

DESIGNING LECTORA INSPIRE-BASED APPLICATION AS INTERACTIVE MULTIMEDIA FOR TEACHING VOCABULARY OF RECOUNT TEXT

Yovie Anggara Saputra^{1*}, Rahayu Apriliawati², & Urai Salam³
^{1,2,3}Universitas Tanjungpura, Pontianak, Indonesia

yoviesaputra48@gmail.com

ABSTRACT

This research aimed to design an appropriate interactive multimedia to support teaching vocabulary of recount texts to tenth-grade students of MAN 2 Pontianak using Lectora Inspire. The interactive multimedia was designed based on the teacher's interview, analysis of the current syllabus, and the English textbooks. The writer applied ADDIE as the research model. However, the writer only implemented four phases which were analyzing, designing, developing, and evaluation (ADDE). The product was designed by using Lectora Inspire and some supporting software. The contents of the interactive multimedia were focused on historical recount texts and it was adopted from "Buku Bahasa Inggris Kelas X" Version 2017 that linked to syllabus and learning objectives. The interactive multimedia was completed with some interactive features like feedbacks, navigation buttons, and dictionary. The writer used expert validation to evaluate the product based on the content aspects and the design aspects. It revealed that the product validation ranged from good to very good. Therefore, the interactive multimedia was usable to support teaching and learning processes in MAN 2 Pontianak.

Keywords: *Lectora Inspire, Interactive Multimedia, Recount Texts, Teaching Vocabulary*

INTRODUCTION

Digital facilities have been an innovation in the teaching and learning process and it cannot be avoided. Education 4.0 is well known as a new transformation in educational context that concerns the innovation of teaching learning by maximizing internet and technology (Anggraini, 2018). Since students belong to the millennials and they are already influenced by modern devices, it is a good opportunity for teachers to master the technology usage in the classroom. By using technology, it is easier to present pictures, videos, podcasts, and e-learning media at once.

English is one of the subjects taught at Indonesian high schools. Reading becomes one of the receptive skills that are included in Curriculum 2013. To understand the passage, students must be able to identify words faster, master the vocabulary best, and combine each of them into a coherent message. Vocabulary is one of the aspects that must be fulfilled by

students to comprehend the text easily (Wiraldi, Jufriadi, 2020). Recount text was chosen by the writer because it became as one of basic competences learned by 10th grade students. They were needed to fulfill some competences on learning recount texts, like analyzing the components (social function, text structure, and language features) of the text and understanding the text meaning. The materials used in learning recount text in grade X is the student's worksheet (LKS) published by PT. Intan Pariwara, which has colorless and less displayed pictures on each page, even it provides good explanation. Moreover, the students cannot recognize the vocabulary in case of differentiating both simple present tense and simple past tense.

Multimedia can be an alternative to help teachers while teaching students interactively in the classroom. Lectora Inspire is the one of interactive multimedia maker software that can be operated by teachers easily. Moreover, this software provides any understandable and developable features for beginner users (Akbarini et al., 2018). Several researches about Lectora Inspire as interactive multimedia in English language teaching have been done. Istikharoh (2015) found that the developed interactive multimedia by Lectora Inspire can be categorized as appropriate to cover two skills at once, reading and writing skills. Other findings delivered by Asih (2013) show that the usage of interactive multimedia can stimulate students while learning because of the combination of pictures and background music. The use of interactive multimedia can be an alternative in for students on self-access learning. Widiyati (2015) stated that developing interactive multimedia using Lectora Inspire was effective from the aspect of content quality, multimedia components, and design quality.

The writer developed a teaching material multimedia based on *Lectora Inspire* software to support the teacher in teaching recount text reading. The distinction on this research with other similar research was the teaching material designed was presented in an application which was accessible for any devices, like smartphones and laptops. Moreover, it was applicable for both online and offline for teaching recount text reading for tenth-grade students of high school level.

METHODS

Development Model

This research used a development model. According to Borg, et. al (2003), it is a development model where the findings are to design new products and new procedures by testing, evaluating, and treating the product to meet the standards.

In designing multimedia-based teaching material, the writer used the ADDE model as an adaptation from Branch (2009) to find out the appropriate product. The writer modified the procedures by focusing on analyze, design, develop, and evaluation (ADDE) phase because of the pandemic situation faced by the school during the teaching and learning process.

