

DEVELOPMENT OF E-STORYBOARD APPLICATION MEDIA TO TEACH WRITING SKILLS

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Abstract

Learning media is a tool that functions to convey material or information in the teaching and learning process. The integration of media can stimulate students' attention and interest in learning. This research contains the development of E-Storyboard application media to teach English writing skills, especially recount text. Due to the importance of learning media the current research aims develop of E-Storyboard Application as media to teach English writing skill especially recount text. To achieve the goal of the research was implement ADDIE model (Analysis, Design, Development, Implementation and Evaluation). The research subjects were 40 students of class X DPIB 2 and English teacher at SMK Islam 1 Blitar. There are two types of data in this research, namely qualitative and quantitative. The qualitative data was generated from observing the learning process and interviewing English teachers. While the quantitative data is generated from validation calculations and student response questionnaires. Product validation calculations use the percentage formula which results in an average of 89.5% in the "Very Valid" category. Then for the calculation of the student questionnaire using a Likert scale (1-4) and the index% formula to get a result of 80.3% which is in the "Very Angree" category. In summary the E-Storyboard application media product is accepted as an English language learning media, especially in writing recount text skills.

Keywords: E-Storyboard Application; Writing Skill; Recount Text

INTRODUCTION

English lessons are taught from elementary to high school as a compulsory subject. There are four skills that must be mastered in learning English, namely speaking skills, reading skills, listening skills and writing skills (Pamuji & Setyami, 2021). From those four skill , writing is a skill that is often used for indirect communication. Writing skill is the ability to make marks (letters, numbers and punctuation) in any language by using writing tools on a certain page. (Gie, 2002). The benefit of writing include boosting intelligence, encouraging initiative and creativity, fostering courage, and encouraging the capacity for information gathering. (Yunus & Suparno, 2009). Writing skills are very important to develop because writing can show the knowledge that other people have. Writing skills in English is a complex skill because it needs to organize ideas and translate written work into readable text (Agustin & Widiarini, 2021). Bear in mind for those reasons, English writing skill plays an important role. Based on the results of observations at SMK Islam 1 Blitar on 10th January 2023, some class X *Desain Permodelan dan Informasi Bangunan* (DPIB) 2 students obtained some data on the problems they were experiencing. Actually, in this class students realize the importance of learning English, it is just that students tend to be passive and bored when learning takes place. This is because the media used by the teacher is less interesting and does not vary because it only uses white board media. The advantages of learning media in the educational process for students include making learning more appealing to them so that it can encourage learning motivation and giving the learning materials a clearer meaning so that students can understand them better

