

THE DEVELOPMENT OF LEARNING MEDIA “ENGLISH DIGITAL BOOK” FOR TENTH GRADE STUDENTS

Iin Baroroh Ma'arif¹, Rohmat Hidayat², Siti Nur Farida³

^{1,2,3}KH. A. Wahab Hasbullah University

inmaarif@unwaha.ac.id

Abstrak: Penelitian ini bertujuan untuk mengembangkan sebuah media belajar yang di sebut *English Digital Book* sebagai media pembelajaran bahasa Inggris untuk siswa kelas X SMA. Media pembelajaran ini terdiri dari beberapa materi dan soal soal latihan yang layak dan cocok untuk dipelajari siswa. Semua materi dalam media ini didasarkan pada silabus sekolah menengah sesuai kurikulum K13. Metode penelitian yang digunakan dalam penelitian ini adalah Research and Development. Pengembangan ini menggunakan model ADDIE yang memiliki beberapa tahapan, yaitu; 1) analisis, 2) desain, 3) pengembangan, 4) implementasi, dan 5) evaluasi. Hasil validasi media mendapatkan skor 92 dengan kategori “sangat baik”, dan validasi materi mendapatkan skor 95 dengan kategori “sangat baik”. Respon siswa terhadap hasil try out mendapatkan skore 87 berada pada kategori “sangat baik”. Dengan hasil tersebut, media belajar *English Digital Book* ini layak untuk digunakan sebagai media pembelajaran bagi siswa kelas X. Selanjutnya penelitian ini dapat digunakan sebagai referensi bagi peneliti lain dalam mengembangkan media pembelajaran bahasa Inggris pada tingkat siswa yang berbeda.

Kata kunci: Media Pembelajaran; English Digital Book; SMA

Abstract: This research aims at developing a learning media which called English Digital Book as English learning media for Tenth grade students of Senior High School. This English Digital Book consists of some materials and exercises which is appropriate and feasible to be studied for students. All materials in this media are based on senior high school syllabus of K13 curriculum. The research method used in this research is Research and Development. This development used ADDIE model which have several steps, those are; 1) analysis, 2) design, 3) development, 4) Implementation, and 5) evaluation. The result of this research shows that from the media validation result got 92 score it was in “very good” category, and the material validation got 95 score it was in “very good” category. The students’ responses of try out result 87 was in “very good category”. By having those result, this English Digital Book is feasible to be used as a learning media for Tenth grade students. Furthermore this research can be used as reference to other researcher in developing English learning media in different level of students.

Keywords: Learning Media; English Digital Book; Senior High School

INTRODUCTION

Education is a basic need for everyone that can develop the potential of human resources. Kasnadi and Arifin (2015) emphasized that education is an outstanding investment which should be the concern of every people. In the world of

education there is a curriculum which has set by the government as an effort to achieve the goals of educational development. The government always organizes curriculum changes by having goal at improving the quality of Education. Officially, the government set a new curriculum that is called K13

curriculum as a form of improvement from the previous curriculum. Based on the functions and objectives of national education, the development of the curriculum must be rooted in the culture and life of the nation today and the future (Daryanto, 2014). The process skills applied to this newest curriculum are scientific approaches because education is also one of the first benchmarks of a nation's progress especially in the process of language learning which requires intensive learning especially in English language learning.

English is a universal language that commonly used by many nations to communicate. It means English is an international language that everyone should understand and able to apply because it is a global language. As it is known that English is an international language which is the most common language used in the world, therefore when we master it of course we will easily adapt to anyone. Moreover as one of an important international language, English can also connect people with the world in all aspects, one of which is in the aspect of education. The importance of mastering foreign languages especially English, is as an introduction to success in one's academic field and to support a career in the world of work (Sinaga, 2010). That is why learning English is very important and English also being studied at early level of education.

There are three main components in a learning activity, those are educators, students, and learning resources. Educators prepare the right learning resources so that materials are easily delivered to students. Teaching materials used for learning resources can be used to help and improve the learning process of students and teachers. There are several types of teaching materials that are used to support learning, namely printed, audio and interactive teaching materials. According to Prastowo, (2014) Teaching materials are all materials information, tools, and texts that are organized systematically, which still displays the integrity of competence that will be quasi learners. Teaching material is an explanatory description

of a concept found in each chapter. Since the pandemic covid-19 learning is done from home. This causes learning to be ineffective. Therefore, there needs to be an update of learning methods, such as the use of digital textbooks. With the renewal of varied learning methods, students will be more interested and motivated in the process of following the learning process.

