# Improving the Quality of Teachers-made Summative Test at the Senior High School in South Sumatera

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Abstract: This research has a specific purpose to elaborate the problems related to strategies in solving the quality of

teacher-made summative test. Therefore, more in-depth research is needed on 2 (two) fundamental problems that can be formulated as follows: (1) What are the obstacles in improving the quality of the teacher-made summative tests in senior high schools; (2) How is the strategy to improve the quality of summative tests in senior high schools. The subjects of this study were senior high school teachers who taught in South Sumatera Province. This research object was a teacher-made summative test for the School Final Examination for Subjects of Citizenship Education, History Education, and Religious Education are tested in the School Final Examination. The quality improvement strategy for the teacher-made summative test made in senior high schools in South Sumatra. The analysis shows that: for the quality of the summative final exam made by the teacher multiple choice objective form, which was assessed based on the percentage of valid items. The results of the study also show that different power indices (discrimination) for

summative examinations made by teachers generally have a low stage.

### 1 INTRODUCTION

The quality of tests plays an important role in improving school learning programs, which tests become part of the components in learning and have a direct influence on student development. According to Taras (2015) the test is an important part of the teaching and learning process. Exams can be done at the beginning of learning to know past experience or learning or so on at the end of the lesson as a way to assess the significance of learning to students and correct weaknesses in aspects of learning.

The need to take measurements in class and at school, it is necessary to know the extent of students' knowledge, skills, attitudes and interests. Because the test is a tool to get data about individual behavior, so in coaching the many things that must be considered such as reference so that the exam has good quality (Taras, 2015; Kane, 2018).

There are two types of assessments that are commonly carried out in an educational institution in making measurements of the stage of progress in student achievement through continuous assessment tests during the learning process (formative assessment) and the final assessment exam

(summative assessment). There are two types of summative examinations for student performance assessment, namely the National Examination or standardized tests made by the central government and the School Final Examination made by teachers for graduating students at the Elementary School, Junior High School and Senior High School.

There is a lot of criticism made against the final school examinations, both by the masters and observers of education (Arikunto, 2015). If observed carefully, there are several problems in the field of measurement and assessment of education made by the teacher faced at this time.

First, that education examinations and assessments are conducted by teachers who generally lack knowledge and skills in the field of assessment and measurement. If the assessment is carried out by an untrained teacher, then it is not surprising that the quality of the exam is also still low (Arikunto, 2014). There are times when the interpretation of the test Results turns out to be wrong so the results become less precise.

Secondly, with regard to providing and administering school final examinations made by teachers who lack pedagogical competence in the implementation of learning, especially assessing student achievement and there is a teacher's motivation/mutation that changes every year. Therefore, the exam questions are sometimes provided by the newly teacher who less experienced. Schneider, (2017), argues, experienced teachers can generally provide higher quality exam questions. Teachers who often make formative exams are likely to have better competencies to provide quality summative examinations for student achievement measurements.

Third, the quality of the exam used also affects the accuracy of the measurement of student achievement. The role of the teacher as an individual who makes the test is very important. If the teacher is able to develop formative exams well in the learning process, it is expected that the teacher does not have a big problem when providing school final exams or summative examinations. Some criticisms about the exam include what Gullickson, (2016), said that objective examination procedures do not test the actual mastery of student competencies. In addition, the present assessment system should not only measure aspects of cognitive development.

Therefore, further research is needed on what strategies are needed to improve the quality of teacher-made summative tests. This research has a specific purpose to elaborate the problems related to strategies in solving the teacher's quality summative quality test.

Therefore, more in-depth research is needed on the basic problems that can be formulated as follows: What is the summative quality improvement strategy made by teachers in high schools? What are the obstacles in improving the quality of the teacher-made summative tests in senior high schools?

This research has urgencies in terms of formulating the correct strategy in an effort to improve the quality of teacher-made summative tests. In addition, the result soft his study can provide useful information for the formation of examination institutions that oversee the quality of tests at all levels of education, at all levels of school, all provinces in Indonesia. With this, the teacher is expected to get guidance in making quality exam questions. The results of this study are expected to be a reference material for assessing the quality of subsequent teacher-made tests for other subjects at the elementary school, junior high school and senior high school level in other provinces.

The next urgency is that this teacher-made test quality improvement strategy can be generalized to other provinces in Indonesia in general by considering the characteristics of each province. More importantly, the teacher-made test as a tool for measuring student achievement is a guide for teachers' knowledge and ability to carry out the learning process at school. By knowing the quality of the homemade test, the teacher will feel compelled and motivated to improve their competence in making the test.

The results of this study will also be useful information for the Ministry of Primary and Secondary Education in improving teacher competency in developing high- quality tests. The higher the quality, the more appropriate the student's achievement. The result soft his study can be used as a useful reference in carrying out the summative test, and help teachers to develop their own summative examinations for graduating students at the elementary school, junior high school, and senior high school level.

