Developing E-Module Based on Kuantan Singingi's Local Wisdom for Writing Procedure Texts

Sri Indrawati[1✉], Atni Prawati[2], Rumiri Aruan[3]
Universitas Riau, Indonesia[1,2,3]
e-mail : sri913765@gmail.com[1], atniprawati05@gmail.com[2], rumiri.aruan@lecturer.unri.ac.id[3]

Abstrak

Penelitian ini bertujuan untuk mengembangkan e-modul berdasarkan budaya lokal di Kabupaten Kuantan Singingi sebagai bahan ajar untuk menulis teks prosedur dan untuk mengetahui level validitas e-modul yang telah dikembangkan. Karena itu, penelitian ini menerapkan metode Research and Development yang diperkenalkan oleh Thiagajaran et al. (1974). Instrumen pengumpulan data pada penelitian ini adalah wawancara bersama guru bahasa Inggris di SMAN 1 Sentajo Raya dan angket validasi untuk ahli materi dan ahli media. Berdasarkan analisa data, ditemukan hasil validitas oleh ahli materi sebesar 84 dengan persentasi 84% yang dapat diklasifikasikan '*Valid*', serta hasil validitas oleh ahli media sebesar 80 dengan persentasi 94,11% yang dapat dikategorikan '*Sangat Valid*'. Hasil penelitian inipun menunjukkan bahwa e-modul bersifat valid dan layak untuk digunakan sebagai bahan ajar untuk menulis teks prosedur di SMA. Penggunaan e-modul dapat menjadi alternatif untuk bahan ajar serta membantu meningkatkan kemampuan menulis teks prosedur peserta didik dan menjaga budaya lokal terutama makanan tradisional.
Kata Kunci: e-modul, budaya lokal, teks prosedur

Abstract

This research was intended to develop an electronic module based on Kuantan Singingi's local wisdom as teaching material for writing procedure texts in high school and to discover its validity level of it. Thus, this research applied the Research and Development (R&D) using the 4D Model introduced by Thiagajaran et al. (1974). The data of this research were collected through an interview with an English teacher at SMAN 1 Sentajo Raya and the validation sheet from a material expert and a media expert. The research findings revealed the assessment from the material expert scored 84 with a percentage of 84%, classified as 'Valid', while that from the media expert scored 80 with a percentage of 94.11%, categorized as 'Very Valid'. Owing to this, the e-module is confirmed to be valid and eligible to use as teaching and learning material for writing procedure texts in high school. The use of this e-module can be an alternative to teaching material to help improve the student's skills in writing procedure texts as well as conserve the local wisdom, specifically concerning traditional food, among them.
Keywords: e-module, local wisdom, procedure text.

INTRODUCTION

In virtual technology, online instruction is an alternative to traditional learning to online learning (Salve-Opina, 2014). Anyone can acquire information and knowledge with the help of virtual technology. Information and communication technologies have grown in popularity in technology-supported learning. The utilization of technology in learning is an effort to accelerate achievement (Mahara et al., 2017).

One of the utilizing technologies in learning is the development of teaching material. Teaching material consists of material that is written and develop systematically containing the competencies that need to be learned and mastered by the students (Nafiah, 2020). Therefore, teaching material is essential thing in the learning process.

One of the numerous issues found in the Indonesian education field is the lack of textbooks (Tia, 2020). Because of that, the learning process in the class will be obstructed. For this reason, developing teaching materials utilizing technological development is reasonable (Tia, 2020).

Based on the 2013 curriculum, procedure text is one of the lessons learned in high school at KD 3.6 and 4.6. Procedure text is defined as the kind of text that details how to do or use something with a sequence of steps (Khasanah, 2018). Naturally, there are some difficulties encountered by the students when writing procedure text. Mostly, these difficulties are in the aspect of vocabulary mastery and syntax (Lubis & Hasibuan, 2020). For example, the students lack the knowledge needed to write procedure text and have poor grammar skills as well as vocabulary mastery (Suryanto (2019). Similarly, a study revealed that the dominant factor of the student's issues in writing procedure text was related to linguistics, such as vocabulary and grammar. These two are known as the main components of a language, so the lack of them undoubtedly causes students to have a hard time writing a procedure text (Hidayah et al., 2021). From all these findings of the past research concerning the difficulties faced by students in writing a procedure text, the researchers concluded the skills of writing procedure text by Indonesian students can be categorized as low. In writing a procedure text, the students oftentimes have poor knowledge about it and still lack grammar and vocabulary skills.

