



Development of E-Learning Modules to Improve Knowledge and Skills of The Taliabu Regional Language of High School Students

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Abstract: This study aims to produce e-modules for the Taliabu regional language that are valid, practical, and effectively improve high school students' knowledge and language skills. This study used research and development methods with the Borg & Gall model. This research was conducted at SMAN 3 Taliabu Island with a total of 71 subjects. Data collection techniques used interviews and tests. The data analysis technique used a paired sample t-test by carrying out analysis requirements in the form of the Kolmogorov-Smirnov normality test and homogeneity test. The expert test results showed that the Taliabu regional language e-Module was very feasible and practical for use by students and meets the criteria. The results of the Taliabu regional language e-module trial explained that there were differences in the level of knowledge and skills of students before and after using the e-module, this was proven by the results of the paired sample t-test which obtained a significance value (2-tailed) of 0.000 ($p < 0.05$).

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Introduction

Regional languages are a valuable asset to a nation. However, the paradigm of 21st-century society considers that foreign languages have higher prestige than national and regional languages (Martoyo, Sentinuwo, & Sambul, 2018). People prefer to use national and foreign languages in communicating (Widianto, 2018). Along with the times and the era of globalization, language diversity is now threatened (Nandita Wana Putri, 2018). Regional languages must be a priority program for the government in implementing a proper education system with the various problems that occur. The problem of minimal use of regional languages must be truly preserved by every region, including the Taliabu Island area.

Based on the results of interviews obtained from regional language teachers in Taliabu, knowledge and skills in regional languages are increasingly fading among the community, especially students. The fading of regional languages which are rarely used by students in the Taliabu area is caused by external cultural factors and environmental factors. Likewise, regarding the results of observations in the classroom, teachers still tell students to note down the Taliabu regional language in each student's notebook so that by creating regional language e-module facilities, they can minimize time constraints in the learning process.

Knowledge and skills in regional languages are one of the goals of Indonesian education, as stated by the Ministry of Education and Culture, prioritizing Indonesian, preserving regional languages, and mastering foreign languages so that preserving regional languages by providing knowledge and dialogue skills using e-modules makes learning more



effective and efficient. Based on data from the Ministry of Education and Culture, it was found that 11 of 71 regional languages had been declared extinct, most of which came from the Maluku, North Maluku, and Papua regions (Bin-Tahir, Hanapi, Hajar, & Suriaman, 2020). Apart from that, the multi-ethnic condition of Indonesian society with its languages and cultures certainly opens up opportunities for contact through communication and interaction between ethnic groups with different languages and cultures (Tondo, 2009). To anticipate the extinction of regional languages in Indonesia, many schools provide regional language materials that are appropriate to the context of their use and do not blame Indonesian as the language of instruction in schools (Yati, 2015).

Teachers as educators and implementers in schools should continue to develop themselves in efforts to preserve culture, especially in the field of language (Munawaroh et al., 2022). Teachers are the spearhead in facilitating students in improving their knowledge and skills in regional languages because teachers design learning to be more fun and pay attention and guide students by following the educational programs they run. According to (Prastowo, 2012), modules are learning resources that are managed systematically and written in a language that is easily understood by students according to their age level and level of knowledge to learn independently. Meanwhile, according to (Ramadhan & Nur, 2016) learning through modules helps students absorb lessons because they not only hear what the teacher says but also read. The ever-growing technological advances require us to always create innovations to facilitate classroom learning with several learning resources using e-modules.

E-modules (digital modules) can be interpreted as module teaching materials that are displayed using digital tools in delivering the material (Kuncahyono, 2019). One that is often used is Canva as the main page of the Digital Module. In this section the material can be displayed more interestingly, involving various media including text, images, and videos, and equipped with quizzes that allow immediate automatic feedback. The position of this research in the study of Learning Technology is included in the area of *creating*, namely developing e-modules according to learning needs which are then applied to the learning process to improve knowledge and skills in the Taliabu regional language (Seels, Barbara B. & Richey, 1994). Learning technology has been able to change learning strategies to be more feasible, effective, and practical. (Syaad Patmanthara, 2014). Therefore, this study aims to produce e-modules for the Taliabu regional language that are valid, practical, and effectively improve high school students' knowledge and language skills.

Research Method

This method of research was Research and Development (RnD) with the Borg & Gall Model (1983), which consists of 10 stages: 1) Potential and problem identification, 2) Material collection, 3) Product design, 4) Design validation, 5) Design validation revision, 6) Limited trial, 7) Limited trial revision, 8) Field trials, 9) Field test revisions, 10) Product deployment. Data collection techniques used interviews and questionnaires. Then create material and media expert instruments to test the suitability of the product. Conduct validity and reliability tests of instruments *pre-test* and *post-test* to test product effectiveness. The analysis technique used in this research is the descriptive analysis technique. Descriptive analysis techniques were carried out using descriptive statistics (Sugiyono, 2019). Data in the form of descriptive verbal data were analyzed qualitatively. Meanwhile, analyzing data in the form of expert tests and field tests was carried out quantitatively.