Procedure of Development

Based on the ADDE model, the writer used the following procedure:

Analysis

The writer conducted the analyzing steps by interviewing the teacher, checking the current syllabus and the English textbook used by the teacher and students. The aim of the interview was to gain the information related to problems faced by students and the teacher on teaching and learning historical recount text. The findings of analyzing phase became the guideline on designing and developing the product.

Design

The design phase focused on designing learning objectives, the flowchart, and also the course grid. According to Branch (2009), the aim of the design phase is to test the designed performances if it is already right or not. The teaching material was adopted from the textbook publish by *Kemendikbud* (2017) and it would be presented in the interactive multimedia with interesting menu and activities based on the tenth-grade students' needs of high school. The writer designed the flowchart of the interactive multimedia to draw the flow and sequences of the materials. It is often developed to illustrate the structure of the content (Cennamo and Kalk, 2019). There were some sequences that developed here, started from the main menu to the navigation buttons.

Develop

In the development phase, the writer started producing the interactive multimedia based on the flowchart and the course grid. The development phase included creating and organizing the materials and tasks that would be used for the teaching and learning process. It was developed by using Lectora Inspire 17, the updated version of the software. There were also some supporting software on developing the multimedia, like Adobe Photoshop CS6 and Text to Speech. The interactive multimedia covered the reading skills of historical recount text, which focused more on vocabulary mastery.

Evaluation

After developing the interactive multimedia, the final product was validated on the evaluation phase. The writer conducted expert validation through questionnaires that evaluated by the teacher of MAN 2 Pontianak and the multimedia expert (the lecturer). The teacher evaluated the content appropriateness and the expert focused on the design appropriateness.

Location and Time of the Study

The study was conducted at MAN 2 Pontianak. It was conducted in October 2020-January 2021.

The Informant of the Study

The informant was the English teacher of tenth-grade students of MAN 2 Pontianak who is teaching the tenth-grade students. The informant shared about the information related to the problems that students faced on teaching and learning historical recount texts through the interview. The English teacher was also the evaluator of the product.

Techniques and Data Collection Instruments

Techniques of Data Collection

There were three techniques used by the writer on conducting the study: Observation, structured interview, and expert validation. The writer observed some documents to find out the learning objectives and the materials related to recount texts. The documents were including the textbooks used by students and the current syllabus used by the teacher. The writer also did an interview with the English teacher to make sure what students actually really needed on mastering their vocabulary on reading recount text. The interview used open-ended questions and English language. The questions were related to problems faced by students and expectations of the final product. This research also needed expert validation to make sure whether the product was appropriate or not. The writer conducted the expert validation twice. The first validation was taken from the teacher referring to the content appropriateness. As the one who knew the students' needs, the English teacher decided whether the interactive multimedia was already suitable with objective learning and syllabus in teaching learning recount text or not. The second validation was taken from the lecturer who understood the layout and the design needed on interactive multimedia. The writer prepared questionnaires to find out the experts' judgement dealing with the interactive multimedia contents and its design.

Data Collection Instruments

The writer applied an interview sheet to collect the data given from the teacher as the respondent. Questionnaire was made to make sure the appropriateness of the product from experts' point of view. The questionnaires were distributed to the English teacher of MAN 2 Pontianak and the lecturer. The questionnaires were used to evaluate the content appropriateness and design appropriateness of interactive multimedia. The statements about the contents appropriateness were adapted from *Instrumen Penilaian Buku Bahasa Inggris SMA* by BSNP (*Badan Satuan Nasional Pendidikan*) and the other statements (design-related) were adapted from *Evaluation Form* by Alessi and Trollip (2001). The questionnaire point was created based on a Likert-Scale questionnaire with a four-point range. The responses of the questionnaires would determine whether the interactive multimedia was appropriate or not.

Technique of Data Analysis

Analysis of Qualitative Data

The interview and observation results were considered as qualitative data. The writer analyzed both of the data by using thematic analysis as proposed by Braun and Clarke (2006). The writer transcribed and made important notes of the interview. The writer also read the documents (the books and the syllabus) and took the notes on it which was used to highlight the materials on learning recount texts. Next, the notes were organized based on what should be included in designing the interactive multimedia and the writer wrote a report related to the analyzed data.