At a time of pandemic, the development of science and technology is very much causing changes in all areas of life, one of which is in the world of Education. This development directs modernization efforts in the utilization of technological result in the teaching and learning process. Basically the teaching and learning process is the process of communication between students and teachers. However, currently the communication process is constrained by the emergence of the Covid-19 virus. One of the efforts that can overcome such circumstances is the need for effective media in a learning process. Learning media is one of the supporting factors for achieving learning. This is related to the use of appropriate and varied media in learning and can help and motivate students' learning and can reduce the passive attitude of students in learning. Moreover according to Hamidjojo (as cited in Utari, 2014) explaining that the media is a form of intermediary used by humans to convey ideas and opinions that are conveyed to recipients well. Before Covid-19 appeared, the media commonly used during learning were textbooks, power points, modules and student worksheets. In times of pandemic like this, the media is less practical because it cannot be used at any time by students. One of the media that is easy to develop and can be used anytime and anywhere learning is digital book. Digital Book is a traditional book with digital features that can help users, as well as being an interesting tool for most students. The development of modern technology is expected to develop with the changing times to renew traditional paper books for a better future.

Digital Book or commonly called E-Book (Electronic Book) in the world of Education is a publication in the form of text and images produced in digital form and can be read through mobile phones, computers, and other digital tools. Digital books are very easy to use because digital books are very light and can be read anywhere.

E-books have become advanced technological innovations that are expected to evolve over time replacing traditional paper books in the future. (Lynch, 2012; Lai and Chang, 2011).

There are many advantages of digital books, such as it's easy to carry because it is in the form of soft copy that can be used by readers in portable electronics. Then it is not heavy, digital book only need to be put in a folder inside portable electronics, so that brought only portable digital devices. Furthermore, digital book is easy to duplicate, digital book is easy to copy for free so it will save costs and will support learning needs, and the last digital book is save paper, in the era of global warming means we have supported go green which is still carried out in the present.

The purpose of this research is to develop an English Digital Book as a digital-based English textbook for Tenth Grade of Senior High School in first semester. The development of this English digital book is expected to help the learning of tenth grade students in English subject first semester and can contribute in reducing the adverse impact of the world into sea-based digital learning. To solve the problem that occurred in the field, the researchers tried to develop a digital-based book by conducting research by taking the theme at developing English Digital Book for tenth grade of senior high school.

METHOD

Research Design

This research is classified into Research and Development (R&D) for the reason that the purpose of this research is to develop and test a

product. Research and Development (R&D) is a research method used to produce certain products, and to test the effectiveness of the product, so that it can function in the wider community, it is necessary to test the effectiveness of the product (Sugiyono, 2014: 407). This research uses the Research and Development (R&D) method to determine the progress of students in learning English. The development research model applied in this research is the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model developed by Dick & Carry. The main purpose of this research is to develop digital English book media for the learning process.

Research Procedures

As stated earlier that this research method is adapted from Dick and Carey model that consist of some procedures must be done. Dick and Carey (1996) as cited in Endang (2011: 179) is popularly called the ADDIE development model which has 5 research and development procedures: 1) analysis, 2) design, 3) development, 4) implementation, 5) evaluation.

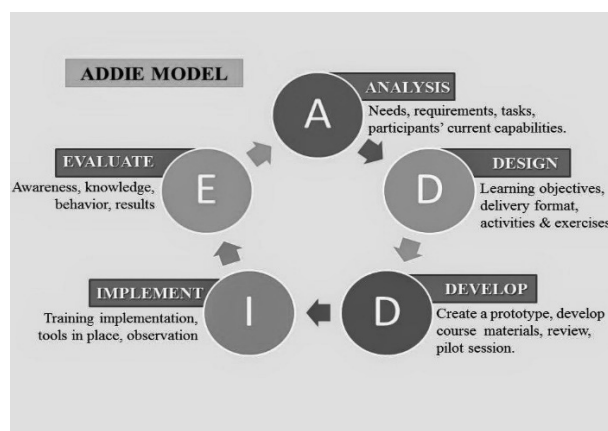


Figure 1: Research & Development Method (R&D) ADDIE model

Analyze

This analysis stage aims to find out what is needed in the development of instructional media. Things that need to be analyzed at this stage are field studies and need analysis. The Field study

stage aims to get information about how the learning process includes what media are used and what obstacles are experienced during the learning process. The object of this research to get more information about learning process is MA Nurul Qur'an Ploso. The researchers ask for the informations by interviewing English teacher at the school. The Need analysis stage is aimed at finding out what students need, to know problems in learning and how to solve them. This analysis was carried out by distributing questionnaires. The researchers ask for the information related to this step by giving questionnaire to some students at MA Nurul Qur'an Ploso especially at Tenth Grade.

