

DESIGNING SUPPLEMENTARY FORMATIVE TEST FOR READING SKILL BY USING HOT POTATOES AT MAN 1 GORONTALO REGENCY

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ABSTRACT

Penelitian ini bertujuan untuk merancang tes formatif tambahan untuk keterampilan membaca pada siswa kelas X MAN 1 Kabupaten Gorontalo dengan menggunakan Hot Potatoes. Tujuan dari penelitian ini adalah, untuk mengetahui target kebutuhan siswa kelas X MAN 1 Kabupaten Gorontalo dan untuk mengetahui kebutuhan belajar siswa kelas X MAN 1 Kabupaten Gorontalo. Jenis penelitian ini adalah Penelitian dan Pengembangan (R&D) menggunakan model ADDIE (Analisis, Desain, Pengembangan, Implementasi dan Evaluasi). Penelitian ini melibatkan 30 siswa kelas X MAN 1 Kabupaten Gorontalo sebagai subjek pengumpulan data kebutuhan siswa. Instrumen yang digunakan dalam penelitian ini adalah wawancara, kuesioner, dan dokumentasi. Hasil analisis kebutuhan dianalisis menggunakan persentase. Desain uji formatif dengan menggunakan Hot Potatoes divalidasi oleh ahli materi dan media, dan evaluasi penggunaan produk dievaluasi melalui tanggapan guru dan siswa. Tanggapan terhadap penggunaan produk dilakukan oleh seorang guru bahasa Inggris dan 15 siswa kelas sepuluh. Hasil penelitian ini adalah 60% siswa ingin pekerjaan tes membaca menggunakan komputer / laptop. Hasil evaluasi penggunaan produk, guru menyatakan kategori baik dan setuju untuk menggunakan produk dalam pembelajaran bahasa Inggris. Respon siswa menyatakan 90,30% positif setuju dengan penggunaan produk ini. Akhirnya, dapat disimpulkan bahwa produk desain ini sangat cocok untuk digunakan oleh guru dan siswa dalam belajar bahasa Inggris terutama dalam tes formatif untuk keterampilan membaca.

Keywords: *Formative Test, Reading Skill, Hot Potatoes.*

A. INTRODUCTION

In language, there are four common skills that are, speaking, listening, writing and reading. One of the students' problems in language learning is reading skill. However, there are several ways that can be done to develop the ability and language proficiency of students such as by giving test to them. Based on the regulation of the national education minister number 23 in 2016 about educational assessment standards in article 9 explains that assessment of aspects of knowledge is done through tests written, oral tests, and assignments according to competencies assessed. Furthermore, the test should be

accordance with the materials they have learned, because according to Brown's explanation (2003), one component of the test is the test must measure. Required test it can be used to teach the students and to do the test will be given in accordance with the students' abilities and provide useful lessons for students to get information from the text listed in the test.

Therefore, in designing this formative test, the researcher has several indicators which as done by the English teacher, such as presenting a short functional text and students can determine one answer to a question about certain information, and also about

determining the answer in determining the meaning of the word in a text. Based on interview to the English teachers at MAN 1 Gorontalo Regency, that the model of formative tests is usually done is giving daily tests in the form of reading and sometimes also is listening. The number of questions given is around ten to fifteen. It can be in the form of essays but also often use multiple choice forms.

Furthermore, based on observations by the researcher to English teacher in MAN 1 Gorontalo Regency, the results of students' achievement in formative tests conducted by the teacher in academic year 2018/2019, the data showed about 60 to 75% of students at tenth grade succeeded in the formative tests given by the teacher. The teacher and the researcher rate this number to be still below, even though there are some students who have succeeded. It means that strategies and ways to improve students' result achievement are still needed.

Furthermore, one of the problems students in learning process, especially in reading is to answer the test, in other words, the lack of vocabulary is a constraint for students in solving these problems. Beside that, according to Bachman and Palmer framework in Alderson (2000) explained that reading tests are after all used not only predict real life reading ability, but are also used for diagnostic and achievement purposes.