Analysis of Quantitative Data

The results of expert validation were gathered from the questionnaire and it was considered as quantitative data. The data of the questionnaire was analyzed by finding the mean (X) as the indicator to measure each aspect of appropriateness. The means were calculated by using the formula of data conversion as suggested by Suharto (2006) below:

$$Mn = \frac{\sum Fx}{N}$$

Mn = mean
 $\sum Fx$ = number of scores
N = number of cases

Table 1. Data Conversion Table by Suharto (2006)

Scales	Interval	Categories
1	1 < X ≤ 1.74	Poor
2	1.75 < X ≤ 2.49	Fair
3	2.5 < X ≤ 3.24	Good
4	3.25 < X ≤ 4	Very Good

RESULTS

The Results of Analysis Phase

Based on the interview results, there were four points concluded by the writer; (1) The curriculum used in MAN 2 Pontianak was 2013 Curriculum and the teacher applied scientific approach in this curriculum, (2) The textbook used by the students was colorless and less of displayed pictures, (3) Students had difficulties on recognizing simple present tense and simple past tense since they lack of vocabulary, (4) The teacher expected the writer to design the interactive multimedia by looking at the effectiveness on achieving students' motivation and it must be supported by pictures to make students easier on comprehending the texts.

There were two basic competences that must be fulfilled by students on learning recount texts; (1) to identify the social function, generic structure, and language feature of a historical recount text. (2) to find the detailed information related to the historical recount text. The teacher used two different books while teaching students on learning recount texts: *Contextual English* published by *Platinum* and *Buku PR Bahasa Inggris Kelas X* by *Intan Pariwara*. However, the second book that mostly used on the teaching and learning process even it had some weaknesses like colorless and less displayed pictures.

By looking at the result, it was necessary to design the interactive multimedia in order to support the textbook used by students. It could be used by the teacher as the teaching sources. Lectora Inspire could be an alternative software on designing interactive multimedia.

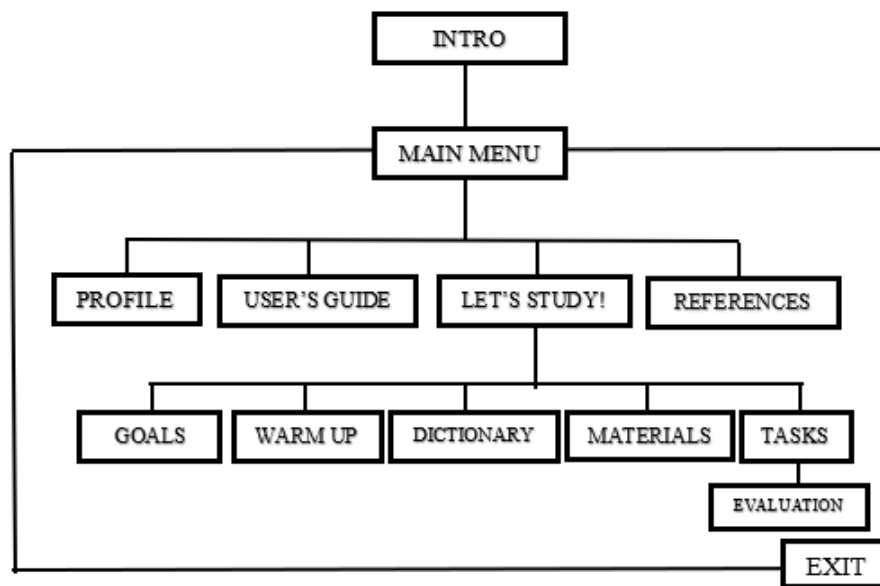
The Results of Designing Phase

The main results on designing the interactive multimedia were drawing the flowchart

and creating the course grid. The flowchart was the basic look of multimedia models and it helped the users while using the product through its visualization.

Based on the flowchart, the interactive multimedia consisted of 4 sub menus in main menu: Let’s Study, User’s Guides, Profile, and References. Each menu provided its own function, starting from Let’s Study as the sub menu to teach and to learn historical recount texts. User’s Guide menu provided the guides how to use the interactive multimedia in general and each symbol was described here. Profile menu presented the personal information of the writer as the interactive multimedia developer. “References” menu presented about the sources taken by the writer during designing the product. The figure below shows the flowchart.

