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DEVELOPING TEXTPRO AS LEARNING MEDIA IN WRITING PROCEDURE TEXT

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Abstract

The lack of student interest in writing is caused by learning media that are less interactive and innovative. Due to the lack of facilities or equipment for learning activities, teachers have difficulty making educational tools. In fact, in modern education, it is essential to establish interactive media for the educational process. Therefore, development of interactive media is needed as an educational tool that can support teachers in delivering lessons. Developing Textpro can be an alternative to interactive and innovative learning media. This study belongs to a category of research and development (R&D) studies with the model by Borg & Gall, that was is constructed of Analysis Data, Planning and Developing, Validation Product, Testing Product, and Revision Product. Methods of gathering data include observing, interviews, survey validation, and assessment. This study's objective is to create an educational tool Textpro that is legitimate, useful, and successful, which can improve students' procedural text writing skills. Validation results from experts obtained a final mean of 3.72, on highly legitimate criteria. Students' and teachers' responses to the interactive media Textpro obtained a final mean of 3.61 on highly useful. From the students' assessment pretest and posttest, N-gain percent obtained is 58.8428 (58%), which is included in the Quite Effective classification as well. As a result, it is stated that developing Textpro may be considered appropriate for use in the learning process. In addition, increasing the academic results of students.

Keywords: articulate storyline, learning media, procedure text, writing

INTRODUCTION

According to Brown, (2014) stated that writing is the outcome of thought, editing, and reviewing; it calls for specific abilities to generate thoughts, arrange them cohesively, use sentence markers and style guidelines coherently, create the final product, revise it for clarity, and edit it for proper syntax. In addition, according to Wijayatiningsih et al., (2025) writing is one of the most crucial skills required to acquire a new language. Writing proficiency is essential for developing a compelling argument, expressing ideas clearly, and mastering grammar, vocabulary, and mechanics. Practice writing from paragraph to essay, including argumentative and expository writing, can help you improve your writing abilities. Stated differently, there are procedures needed to help children develop these abilities (Wijayatiningsih et al., 2022). Writing can be divided into several types, such as writing poetry, short stories, and writing text. In English education, there are several types of texts, including descriptive text, narrative text, report text, procedure text, and many other text genres. Procedure text are created with a goal of clearly and sequentially explaining how to accomplish a particular activity by deconstructing it into several steps or actions. This kind of writing is frequently used in instruction manuals, recipes, educational resources, and other writings where it is crucial to provide information logically and sequentially (Ameliah et al., 2019).

Challenges or difficulties faced by teachers when providing English learning, especially procedural text material. In terms of writing procedural texts, the average score of students in the tenth grade at SMK Islam Diponegoro was 61.3, whereas the passing grade criterion (KKM) was 75. This indicates that students have rather poor English proficiency and comprehension, particularly when it comes to writing procedural texts. The teacher said that writing procedural text is one of the skills that can be said to be quite complex. Several aspects are needed to form a procedural text, which is the linguistic element that is a challenge when writing a procedural text. Writing is more than just putting ideas on paper; there are many other things to take into account, like grammar usage and

other linguistic components. This is one of the reasons why students aren't as interested in writing. Based on the research conducted by Aimah, (2011) said that writing in English is essentially difficult to teach. It makes sense because English teachers deal with a variety of issues. In general, the kids don't know what to write and are perplexed about what they want to express. The comprehension and writing skills of the pupils regarding the process of literature remain inadequate. Students are less interested while studying through learning resources like PowerPoint or Canva. Additionally, the tenth-grade English teacher verified that using educational tools like PowerPoint or Canva has decreased engagement for the learners. Teachers also have difficulties in making learning activities more interesting. Some of these challenges are related to not having enough facilities or equipment for learning activities. Lack of equipment (LCDs, projectors, sound systems, etc) is another issue that teachers face when instructing. As generally understood, learning media can be either audio, visual, or audiovisual, and they are used to encourage educational activities. Selecting instructional methods can motivate students and encourage collaboration with others in writing or creating a procedural text.