(Sudjana & Rivai, 2013). If the media used is not interesting, the result is that some students do not pay attention to learning; students tend to do other activities such as chatting with friends, reading comics, stealing opportunities to play mobile phones and some even sleep. In addition to the problems above, according to the outcomes of interview with English teacher, students experienced difficulties in writing skills, especially in writing texts. Some examples of difficulties experienced by students are (a) writing the wrong vocabulary spelling; (b) inappropriate use of tenses; (c) mastered vocabulary brackets such as verbs, adverbs, conjunctions; and (d) difficulty determining ideas in writing stories. Writing difficulties are difficulties in following writing teaching or writing skills (Yusuf, 2013). Writing in English is not an easy thing because writing in English is a complex skill that must pay attention to spelling, grammar, tenses and so on. Based on observations in class X DPIB 2, currently there are still many students who make mistakes in writing skills, starting from writing vocabulary spelling, using grammar and tenses, and are unable to determine ideas when writing stories. Based on some of the problems that have been mentioned, researcher focus on overcoming problem in the difficulty of finding ideas when writing stories. The researcher provides a solution by developing an E-Storyboard application media to make it easier for students to find ideas for writing stories, especially in recount text. The e-storyboard application is a learning medium in the form of an application that contains material with storyboard visualization. Storyboard is a serial area of a sketch that is used as a planning tool to show visually how the action of a story takes place (Nurhasanah & Destyany, 2011). Storyboard is a pre-writing activity that emphasizes elaboration, prediction, brainstorming and sequencing. In general, storyboards are sketches of pictures arranged sequentially according to the storyline (Wishandanger, 2016). Storyboard aim to guide people in making films/stories, enabling a person to develop stories with his ideas (a tool for channeling ideas) and explaining the flow of events in the story (Sukanto, 2011) . The use of storyboard media provides many benefits for students such as making it easier for students to absorb more material because it is arranged with a simple concept. In fact, using pictures in storyboards is more effective than just using text/narration. Based on some of the problems that have been mentioned, researcher will focus on developing application E-Storyboard media. The choice of application-based media is because currently technological developments are increasingly advanced in the world of education. Electronic media design as a result of technological developments can be used as an effective media for learning recount text writing skills (Banggur et al., 2018). The development of electronic-based media through the e-storyboard application was chosen because it is considered the right medium to overcome problems in English writing skills, especially in recount text. The E-storyboard application helps teachers present content more effectively, grabs students' attention, and motivates them to learn. The main reason for choosing this media development is to add a variety of media in learning English, especially in writing skills on recount text. With the E-Storyboard application, the researcher hopes that it can help students hone their English skills, especially in writing skills. The application in the form of an e-storyboard helps direct students to follow the pictures that make up the storyline which in turn can encourage students to generate and develop ideas into their writing. Research on developing E-Storyboard application media is in line with research conducted by (Marziola, 2019). In addition, there are significant differences in learning outcomes between the experimental class and the control class. The researcher concluded that multimedia storyboards made students' writing easier to understand and well organized. Subsequent research was conducted by (Andri et al., 2020) Based on research findings, the implementation of multimedia storyboards in second grade students of MA Fajar Islam Basarang is effective in improving writing skills. The use of multimedia storyboards is advised while creating descriptive prose. This is one of the best methods for assisting kids with their writing. This encourages creativity and makes it simple for them to organize stories. The outcomes of the pretest and posttest show how effective

this multimedia storyboard was. One of the teaching tools that might encourage students to write creatively is multimedia storyboards. After reviewing several references from previous studies, it turns out that the use of storyboard media still uses scene images that are printed and then arranged on a board. As a result, researcher are developing storyboard media as an application that looks cutting-edge and makes use of recent advancements in technology. Researchers will conduct research with the title "Development of E-Storyboard Application Media to Teach Writing Skills". The goal of this research is to find out the process and results of the development of E-Storyboard Application media in teaching writing skills.

METHOD

This research is Research and Development (R&D). Research and development (R&D) is a research method used to create product and evaluate their efficacy (Sugiyono, 2016). The methodology using the ADDIE model. The ADDIE model consists of five stages which include Analysis, Design, Development, Implementation and Evaluation (Sugiyono, 2016).

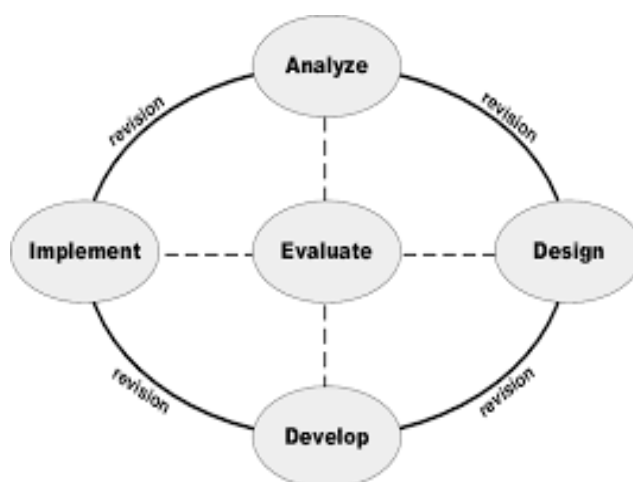


Figure 1. Research Procedure (Sugiyono, 2016)

The figure above shows the research procedure using the ADDIE model starting from the **Analysis** stage, namely needs analysis through observation of learning activities and interviews with teachers. Second, **Design** is the process of drafting product concepts and designs. The design stages use a flowchart to simplify the design process. Third, **Development** is the process of creating a product according to the design plan, after which the finished product will be validated by media and material experts which will be calculated using the Percentage validity formula. Researcher will be revised if the product does not meet the validation criteria. Fourth, **Implementation** is a product trial process to students. Students use products made in the learning process. Fifth, **Evaluation** is the process of evaluating the product after use. Researchers gave a questionnaire to assess satisfaction using the product made. The questionnaire will be calculated using the Likert Scale (1-4) and index formula.