In the interview with an English teacher at SMAN 1 Sentajo Raya, the teacher said that she is still using textbooks as a teaching medium in the learning process. In this modern era, using only textbooks to teach makes the learning process tedious and boring for students (Ikadestanti & Supriani, 2017). Moreover, when it comes to teaching a complex skill, such as writing, the conventional teaching method is no longer enough, for it makes the lessons unappealing, tiresome, and passive (Ndraha, 2020). Owing to this, it can be determined that the teaching problems of procedure text are due to the limited media and teaching material for the learning process (Rahmawati et al., 2016). In short, these issues are the teachers' lack of technological use in the classroom (Regan et al., 2019). Therefore, it is necessary to develop good teaching material utilizing the technology for teaching procedure text to promote a better and more effective way of learning.

Generally, procedure texts focused on common and popular things. Very rarely it is related to local wisdom. By definition, local wisdom is an integral part of the culture in a community; it exists and develops because of and in the said community itself (Darmadi, 2018). Local wisdom can be described as manners, views, and skills of the society in managing their spiritual and physical environment (Naryatmojo, 2019). Integrating local wisdom in learning has positive impacts not only on students but also on cultural sustainability (Nafiah, 2020). Due to its rarity, local wisdom integrated into teaching materials may attract students of the community where it comes from to learn better (Faisal & Sulkipani, 2016). Also, the e-module encouraging local wisdom built and improved the students' character of social care and discipline (Asrial et al., 2021). Therefore, it can be deduced that integrating local wisdom has beneficial impacts on the educational process.

Looking at the problem occurring in writing procedure text at SMAN 1 Sentajo Raya, the development of teaching material is urgently needed. One of the teaching materials that are technologically oriented and suitable to be developed and used in this kind of era is an electronic module. E-modules are teaching media that are designed systematically following the chosen curriculum and can be accessed using digital devices (Wati &

Efi, 2021). Related to the previous research, e-module is claimed as useful in the teaching and learning process in the English subject, especially in writing. Relevant research found that students' learning outcomes were increased after applying the e-module for writing procedure text (Asri et al., 2019). Then, confirmed another research with the result of students' perception of the e-module for writing categorized as excellent and good to use in learning (Zulkifli, 2021). Besides, the percentage of the practical e-module in writing by the teacher was 90.06% and by the students was 83,55% which is classified with a very practical category (Winita et al., 2020). Agreed with the previous, the students' learning outcomes a percentage of 92,5% in procedure texts using the e-module (Mahara et al., 2017). Also, the result of linked research found the percentage of students' scores above the minimum completeness criteria (KKM) was 87% in learning procedure texts with the e-module (Tia, 2020). Therefore, it can be inferred that the e-module is claimed valid and practical for use in teaching writing, specifically procedure texts.

In this research, the e-module was designed based on Kuantan Singingi's local wisdom. The previous research found that learning using the e-module integrated local wisdom can preserve the local wisdom itself in the community, especially among the students as the young generation (Sofyan et al., 2019). Also, the e-module is attractive for use, and it can cover the students' knowledge of local wisdom (Dinata, 2020). In addition, the e-module integrated local wisdom not only preserves the local wisdom itself but also shapes the students' character (Asrial et al., 2021). However, to this day, there hasn't been any research discussing the development of an e-module based on the local wisdom of Kuantan Singingi as teaching material found, so it is innovative to integrate lessons about local wisdom into media for learning; which in this case English learning.

According to the problem above, the researchers were interested in developing an e-module based on Kuantan Singingi's local wisdom as teaching material for writing procedure texts in high school. This research focused on the twelfth graders in the even semester of 2021/2022 academic year at SMAN 1 Sentajo Raya. From the findings of this research, the researchers hope to produce a useful and valid e-module for use, which is expected to be beneficial for teachers in teaching and for students in learning procedure texts based on local wisdom at SMAN 1 Sentajo Raya. Also, this research is predicted as an innovation of teaching material in the form e-module integrated with Kuantan Singingi's local wisdom in the educational field.

