

DEVELOPING TEST FOR READING REPORT TEXT  
BASED ON TWO-TIER MULTIPLE CHOICES TEST FOR  
JUNIOR HIGH SCHOOL STUDENTS

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**ABSTRACT**

This study aims to develop a test for reading report text based on the Two-Tier Multiple Choices test for Junior High school students in SMP Negeri 3 Dooksanggul. The Two-Tier Multiple Choices Test was developed by using Research and Development (R&D) method proposed by Borg and Gall (2007), which has been modified by Sugyono (2016). It consists of six steps: gathering data and information, analyzing data, developing material, validating by experts, revising the product, and developing the final product. The test instrument developed was a two-level multiple choice test consisting of multiple-choice questions and a choice of reasons totaling 30 questions. The validator assessment sheet consists of three aspects, namely material, construction, and language, with 12 assessment indicators and is analyzed using the Content Validity Index (CVI). The first draft was revised based on validation results and experts' comments to develop a better test instrument. The developed reading test validated the Content Validity Index (CVI) score was 1.00. It concluded that the instrument test was categorized as "Very Good."

**Keywords: Instrument test, Reading, Two-Tier Multiple Choice Test, Report Text**

## I. INTRODUCTION

The test is among the instruments used to assess learning evaluation activities. Magdalena (2020) stated that a test is usually used to evaluate students' abilities or achievements in the cognitive scope, for example, knowledge, understanding, analysis, synthesis, and evaluation. The test must be made logically and rationally regarding any subject matter that should be tested as important knowledge material that needs to understand by the student. The test must have a level of difficulty that adjusts to the student's characteristics. Arikunto (2013) stated that an excellent test as a measuring tool must meet the test requirements, namely validity and reliability. But in fact, as Magdalena (2020) said, most of the teachers ignore this and take questions from pieces of material in the textbooks and other sources such as the internet, LKS, etc. Students' understanding of essential knowledge must be known and understood without knowing whether the questions are correct. Even the difficulty level of the item test is not according to the students' characteristics.

The same thing was also found from interviews conducted with the teachers at SMP Negeri 3 Doloksanggul showing that when giving tests to students, the teacher didn't consider several things such as the test's purpose to measure which indicators and what the next actions. In otherwords, the teacher cannot develop the test instrument properly and still has not used the test results analysis to improve the learning process. Moreover, the teacher sometimes uses the two-tier multiple-choice test to measure students' understanding. The teacher gives students two-tier multiple-choice questions, with the second level asking them to explain why they chose certain answers on the first level.

Here is the evidence of the Two-Tier Multiple Choice that the teacher uses and is unsuitable for the indicators.

Task

Read the text below. Then select the correct answer and give reasons for each answer you choose in the blank space.

### **Blue Whale**

Blue whales are not only the biggest whale on the planet today. The blue whale is the largest animal that has ever lived on Earth. Some species of blue

whales are very large. They are enormous, much larger than any of the dinosaurs.  
The blue whale is a sea-living mammal.

1. What is the title of the preceding text?
  - a. Panda
  - b. Bats
  - c. Blue whale
  - d. Lion

Reason: .....

The multiple-choice test above is not suitable for the indicators in the lesson plan, where the indicators require students must read and comprehend the text's message. However, in this question, students can answer the question directly without reading or understanding the contents of the text first. Suwanto (2013) stated that to understand the reasons given by students, teachers must provide different assessment instruments for the first and second levels. In addition, teachers must also provide different assessment instruments for tiers one and two. Therefore, the test became more complicated for the teacher to assess.

A two-tier multiple-choice test is used to assess students' reading abilities. Treagust (1988) stated that two-tier multiple choices are developed from the traditional multiple-choice. The test is typically divided into two sections; the first consists of a multiple-choice content question with two or three answers. Each instrument test's second section contains four possible explanations for the first section's answer. (Adodo 2013) also stated that a multiple-choice question test is a multiple-choice test with two levels. The first level is analogous to traditional multiple-choice questions associated with knowledge statements. In contrast, the second tier is also presented in multiple choices, which encourages the student's critical thinking and reasoning in choosing the answer in the first tier.

However, Shidiq (2014) stated that because of a lack of time and knowledge about the development of this test, many teachers still do not prepare their version of the two-tier multiple-choice instrument test. To be pushed beyond student knowledge capacity, pupils must develop higher thinking skills such as critical thinking, decision

making, and problem-solving. Therefore, Teachers must learn and practice these skills as well. Nahadi (2014) also stated that teachers frequently use two-tier multiple choices. The two-tier multiple-choice test instrument is easier to implement and score compared to other diagnostic tools, thus providing more benefits for teachers in the classroom.