The data for this study came from SMK Islam 1 Blitar, class X DPIB 2 students, totaling 40 students consisting of 32 boys and 8 girls. Presentation of data in this study uses two types of data, namely qualitative and quantitative. Qualitative data is data presented in the form of sentences or descriptions (Sugiyono, 2017). Qualitative data in this study came from observations and interviews. Meanwhile, Quantitative data is data presented in the form of numbers or scores (Sugiyono, 2017). Quantitative data from this research are the result of media, material and language expert validation as well as students' responses to product use.

RESULTS AND DISCUSSION

Results

The results of the development of the E-Storyboard application media will be presented according to the stages of the ADDIE model. First, **Analysis** stage the researcher conducted a needs analysis by observing the learning process and interviewing English teachers on 10th January 2023. Needs analysis is the first step that must be taken because it acts as a guide for the development needed (Widhi, 2016). According to the results of the needs analysis that was done, the learning process for class X has used the independent curriculum. The use of learning media in class only uses whiteboards, this causes learning to tend to be boring. English learning material comes from the teacher without any learning books. Researcher will create media in the shape of E-Storyboard application as innovation in technology-based learning media based on the findings of this needs analysis. The way that technology is used nowadays has a significant impact on all activities, including learning (Sardi & Sari, 2020). The advancement of educational media is anticipated to boost students' enthusiasm to learn, particularly when acquiring a language like English.

Second, **Design** stage the researcher uses a flowchart. A flowchart is a diagram with specific symbols that precisely explains a simple series of processes (Wibawanto, 2017). The use of flowcharts is also to see the overall material interrelationships in the media being developed. The E-Storyboard application media design flowchart is presented in the following figure :

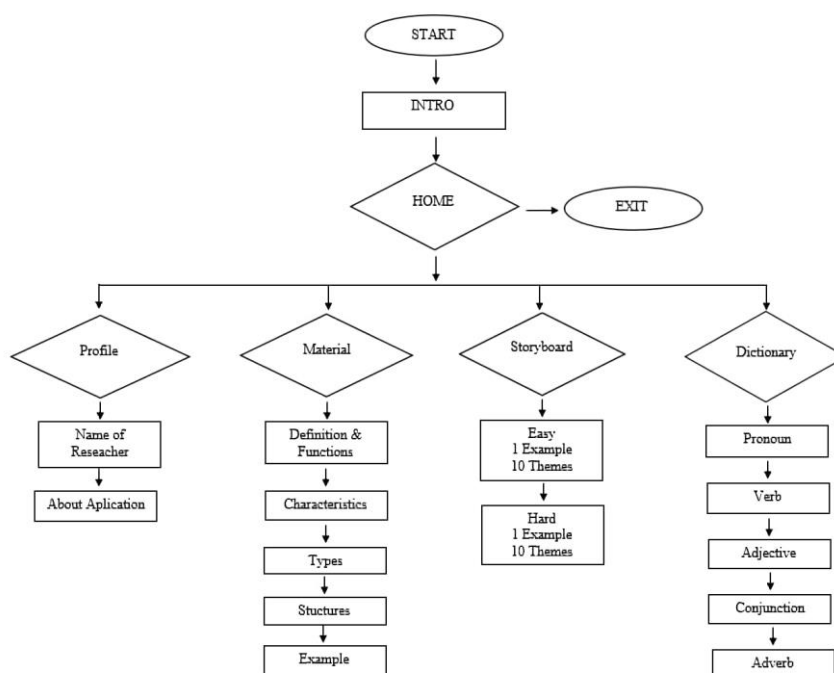


Figure 2. Design Flowchart Application E-Storyboard

The preparation of the material in the flowchart is in accordance with the learning outcomes in the Recount Text material. In the home there are 3 main menus (material, storyboard, and dictionary) and 1 additional menu (profile). The material is presented according to the group with the following explanation: (a) The profile contains the researcher's name and a brief explanation of the E-Storyboard application; (b) The material contains the parts of the Recount Text, starting with the text's definition and moving on to examples; (c) Storyboard contains 2 levels, namely easy and hard. The difference in these two levels is that at the easy level the