For those circumstances, the implementation of interactive and innovative educational tools is very necessary. Particularly in modern times, almost all sectors have taken advantage of technological advances. Technology is also vital in the field of education, especially when it comes to assisting educators in creating or producing educational materials that pique students' attention and facilitate their understanding of the subject matter. According toTaylor et al., (2021) stated that digital technology can increase students' learning motivation with interesting, interactive, and fun learning. Teachers and students may now collaborate and communicate meaningfully in new ways through digital technology. While there will undoubtedly be positive effects from this technology's development, there will also undoubtedly be negative effects. For this situation, literacy is essential to optimizing technology's positive impacts. The use of interactive and innovative learning media can boost learners' enthusiasm for writing and foster a positive learning environment. Therefore, the development of technology and teaching media needs to be implemented by teachers. So that students' interest in writing can increase. In addition, Ediyani et al., (2020) stated that learning media is a crucial component in learning activities. Teachers can utilize media for learning as instructional resources to help their students understand the topic more comprehensively. Students can obtain knowledge from teachers' use of different types of education. To learners, utilizing educational media in the teaching and learning process helps encourage the interest of learners and motivation. Using learning media during the learning process will significantly improve the effectiveness of the learning process as well as the transfer of information and lesson material. Moreover, Rosyida et al., (2021) stated that students' performance in learning activities might be impacted due to the use of suitable learning materials in the teaching process. The benefits of using media in learning activities are that they increase student engagement, provide more lucid learning content, and increase the variety of learning approaches. Teachers received assistance from the media in imparting knowledge to their students. Because students can use the media as a learning resource and tool during teaching activities, using media in class would significantly enhance how students learn. Language instruction can make use of a wide range of media thanks to current developments in education.

From what has already been said, it can be assumed that the difficulties in writing, especially in writing procedure texts, include determining a topic or the main idea, using language features, grammatical rules, making every sentence form a coherent paragraph, and the basic mistakes in writing, such as spelling, grammar, and punctuation. Furthermore, the lack of students' interest in writing is caused by less interactive and innovative learning media. This demonstrates the importance of using media to learn a foreign language, as it serves as a tool for delivering messages or information during teaching activities. Media can be used in learning activities to assist teachers in presenting information in a way that is easier for learners to comprehend. My own experience has shown me that learning is generally tedious for students, primarily due to less engaging educational mediums, such as textbooks, images, Canva, PowerPoint, and YouTube videos. However, there are now many more interactive learning resources available. Teachers or educators must develop their technological skills, such as by employing more engaging and dynamic instructional materials.

So, I decided to create a learning media-based Android or mobile learning using Articulate Storyline software. Articulate Storyline is software that used to create interactive educational materials. With this software, interactive learning multimedia will be developed as an alternatives learning media that may help teachers deliver difficult subject matter and offer an innovative and engaging learning environment (Darnawati et al., 2019). According to Evans (2008) explains that learning via mobile devices can encourage learning activities and is more effective than conventional book-based learning. Learning on mobile devices provides students with easy access, a variety of learning approaches, experiential learning, flexibility over how they learn, a boost, and support for learning. A software Articulate Storyline can be used to create interactive learning media to ensure that students do not feel bored throughout the educational process for learning. I chose research title "Developing Textpro as Learning Media in Writing Procedure Text." I also aim to investigate 1) How is the validity of Textpro. 2) How is the practicality of Textpro, and 3) How is the effectiveness of Textpro as a learning media in writing procedure text.

Whether learning materials created using this program are useful and suitable for educators, supporting learners as well as teachers in their educational journey, also utilizing technological advances.

METHOD

I employed research and development (R&D) as my research methodology. Products that have been developed and their efficiency tested using the research and development processes. According to Waruwu, (2024) development research was a research process that begins with the process of analyzing problems, overcome by developing a product. Where the product has been developed and designed to answer the problems. Before the product was implemented, it was first validated, tested, and revised. The results of the revision produce a quality product suitable for implementation by the wider community. In addition, according to Walter R. Borg & Meredith D. Gall, (1983) stated that the process of developing and validating products known as research and development. Within the process of development, it was not only the development of an existing product but also the research for knowledge or answers to practical problems.