Therefore, this problem must be overcome immediately with an innovation or a way that can solve it, because if the problem in reading test is not immediately addressed, it will affect to students' test results. Thus, the teacher needs an innovation, because it will be very useful for students and for the teacher, one of them is by making and designing a test that are useful for students in understanding and delivering the materials, and they also can measure their ability to learn more. Therefore, to achieve all that, requires an innovation and development in designing a test.

Meanwhile, education in Indonesia currently is using 2013 curriculum. MAN 1 Gorontalo Regency is one of the schools that use 2013 curriculum. In 2013 curriculum, there is a textbook that contains about learning materials, this is to facilitate teachers and students in the learning process, but according to Cook, et al (2009) textbooks are not written for students to easily comprehend but mainly to store vast amounts of information. Reading methods should allow students to become effective readers to unlock these "vaults of information" in the content areas. Students who have effective strategies for learning from texts will become more proficient readers, and experience more success in the content area.

Besides that, one of the disciplines that serves to provide the ability to think of humans in overcoming increasingly complex problems in order to compete in the 21st century is informatics. According to Minister

of Education regulation number 36 of 2018 regarding the 2013 curriculum for Senior High School that Information and Communication Technology as a part of Informatics is a basic requirement for students to be able to develop their abilities in the digital era.

Therefore, learning with technology is needed in addition to facilitate the learning process in 2013 curriculum, especially now that we are facing the fourth (4.0) industrial revolution, where innovations are supported by technology including in education. Additionally, Schwab (2016) explained that the fourth industrial revolution was not only about intelligent and connected machines and systems. The coverage is far wider. For that reason, as a teacher or student in the industrial revolution era must be able to improve and design innovation and ideas for the future education be better. In addition, at this time the students are millennial who are already familiar with the development of digital technology. Therefore, the teachers and students are expected to be able to use technology products especially in the 4.0 industrial revolution.

Thus, the technology also will be very useful if used in the form of test. In beside that, now we always find the tests that still use paper. Therefore, the researcher used media technology in this designing process. In addition, according to Irons (2008) the use of technology as a means to achieve the objective

of formative test implementation. Although there are still many who use paper as material for testing.

Furthermore, technology that used by the researcher in this research is Hot Potatoes. Hot potatoes is a software application that is often used to compile several forms of questions and tests. There are several research also that have been done using Hot Potatoes software, such as, "Using Hot Potatoes Program For Reading Test Instrument In English Teaching Learning Process" by Syamsudin and Lisa Kurniawati (2016).

Hot Potatoes has several benefits, especially in designing reading skill test, such as Hot Potatoes is designed mostly used to teach vocabulary, Hot Potatoes also can provide texts with various interactive exercises that can interest students in taking the tests, and also for the teachers Hot Potatoes can be used as instruments test in compiling computer-based tests. Also, the exercises can be shared with teachers around the world, as long as they have access to the Web (Winke&MacGregor, 2001).

In Hot Potatoes itself, there are several features that can be used to make tests. Some of those features are Jquiz, Jmatch, Jcross, Jcloze, Jmix and The masher. One of the features used by the researcher in this research is Jquiz. Jquiz itself is a feature that can be used to create multiple choice questions. Besides that, Jquiz also can be used in giving

questions that require short answers. Furthermore, Quiz feature also is very easy to use in this Hot Potatoes application. In addition, Hot Potatoes used in this research is version 6.

B. RESEARCH METHOD

In this research, the researcher used R and D (Research and Development) method. R and D is an development research model and has the objective to design new products and procedures, which have several systematic stages such as being tested, evaluated, and then refined until found specified criteria or standards (Borg et al., 2003). Meanwhile, designing model in this research used ADDIE. ADDIE is acronym for (Analysis-Design-Develop-Implement-Evaluate). Based on the fact, that this model is suitable for designing and developing product learning models that are right on target, effective and dynamic and very helpful in developing learning for teachers.

This research conducted in tenth grade at MAN 1 Gorontalo Regency. This school is located at Idris Dunggio Street, Gorontalo Regency. This is one of Islamic senior high school in Gorontalo Regency. The participants are selected based on the objectives of research to design and to produce supplementary formative test for reading skill by using Hot Potatoes based on the students' needs in reading. This research conducted at first semester in 2019/2020 academic year.