Design

At this stage the material and media are designed. The determination of basic competencies (KD) and learning objectives that will be developed in this digital book media is the result of needs analysis and the result of and interview and discussions with the English teacher at MA Nurul Qur'an plos. Meanwhile, to design media design, namely making a description and design of the Digital Book that will be developed. This design stage includes material that will be displayed in the Digital Book including the selection of images, videos to be presented, and exercises that are in accordance with Tenth grade material.

Development

The media production stage is done to realize the product that has been designed. This Digital Book was created using the FLIP PDF application by inserting the learning supporting video that was presented. To display the material presented is a display of material that is designed to look as attractive as possible.

The other stage in this phase is product validation. This validation has 2 stages, namely media validation and material validation. Media validation is carried out by media experts for

the purpose of obtaining the feasibility value of someone who is already an expert in the field of technology. Meanwhile, material validation is carried out by material experts, which aims to obtain a valid material assessment. Validation data were obtained from questionnaires given to media and material experts. The data that has been obtained are collected and processed into quantitative data, then the result of the average data are sought. The result of the average data will determine the quality and feasibility of the Digital Book being developed. Inputs and suggestions given from media and material experts are used as a reference for improving the digital book media developed so that the developed media is suitable for use in terms of material or appearance.

Implementation

After going through the development stage and obtaining decent result from the assessment of material and media experts, the next stage is the implementation of media or product trials that aims to determine the level of attractiveness of Digital Book. This implementation was carried out to students of MA Nurul Qur'an class X by filling out a response questionnaire with 10 students as respondents.

Evaluate

This evaluation process is the final stage of the five stages of developing the ADDIE model. From the result of observations and student response questionnaires, an evaluation of the products that have been developed will be evaluated for revision if there are still deficiencies in the Digital Book media. The result of the evaluation of Digital Book media using the FLIP PDF application are expected to be suitable for use by educators or students in English learning activities in class X in the first semester because they have gone through several development research procedures in stages..

FINDINGS AND DISCUSSION

The Result of Analyze

Based on the observation that was done to tenth grade students of MA Nurul Qur'an Ploso, the researchers collected information of need analysis. The need analysis was carried out by questionnaires.

Table 1: Questionnaires as result of need analysis

No	Need Analysis Aspect	Score
1	Learning attraction	171
2	Learning media/learning tools	215
3	Developing media	100
Total Score		486

In calculating the result, the researchers processed it by calculating the Likert scale as follows:

Max Score = 5×11 (items) $\times 10$ students = 550

Percentage = $486/550 \times 100\% = 88\%$

From these result, it can be concluded that 88% of students need interesting supporting instruments in English subject.

The Result of Design

After the researchers identified the classroom situation and school conditions based on the data obtained from the questionnaire, the next step was to plan and create media based on core competencies, basic competencies, and learning indicators in accordance with the tenth grade syllabus in the first semester at school based on the 2013 curriculum.

At this stage the researchers designed all the content for this media such as designing the appearance of the Digital Book, and designing the material that will be presented in the Digital Book. This stage is carried out after the need analysis done. Researchers must consult to media expert about the design, colors, images, and background of the theme of this Digital Book, whether the display in the Digital Book already looked attractive and can make students interested, so that students can enjoy using this media more.

Materials include English materials for class X first semesters are: Talking About Self, Congratulating and Complimenting Others, Expressing Intention, Descriptive Text, Which One is Your Best getaway?, and Giving Announcement Images, Audio, and Video formats that can be uploaded include JPEG, MP3, MP4 and others.

The Result of Development

In initial product development, the researchers began to structure the materials, exercises, and features used to complement the product. After completing the product, the researchers validated to the expert to see the feasibility of the product. The researchers validated to two experts, namely media expert and material expert.

For media validation, the researchers conducted media validation to an IT expert. The result of this media validation was presented in the form of a validation sheet.