story scenes are made sequentially, while at the hard level the scenes are randomized so students must sequence the scenes first before developing the story. Each level consists of 1 example of problem solving and 10 story themes presented in storyboard form which students will develop into a story; (d) The dictionary contains 5 parts of speech (pronoun, verb, adjective, conjunction and adverb) which functions as a dictionary which helps students in story writing skills.

Third, **Development** stage the researcher begins to make the E-Storyboard application in accordance with the results of the design at the design stage. The making of this application uses a codular website. Kodular is an application developer website that allows users to create Android-based applications for free and with programming blocks, so that users don't have to code (Ronaldo & Ardoni, 2020). The product results from the development of the E-Storyboard application can be seen in the figures below:

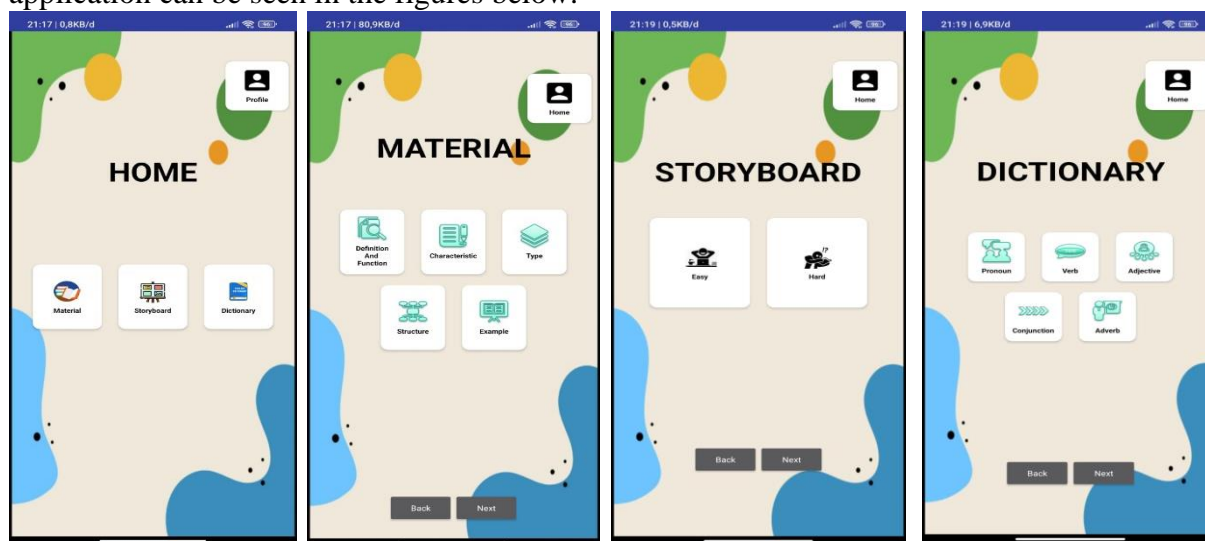


Figure 3. Display of the E-Storyboard Application Product

After the E-Storyboard application product was developed, the researcher conducted a validation test with two categories, namely media expert validation and material expert validation. The validation calculation uses the following validation percentage formula:

$$P = \frac{\sum x}{\sum x_i} \times 100\%$$

Information :

P = Validity

$\sum x$ = Number of evaluation responses

$\sum x_i$ = Highest response number

Table 1. Percentage Eligibility Criteria for Expert Validation

Percentage %	Validity Category	Explanation Eligibility Category
0% - 20%	Vey Invalid	Very Infeasible
21% - 40%	Invalid	Infeasible
41% - 60%	Less Valid	Less Feasible
61% - 80%	Valid	Feasible
81% - 100%	Very Valid	Very Feasible