METHOD

This research applied R&D (Research and Development) design and adopted the 4D Model by Thiagarajan et al. (1974). There are four stages of the process of the 4D Model; define, design, develop, and disseminate. Specifically for this research, the researchers only completed the 'develop' stage. In detail, the development procedure of the e-module based on Kuantan Singingi's local wisdom as teaching material for writing procedure texts in high school was described in Picture 1.
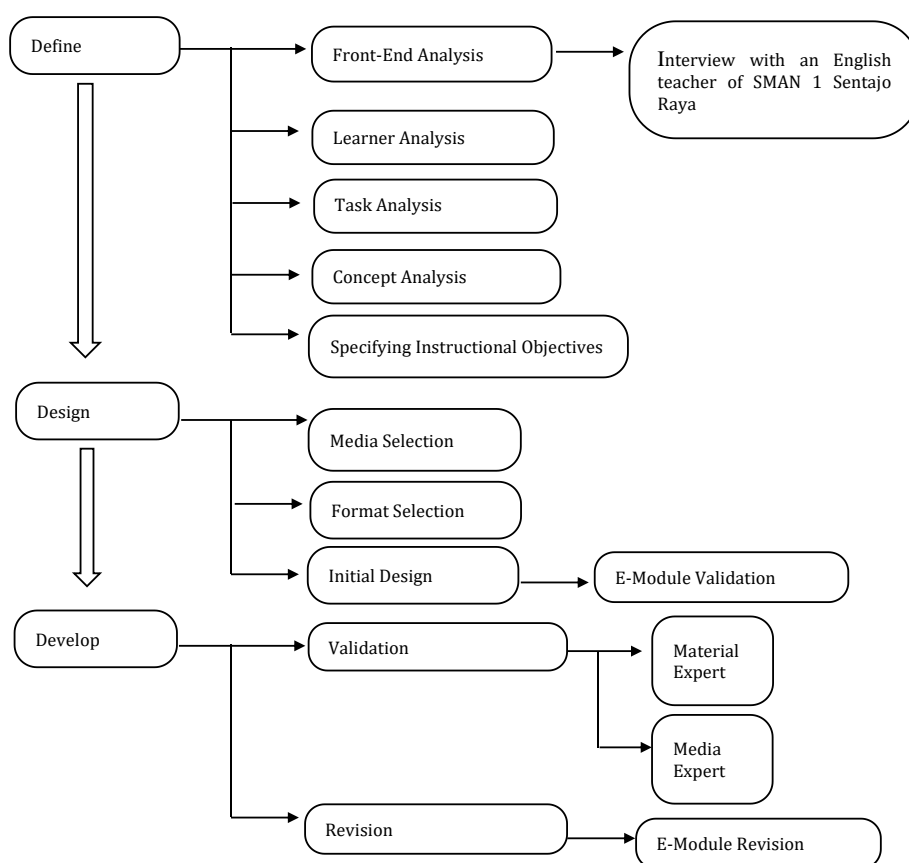
Figure 1. Steps in the Research

By using this model, the researchers had to first define and discover the basic problems of the English teacher of SMAN 1 Sentajo Raya in teaching writing procedure texts and the focus of learning related to the curriculum 2013 before designing the e-module. Then the researchers designed the e-module according to the results at the define stage. Lastly, at the development stage, the researchers involved expert judgment and assessment of the e-module to see its eligibility as a teaching medium.

To collect the research data, there are two instruments used by the researchers: interview and validation. The interview aims to get information about the problem faced in teaching English. The validation by experts aims to assess the credibility and adequacy of the e-module as teaching material. The technique used to validate an e-module is the construction validation technique. Once it is done, the researchers analyzed the results from the validation and revised the e-module according to suggestions from validators.

This research employed quantitative and qualitative approaches. That means the data were collected both in numerical and non-numerical forms. For the non-numerical data, the researchers gained from the interview with the twelfth-grade English teacher at SMAN 1 Sentajo Raya and the feedback from the experts. The data then was analyzed using the descriptive qualitative method. For the numerical data, the researchers attained it from the expected validation. This data is scores given by validators after assessing the e-module, which then was analyzed using the percentage of the average score. The e-module is claimed as valid and eligible if the percentage of validation is found to be over 70% (Akbar, 2013).

RESULT AND DISCUSSION

Result

As stated previously, this research applied the 4D Model (Thiagarajan et al., 1974). Specifically in this research, there are only three stages needed completing, namely define, design, and develop. The following are the details of the procedure for each stage:

Define Stage

At the define stage, the data were obtained from five analyses: front-end analysis, learner analysis, concept analysis, task analysis, and instructional objectives analysis. In the front-end analysis, the researchers interviewed an English teacher of SMAN 1 Sentajo Raya; Junita Efni, S.Pd. From the interview, it can be inferred that the use of ICT in learning has been implemented by teachers where they deliver the materials through pictures, videos, or others. The use of ICT in learning also proves to be effective in improving student learning outcomes since it increases the student's interest and motivation to study. Mrs. Efni also emphasized that the teaching materials used are usually handbooks, and to this day, there has been no teaching medium in the form of e-modules regarding local wisdom found to be used at SMAN 1 Sentajo Raya.