Table 2: Result of media validation

No	Media Validation Aspect	Number of Question	Score
1	Design	1-7	33
2	Features/Visual	8-13	27
3	Format	14-18	24
4	Software	19-20	10
Total Score			94

In calculating the result, the researchers processed it by calculating the Likert scale as follows:

Max Score = 5×20 (items) = 100

Percentage = $94/100 \times 100\% = 94\%$

Furthermore, based on the result of media validation, the result obtained was 94%. This result was classified in the "very good" category which meant that this Digital Book was feasible to use. After doing validation, what must be revised are: the first cover and last cover, the appearance on each cover page was given a picture and the color was adjusted.

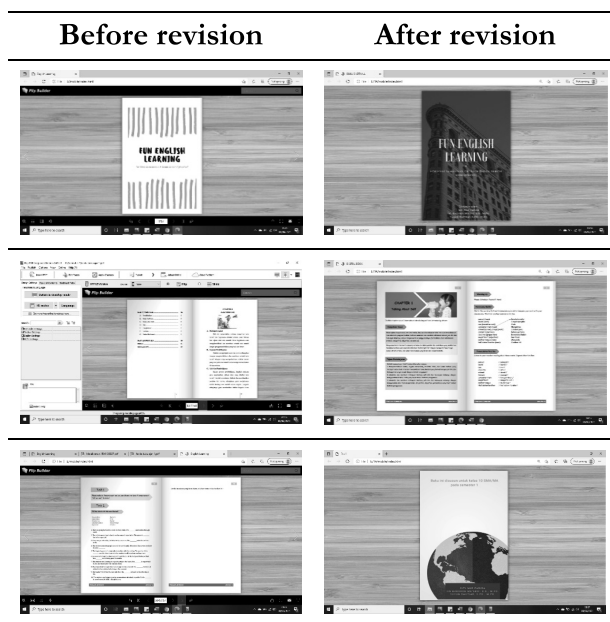


Figure 1: The result of first material validation and revision

At the material validation stage, the researchers consulted material discussion to one of English experts. The result of the validation of this material was presented in the form of a validation sheet.

Table 3: Result of material validation

No	Material Validation Aspect	Number of Question	Score
1	Learning	1-6	28
2	Display	7-10	19
3	Material	11-16	27
4	Content	17-20	17
Total Score			91

In calculating the result, the researchers processed it by calculating the Likert scale as follows:

$$\text{Max Score} = 5 \times 20 \text{ (items)} = 100$$

$$\text{Percentage} = 91/100 \times 100\% = 91 \%$$

Based on the result of material validation, the result obtained was 91%. This result was included in the “very good” category which meant that the materials in this Digital Book product deserved to be presented in a media product.

After doing validation, there must be some revisions. Some things to be revised were the cover of the book and after each chapter a reference was written.

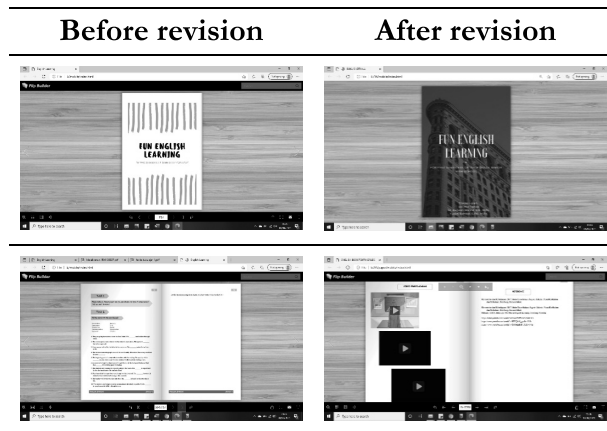


Figure 2: The result of second material validation and revision

The Result of implementation

In the implementation phase, the researchers conducted a field trial which was attended by 15 students at MA Nurul Qur’an Ploso to test the attractiveness of the Digital Book. After students see and use Digital Book, they would be provided an assessment using a questionnaire. In this questionnaire there were 10 questions and 5 assessment options. From the result of the questionnaire obtained the following result:

Table 4: Result of implementation

Aspect	Indicators	Score
General	1. This digital book is interesting and creative	75
	2. This digital book is easy to use	75
	3. This digital book can be accessed anytime	73
Design	1. Display and writing in digital books are clear	62
	2. Colors in digital book are very interesting and varied	75
	3. This digital book is more interesting than the provide book	72

	4. Interested in using this digital book as a learning media at school	73
Material	1. The display of material in the book is easy to understand and simple	62
	2. The material delivered is in accordance with the basic competencies	69
	3. The material is presented in the form of a complete digital book	74
Total		710

In that result, the researchers processed it by calculating the Likert scale as follows:

$$\text{Max Score} = 5 \times 10 \text{ (items)} \times 15 \text{ students} = 750$$

$$\text{Percentage} = 710/750 \times 100\% = 94\%$$

Based on the result of the implementation with 15 students as respondents, the result was 94%. This result is included in the “very good” category which meant that this Digital Book can be used as a learning tool to assist student learning activities in English lesson in the tenth grade of MA Nurul Qur’an Ploso.