Results and Discussion

Based on the results of the research conducted, the discussion in developing the Taliabu regional language e-Module can be explained, including the following:

1) Development of the Taliabu Regional Language E-Module

Level one namely the potential and problem identification stage is the collection of information starting from teachers and students. Based on the results of interviews obtained from regional language teachers in high school students in Taliabu. The teacher said that regional language knowledge and skills are increasingly fading among the community, especially students. This can be seen from the final grades obtained. There is still a lot of language knowledge and skills lacking and also In conducting dialogue, there are still many who do not use regional languages in conducting conversations with cultural actors or with local communities. So it is necessary to create e-Modules to support optimal regional language learning. According to the results of the questionnaire distributed to students, 51 students responded to the questionnaire. Based on the results of distributing questionnaires, it is known that high school students on Taliabu Island do not yet have Taliabu regional language e-Modules to facilitate technology-based learning. Students have a high level of interest in learning using e-Module media, of the 51 respondents, 35% said they were interested, 57% said they were somewhat interested, and only 8% or 4 people said they were not interested in using e-Modules. It can be concluded that it is necessary to create an e-Module for the Taliabu regional language to increase knowledge and skills. This statement is also reinforced by (Notoatmodjo, 2007) that knowledge is the result of knowing and sensing certain objects. Meanwhile, according to (Nedler, 1986), skills are activities that require practice and can be interpreted as implications and activities.

Level two is the stage of collecting material by analyzing the material to determine the material described in the Taliabu regional language e-Module being developed. According to (Ibrahim, 2009) Taliabu language is a language used in the North Maluku province which is used by native people in daily communication and there are 2000-4000 Taliabu speakers. According to (Ridwan et al, 2017) the Taliabu language has three dialects including the Ka dai, Siboyo and Mange dialects. (Chaer., Abdul., and Leoni, 1995) defines dialect as a variety of language and a group of speakers whose relative numbers vary in a particular area. The collection of material obtained will be arranged according to the discussion points consisting of sentences and vocabulary. According to the KBBI, a sentence is a small language unit. Meanwhile, according to (Wermke, 2007), vocabulary is a set of words of a particular language that a person owns.

Level three namely the product design stage aims to plan the product to be developed. At this stage, the researcher processes the information that has been obtained from collecting material. This product was developed taking into account feasibility and effectiveness so that it can be used well in schools. This stage includes test preparation, media selection, format selection, and initial design. This statement is in line with (Prastowo, 2013) that e-Module development is a process of designing independent teaching materials that are arranged systematically in electronic format to achieve certain learning objectives. Then according to (Directorate of Middle School Development, 2017) there are several e-Module formats including cover, e-Module title, subject name, material topic, clear learning, author, table of contents, introduction, learning practice questions, evaluation, and so on. This stage focuses more on e-Module product design in accordance with the preparation of the format and design which is focused on increasing the knowledge and skills of students at SMA Negeri 3

Taliabu Island. The following is an image of some of the e-Module sheets that were developed.



Figure 1. Taliabu District Language E-module

Level four, namely, the design validation stage consists of 2 stages, namely media expert validation carried out by the educational technology lecturer, Prof. Dr. Haryanto, M. Pd. and material expert carried out by regional language subject teacher Taliabu Sem Lari S.Pd. This stage will validate the design in accordance with the validated assessment instruments to determine indicators of achievement in making media and materials that are feasible, practical, and efficient when used. The feasibility of the e-module is calculated based on the scores obtained from material expert validators and media experts.

Level five namely the design validation revision stage which seeks to determine the suitability of the product created by the developer so that the developer carries out revisions with the results of validation revisions carried out by material experts and media experts as a reference in making the product even better. Expert validation is carried out to see the suitability of the e-Module before use. The eligibility of e-Modules is calculated based on scores obtained from material expert validators and media experts. Apart from looking at feasibility, revisions were also carried out according to input and comments from the validators. Validation is carried out by providing e-Modules and assessment instruments in the form of files sent via email. Material experts provide assessments, suggestions, and input on the e-Modules that have been developed. From the input and suggestions provided by material experts, researchers can make revisions to improve the e-Module. The result was a score of 64 from the value given by the material expert. So it's worth trying. Media experts provide assessments, input, and suggestions regarding the appearance of the e-Module being developed. The result was a score of 85 from the value given by media experts. So it's worth trying. The results of the assessment are used to conduct feasibility trials for the e-Module, while input and suggestions from media experts are used as a reference for improving the e-Module being developed.