In the learner analysis, the researchers acquired the data from a literature study by looking at the government policy and curriculum review on technology-based learning that is suitable for students' characteristics at the high school level. As claimed in UU 20 in 2003 regarding National Education System in article 1, learning is a process where there is an interaction between teachers, students, and their teaching materials (JDIH BPK RI, n.d.-b). Remembering the era of where we are today, this interaction will be more efficient with the help of technology (Tahang, 2021). Therefore, to implement the UU 20 in 2003 article 1 paragraph 20, the development of teaching material needs to utilize technology.

Regarding the national education system which states that technology-based learning is urgently needed, the development of teaching material utilizing technology is the one solution to a more effective learning process. Among all of the technology-based teaching materials, an electronic module or e-module is one of the most popular. This kind of medium is one form of teaching material suitable in the era of industrial revolution 4.0 where utilizing technology in the learning process is more interesting and interactive and can be done at any time and anywhere (Asri et al., 2019).

Procedure text is one of the lessons learned in the twelve grade in high school according to the 2012 curriculum. Concerning the topic of this research, learning procedure text is rarely discussed in local wisdom. Based on the authority of the provincial government PP 25 in 2000 about curriculum advancement, the implementation of local wisdom at the school may dig the certain region potency optimally (JDIH BPK RI, n.d.-a). One way to apply this is by integrating local wisdom into teaching material at the school (Sofyan et al., 2019). Therefore, the result of this analysis showed that the e-module integrating local wisdom urgently needed to be developed as teaching material in writing procedure text related to the UU 20 in 2003 concerning National Education System and the provincial government PP 25 in 2000.

In the task analysis, the researchers examined the Core Competence (KI) and Basic Competence (KD) contained in the curriculum implemented in the intended school, which is Curriculum 2013. Assumed from the curriculum, lessons about procedure texts are found in KD 3.6 and 4.6, which are for senior high school students.

Concept analysis intends to discover the main concept of the procedure text material for twelfth-grade students in high school according to the 2013 curriculum. The focus of competence is on social function, generic structure, and language features of procedure text. KI 3 with KD 3.6 focuses on knowledge about procedure texts. Thus, the researchers integrated procedure text material about Kuantan Singingi's local wisdom, which is the traditional food of Kuantan Singingi. Meanwhile, KI 4 with KD 4.6 focuses on the skill and creative progress of students regarding procedural text materials. So, the researchers applied some exercises and evaluations to see the students' improvement in writing procedure texts. At the end of the define stage, the researchers completed the specifying instructional objectives by classifying the learning objectives of the e-module designed and determined from the task analysis and concept analysis.

Design Stage

At the design stage, there are 3 steps to be completed: media selection, format selection, and initial design. Firstly for media selection, the e-module was selected and presented as visual learning material to allow more convenience for teachers and students during the learning process, especially regarding procedure texts. For