The stages that I used were a modification of Borg and Gall. The steps of the Borg and Gall development model were as follows: Analysis Data, Design and Development, Validation Product, Implementation Product, and Evaluation Product. The object of this study was Textpro that created by Articulate Storyline software as a learning media to learn English according to the procedure text material. This application was tested by thirty-one students in the tenth grade at SMK Islam Diponegoro Losari. I used methods of gathering data such as observation, interviews, a questionnaire, and a test. This research, the questionnaire was divided into two parts: the first for validation by material and media experts and the second for student and teacher responses. The assessment includes a pre-test and a post-test. These tests contained questions that assessed students' learning outcomes by measuring their knowledge. The N-gain test formula and the Wilcoxon test are used to compute the pretest and posttest results, which provide a normalized score to evaluate the improvement in students' ability to write procedure texts. In this study, data analysis used mixed methods, specifically descriptive qualitative and quantitative analysis techniques. The use of quantitative and qualitative data analysis techniques simultaneously was very important in development research. Both analysis techniques could complement each other, so that the data analyzed was more complete, and comprehensive (Waruwu, 2024). Observation activities carried out on the tenth-grade students at SMK Islam Diponegoro during learning as data qualitative descriptive, questionnaires and assessment of students' abilities in text procedure material as data quantitative.

The formula used to calculate the questionnaire's validation sheet

Mean = total score ÷ total indicator

Validity and Practicality Assessment Criteria

Range of scores	**Criteria**
≥ 3.25	Very Valid / Very Practical
≥2.50	Valid / Practical
≥1.75	Valid Enough / Practical Enough
≤1.75	Not Valid / Not Practical

To calculate the score for increasing students' ability to write procedure text, the N-gain formula was used. The level of N-gain score was categorized into three categories.

N-Gain= S1-S0 ÷ Smax - S0

Description:
S0 = initial score (pre-test)
S1 = final score (post-test)
Smax = maximum score

N-Gain Score Category

Range of scores	**Criteria**
N-gain >0.7	High

N-gain ≥0.3	Middle
N-gain <0.3	Low

Effectiveness Category

Value (%)	**Clasifcation**
< 40 %	Not effective
> 40 %	Less effective
> 56 %	Quite effective
> 76 %	Very Effective (Hake, 1999)

FINDINGS AND DISCUSSION

3.1 Findings

3.1.1 The Validity of Textpro as a Learning Media in Writing Procedure Text

a. Analysis Data

Information gathering was done by observation of the tenth grade and interviews with the English teachers at SMK Islam Diponegoro. From the findings, that could be seen that when the teacher explained the material, especially the procedural text material, the teacher only used media such as image objects, PowerPoint, and speech. This was also confirmed by the teacher themself, that teacher often used images, Canva, and PowerPoints for using of educational materials. Facilities and infrastructure such as LCDs, projectors, and sound systems, available at the school were still limited, so they had to take turns with other classes. The teachers had never employed application media for learning in the procedural text.. Therefore, developing a mobile application on Android for interactive learning materials was essential. TextPro, which were expected to support learning activities, especially in the skills of writing procedural text.

b. Design and Development

The stage where the interactive media *Textpro* was created. Articulate-Storyline was the primary software program utilized to produce *Textpro*. The content of the material sourced from the English Module book for Class XII KD 3.6/4.6, English: Work in Progress Class X, English for Class XII Curriculum 2013 revised edition 2018, and also several sources from the internet as additional references. in addition to several additional tools to create buttons, a background, and other supporting decorations. These were the outcomes of producing interactive media products for *Textpro*:

Figure 1. Some menu displays on the interactive media Textpro

c. Validation Product

Media Expert Validation

The validation was conducted by 2 English Education lecturers and 1 English subject teacher of SMK Islam Diponegoro. The media expert validation questionnaire consisted of 15 statements, including programming and display aspects. To help with the revision of the Textpro interactive media, validators were requested to offer their opinions, critiques, and recommendations. The outcomes of the validation test conducted by media experts have been as follows.

Table 1. Results of the Media Expert Validation

Aspect	Validator			Average	Information
	I	II	III		
Programming	3.00	3.83	3.83	3.56	Very Valid
Appearance	3.67	4.00	4.00	3.89	Very Valid
Score				**3.72**	**Very Valid**

From the table above, validation results by media experts obtained a mean score of 3.72 in a very valid category. From the results, interactive media *Textpro* was deserving of testing, according to the revision of the validator, which suggests that adding a user guide menu and a superior accreditation logo from Lamdik.

Table 2. Revisions Product by Media Expert

Before Revision	After Revision
Revision: Add superior accreditation logo by Lamdik	
Before Revision	**After Revision**
Revision: Add user guide menu	

Material Expert Validation

2 English Education lecturers and 1 English subject teacher from SMK Islam Diponegoro carried out the material expert validation. The validation questionnaire form for material experts contained fifteen statements, including the suitability of the language and the content aspects.