In this research, the researcher used data collection techniques based on ADDIE model in Branch (2010), besides that with several techniques in technique data collection, such as interview, questionnaire and documentation.

Interview

In this study the researcher collected the data by interview. According to Creswell (2012) some advantages of interview are, provide useful information when the researcher cannot directly observe participants, and the researcher permit participants to describe detailed personal information. The interviewer also has better control over the types of information received, because the interviewer can ask specific questions to elicit this information.

Interview was conducted with one English teacher to know the description of the existing learning process and also some students about the learning process they received and the results of the learning. Furthermore, interviews in this research used unstructured interview to get deeper information about the condition of students and learning.

Questionnaire

The researcher used questionnaires to analyse the students' needs and expert judgement consist of the expert of media and the expert of material. The indicators of the questionnaires for students are the target needs, the learning needs of the students, procedures, setting, teacher role and the students' role in the classroom. Meanwhile,

indicators for the expert of media involvessome aspects, such as use of words or language in media, display of media and design. Then, for the expert material judgement involves some aspects of learning, construction of the test and the material content. Thus, the questionnaireshelped the researcher to design the test reading skill for students.

Documentation

In this research, documentation isalso needed in collecting the data. According to Creswell (2012) document is a represent a good source and valuable information in a research. Therefore, the researcher used documents such as questions card and pictures as represent a source.As for the ADDIE model form that used they were:

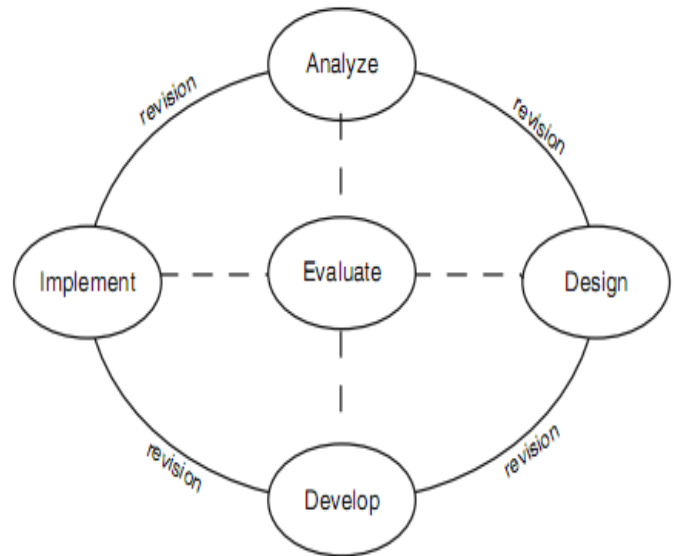


Figure.ADDIE model by Branch (2010)

Analysis

In this step, the activities carried out are to analyze and to identify the needs of students. Branch (2010) explained that the purpose of the analysis phase is to identify the probable causes for performance gap. The output produce isthe form of characteristics or profile of students, identification of gaps, identification of needs and detailed test analysis based on students’ needs, include the result of interview and observation to the English teacher. Then, the researcher be able to know the direction of the need learning process.

Designing

After the analysis activity, the next step is design. According to Branch (2010) that the purpose of the design phase is to verify the desired performances and appropriate testing methods. In this step the researcher has designed a blueprint for formulating learning

objectives and then developing items or questions to measure the level of student progress and the level of achievement of the goals that have been formulated.

Developing

In this step, it includes preparation of media and materials for students in accordance with the specifications of the product being developed. In this step also, the researcher have produced content and developed guidelines for students. In addition, the researcher also prepare product validity forms for media experts and material experts, as well as forms for teacher and student responses.

Implementation

This step is also called application. Application for students and teachers, after the product is ready. In this research, the researcher implemented through small group and then evaluated through a questionnaire responses of teachers and students as product users. In the process of implementation, the researcher made notes for any deficiencies and obstacles in product implementation, as notes and suggestions for future research.

Evaluation

This is the last step in the ADDIE model. In this step according to Branch (2010) is to assess the quality of the instructional products and processes, both before and after implementation. However, this research is limited only to implementation stage due to several considerations such as, this research only reaches small and limited trials. So that

the evaluation phase is obtained from the response of teachers and students in the use of the product.