format selection, the researchers chose the title of the e-module, which is "English E-Module Writing Procedure Texts for 12th Grade SMA/MA/SMK". Also, the e-module has been designed using A4 paper size with Times New Roman typeface. For the framework, the researchers designed the e-module according to the preparation of e-modules guidelines (Direktorat Pembinaan SMA, 2017). The framework included a cover, introduction (KI and KD, concise description of e-module, and guidelines for using the e-module), learning activity (objectives, material description, summary, exercise, task, and self-assessment), evaluation, answer key, glossary, bibliography, and biography. For the designed cover of the e-module, the researchers used the Pixellab Application. In addition, the researchers created some videos to clarify the procedure text material. The videos that have been made are cooking videos about the traditional food of Kuantan Singingi. Next, the researchers designed the prototype of the e-module using Microsoft Word, then modified the format from .doc to .pdf before uploading it to Flip Pdf Professional Application. Finally, the researchers designed the e-module by adding a cover, some videos, and links to the task using the features provided in Flip Pdf Professional. After publishing online, the e-module can be accessed using Google Chrome or Firefox. The result of the e-module in the design stage can be seen in Picture 2.
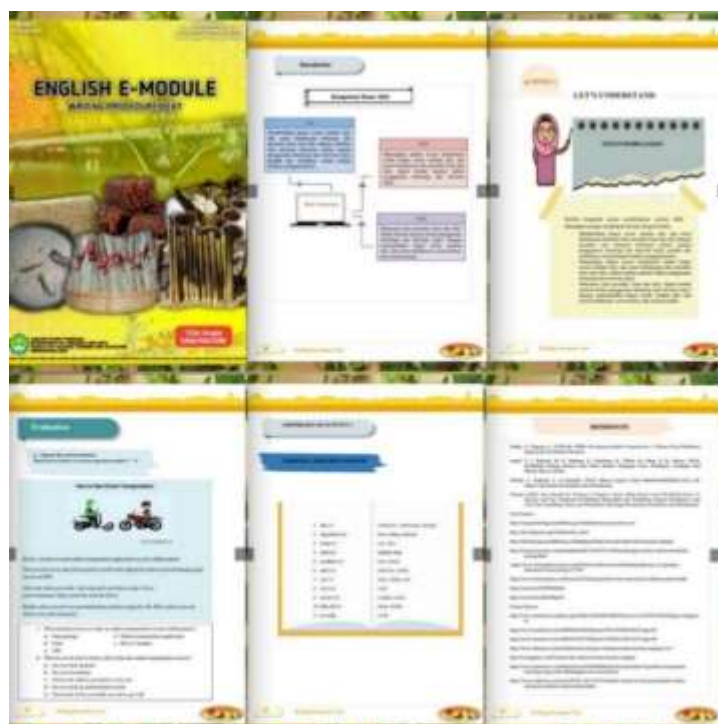

Figure 2. E-Module Validation

Develop Stage

At the develop stage, the researchers had experts validate the e-module. These experts are material expert and media expert who are lecturers of the English study program at Universities. The criteria for the chosen experts are a magister's degree and their experiences in their fields. A material expert validated the e-module based on the material aspect, learning aspect, and language feature aspect. On the other hand, a media expert validated the e-module based on the effectiveness of screen design, the simplicity of program operation, consistency, and animation. The summary of the validation results is shown in Table 3.

Table 1

The Result of Validation by Expert

No	Aspect	Total Score	Category
1.	Material	84 %	Valid Category
2.	Media	94,11 %	Very Valid Category

As can be seen from Table 3, the score of the validation assessment from the material expert is 84 with the highest score of 100. Thus, the percentage was found to be 84%, which can be categorized as 'Valid'. Then the score of the validation assessment from the media expert is 80 with a maximum score of 85. So, the percentage reached was 94.11%, which is also categorized as 'Very Valid'. Owing to this, it can be confirmed that the developed e-module is valid for use as teaching and learning material for writing procedure texts in high school.

Concerning the input provided at the validation in the development stage, some revisions were carried out to improve the e-module. The suggestions by the material expert are topic groupings and clear sub-headings. For example, at the beginning of a new topic, apperception is standardized by first showing a snapshot, then introducing vocabs, core material, grammar focus/syntax, and drills. Besides that, the media expert advised that the cover of the e-module would be better if the name of the supervisor was listed together with the name of the researcher. Also, the media expert suggested avoiding using a strong color as the background, for instance, the background of pages 7, 12, 39, and 55, to make the readers read comfortably. For detail, the e-module layout in the final revision can be seen in Picture 3.
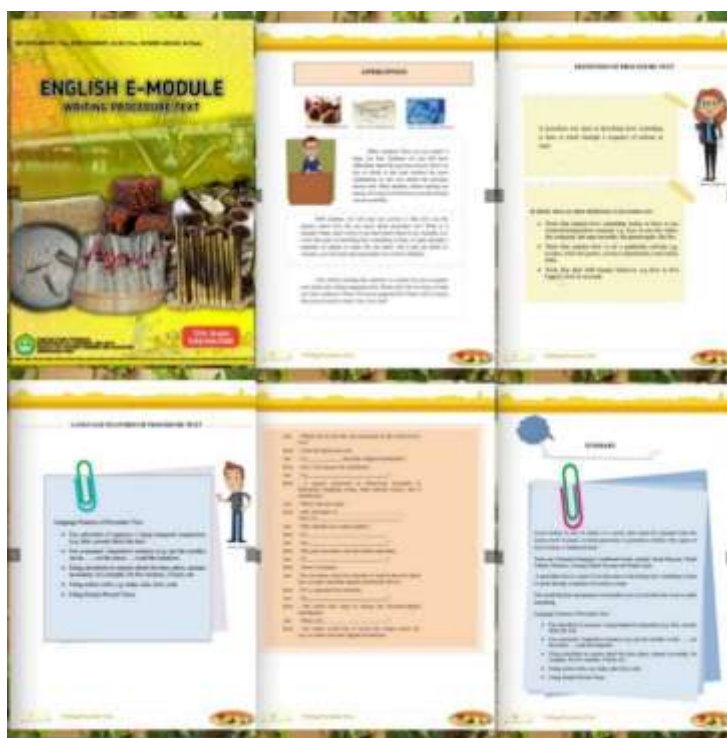