Table 3. Result of the Material Expert Validation

Aspect	Validator			Average	Information
	I	II	III		
Suitability of the Content	3.20	3.90	4.00	3.70	Very Valid
Suitability of the Language	3.40	3.80	4.00	3.73	Very Valid
Score				**3.72**	**Very Valid**

Based on the table above, validation results from material experts obtained a mean score of 3.72 in a very valid category. Based on the results, interactive media *Textpro* was deserving of testing, according to the revision of the validator, which suggests that the interactive media *Textpro* requires all languages to be in English, not Indonesian.

Table 4. Revisions Product by Material Expert

Before Revision	After Revision
Revision: Translated into English	

Table 5. Calculation Results of Validation from Experts

Validator	Average	Information
Media Expert	3.72	Very Valid
Material Expert	3.72	Very Valid
Score	**3.72**	**Very Valid**

Based on Table 5, the result of the experts who validated the interactive media *Textpro* obtained a final mean score of 3.72 in a very valid category. Each expert has an average, with media experts scoring 3.72 and material experts scoring 3.72.

3.1.2 The Practicality of Textpro as a Learning Media in Writing Procedure Text

d. Implementation Product

Field tests were conducted on 31 students of class X of SMK Islam Diponegoro Losari offline. Before learning to use interactive media *Textpro*, students were asked to work on pre-test questions, namely writing procedure text, to determine students' initial abilities related to procedure text material. Once the preliminary assessment (pretest) was completed, I asked the learners to install the interactive *Textpro* media on their gadgets, and then I explained how to operate it. Students listened and listened carefully to my explanation. Learning activities were carried out through interactive *Textpro* media. I delivered the material about the procedure text according to what was on the interactive *Textpro* media. After that, students worked on the practice questions on the exercise menu and quiz menu. After the learning activities using interactive *Textpro* media were completed, students were asked to work on post-test tasks that tested students' final understanding of the procedure text subject matter. To measure the level of practicality of the interactive *Textpro* media that had been developed, both learners and teachers were given the task to completing the response sheets that had been provided. The results of student and teacher responses were used as a measure of the practicality of the development of interactive Textpro media.

Table 6. Calculation Results of Students and Teachers' Responses

Respondents	Average	Information
Students Responses	3.33	Very Practical
Teachers Responses	3.88	Very Practical
Score	**3.61**	**Very Practical**

From the table above, the results of the responses from teachers and students to the interactive media *Textpro* obtained a final average score of 3.61 with very practical criteria. With details of students' responses of 3.33 and teachers' responses of 3.88.

3.1.3 The Effectiveness of Textpro as a Learning Media in Writing Procedure Text

The effectiveness test of interactive media Textpro in the writing procedure text was conducted to determine how effective interactive learning media Textpro was in improving students' procedure text writing skills. The

Wilcoxon test was utilized to assess whether there was a significant difference in the mean before and after using interactive media Textpro, and the N-Gain test was used to determine the effectiveness category of using interactive media Textpro.

The following was the study's hypothesis:
Ho= Before and after using Textpro interactive learning materials, the results of the pre-test and post-test did not differ significantly.
Ha= The results of the pre-test and post-test following the use of Textpro interactive learning materials differed significantly.

The Wilcoxon test's foundation for decision-making:
1. Ha was approved and Ho was denied if the (2-tailed) Asymp.Sig value was less than 0.05.
2. Ho was approved and Ha was denied if the (2-tailed) Asymp.Sig value was more than 0.05.

Table 7. Normality Test

	Kolmogorov-Smirnov[a]			**Shapiro-Wilk**		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pretest	.255	31	.000	.865	31	**.001**
Posttest	.298	31	.000	.850	31	**.001**

a. Lilliefors Significance Correction

Based on the result in Table 7, viewed inside the Shapiro-Wilk normality test. The data was not normally distributed because the Sig. pretest and Sig. posttest values were both less than 0.05. To conduct Wilcoxon test, Normality test results must be obtained.

Table 8. Test Statistics of the Wilcoxon Test

	Post Test - Pre Test
Z	-4.891[b]
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

From the table result above, Asymp.Sig value (2-tailed) was less than 0.05, indicating a significant difference between pretest and posttest results after using Textpro in the procedure text subject.