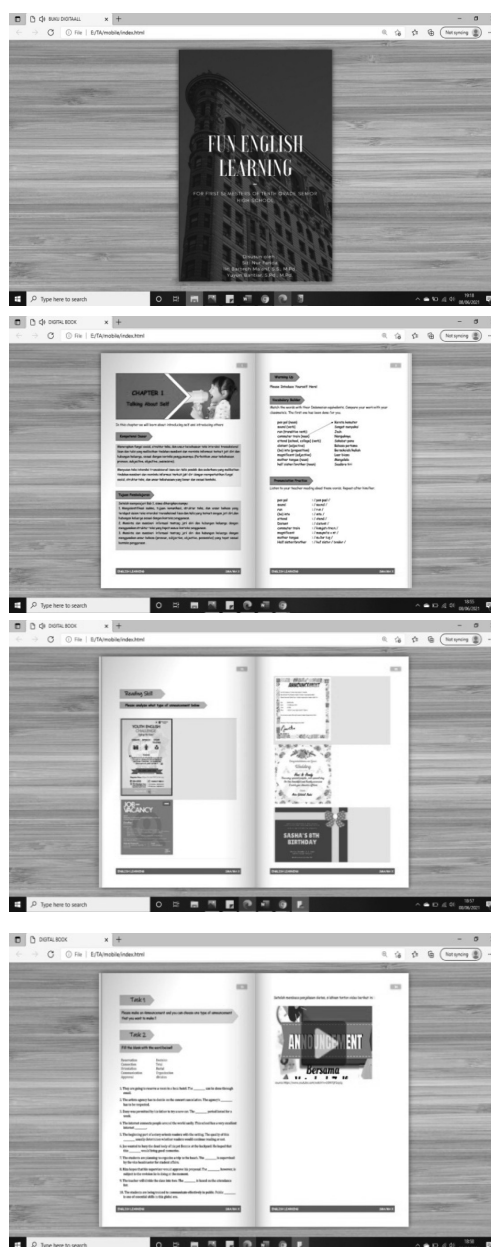
The Result of Evaluate

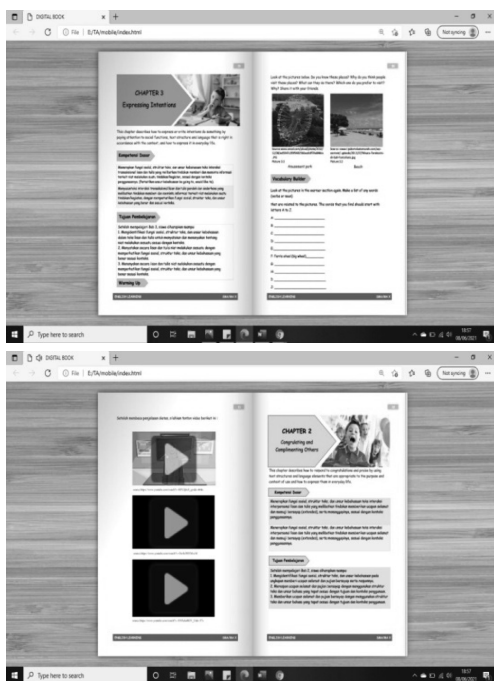
The last stage was a thorough evaluation of all the stages that have been carried out. After the result of the need analysis were obtained, and then prepared a design by adjusting the result of the analysis of students needs namely a supporting media in English subject with the aim that students are interested and enthusiastic during the learning process.

The researchers developed a media using a Flip PDF application to form a digital-based book. After the design stage was completed, the researchers must validate to the experts, namely media experts and material experts, then made revisions or improvements according to the suggestions given by the experts until this digital book media is feasible to implement. After doing validation and revision, the next step was to test

the product at MA Nurul Qur’an Ploso with 15 students in class X and get 94% result in the “very good” category which meant that the digital book product developed by the researchers met the criteria of being very attractive and suitable for use in learning English.