Based on the observation in SMP Negeri 3 Doloksanggul, there are some data on students' scores and KKM in the reading report text. The data shows that the students' scores in reading report text using two-tier multiple-choice are relatively low under the KKM because the second level asks students to write down the reasons for choosing certain answers at the first level. This can be seen from the average value of students. The average of students reading report text-ability is 49 while the KKM is 70, which means that all students didn't pass the KKM in reading. The students do not understand the text's content and are less able to understand the questions. Some students only acknowledged the outline of the text content and required a significant amount of time to comprehend the sentence. When given multiple-choice questions with ten items, most of the students answered half of the questions correctly even though they did not understand the contents of the text. They didn't rationalize why students chose the answer in the first tier. This situation can happen because the questions given are multiple-choice, and students have the opportunity to answer the question correctly by guessing the answer.

Tuysuz (2009) stated that measuring students' understanding using multiple choices with five choices shows a 20% chance of correctly guessing the answer. The possibility of guessing this answer can be decreased by giving multiple choices accompanied by reasons to the students, where the opportunity for students to think the answer correctly is less. However, when students are given multiple choice questions accompanied by reasons, student responding to a question with five choices in the first tier and accompanied by reasons in the second tier has only a 4% chance of randomly correct guessing.

Furthermore, the researcher also asked the teacher's opinion based on the teacher's experience in teaching whether using various tests to measure students' understanding. The teacher said they usually used the textbook or module questions

to test the students' ability to read report text. The tests in the textbook vary, but it is infrequent to find tests in multiple-choice forms, especially for reading tests. It makes students less understanding of reading report text because most of the tests in the textbook about this material focused on the structure of the text and students' writing skills.

Many studies have been conducted using a two-tier multiple-choice test developed for various subjects. One of them is research written by Melayu (2016), which uses this test to promote students' reading comprehension. The study aims to make students struggle more with answering the questions. According to the findings of this study, a two-tier multiple-choice test is an excellent tool for assessing the reading comprehension of senior high school students.

In further research, Rintayanti (2020) developed a multiple-choice test for elementary students using two-tier multiple choice. This study aimed to see if a two-tier multiple-choice test designed to assess Indonesian elementary students' high-order thinking abilities (HOTS) on science concepts like force, motion, and energy was feasible. This study concludes that the developed two-tier multiple-choice test is feasible for senior teachers and users for measuring high-order thinking skills in the concepts of force, motion, and energy in elementary schools.

This test has been developed by several experts previously for various subjects. From the results, it can be seen that this test can reduce students' chances of guessing the answer correctly. However, this test has not been developed for reading report text material. Reading report text is one of the types of text studied in ninth grade, and the teacher does not yet have the right test to measure students' reading ability. This study aims to develop a test for reading a report text. So, a test that can be used to measure students' reading comprehension was required to determine the level of student abilities in reading report text. Therefore, the test that had developed was a test that can measure students' understanding of reading report text, and this test will also encourage students to think critically. Thus, researchers are interested in conducting research based on the context of this problem that develops a test instrument to measure students' reading report text. The test that develops hopefully contributes to helping the teacher assess the students' reading skills.

## **II. REVIEW OF LITERATURE**

The following terms were used to explain some of the concepts used in the research and all the terms related to the theory of test, two-tier multiple-choice, high order thinking skill, reading comprehension, and report text as a genre. This theoretical framework is presented to give some clearer concepts applied to this study and make the readers have the same perception as the researcher.

### **1. Test**

Arikunto (2013) states that a test is a tool or process used to measure something according to predetermined rules and procedures. A test is an experiment that is used to see whether the students understand a certain lesson or not. Harmer (2007) stated that a test is used to measure the students' abilities to see if the students can enter a course or institution. Sometimes it is used to see how well the students are getting on the topic. There are many tests based on how they are answered based on the instructions given, for example: circling one of the letters in front of the answer choice (multiple choices), explaining, and crossing out the wrong answer, doing assignments or orders, answering orally, and others.

To find out whether a test is good and effective for measuring something that must be measured, Harmer (2007) describes some of the characteristics of tests that need to be considered as follows:

#### **1) Validity**

Harmer (2007) Explained that when a test is valid, it measures something that must be tested, such as a previously taught subject or material. The test is valid if it produces similar results to some other measure that can show that the test given has the same result as the other tests. The test must also have an assessment that follows the test given.