C. FINDINGS AND DISCUSSIONS

Based on the research and development carried out, the following research results are obtained:

Table Need Analysis Result

Needs Analysis Component	Aspect	Questions	Categories of Response	Number of Answers
Target Needs	Goals	The goal and important of learning English is.....	to help in communicating with foreign	86,6%
	Necessities	Learning English should make me...	able to interact verbally with proficient in the work field later	60%
	Necessities	I need to learn English, especially reading skills...	toget information from what I read	70%
	Lacks	The difficulty that I often encounter in	vocabulary is too difficult	63,3%

Needs Analysis Component	Aspect	Questions	Categories of Response	Number of Answers
		answering English reading test is.....		
	Lacks	My lacks in reading English texts is.....	to translate the words or terms in reading / text	83,3%
	Lacks	My current proficiency level of English is.....	beginner	83,3%
	Wants	In the future, my English skills should be at a level....	advance	86,6%
	Wants	I want the form of the questions in reading skill is.....	easy to understand in terms of reading / text, and vocabulary	90%
Learning Needs	Input	In my opinion, the material in reading English test should be.....	same as in the textbook	70%
	Input	The length of a text as input reading that I want is around.....	200 – 250 words	73,3%
	Input	The topic of reading texts that I need in learning English is about.....	daily activities	76,6%
	Procedure	Providing and completing reading tests, preferably.....	using computer / laptop	60%
	Teacher's Role	In doing English test, I prefer the teacher to.....	supervise the students' works and help them when they get a problem	83,3%
	Students' Role	In doing English test, I prefer to.....	read a text and then answer the question according to the contents of the text	66,6%
	Settings	The type of class management I want to carry the test is ...	individual	56,6%
	Settings	English test activities that I like is carried out at.....	classroom	53,3%
			outdoor / park	53,3%

Based on the table above, the researcher concluded that the students' need in English learning especially in reading skill is to get information from what they read. However, they also have weakness in answering reading test because vocabulary is too difficult for them. Thus, it is important to design supplementary test for reading skills based on students' needs. This is also supported by the result of the interview with the English teacher at MAN 1 Gorontalo regency.

Question	Answer
Do you see any difficulty or not in reading skill? Even if there are difficulties students in reading skills, how?	Indeed, students have difficulty reading. That is due to the lack of mastery of vocabulary and lack of knowledge of the reading structure, as well as the lack of students' knowledge and experience of the reading text, so this causes the students have difficulty understanding the contents of the reading directly

In addition, from the results of the analysis needs, 70% of students want that the tests they get are sourced from the textbooks being studied. This is also supported by the statement of the English teacher in the interview.

Question	Answer
In giving formative tests, are the questions given based on what is in the textbook or do you have other additions?	For me, about 90% of the formative test questions for students were taken from textbooks and 10% was added from other sources

However, in this study, the researcher combined source textbooks and other

additional sources, because there are about 50% of students also choosing to be adjusted with the needs.

Designing

After the needs analysis was conducted and the results were analyzed, the next step was designing. Designing phase aims to verify the desired performance and the appropriate testing method. In this step, the researcher designed flow charts on Hot Potatoes as a reference in the steps of making questions on formative tests for reading skills.

Development

At this stage of development, there are several things that are done by researchers, including:

Making Questions in Hot Potatoes

The questions that have been designed by the researcher in previous step, produce a form of test then made and developed. These questions were developed by using the Hot Potatoes application. The contents of these questions are based on basic competencies which consist of materials obtained from several sources of English books used by schools and some of which were developed by the researcher self. The form of questions in Hot Potatoes can be seen in the appendix.