Figure 1. The Flowchart



The course grid actually looked like a syllabus. However, the writer made the modification of the activities since the textbook covered all of English skills and made it specified into reading skills only. Learning materials or contents of the interactive multimedia were made based on the textbook adaptation, which was taken from Unit 8 entitled “The Battle of Surabaya”. This unit covered basic competencies (3.7, 4.7.1) of the syllabus. Based on 3.7 of basic competencies, it discussed about how to identify the social function, generic structures, and languages features of historical recount texts. Moreover, 4.7.1 discussed about how to understand the text meanings contextually, which was also related on finding the detailed information of the text. The grammar used in this unit were simple present tense and simple past tense. This course grid also provided some related activities based on the topic.

The Results of Developing Phase

The finding of this research was the interactive multimedia which can be used for both

the teacher and students on the teaching and learning process, especially on reading skills of historical recount texts. The contents were adopted from *"Buku Bahasa Inggris Kelas X, Revisi 2017"* published by Kemendikbud. It was also developed based on the analysis conducted by the writer. The product had some features that helped students to understand the texts easier, like *"Dictionary"* and *"Tasks"*. It could be used for both online and offline usage depending on the school's needs. The design of the multimedia was created more colorful and easier to operate.

Figure 2. Home Page



Figure 3. Main Menu Page



Figure 4. Let's Study Menu



The Results of Evaluation Phase (*Expert Validation*)

The writer conducted expert validation to make sure whether the product was appropriate or not. The first questionnaire was done by the English teacher of MAN 2 Pontianak. There were three aspects that were evaluated by the teacher: The content, the language, and the presentation. Based on the evaluation, it could be concluded that the interactive multimedia was usable based on the content appropriateness. The results indicated all of those three aspects were considered the “Very Good” category.

The tables below show the results of each aspect.

Table 2. The Appropriateness of The Content

No	Statement	Score
1	Materials in the interactive multimedia are in accordance with the textbook “ <i>Bahasa Inggris</i> ” based on Curriculum 2013 for grade X.	4
2	Materials in the interactive multimedia are in accordance with Core Competencies and Basic Competencies of Senior High School grade X.	4
3	Materials in the interactive multimedia are appropriate for reading activities.	3
4	Materials in the interactive multimedia are in accordance with the learning objectives.	4
5	Examples and exercises given are in accordance with the learning objectives.	4
6	Materials in the interactive multimedia include the relevant vocabulary.	3
7	Materials in the interactive multimedia contain reading sub-skills activities.	4
8	Materials in the interactive multimedia include guidance related to the comprehension of the text structure of the discussed text.	3
9	Materials in the interactive multimedia include guidance related to the social function of the discussed text.	4

10	Materials in the interactive multimedia include guidance related to the language features of the discussed text.	4
11	Materials in the interactive multimedia include basic interactive activities (true/false and multiple choices).	4
12	Learning elements (materials, exercises, and evaluation) have appropriate amount.	3
13	Materials presented in the interactive multimedia are beneficial for students' daily life.	4
Score		48

$$Mn = \frac{\sum Fx}{N}$$

$$Mn = \frac{48}{13}$$

$$Mn = 3.70$$

Table 3. The Appropriateness of Language

No	Statement	Score
1	Instruction language used in the interactive multimedia is correct and accurate.	3
2	Texts language used in the interactive multimedia can be understood.	4
3	The materials in the interactive multimedia use English grammatically.	3
4	The materials in the interactive multimedia use correct spelling.	3
5	The materials in the interactive multimedia use correct the words' choices.	3
6	Grammar used in the interactive multimedia is correct.	4
7	Vocabulary used in the interactive multimedia is correct.	4
Score		24

$$Mn = \frac{\sum Fx}{N}$$

$$Mn = \frac{24}{7}$$

$$Mn = 3.43$$

Table 4. The Appropriateness of Presentation

No	Statement	Score
1	Materials presented in the interactive multimedia are in systematic order.	4
2	Learning activities in the interactive multimedia help students to be an autonomous/independent learner.	3
3	Materials in the interactive multimedia contain opening activities, main activities, evaluation, reflection, and summary.	4
4	The learning materials encourage the learners to learn independently and to be responsible of their own learning process.	4
5	The learning materials encourage the learners to think and act creatively.	4
Score		19

