn English. The menu displayed in the application is in the form of narrative text. There are 6 examples of narrative text in English. Researchers add pictures for each story content from various sources. All references are written or listed in the application.

Development of android-based learning media.

After the data is collected and the product design is complete, the researcher collaborates with the research members in the field of Information Technology to develop a simple and easy android-based learning application. In the process, research members took one month to construct the application so that it can actually be used on Android phones.

Expert validation.

The researchers are looking for experts to validate the product before being tested or published after the application is made. The experts who are used as assessors in this study come from the field of language and from the field of information technology. Linguists provide some input related to story content. There are typos, grammatical errors, and untidy writing systematics. Meanwhile, information technology experts suggest adding several menus in several displays. The menus include the "home" and "back" menus so that users can easily access other menus. The researchers made the revision so that the application was considered valid to be tested.

Product trial.

The product is distributed to several High School students. The following is an android-based webtoon application interface design that is adapted to students' English learning materials.
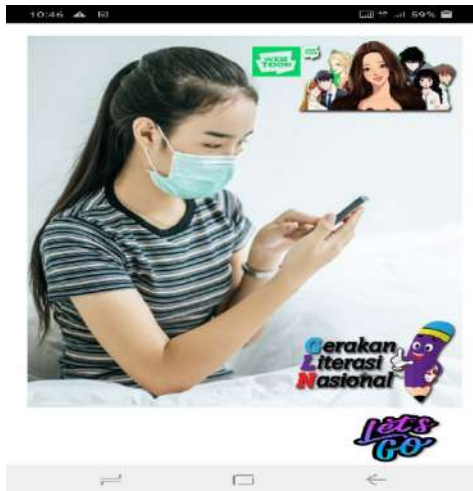
Figure 1. Initial view on android phone

Figure 1 is the initial view on an android phone. When the application is opened, the screen that will appear is figure 1. The user must press the "Let's Go" button to find the selected story menu and others.

Figure 2. Menu display

Figure 2 is the main menu which contains six selected webtoon stories, discussions and references.
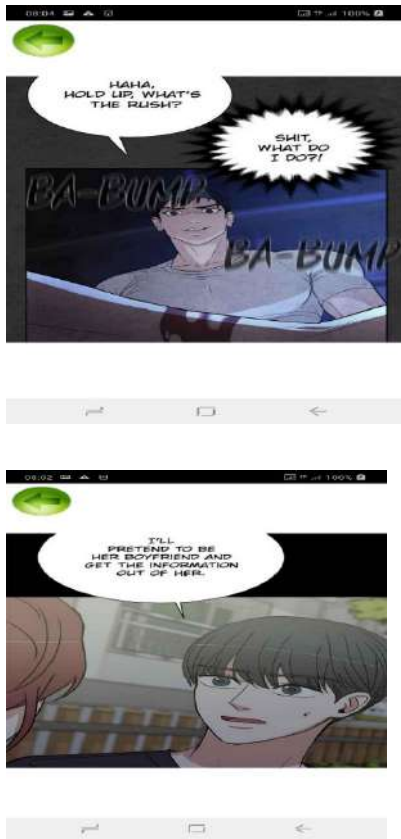
Figure 4. Discussion Menu
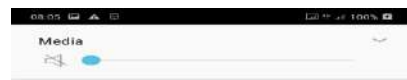
Figure 3. Selected Webtoon Story Menu

By selecting the "discussion" menu, participants will be asked several questions related to the stories they have read. The students were asked to recall the storyline, characters, events and the implied meaning of the webtoon story so that indirectly the students were invited to think critically.

All the texts of the webtoon stories are in English so that readers can practice their reading skills. Implicitly, these stories will be embedded in the minds of students if they really understand the text. Students can acquire English vocabulary from the stories they read. Students can get more than one moral value from the webtoons they read, for example the positive impact of doing good and the negative impact of doing bad.

Figure 5. Reference Menu

In Figure 5 there is a menu of image references from various sources that the researchers summarized.

Descriptive quqlitative analysis

After the learning plan and its media have been prepared, evaluation questions in the form of a questionnaire are prepared to find out how students respond in understanding the material and reveal how students' critical thinking skills are in dealing with existing problems. After obtaining the data in the form of test results, statistical tests were carried out as follows:

Table 1. Descriptive Statistics of Questionnaire Value

SCORE	
Mean	8,102564
Standard Error	0,145999
Median	8
Mode	8
Standard Deviation	0,911762
Sample Variance	0,831309
Kurtosis	0,97682
Skewness	-0,43044
Range	4
Minimum	6
Maximum	10
Sum	316
Count	39
Largest (2)	10
Smallest (2)	6
Confidence Level (95,0%)	0,295559

Interpretation:

Mean (the average value) is 8.05, with a standard error of 0.14.

Median (the middle value) is 8.

Mode (the value that appears most often) is 8.

Standard Deviation is 0.91.

Sample Variance is 0.83 which is also the square of the Standard Deviation.

Kurtosis is 0.97.

Skewness is -0.43.

Range of values is 4, which is the difference between the highest and lowest values.

Minimum is the lowest value data, which is 6.

Maximum is the highest value data, which is 10.

Sum (the sum of the scores of the respondents under study) is 316.

Count (the number of respondents studied) is 39.

Largest (2) shows the second highest score of all respondents studied, which is 9.

Smallest (2) shows the second lowest score of all respondents studied, which is 6.

Based on the findings above, from 39 respondents, an average score of 8 was obtained, which means it is positive. In addition, the students with the maximum score (10) were 2 and the students with the lowest score (6) were 2, meaning that the android-based webtoon application learning model has an effect on the critical thinking skills of the students of Public High School, Semarang.

The results of product testing through questionnaires and interviews showed positive response from students (more than 75% agree to use android-based webtoon application as a medium for learning English. The application is considered easy to use by users. In addition, the content in the application is also considered easy, practical, compatible and has a fairly high accessibility. This application is adapted to the existing curriculum, where English is more emphasized as a tool to convey ideas and knowledge, not on the structure of language alone. Through the literacy movement which still needs to be improved in the latest curriculum, the portion of reading in the realm of learning English must be added. Learners can read webtoon stories on their androids over and over again. With the picture in the story, students will have their own imagination and the picture is judged to be able to last longer in their memory.

Students with low English skills will

eventually be interested in reading it because of the ease with which they can understand the story with the help of pictures. Reading is one of the four language skills besides listening, speaking, and writing. Narrative text can also provide moral values to the readers so that the five main character education reinforcements such as religiousity, integrity, nationalism, mutual cooperation, and self-reliance have been integrated in this English language learning media, both implied and expressed.

CONCLUSION

The use of android-based webtoon application as a learning medium to improve students' literacy culture as an effort to improve English makes students not only learn the existing material, but also can increase their reading interest to face problems in real daily life. This learning model can train students to memorize new English vocabulary that they find in webtoon stories. This provides a concrete experience that gives its own meaning for students.

This learning model can increase students' interest in reading, so as to help students develop thinking skills, solve problems, and become autonomous and independent learners. This learning model also invites students to work in groups to help each other solve complex problems. In addition, this learning can improve student performance in academic assignments, help students understand difficult concepts, and foster students' critical thinking skills.

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