Table 9. Assessment of Students' Improvement of Procedure Text Writing Skills (N-Gain)
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	31	50.00	69.00	61.3226	6.03538
Posttest	31	75.00	94.00	84.3226	5.78151
Posttest - Pretest	31	12.00	38.00	23.0000	8.00833
Max Score (100-Pretest)	31	31.00	50.00	38.6774	6.03538
N-Gain Score	31	.32	.86	**.5884**	.15953
N-Gain Percent	31	32.43	86.05	**58.8428**	15.95257
Valid N (listwise)	31				

From the findings in Table 9, the N-Gain percent was 58.8428 (58%), which was also included in the Quite Effective classification, and the N-Gain score was 0.5884, which was included in the middle category. The tenth-grade students at SMK Islam Diponegoro Losari found that the interactive media Textpro was a very useful learning tool for creating process texts.

3.2 Discussion
3.2.1 The Validity of Textpro as a Learning Media in Writing Procedure Text

According to the findings of the experts' validation calculation, it has been proven that *Textpro* was valid and feasible for use as a learning tool in writing procedure text. This was proven by the results of the assessment given

by media and material experts. English language education lecturers and English subject teachers were selected as media and material experts based on their knowledge in their respective fields. Interactive media *Textpro* was valid because it showed the results of validation data findings was carried out by material experts and media experts, obtaining a final average value of 3.72 with very valid criteria, and the media that has been developed was feasible to use or be tested with revisions according to the direction of the expert. This was due to several aspects that were assessed, such as programming aspects, display aspects, aspects of the suitability of the content, and the suitability of the language. In the programming aspect, I ensure that the interactive media *Textpro* provides comfort and simplicity in its use. In addition, the display aspect, I ensure that the interactive media *Textpro* provides attractiveness, clarity in the display of images, backsound, navigation buttons, etc. Moreover, in the aspect of the suitability of the content, I ensured that the material or content presented in the interactive media *Textpro* was in accordance with the English subject, basic competencies, and learning objectives in the procedural text material were ensured to be appropriate. In addition, in the aspect of the suitability of the language, I ensured that the use of good and correct language was easy for students to understand. From the information above, the *Textpro* interactive learning media's validity was assessed by the validation results from media and material experts, which obtained a final average value of 3.72 with very valid criteria, and the media that have been developed could be used or tested with revisions following the expert's guidance. With several modifications made to the *Textpro*, including suggestions from media experts it's necessary to include both the institution and accreditation logo on the cover section. Also, to make it easier for users to handle *Textpro*, a user guide menu should be put forward.

In light of Nabilah et al., (2020) & Nissa et al., (2021)Nabilah et al., (2020) who affirm that using articulate storyline program for mobile learning to create learning materials was both practicable and valid, based on findings obtained by the material and media expert, and it was exceptionally appropriate for utilize as a learning medium. Likewise, research conducted by Eriyanti et al., (2021) demonstrates how the interactive learning tool Articulate Storyline material pressure was said to be highly reliable and useful for teaching science to junior high school students. However, there was a slight difference in the material or subjects chosen. In my research, I tooked the procedural text material in the English subject. Therefore, it was beneficial as a learning tool for procedural text material as well as topics in science. My research implied that the development of interactive media Textpro may be utilized as an educational tool in English subjects, especially for procedural text material.

3.2.2 The Practicality of Interactive Media Textpro as a Learning Media in Writing Procedure Text

The field test was conducted on 31 students tenth grade of SMK Islam Diponegoro and the English subject teachers' response form was used to view the practicality application of the interactive media *Textpro*. By implementing interactive media *Textpro* during teaching activities, at the end of the learning activity students received a response questionnaire sheet. In Tables 6, the findings of the questionnaire that students and teachers completed, which covered topics including programming, appearance, content appropriateness, and language appropriateness, obtained a final average value of 3.61 with the very practical. Student responses were lower than the teacher's because nearly all of the students who responded discussed how English was used in *Textpro*. In this instance, the students suggested adding Indonesian translations, but the researcher chose to use full English because it was meant for high school English classes, and to ensure that students were common to and familiar with English. Practicality was a circumstance in which the interactive materials created were simple for both teachers and students to use. In order for the educational experience to be engaging, enjoyable, and beneficial for the students, and to foster their innovative thinking when learning. Practicality in interactive media *Textpro* focused on several aspects, including the following: Ease of use of learning media, which was related to ease of operation, access, by providing students with clear usage guidelines, which facilitates their utilization of interactive media *Textpro*. The attractiveness of the display, such as images, backsound, animation, buttons, etc, so that interactive media *Textpro* has an appeal to students. Suitability of material and language, the material and language presented in interactive media *Textpro* were good and easy for students to understand. Thus, interactive media *Textpro* could be used very practically.