$$Mn = \frac{\sum Fx}{N}$$

$$Mn = \frac{19}{5}$$

$$Mn = 3.80$$

The second questionnaire was done by the multimedia expert, one of the lecturer at Tanjungpura University. There were four aspects that evaluated by the expert on this questionnaire, including screen appearance, multimedia elements, navigation buttons, and feedback features. Based on the validation conducted by the expert, it could be concluded that the interactive multimedia also fulfilled the criteria based on the design appropriateness. The results indicated that three of four aspects were considered as “Very Good” category, except the feedback features that considered as “Good” category.

Table 5. The Appropriateness of Screen

No	Statement	Score
1	The screen appearance looks clear.	4
2	The screen appearance is proportional.	4
3	The color combination that is used on the screen is in accordance.	3
4	Pictures that is used in this multimedia can support the materials understanding.	3
5	Animations that is used in this multimedia can support the materials' understanding.	3
6	Texts that appeared in this multimedia are appropriate.	3
7	Pictures that appeared in this multimedia are appropriate.	3
8	Animations that appeared in this multimedia are appropriate.	3
Score		26

$$Mn = \frac{\sum Fx}{N}$$

$$Mn = \frac{26}{8}$$

$$Mn = 3.25$$

Table 6. The Appropriateness of Multimedia Elements

No	Statement	Score
1	Types of fonts that used in this multimedia are appropriate	4
2	Font size that used in this multimedia is appropriate.	3
3	Text, pictures, and animations are well organized.	3
Score		10

$$Mn = \frac{\sum Fx}{N}$$

$$Mn = \frac{10}{3}$$

$$Mn = 3.30$$

Table 7. The Appropriateness of Navigation Buttons

No	Statement	Score
1	Navigation buttons in this multimedia are located consistently.	4
2	Navigation buttons in this multimedia are easy to operate.	3
3	Navigation buttons in this multimedia are well functioned.	3
4	There is a "shortcut" to go back to the main menu and exit the multimedia.	3
Score		13

$$Mn = \frac{\sum Fx}{N}$$

$$Mn = \frac{13}{4}$$

$$Mn = 3.25$$

Table 8. The Appropriateness of Feedback Features

No	Statement	Score
1	The multimedia gives the feedback directly to users.	3
2	The available feedback helps users to operate the multimedia independently.	3
3	The given score in this multimedia helps students to measure their reading ability.	3
Score		9

$$Mn = \frac{\sum Fx}{N}$$

$$Mn = \frac{9}{3}$$

$$Mn = 3.00$$

DISCUSSION

This research was conducted by using ADDE as an adaptation from Branch (2009). The procedure was modified due to Covid-19 pandemic. The interactive multimedia was designed based on the application called Lectora Inspire. It offers some menus to help students on learning reading of historical recount text, such as warm up, materials, dictionary, tasks, and evaluation. The target users of this product are the tenth-grade students of MAN 2 Pontianak and the teacher takes the role as the facilitator. The evaluators of this interactive multimedia were the teacher of MAN 2 Pontianak and the multimedia expert (the lecturer).

The interactive multimedia consists of some elements, like text, sound, graphic, animation, and video. Text becomes the primary element of interactive multimedia. According to Alessi and Trollip (2001), every text appearing in the multimedia must be well formatted and fulfill these following factors: Leanness, transitions, clarity, reading level, and mechanics. There are also other multimedia elements that can be found here, like sound, animation, and graphic. Sounds were provided on each paragraph of texts and also for the instruction of each menu. This developed interactive multimedia was also completed by graphics and animation on each page to stress the discussed topic.

Based on expert validation, the interactive multimedia was appropriate and usable for teaching and learning the recount text reading in tenth grade. There were some points that were evaluated by the experts, such as the content and the design appropriateness. Both the evaluators agreed that the interactive multimedia was suitable with the basic competences of Curriculum 2013. The activities in this teaching material were also suitable for the teaching and learning reading of the historical recount text.