#### **2) Reliability**

A good test should have a consistent result. Arikunto (2013) also added that a test could be reliable if the consistency given to students is the same when it has been tested many times. A reliable test offers a systematic measure of a student's ability to question attainment.

## **2. Two-Tier Multiple Choice**

Tamir (1989) found that the multiple-choice question method is an effective and sensitive tool in learning assignments. So the teacher must do a diagnostic test. A two-tier multiple-choice test is a test in the form of multiple-choice questions consisting of two levels developed by Treagust (1988). The first level contains multiple-choice material with two or three options. Each item's second level consists of a multiple-choice set of the reasons for the answer given in level one. Adodo (2013) explained that the reasons in the second-level answer choices are intended to encourage higher-level thinking and reasoning skills.

Mutmainna (2018) stated that the two-tier multiple choices test instrument assesses students' cognitive learning outcomes at all cognitive levels ranging from memory, understanding, application, analysis, synthesis, and evaluation. Based on the curriculum that has been implemented in schools that are now competency-based, developing a two-tier multiple-choice test to assess student's reading ability is extremely effective. Multiple-choice questions have the characteristics of answers chosen by the testees. Multiple-choice questions have a writing format consisting of the subject (stem) and answer choices (options), where the answer choices consist of one correct answer choice and a distractor.

## **3. Reading**

Elizabeth (2003) stated that reading is concerned with comprehending written text. Reading is both cognitive and perceptual. Reading is made up of two processes that are linked together: word recognition and comprehension. Reading can assist students in comprehending the text and learning from the text itself. Reading abilities can empower anyone who learns it.

Linguists and experts have provided numerous definitions of reading. Grellet (1981) defined Reading as an active skill that unconsciously directs readers' guessing, predicting, checking, and questioning. While reading a text that attracts attention, students will constantly read it to the end to answer their curiosity about the information obtained in the next paragraph, even from the entire text. Yaeger (2018) stated that reading is used to comprehend a text's meaning and make connections. Engelhardt (2013) stated that reading can give you information, statistics, and much information. Reading broadens minds and allows us to consider issues that affect our lives and the future. Nation (2009) defined reading as a source of knowledge and enjoyment. It can be a self-contained goal and a means of achieving other objectives. Amtha (2017) explained reading is an interactive activity that occurs when people look at a text and interpret the written words in that text. It is a language skill that students use to understand what they read.

#### **4. Report Text as a Genre**

A report text is a type of text that results in the form of an investigation about something. The information provided is in the form of general information. The social report text aims to explain how objects are in general, focusing on various natural, man-made, and social realities in the ecosystem. Jasuli (2017) stated that, as the name implies, report text is a type of text that announces comprehensive information. Its principal goal is to inform readers about findings from an exploration. Hyland (2004) said that the social purpose of report text is to reveal factual information, typically accomplished by categorizing things and then explaining their features.

### **III. RESEARCH METHODOLOGY**

In this research, the researcher used the research and development method. Borg & Gall (2007) explained that R & D would design new products or procedures methodically field-tested, reviewed, and refined until the product is more effective, improved in quality, and at least comparable to the earlier product. This research was held at SMP Negeri 3 Doloksanggul. The subjects were SMP Negeri 3 Doloksanggul



English teacher, ninth-grade students, and one expert from the State University of Medan.

The data used for this research are syllabus, lesson plans, answers to questionnaires given to students, transcription of interviews with teachers, test instruments, and test instrument validation sheets. Interviews were conducted to determine the test instrument used by the teacher to evaluate student understanding. Through this interview, it was found the problems encountered by the teacher when using the Two-Tier multiple-choice test instrument with students and the teacher's reaction to Two-Tier Multiple Choice. Interviews during research for teachers of English subjects at SMP Negeri 3 Doloksanggul also aim to know how reading report text learning is carried out. The data obtained can be used as data from a product needs analysis. The previous Two-Tier Multiple Choices test, syllabus, and lesson plans were analyzed to adjust the basic competencies and indicators with the questions. In addition, the researcher also provided a questionnaire containing several written questions that were used to obtain data regarding the needs of the product development test instrument for reading report text based on the Two-Tier Multiple choices test. Validation questionnaires serve as guidelines for researchers to revise products developed in response to suggestions and input from validation experts to create valid test instruments.

This study included data analysis, specifically item analysis, which included validity analysis based on the results of the experts' evaluation. This item analysis aims to identify questions that categorized into the not good, good, and very good. The results of this data analysis obtained useful information for revising the product.