Level six namely the limited trial phase. The e-Module has been validated by material experts and media experts and has been revised, after which it is tested on students. Trials are carried out on a limited basis before conducting field tests for products that are suitable for use. Limited trials were carried out on 10 class X (ten) students. Before being given the e-



Module, students fill out a pre-test in the form of Taliabu regional language questions to determine students' knowledge and skills in the Taliabu regional language. After that, the e-Module was then distributed to students in the form of an application sent via their respective cell phones. After the e-Module is given to students, the final step is to give it a post-test with the same questions as the pre-test.

Level seven namely the limited trial revision stage. The limited trial revision is the result of a trial of 10 class X students who were given the Taliabu regional language e-Module, to become a learning medium in class. From the results of the trial, several revisions were found that needed to be updated in the material contained in the e-module which was revised again, especially in some of the Taliabu regional language material.

Level eight namely the field test stage. The revised e-module was given a limited trial and then carried out a field trial. The regulatory field trials are the same as the limited trials but differ only in the number of samples used, the limited trials use 10 samples of class X students while the field trials use 71 samples of class pre-test in the form of a question. Then the e-module application is given to each student using each student's cellphone. After studying the e-module, the final step is to give it a post-test with the same questions as the pre-test.

Level nine namely the field test revision stage. The revised field trial was the result of a trial by 71 class X students who were given the Taliabu regional language e-module, to serve as a learning medium in class. From the results of the trial, no revisions were found so there was no need to revise the field trial again. The result is that the e-Module product is feasible, effective and practical to use and is widely distributed in every class at High School Students Taliabu Island.

Level *ten* namely the deployment stage. The e-Module product is suitable for use after testing and revision, then this e-module is distributed widely to the wider community, especially students of High School Students Taliabu Island. The deployment stage is the final stage of e-Module development. The E-Module which has been revised based on input and suggestions from validators and supervisors, has been tested for feasibility in accordance with the validator's assessment, and has been tested for effectiveness, then reproduced and distributed to schools. The distribution is carried out by sending it in the form of an application used via cellphone so that with this distribution all people can access it to make it more efficient and practical.

2) Taliabu District Language E-module qualification

The Taliabu regional language e-module is very suitable for use as a medium to support regional language learning at High School Students Taliabu Island. The feasibility of the Taliabu regional language e-Module is proven by the results of feasibility tests carried out by material expert validators and media experts. The result is that the e-Module developed is "very feasible" in terms of material and media. The Taliabu regional language e-Module can also be used by the public, especially students, because the material descriptions are easy to understand and have complete components such as exercises, summaries, user instructions, and so on. The following is the assessment table by validator experts:

Table 1. Material Expert Validation

No	Aspect	Score	Shoes Ideal	Percentage (%)	Category
1	Content qualification	23	24	95%	Very Worth It
2	Language	23	24	95%	Very Worth It
3	Presentation	26	28	92%	Very Worth It



Total	72	76	94%	Very Worth It
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Table 2. Media Expert Validation

No	Aspect	Score	Shoes Ideal	Percentage %	Information
1	Screen design display	20	24	83,33%	Worth it
2	User convenience	13	16	81,25%	Worth it
3	Consistent	12	12	100,00%	Very Worth It
4	Graphics	16	20	80,00%	Worth it
5	Usefulness	20	20	100,00%	Very Worth It
Total		81	92	88,04%	Very Worth It

Things are running in accordance with the characteristics of e-Modules created by (the Directorate of Middle School Development, 2017) regarding the characteristics of e-Modules including independent learning, complete material, ability to adapt to technology, familiarity with users, consistent, using Android, multimedia, using applications, and prioritizing e-Module principles put forward by (Asmiyunda., Guspatni., & Fajriah, 2018). The principles in developing e-Modules include: fostering interest in students, writing for students, packaging flexibly, adapting to learning needs and goals, focusing on providing opportunities for students to practice, helping with learning difficulties, requiring a careful navigation system, providing summaries, language used semi-formal which is communicative and interactive, created for the learning process, requires a learning plan, feedback, supports *self-assessment* and explain how to use the e-Module. All characteristics and principles of the e-Module are contained in the Taliabu regional language e-Module.