From all the results above the researchers could concluded that this Digital Book was feasible to use and could be disseminated for all English learners at tenth grade at any school. The final product can be seen in the following figures:





CONCLUSION

Based on the result of research and development that have explained above, it can be concluded that; from media validation result, this Digital Book obtained 92% result included in the “very good” category which means that it is feasible to use, while the result of material validation obtained 95% result which are included in the “very good” category which also means that the material presented in this Digital Book is feasible to use. Furthermore, at the product implementation stage, the researchers conducted a trial with 15 students of tenth grade, and obtained the result of student responses of 87%, and it classified in the “very good” category. This means that this Digital Book is suitable for use as learning media in the English learning process.

From all the result above, it indicates that this research will give benefits for other people included teacher, students, or the other researchers that will search about learning media.

Commonly the researchers expects that the result of this research can be a reference and contribute to other researchers and give knowledge to the readers.

REFERENCES

- Choirun, L., Nur, N., & Afidah, N. 2019. *Designing Website Learning Media Based Wordpress*. Proceedings of Seminar Nasional Multidisiplin. Retrieved online from <https://ejournal.unwaha.ac.id/index.php/snami/article/view/671/328>
- Kasnadi & Arifin, A. 2015 *Building the Literature Based-Character*. Proceedings of International Seminar on Education for Nation Character Building: STKIP PGRI Tulungagung.
- Komariyah, D. N. 2015. *Writing Strategies Used by the Fourth Semester Students of English Education Department (A Descriptive Study on the fourth Semester Students of University of Muhammadiyah Purwokerto in Academic Year 2014/2015)*. Unpublished Thesis: UMP.
- Leong, L.-M., & Ahmadi, S. M. 2017. An Analysis of Factors Influencing Learners’ English Speaking Skill. *International Journal of Research in English Education*, Vol. 2(1), pp. 34–41. Retrieved online from <http://ijreeonline.com/article-1-38-en.html>
- Nugroho, M. B. 2013. Pengembangan Buku Digital Interaktif Mata Kuliah Pengembangan E-Learning Pada Mahasiswa Teknologi Pendidikan Fip UNY. *Journal of Chemical Information and Modeling*, Vol. 53(9), pp. 1689–1699. Retrieved online from <http://journal.student.uny.ac.id/ojs/index.php/fiptp/article/view/7622>
- Prastowo, A. 2014. *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Yogyakarta. Diva Press.
- Putri. 2020. *HERCULES (Hotel Service Focuses on English Speaking Skill)*. Jombang: UNWAHA.
- Sriwahyuni, I., Risdianto, E., & Johan, H. 2019. Pengembangan Bahan Ajar Elektronik Menggunakan Flip Pdf Professional Pada Materi Alat-Alat Optik di SMA. *Jurnal Kumparan Fisika*, Vol. 2(3), pp. 145–152. Retrieved online from <https://ejournal.unib>

ac.id/index.php/kumparan_fisika/article/
view/8494

- Sari, A. S. 2016. The Development of Digital Book through Sigil Application in Cookies dan Candys Lessons. *Jurnal Science Tech*, Vol. 1(2), pp. 46–54. Retrieved online from <https://jurnal.ustjogja.ac.id/index.php/sciencetech/article/view/1226>
- Suparno, S. 2018. Development of E-Book Multimedia Model to Increase Critical Thinking of Senior High School Students. *Dinamika Pendidikan*, Vol. 12(2), pp. 196–206. Retrieved online from <https://journal.unnes.ac.id/nju/index.php/DP/article/view/13567>
- Sugiyono. 2014. *Metode Penelitian Pendidikan*. Bandung: Alfabeta.
- Syaveny, N. 2017. Teaching Reading Comprehension by Using Directed Activities Related To Text (DRTA) for the Students. *Jurnal KATA*, Vol. 1(2), pp. 153-158. Retrieved online from <http://ejournal.lldikti10.id/index.php/kata/article/view/2002>
- Utari, S. Y. 2014. Pengembangan Media E-book Pada Mata Pelajaran Bahasa Inggris kelas X di SMA Negeri 2 Padang Panjang. *Teknodika*, Vol. 12(2), pp. 41-50. 103. Retrieved online from <https://jurnal.fkip.uns.ac.id/index.php/teknodika/article/view/5283>