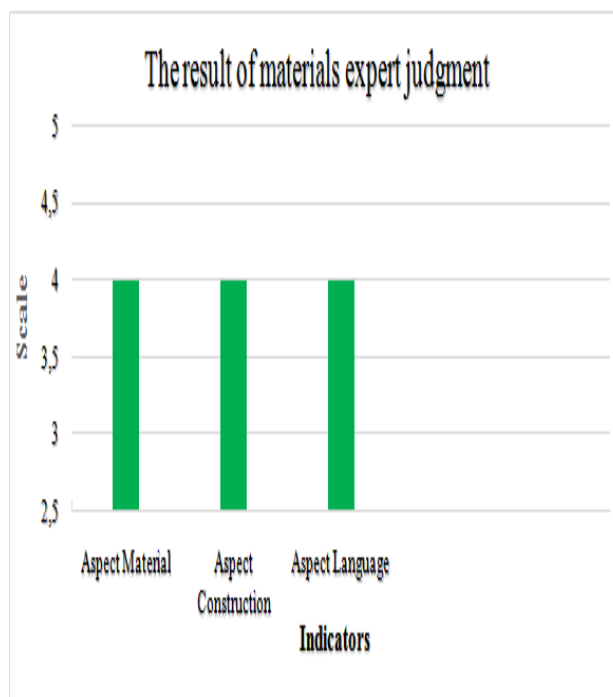
Validation of Product

After making and design the questions by using Hot Potatoes, the researcher made the expert judgments for material and media expert. There are three aspects in material validation of expert, each of which has an indicator namely, material, construction and

language. While for the media validation sheet there are several aspects of validation, such as display and design systems. In addition, the researcher also made the teacher and students' response sheets. This is done because teacher and students are the users of the product, so it requires an assessment of users in the field.

The results of expert material judgement

In validating, the material expert also provide comments and suggestions to improve the content of the material in the test. The results of the validation carried out by the material expert can be seen in chart below:



Based on the results of the data above, it can be seen that the result of expert judgment for material has an average value of 4 it means that it is in the good category.

The revision of material expert judgement

Based on the table and chart above, it shows that the material in this test is categorized as good. Even so, the expert still provided

suggestions for test design, especially for aspects of the material. Following suggest from the expert:

Table 4.8. The revision of the expert in aspect media and material

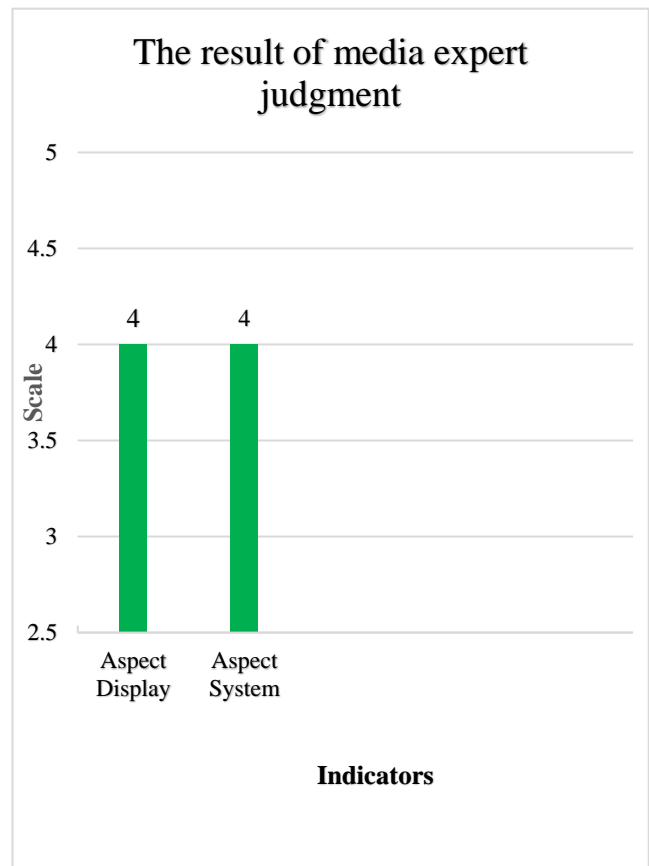
Question	Comment / Suggestion
In general, what are your opinions for the designed test in material for reading skill?	Add images related to the reading text, so the students are interested and understand the reading.

Therefore, based on the advice of the experts the researcher made a product revision, by adding images that supported and in accordance with the text reading. More details can be seen in the appendixs.