#### **IV. RESEARCH FINDINGS AND DISCUSSION**

##### **A. Research Findings**

This research data was tabulated by having the products validated by some experts. The product is a two-tier multiple-choice test for students. The Two-Tier Multiple Choices test was developed in six stages: gathering information and data, analyzing data, developing the two-tier multiple-choice test, validating the two-tier multiple-choice test, revising the two-tier multiple-choice test, and developing the final product.

1. Gathering data and information begins with determining the subject matter to be developed based on the syllabus. The next step is to choose a school, SMP Negeri 3 Doloksanggul, because students are still less enthusiastic when doing the English test. With this question, students should be more enthusiastic about working on reading report text questions. Next, the researcher observed the school and conducted interviews with two English teachers who teach in the ninth grade to find out the problems related to the test instrument for reading report text. The material chosen was reading report text because the teacher did not have questions to measure students' reading report text abilities.
2. After the data and information are found, the next step is to analyze the data and information found by conducting a literature review or literature study of the test to be developed. The researcher also reviewed the existing test, especially the multiple-choice test that the teacher uses.
3. Developing test for reading report text. Reading report text begins with finding the report text for the questions. Select a section of the text that was turned into a test in the form of a Two-Tier Multiple Choice Test. Then create a test based on the Two-Tier Multiple Choice test.
4. The test instrument has been completed following the development of the test, and the next step is to validate the developed test instrument. Validating is an activity to collect data or information from experts (validators) to determine whether the test instrument developed is valid. Before a test instrument can be used in general, it must be validated. The test instrument is said to be valid or feasible if the level of validity is high, and otherwise, it is said to be invalid if the level of validity is low. Validating the new test was done by experts. In this research, the experts are two English education lecturers in UNIMED and an English teacher of SMP Negeri 3 Doloksanggul.
5. Design revision is the process of correcting flaws discovered due to product design validation results. In this study, suggestions given by experts (validators) were used as material for the revision of the test instrument product. The product is in the form of a test instrument developed using the

Two-Tier Multiple Choice test on reading report text material for junior high school students and was further developed to be made into a product based on suggestions from the validator. After reviewing the test by experts, the researcher revised the instrument test. The instruments test was revised to give a better quality to the instruction.

6. The revised test instrument design is then turned into a product, which is a Two-Tier Multiple Choice test instrument. The test instrument product contains test instructions, assessment instruments, report text consisting of four texts, and multiple-choice questions consisting of 30 questions.

## **B. Discussion**

The instrument test was developed based on Two-Tier Multiple Choices to measure reading report text ability. It has gone through a series of development phases proposed by Borg and Gall (2007), which has been modified by Sugyono (2016), starting from gathering data and information as preliminary data, analyzing data, developing material, validating by experts, revising product to produce a final product. The final product in question is a Two-Tier Multiple choice test instrument with 30 questions.

Based on the research findings regarding the interview with the teacher, instrument test analysis, and the result of the expert judgment, the students' reading instrument test developed based on the Two-Tier Multiple Choice test in this research was considered appropriate to be used in measuring reading report text skills for the ninth-grade students of SMPN 3 Doloksanggul. As the results from the validators, the average of all aspects of the Content Validity Index was **1.00**. It concluded that the instrument test was categorized as "Very Good."

## **V. CONCLUSION AND SUGGESTION**

### **A. Conclusion**

Research on the development of a test instrument for reading report text based on Two-Tier Multiple Choice has been carried out by referring to interviews with teachers, the result of previous instrument test analysis, the document of the syllabus, and the lesson plan. The ninth-grade English teacher

were interviewed to get more accurate data. After that, the syllabus, lesson plan, and item tests were analyzed to develop test items that followed students' achievements in the syllabus and lesson plans. The Two-Tier Multiple Choice test instrument was developed. Namely, the first level consists of questions that reveal the concept that students will choose the answer. The second level contains why students choose certain answers at the first level. The test instrument was developed using the development method proposed by Borg and Gall (2007) with a lower-level development procedure that has been modified by Sugyono (2016), starting from gathering data and information as preliminary data, analyzing data, developing material, validating by experts, revising the product to produce a final product. The instrument test that was developed as a whole is of very good quality, judging by the validity of the developed test which has a content validity (CVI) of 1.00 and can be used by the ninth-grade students of SMPN 3 Doloksanggul.

## **B. Suggestion**

Teachers can use this instrumented test to measure the ability to read report texts for grade 9 students and for the topic of reading report texts. For other researchers, they can develop this test for other higher-level English materials as well. Teachers at SMPN 3 Doloksanggul should also make similar questions for other English language materials instead of taking questions from the internet that have not been tested for validity and have not been able to measure students' critical thinking.

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