3) Effectiveness of E-Modules in Increasing Knowledge and Skills of the Taliabu Regional Language

After conducting a feasibility test for the e-Module, the next step is to test the effectiveness of the e-Module in improving students' knowledge and skills. The effectiveness test was carried out by testing the Taliabu regional language e-Module on 71 class X students of High School Students Taliabu Island. Before being given the Taliabu regional language e-Module, students are first given items in the Taliabu regional language to measure the student's level of knowledge and skills. These results show that the level of students' knowledge and skills has an average of 48.71, which means it is in the low category. Then students are given the Taliabu regional language e-Module which is distributed via each student's cellphone in the form of an application. Students are given an understanding regarding the use of e-Modules in the learning process for the next learning process under the supervision of the subject teacher for three weeks. After that students are given a *post-test* to determine changes in knowledge and skills of the Taliabu regional language. Results *post-test* shows that there is an increase in knowledge and skills with an average score of 59.88 included in the "medium" category. This shows that there is an increase in the average score of knowledge and skill levels before and after using the Taliabu regional language e-Module. The following is a table of assessment results *pre-test* and *post-test*:

Table 3. Assessment Results Pre-Test and Post-Test Descriptive Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pre-test	48,7183	71	8,98122	1,06588

Post-test	59,8873	71	9,95927	1,18195
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This is also in line with the quote (Notoatmodjo, 2007) that measuring knowledge can be done by interviews or questionnaires that ask about the content of the material that the respondent wants. Then, according to Mueller, measuring skills also uses a questionnaire to find out the extent to which students' skills improve by providing *protest* and *post-test*. Apart from looking at the average score, e-Module effectiveness was also analyzed using the t-test by looking at the significance value (2-tailed). Based on the t-test analysis, it shows that there is a difference in the level of knowledge and skills before and after being given the Taliabu regional language e-Module with a value of $t = -7.020$ and a significance (2-tailed) of 0.000 ($p = 0.000 < 0.05$) which means H_a is accepted. So there is a difference in knowledge and skills before and after using the Taliabu regional language e-Module for class X students at SMAN 3 Taliabu Island. The following is the T-Test table below:

Table 4. T test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pre-test - Post-test	11,16901	13,40574	1,59097	14,34210	7,99593	7,020	70	,000

4)The practicality of the Taliabu District Language E-module

The Taliabu regional language e-module is very practical for use as a regional language learning medium in High School Students Taliabu Island starting from the aspects of learning, quality, function, and appearance. The practicality of this e-Module is based on the development of the syllabus (Directorate of Middle School Development, 2017) that e-Modules are required to arouse students' interest in learning, designed to be used by students, explain learning objectives, flexible learning, arranged based on student needs, focused on needs, students to study and practice, accommodate learning difficulties, need a navigation system, provide summaries, need learning instructions and so on. The practicality of the Taliabu regional language e-Module is proven by the results of practicality-level tests by e-Module users, namely teachers and students. The e-Module developed is in the "very practical" category as seen by e-Module users. The following is a diagram of the practicality test of the Taliabu regional language e-Module.

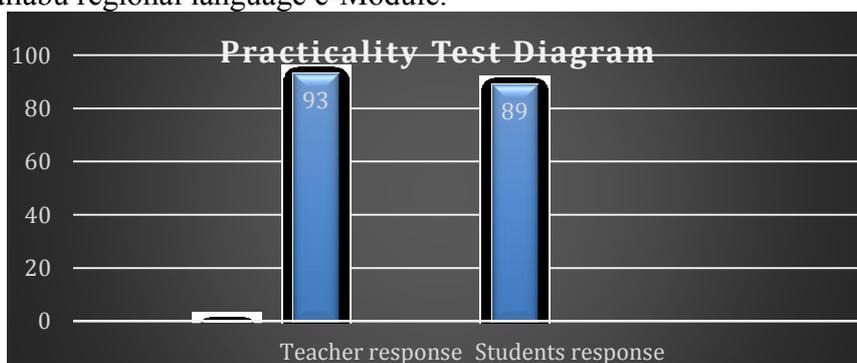


Figure 2. Particality test diagram



These results are in accordance with the practical e-Module mentioned by (Triyanto, 2010). The practical e-module is supported by a systematic conceptual framework for organizing students' learning experiences to achieve learning goals and functions as a guide for learning designers and teachers in carrying out learning activities. All practical aspects referred to above are included in the e-Module starting from the learning aspect, quality, function, and appearance of the e-Module. The practical implications of this research are that The existence of this e-Module can provide encouragement and initiative for students to study this e-Module as a guide in mastering the Taliabu regional language so that it continues to be preserved so that the Taliabu regional language is maintained.

Conclusion

From the research results it can be concluded that the expert test results show that the Taliabu regional language e-Module is very feasible and practical for use by students and meets the criteria. The results of the Taliabu regional language e-module trial explained that there were differences in the level of knowledge and skills of students before and after using the e-module, this was proven by the results of the paired sample t-test which obtained a significance value (2-tailed) of 0.000 ($p < 0.05$).

Recommendation

For students, this e-Module can be a motivation to improve their knowledge and skills in the Taliabu language. For teachers, e-Modules can become a learning facility in improving students' knowledge and skills. Schools with the Taliabu regional language e-module are able to ensure that the policies issued can preserve local content and are supported by adequate facilities to improve students' regional language knowledge and skills.

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