These findings align with (Alfirzan et al., 2024) which provides that the Articulate Storyline application-based learning medium was very practical, based on student and teacher responses. It indicated that the educational materials developed through the Articulate Storyline application was practical and capable of supporting the implementation of the integrated thematic learning process. However, there was also a difference that in this research, the media that had been developed was operated using a laptop and projector, whereas in my research, the interactive media was operated using a mobile phone. My research implied that teachers and students might easily use interactive media Textpro as an educational tool for procedural text material.

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3.2.3 The Effectiveness of Interactive Media Textpro as a Learning Media in Writing Procedure Text

The effectiveness of the interactive learning media *Textpro* was seen from pretest and posttest results of the tenth-grade students' assessment of writing procedure texts. It has been demonstrated in Table 8, that there was a particularly substantial difference after using interactive media *Textpro*. It can be concluded that students' procedural text writing skills have improved. Based on Table 9, the N-Gain score was 0.5884, which was included in the middle category, while the N-Gain percent was 58.8428 (58%), which was also included in the Quite Effective classification. This indicates that after applying the interactive media Textpro, students' writing skills have improved. As a learning tool for writing procedural text, interactive media *Textpro* proved to be quite effective for students in the tenth grade of SMK Islam Diponegoro Losari. The use of interactive *Textpro* media, accessibility, and the visual appeal of the media display all contribute to this. Students were inspired to learn, and the appropriateness of the content and language makes it simpler for them to comprehend the procedural text material. Additionally, the way the exercise and quiz menus were presented aids in their comprehension of the material being studied.

These findings align with (Muhfiyanti et al., 2021) who demonstrated that the posttest results exceeded the pretest results, indicating that android-based mobile learning was effective, and in their opinions, pupils found the teaching method that used mobile learning based on Android to be beneficial. The use of mobile learning makes it easier for students to access and operate. Similarly, research conducted by Firdaus et al., (2022) discovered that employing learning materials with an articulate storyline increases students' ability to understand mathematics, in medium categories. However, I learned that developing interactive media *Textpro* with articulate storyline has no boundaries to scientific and math courses, but can also be used in English subjects, especially procedural text materials

CONCLUSION

From the findings and discussions, it was clear that the establishment of *Textpro* qualifies as a legitimate and feasible tool to serve as an educational tool for writing procedural texts, and was practical, meaning that interactive media *Textpro* can accommodate both teachers and students during the teaching process. Also, interactive media *Textpro* quite effective to enhancing learners' abilities in writing procedural texts. Evidently, it showed a substantial increase both before and afterwards utilizing interactive media *Textpro*. This was because the material presented in the interactive media Textpro was clear and easy to understand. This interactive Textpro media was also Android-based and can be accessed without the internet, so teachers do not need additional devices such as LCDs or projectors, because students could use it through their gadgets.

The implication of the research, that interactive Textpro media developed using Articulate Storyline could serve as a piece of equipment for teaching. For teachers, this could be an alternative interactive and innovative learning media, as well as being able to overcome the problem of limited facilities such as LCD, Projector, or Sound system, because interactive Textpro media does not require these additional devices. For students, this media could make students more involved in teaching. Also, the material was presented equipped with interactive games to make it easier for learners to learn and comprehend. This media could also be implemented for high school students. In addition, this interactive media could help teachers in English subjects with procedural text materials.

However, after I conducted this development research, I learned that there were limitations or shortcomings in this interactive media, there was a time limit for use that has been determined by the development (Articulate Global, LCC), where after exceeding the time limit, interactive Textpro media could no longer be accessed on Android and must switch to paid use. Therefore, I suggest further research to develop not only for Android and could be accessed without the internet, but should also be developed in the form of a link or web so that its reached was wider and could still be accessed without paying. And I also suggest not only mathematics and science, but also in English subjects.

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