The results of expert media judgement

The expert for media evaluates the appearance and system of Hot Potatoes. In addition, the experts also provide suggestions and opinions related to the existing media. Here are the results of the validation of media experts:

The results of expert judgments for media can be seen in chart form as follows:



Based on the results of the data above, it can be seen that the result of expert judgment for media has an average value of 4 it means that it is in good category. Thus, this product is ready for use and implementation for students and teachers.

Implementation

At this stage the product is ready to be used by students and teacher after going through expert validation and revision. In this stage, the researcher only conducted product trials on small group (limited testing) to 15 tenth grade students and 1 English teacher, but the researcher still see the response of teacher and the response of students to media that has been developed through the questionnaire that has been provided. Product implementation is done by using one laptop and the students take

turns to trying it. This is due to the lack of existing laptops.

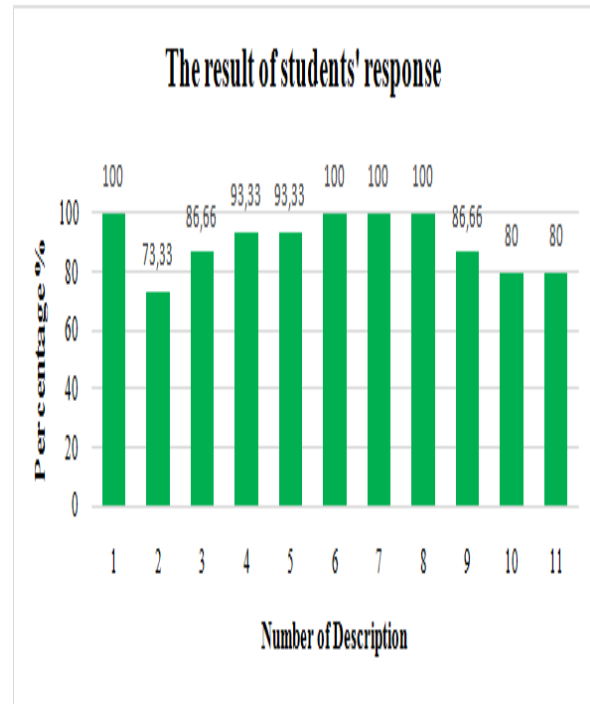
In implementing the product, the researcher explains the procedures for using and the features available in the media, such as how to answer, the time allotted, the material in the test and how to see the results of student scores, likewise to the teacher, the researcher also explains the procedures for use and existing features.

After the implementation of product to teacher and students, the researcher gave questionnaires to teachers and students, the aim is to see and assess their responses to the products provided, namely design test formative reading using Hot Potatoes. Although included in good category and feasible to use, there are suggestions and comments from the teacher.

The following are comments and suggestions from the teacher:

Comments and suggestions
<ul style="list-style-type: none"> • This product is very good to use in learning, especially when giving evaluations or tests to students. • It's very good, but see the obstacles, that is the need for a laptop. In the future we will try to make students comfortable in doing this test using Hot Potatoes. • My suggestion, in the future you can try other features available on this Hot Potatoes. Very good.

Meanwhile, the following is the results of students' responses to a limited trial of a product design formative test for reading skills by using Hot Potatoes.



Based on the chart above, the results of student responses to products for formative tests using Hot Potatoes are categorized as positive and very good for reading skills especially in formative tests, with positive student responses showing more than 80% of all aspects asked in the student response questionnaire with an average percentage averaging 90.30% is very good.

Evaluation

The last stage of this research is evaluation. However, this research is limited only to implementation stage due to several considerations such as, this research only reaches small and limited trials. So that the evaluation phase is obtained from the response

of teachers and students in the use of the product.

D. CONCLUSIONS

There are several conclusion points that can be drawn from this study. First, in designing formative tests for reading skills must be based on student needs, both in terms of needs, wants and their lacks because it is a reference for the researcher in designing and developing formative tests so that the results in accordance with the needs desired by students.

Second, besides that Hot Potatoes media which is used greatly helps students in formative tests on reading skills, it is also very helpful and facilitates the teacher in giving tests to students in each formative test. Therefore, it can be concluded that the media of Hot Potatoes in designing formative tests is very helpful and overcomes students' problems in formative tests especially on reading skills.

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