#### 2 RESEARCH METHOD

The research object was a teacher- made summative test on subjects of Citizenship Education, Historical Education, and Religious Education. The location of this study is high school (SMA) located in Palembang, Prabumulih, Lubuk Linggau, and Pagaralam in South Sumatra Province, each with 3 (three) schools. The selection of the four locations above considers 3 (three) things as follows: (a) is a high school that is both in the city status area so it is assumed that the teachers in charge there can be accessed better and the data needed is easier to obtain by researchers; (b) teachers in urban areas certified generally teachers (Teacher Certification); (c) access to information in urban areas is relatively more adequate so that teachers should not experience significant obstacles in obtaining material for the preparation and development of the summative tests they make.

#### 2.1 Research Road Map

There are a number of stages in this research, namely the stages of (a) literature review and stage (b) field study. The literature review stage is placed at the beginning of the study, with the aim of examining various factors that influence the quality of the teacher's summative test from various literature, both books, research reports, and scientific journals. After obtaining a theoretical foundation as well as a preliminary picture of the factors that determine the quality of the teacher's summative

test, the study continues to the next stage, namely field studies.

The stages of the field study consisted of 3 (three) steps, namely observation, questionnaire survey, and in-depth interview. Field studies were carried out in Palembang City, Prabumulih City, Lubuk Linggau City, and Pagaralam City. In each location, a survey will be conducted through a questionnaire in which respondents are selected using the Purposive Sampling Non- Probability method, which is sampling from the population with closed criteria. Then this research is deepened by conducting in-depth interviews. Of the total respondents selected in the questionnaire survey, selected speakers were selected for in-depth interviews.

## 2.2 Data Collection Technique

The Literature Review Stage, consisting of (a) literature review, was carried out by studying various research reports published in books, journals, magazines, bulletins and newspapers both printed and printed on the internet; and (b) review of statistical data, carried out by tracing and inventorying statistical data available at the Central Bureau of Statistics, study centers, and non-governmental organizations.

Field study stage, consisting of (a) observations, carried out from the beginning to the end of the field study by observing the subject and object of study to get an overview of the subject and object of the study; (b) survey, carried out using questionnaires for each of the 25 (twenty five) teachers who served in 4 (four) research locations so that there were a total of 100 (one hundred) respondents; (c) Focus Group Discussion with teachers in 3 (three) schools in each research area; (d) In-depth interviews (indepth interviews), conducted at each research location, for each of the 3 (three) teachers who made subjects of citizenship education, represent historical education, and religious education. Thus, there will be a total of 12 (twelve) teachers interviewed in depth.

# 2.3 Data Analysis Technique

The analysis carried out in this study is analyticalcomparative, which is analyzing the data with the aim of finding an overview of the subject and object of the study and then explaining the various things that underlie the situation experienced by different research subjects. Data obtained through literature review is used as a theoretical basis and an initial description of the research focus. Data obtained from observations and surveys are used to verify pre-existing data on the quality of teacher's summative tests. Then the data obtained from the FGD and in-depth interviews are used to formulate teacher's summative quality improvement strategies.

#### 3 RESULTS AND DISCUSSION

The importance of measurement education, based on Anastasi (2007), is the process of collecting data by paying attention to experience (empirical). This data collection process is carried out to assess what students have acquired after participating in a lesson for a certain time. This process can be done by paying attention to their learning, hearing what they say and gathering information that is in accordance with what the students have done.

Measurement is the process of giving value to an object and its attributes systematically (Anastasi, 2007). Measurement results information will help a person make reasonable consideration. Consideration requires information obtained through measurement. Someone will be able to judge better if the measurement can provide valid and reliable information.

Quantitative measurement, it is as stated by Tuckman (Anastasi, 2007). that measurement is only a unit or instrument of assessment and is always related to quantitative data, for example in the form of student scores. That way, concrete measurements of nature can support the objectivity of a process of assessing learning achievement. According to Mardapi (2008), measurement is basically the activity of determining score on an object systematically.

The characteristic contained in the measured object are moved into a score form so that it is easier to assess. The aspect contained in individuals such as cognitive, affective and psychomotor are converted into scores. While based on the opinion of Anastasi (2007) that the main characteristic of measurement is actually a comparison. Thus, measurement is comparing something that is being measured with a measuring instrument descriptively. Descriptive intent is to state the results of the measurement only by unit or size of size without giving a quality assessment.

As for the opinion of Gullat & Ballard (2008), measurement is a quantification process by giving value to something competency characteristics and the characteristics of the competency. In teaching and learning in the classroom, the

competence of the material taught by the teacher to students is quantified by giving a test score. The need to take measurements at school and in class is necessary, in terms of measurement to find out where students 'knowledge, students' ability limits, student attitudes and interests. From the student's point of view, the measurement must be precise, whether it is through an exam or through other measurement instruments. Where as from the teacher's perspective, measurement gives feedback about students. From the measurement results can be known the obstacles faced by students and can be used as a principle of assessment of student achievement and provide feedback for teacher teaching.