Figure 3. E-Module Revision

Discussion

After developing the e-module and analyzing the research data, a discussion is provided to address the research problems. There are two parts to the discussion. The first part is the development process of the e-module, and the second part is the result of the validity level of the e-module as a teaching material for writing procedure texts in high school.

Firstly, for the process of development, the e-module was organized following the 4D Model. Although generally, the development process comprises 4 stages (define, design, develop, and disseminate), the researchers only needed to complete the 'develop' stage.

Secondly, for the validity level of the e-module, the research question is "How is the validity level of an e-module based on Kuantan Singingi's local wisdom as a teaching material for writing procedure texts in high school?". To answer this question, the researchers described and classified the validation scores from both the material expert and the media expert. According to the validation assessment from the material expert, the score

is 84 with a percentage of 84%. This number is included in the 'Valid' category, which means the e-module designed has appropriate and valid materials regarding procedure texts. Meanwhile, from the validation assessment by the media expert, the score is 80 with a percentage of 94.11%. This number is in the range of the 'Very Valid' category, denoting that the e-module designed is very adequate as a learning medium. Considering these findings, the e-module developed can be declared as an eligible teaching and learning medium for writing procedure texts in high school.

To sum up, the e-module based on Kuantan Singingi's local wisdom has met all the required standards as teaching material for writing procedure text lessons in the twelfth grade of senior high school. The e-module is expected to help develop the student's skills in writing procedure texts as well as hoped to be beneficial to introduce and support the local wisdom among students.

Related to the previous research, using traditional foods in learning procedure text gives a positive impact to improve students' achievement (Latupapua, 2018). Also, students can get knowledge about the process of making traditional food in procedure texts effectively (Widyaningrum et al., 2021). Because of that, the students are more understanding in the learning and improve their skills in procedure texts material. From the explanation, the researchers inferred that incorporation of the traditional food in writing procedure text improves learning and spreads traditional foods not only locally but also in the national scope.

This research backs up another research that has implemented an e-module that has local wisdom at schools. Promoting local wisdom in the e-module was found to be pleasant for students and obtained the result of correlation with students' attitudes; 0,969, which was positive and good (Asrial et al., 2021). Additionally, relevant research discovered the lecturers, teachers, and students' responses to using the e-module integrated local wisdom excellent and very feasible for use in the learning process (Sofyan et al., 2019). For this reason, the implementation of an e-module containing local wisdom is needed as the solution to the development of teaching material based on technology and related to the educational system in curriculum 2013.

CONCLUSION

Based upon the findings of the study, the e-module titled 'English E-Module Writing Procedure Texts for 12th Grade SMA/MA/SMK' was developed using the 4D Model by Thiagarajan et al. (1974). To ensure the eligibility of the e-module, the researchers had two experts (a material expert and a media expert) assess and validated the e-module. The validation assessment from the material expert scored 84 with a percentage of 84%, which is interpreted as 'Valid'. That means the e-module has appropriate and valid materials regarding procedure texts. Next, the validation assessment by the media expert scored 80 with a percentage of 94.11%, interpreted as 'Very Valid'. That means the e-module design is very eligible as a learning medium. Owing to this, it can be confirmed that the e-module developed has met all the required standards as teaching material for writing procedure texts in high school. This e-module can be used as an alternative to teaching material to help develop the student's skills in writing procedure texts and conserve the local wisdom, specifically concerning traditional food, among them. Since this e-module product has not yet completed the final stage of the 4D Model; dissemination, which is to measure the student's learning outcome after using it, it is available for other researchers to conduct a further studies regarding the effectiveness of it to upgrade students' skills concerning procedure texts.

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