Source : (Arikunto, 2010)

Table 2. Recapitulation Validity Result from Expert

No	Type of Validation	Presentage	Validity Category
1.	Media Validation	92%	Very Valid
2.	Material Validation	98,66%	Very Valid
3.	Language Validation	78%	Valid
	Mean	89,53%	Very Valid

Based on the table above, validation from media experts value 92% which was in the "Very Valid" category, validation from material experts value 98.66% which was included in the "Very Valid" category and validation from linguists value 78% which entered the "Valid" category. ". The average validation value is 89.53% which is included in the "Very Valid" category. Therefore making the E-Storyboard application media appropriate for usage as a teaching tool in a classroom.

Fourth, **Implementation** stage a trial was carried out on April 12th 2023 which lasted 2 x 30 minutes. The trial was conducted in class X DPIB 2 with 40 students but at that time there were 7 students who could not take part in the trial with the statement that 3 students were sick, 2 students with permission and 2 students without explanation. The trial activity begins with the researcher explaining how to use the E-Storyboard application after which The researcher requests that students create groups of two to three people. Then each group chooses one of the themes in the easy level to be developed into a story about past events. The trial process is focused on writing recount text skills according to the scene in the storyboard that has been selected.

Fifth, **Evaluation** stage after the product was tested on the research students distributed questionnaires to get a value of product use satisfaction. The questionnaire was distributed in the form of a google form link which students filled in directly. Questionnaire data was filled in by 33 students with 10 questions, so there were a total of 330 answers. Data from student questionnaires are calculated using a Likert Scale (1-4) and Index% with the following formula:

$$\text{Likert Scale : } T \times P_n$$

Information :

T = Total answers chosen by respondents

P_n = Score or Choice of numbers on a Likert scale

Table 4. Caculation Likert Scale

Answer	Score (P _n)	Total answers chosen (T)	Result of T x P _n
Very Disagree	1	4	4
Disagree	2	13	26
Agree	3	222	666
Very Agree	4	91	364
Total		330	1.060

The results of the Likert Scale calculation are then entered into the Index% formula:

$$\text{Index\%} = \frac{\text{Score Total}}{Y} \times 100$$

Calculation Score :

Y : Highest score x total of all answers = 4 x 330 = 1.320

X : Lowest score x total of all answers = 1 x 330 = 330

$$\text{Index\%} = \frac{1.060}{1.320} \times 100 = 80,3\%$$

Then the results of index% will be categorized into Score Intervals based on the table:

Tabel 3 : Criteria Interval Score

No	Criteria	Score
1.	Very Disagree	0% - 24,99%
2.	Disagree	25% - 49,99%
3.	Agree	50% - 74,99%
4.	Very Agree	75% - 100%

Source : (Sugiono, 2016):

The results of calculating the questionnaire data get a value of 80.3% which is included in the "Very Agree" category, which means that the satisfaction of using the E-Storyboard application media can be accepted as a learning media in class with high value.

Discussion

Based on the findings of the observations and interviews done at SMK Islam 1 Blitar class X DPIB 2, this study identified a number of problems. The problems found included: (a) Using an independent curriculum but when learning was taking place still using a teacher center; (b) The media used only uses blackboards so that many students feel bored when learning takes place; (c) the material only comes from the teacher, there are no textbooks; (d) students experience difficulties in writing skills, especially in writing texts. Some examples of difficulties experienced by students are errors in writing spelling vocabulary, using inappropriate tenses, mastering parenthetical vocabulary such as verbs, adverbs, conjunctions and difficulty determining ideas in writing. story. Researcher will create technology-based learning media to instruct English writing skills in accordance with the findings of the analysis of student needs.