Most measurements of student achievement in the classroom are carried out through examinations. Because measurement is an integral part of teaching, a teacher must be able to carry out the measurement through the test he made.

The test is a measuring tool that is often used to obtain empirical evidence for the purpose of assessing teaching and learning in schools. Gullatt & Ballard (2008), states that the main purpose of the exam is to produce evidence that can be used to make an assessment of teaching and learning in school. Assessment in class can help teachers improve their teaching and student learning. In addition to information for teaching and learning diagnosis, exam scores are also used as a basis for the selection of majors, student placement, and student coaching. Therefore, the right way to ensure this is by holding a quality exam.

The quality improvement strategy for the teacher-made summative test made in senior high schools in South Sumatra. The analysis shows that: for the quality of the summative final exam made by the teacher multiple choice objective form, which was assessed based on the percentage of valid items which obtained 35 people (58%) the teacher was in the simple and good stage, 9 people (15%) the teacher was found has a valid percentage of items at the good stage, 26 people (43%) teachers are in sufficient stages, while 25 people (42%) teachers are in the low stage.

Summative test reliability multiple choice objective forms made by teachers generally are in sufficient stage, namely as many as 28 people (47%) teachers, 23 people (38%) teachers develop examinations that have reliability at good stage, while 9 people (15%) teachers are at the stage low test reliability. The results also show that the teacher's level of summative exam difficulty level is generally low. There are 42 people (70%) teachers

who are in the low stage, while 18 people or 30% of teachers are in the sufficient stage.

The results of the study also show that different power indices (discrimination) for summative examinations made by teachers generally have a low stage. Most teachers, 57 people or 95% of teachers are at a low level. The teacher in making a test with a different level of power is one teacher, in enough stages there are 2 teachers. The effectiveness of distractor for teacher-made summative examinations generally has a low stage. Most teachers, 44 people or 73% of teachers have at a low stage. The teacher's summative exam in making a test with a Deceiver at the sufficient stage there are 12 people (20%) teachers.

The relationship between summative examination quality and teacher background such as teacher's latest education, frequency of making examinations, teacher teaching experience, and training in evaluation in the last three years of teaching turned out to be insignificant. Probably the reason that the teacher is influenced also by other factors such as affective background in the form of attitudes, interests, talents, this motivation needs to be considered. Other factors include socioeconomic backgrounds such as family expenses, family education and the number of family members. These factors are believed to influence teachers in making high-quality summative exams.

Developing a summative exam, the teacher states that they consider all aspects as references in developing good questions. The choice of aspects that lack consideration in developing the test, is to determine a different power index, namely there are 41 teachers, and develop an exam at the level of difficulty, namely there are 26 teachers.

The obstacles faced by the teacher in developing the summative test are determining the validity (valid items) and reliability of the test there are 38 teachers, assessing the effectiveness of the distractor there are 36 teachers, analyzing teacher-made tests there are 34 teachers, in assessing the quality of homemade tests there are 30 teachers. The obstacle is also faced by the teacher in developing and holding summative examinations in determining the number of items with the exam time of 28 teachers, determining the test lattice there are 26 teachers, choosing the appropriate words on the exam there are 25 teachers, determining the type of exam that matches the purpose 23 the teacher, compiling the exam questions there are 21 teachers, determining the purpose of the exam there are 16 teachers.

#### CONCLUSIONS

The quality improvement strategy for the teachermade summative test in senior high schools in South Sumatra. It is expected that the teacher gets guidance in making quality exam questions. The results of this study are expected to be a reference material for the teacher- made summative test quality improvement model for high schools in South Sumatra, then for other subjects at the elementary school, junior high school, and senior high school level in other provinces. The next urgency is that the strategy to improve the quality of the teacher-made summative tests in senior high schools in South Sumatra. This can be generalized to other provinces Indonesia in general by considering the characteristics of each province. More importantly, the teacher's test of learning outcomes as a measuring tool for student achievement is a guide to the knowledge and ability of teachers to carry out the learning process in school.

By knowing the quality of their own learning outcomes, the teacher will feel compelled and motivated to improve their competence in making the test. There results of this study will also be useful information for the Ministry of Primary and Secondary Education in improving teacher competency in developing high-quality summative tests. The higher the quality of the test, the more appropriate the student achievement.

The results of this study can be used as a useful reference in carrying out summative tests of teachermade learning outcomes at the high school level in South Sumatra.

It is hoped that this research can be as a process of evaluating learning outcomes into a textbook with comprehensive content, ranging from forms of learning outcomes tests, steps in the process of preparing learning outcome tests, and teacher-made test validation models. In addition to publishing in the form of text books, it also plans to develop a policy-paper that can be a public policy model related to strategies to improve the quality of learning outcomes so that it can be applied in schools.

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