There were some similarities that can be found in this research referring to the previous studies. Istikharoh (2015) did a study about developing interactive multimedia by using Lectora Inspire and it can motivate students because of the interesting interface. This developed interactive multimedia also has the complete elements except video. Another similarity can be found from Widiyati (2015). The developed multimedia was appropriate

based on some aspects, while the interactive multimedia made by the writer was also usable because of the features.

This research had some limitations faced by the writer during the process. Firstly, it was done without the implementation phase due to COVID-19 pandemic. Secondly, the interactive multimedia did not include videos as one of the main elements. However, the product was appropriate to use on the teaching and learning process especially on historical recount texts.

CONCLUSION

The product resulted from this research was the interactive multimedia based on Lectora Inspire application which was designed to support teaching vocabulary of recount texts. The contents were developed based on the interview results and the document observation (including the syllabus and the textbooks). The materials were adopted from *"Buku Bahasa Inggris Kelas X" Version 2017*. The product was considered appropriate to support the teaching vocabulary of historical recount texts for the tenth-grade students. Based on the expert validation results, it can be seen from the mean score of questionnaires of the content appropriateness and the design appropriateness that are categorized as "Very Good" and Good. Therefore, the interactive multimedia based on Lectora Inspire is usable to support the teaching vocabulary of historical recount texts for tenth- grade students of MAN 2 Pontianak.

Some suggestions were addressed to the English teachers, the tenth-grade students, and the developers based on the results of this research. The English teachers should consider both the multimedia content and design while developing the interactive multimedia, where the materials should be in accordance with the basic competences of the curriculum and the design should be interesting in order to motivate students in learning English. Students have to prepare a device which can access the multimedia easily. They can explore the features of the product to learn vocabulary of historical recount text, such as the dictionary to find the word meanings and tasks to measure their reading ability. Lastly, material developers should consider both the content and the design. In terms of the content, it should be more suitable and appropriate with students' needs. Other developers also have to develop the product for all four English skills. The multimedia should be attractive for users in order to make students enjoy learning English in an interesting way. They also have to consider some supporting software since Lectora Inspire has some weaknesses.

REFERENCES

- Akbarini, N. R., Murtini, W., & Rahmanto, A. N. (2018). The effect of Lectora inspire-based interactive learning media in vocational high school. *Jurnal Pendidikan Vokasi*, 8(1), 78. <https://doi.org/10.21831/jpv.v8i1.17970>
- Alessi, S. M., & Trollip, S. R. (2001). *Multimedia for learning: Methods and development (3rd Edition)*. Allyn and Bacon.

- Anggraeni, C. W. (2018). Promoting education 4.0 in English for survival class: What are the challenges? *Journal of English Language, Literature, and Teaching*, 2(01), 12–24. <https://doi.org/10.31002/metathesis.v1i2.676>
- Asih, W. K. (2013). *Developing interactive learning multimedia to teach reading narrative*. UNY Press.
- Badan Standar Nasional Pendidikan (BSNP). 2011. *Penilaian buku teks pelajaran Bahasa Inggris sekolah menengah kejuruan*. Jakarta: Badan Standar Nasional Pendidikan
- Borg, W. R & Gall, M. D. Gall (2003). *Educational research: An introduction, Forth edition*. Longman.
- Branch, R. M. (2009). *Instructional design: The ADDIE approach*. Springer.
- Cennamo, K., & Kalk, D. (2019). *Real World Instructional Design*. Routledge. <https://doi.org/10.4324/9780203712207>
- Istikharoh. (2015). *Developing interactive multimedia for reading and writing learning materials*. UNY Press
- Suharto, G. (2006). *Pengukuran Penilaian Hasil Belajar Bahasa Inggris*. Yogyakarta: P3B UNY.
- Widiyati, D. N. (2015) *Developing Interactive English Learning Materials by Using Lectora Inspire Program for Islamic Elementary School Students in Yogyakarta*. S2 thesis, UNY
- Wiraldi, Jufriadi, M. I. (2020). Improving Vocabulary Mastery of The Seventh Year Students Using Scattergories Game in SMP Negeri 8 Palopo. *FOSTER: Journal of English Language Teaching*, 1(2), 159–167.