Currently the standard for 21st century or digital century schools for teachers and students is related to the application of technology in learning (Eggen, 2012). One way for teachers to help students get ready for life in the digital age is to use their expertise in the subject, education, and technology to support advanced student learning experiences, creativity, and innovation in real-world and virtual settings. The integration of technology in learning is very important considering that almost all students have mobile phones in their hands. They can not be separated from the mobile phone screen they have. In class, when learning takes place, some students open their cellphones to just check notifications or messages. When the teacher is off guard, not a few students steal time by opening social media or playing online games. Based on this, teachers need to plan learning that utilizes mobile phones so that students realize that mobile phones can also be used during classroom learning.

The integration of technology in learning makes researcher more confident in developing learning media in the shape of E-Storyboard Applications. Learning media are teacher aids in teaching (pictures, models, objects or tools) that can provide concrete experiences, learning motivation and student memory (Pakpahan, 2022). In addition, integration of technology can enable teachers to provide innovative and interesting learning source as well as learning media (Nurhajati & Widiarini, 2016). The importance of media in the learning process, the researchers developed the E-Storyboard Application media. Utilization of technological developments in the classroom aims to help students solve learning problems, increase learning motivation, foster independent learning abilities and enable learning interactions wherever and whenever (Sulistyaningsih, 2021). The learning process, which formerly relied on the lecture technique, has altered as a result of the introduction of technology learning media and now include interactive learning materials. Learning media that was previously in the form of print media has turned into interactive multimedia that can be accessed online or offline (Ardiansyah & Nana, 2020).

The E-Storyboard application is a learning media in the shape of an application that contains material with storyboard visualization. Storyboard is an area of a series of sketches that is used as a planning tool to visually show how the action of the story takes place (Nurhasanah & Destyany, 2011). Storyboarding is a pre-writing activity that emphasizes elaboration, prediction, brainstorming and sequencing. In general, storyboards are sketches of pictures that are arranged sequentially according to the storyline (Wishandanger, 2016). Storyboards aim to guide people in making films/stories, allow someone to develop stories with their ideas (a tool for channeling ideas) and explain the flow of events in the story (Sukanto, 2011). The use of storyboard media provides many benefits for students such as making it easier for students to absorb more material because it is arranged with a simple concept. In fact, using pictures in storyboards is more effective than just using text/narration.

In the product design process, researchers create a design framework using a flowchart as the basis for the development process. A flowchart is a diagram with specific symbols that precisely explains a simple series of processes (Wibawanto, 2017). Then the researcher developing learning media according to the design that has been made. The product that was successfully developed has been validated by 3 experts with the following scores: (1) Media Expert is a Computer Science Lecturer with a score of 92% which is included in the "Very Valid" category, (2) Material Expert is an English Teacher with a score of 98, 6% in the "Valid" category and (3) Linguistics is a Sociolinguistics Lecturer with a score of 78% in the "Valid" category. The product goes through a validation process without revision and the product is ready to be tested on students. In the trial process, students first install the application and then use the application at the direction of the researcher. After the trial process was complete, the researcher distributed questionnaires as an assessment of product use. The results of the student satisfaction questionnaire obtained a score of 80.3% included in the "Strongly Agree" category. Students receive the product well and feel that the product fits their needs. Most students agree that the product is simple and modern to use, so that it can increase students' interest in learning, especially in writing skills on recount text. The produced material is also simple to comprehend. The E-Storyboard application is an alternative medium for finding writing ideas easily because pictures in storyboards are often worth more than a thousand words.

CONCLUSION

This research is Research and Development (R&D) which uses the ADDIE model for the development of E-Storyboard application media. The research procedure includes 5 stages, namely analysis, design, development, implementation and evaluation. This research was conducted at SMK Islam 1 Blitar in class X DPIB 2 students, totaling 40 students consisting of

32 boys and 8 girls. Needs analysis forms the basis for product design and development. The finished product is validated by 3 validators who get an average score of 89.5% which is in the "Very Valid" category. Products that have been validated are ready to be tested on students. After that the researcher distributed questionnaires to students as an assessment of product use satisfaction. The results of the questionnaire calculation using a Likert scale (1-4) scored 80.3% which is in the "Very Agree" category. So it can be concluded that the E-Storyboard application media is highly accepted as a media in learning. Researchers hope that the development of this product can help overcome difficulties in writing skills and increase student motivation.

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