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Learning Evaluation: Characteristics of Excellent Assessment

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Abstract

Aim: The aim of this research is to explain the learning evaluation process which focuses on the characteristics of excellent assessment. Evaluation has an important role in learning outcomes and one way to obtain excellent test items is to test the validity of the test items. One way to find out student learning outcomes is to carry out learning evaluations. In learning evaluation there is an assessment process which has an important role in measuring student abilities. So it is important for a teacher to know the characteristics of excellent assessment. If the learning evaluation is carried out well, the results of the evaluation are used to improve the learning curriculum used.

Methodology: Qualitative research methods and library research types of research are used to determine the characteristics of excellent assessment. The collected data is then analyzed using several stages of data analysis, and then data validity is carried out to determine the validity of the data.

Findings: This research shows that the characteristics of an excellent assessment are: 1) Validity, the tools used in the assessment process are valid. 2) Consistency, when the assessment is carried out with various assessment objects, the assessment results do not differ too much and are stable. 3) Objectivity, meaning there is no subjectivity factor in carrying out the assessment. 4) Ease of Application, both ease of implementation and ease of inspection. 5) Economical, doesn't cost a lot of money, energy or time.

Implications/Novel Contribution: The seriousness of educators in carrying out the assessment process must be considered so that the objectives of learning evaluation are achieved. So, with the successful implementation of the assessment, student learning goals can be achieved.

Keywords: Evaluation, Assessment, Education, Test

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INTRODUCTION

Education has a major role in building individuals and society. Through it, we can make someone a good student, useful in the society in which he lives. The purpose of education is to develop human abilities, educate human personalities to be good, and build generations and advance them (Roco & Bainbridge, 2002). Education also functions to develop students' thinking processes for the better, so that students can distinguish which actions are good and which are bad deeds.

The evaluation process is a procedure that is the implementation of a good learning process and is one of the important components of the education system, which is considered the basis for improving educational input and output. Concepts and qualitative issues related to student learning evaluation are important discussions to be able to develop students' skills efficiently (Jeong & So, 2020). The evaluation process is an integral part of something that is pursued in a program or activity in an educational process (Lawless & Pellegrino, 2007). As part of the Education component, doing learning evaluation is the main task of the evaluator, but not only the evaluator must understand the learning program evaluation model. Educators, prospective educators, and other practitioners working in the world of education need to understand this.

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The purpose of learning evaluation is to find out the effectiveness and efficiency of the learning system, both in terms of objectives, materials, methods, media, educational resources, environment, and the assessment system itself or in other words the assessment is done. to find out the value or quality of the learning activities done. According to Ho, evaluation is the process of compiling, obtaining, and providing useful information as an alternative decision-making process (Ho, Xu, & Dey, 2010). In the assessment process, some are based on test results and some are based on non-tests. An important feature of the assessment is the comparison process. Therefore, assessment in learning evaluation is an important activity and find outs the success of learning. In general, evaluation is a systematic system to find out the level of success and effectiveness of a program. Evaluation in the education system is one of the important activities that is done periodically in certain periods, among others, to monitor the quality of education and assist the teaching and learning process in the classroom, so a measuring instrument is needed (Rosas et al., 2003). One can find out students' understanding of the topic based on the results of the assessment so that meaningful information can be obtained in the decision-making process. Therefore, from the implementation aspect, assessment issues occupy a very important position in the evaluation process.

Omar stated that if the quality of the activity assessment is good enough, the resulting data can be used to make decisions about students and can improve the curriculum to achieve learning targets. On the other hand, if the quality of the assessment is low, it will mislead decision-makers or policymakers. This means that the assessment aims to improve the student learning process and can provide feedback that can be used as a basis for future planning. For the results of this semester's exam to reflect the actual situation, the questions used must meet all aspects of the requirements for a good measuring instrument and be tested in various aspects. The set of questions used in the semester exams is prepared by each teacher at each school according to the field of study being taught. According to Mokkink, the description of the quality of the measuring instrument is reflected in the characteristics of the questionnaire itself (Mokkink et al., 2010). Characteristics are characteristics that are inherent in or possessed by a set of questions, namely validity, reliability, level of difficulty, and different strengths.

In the field of education, assessment is an important part of the teaching and learning process. The form of assessment that is commonly used to see whether learning outcomes are by the learning objectives is providing test and non-test assessments (Chapelle, 2019). In other words, the measure of success in the teaching and learning process is passing the assessment. Therefore, assessment and the teaching and learning process are very closely related and cannot be separated. So that a learning assessment can measure what it wants to measure or can express what it wants to express, the measuring instruments or assessment tools used must also meet the measurement criteria. This paper is important because it discusses the concept of learning evaluation by describing the characteristics of good assessment.

The characteristics of a good assessment or good assessment specifications and the principles of preparing an assessment must be used as a reference by the assessor in preparing a measuring instrument (Nurtanto, Sofyan, Pardjono, & Suyitno, 2020). The discussion includes validity, consistency, objectivity, ease of application, and economics. Referring to the characteristics of a good assessment, it is hoped that we can see the effectiveness and efficiency of the learning system. So that it can improve the quality of learning from time to time so that it can contribute to improving the quality of education.

Much research has been conducted on learning evaluation, for example in research entitled The learning evaluation: a theoretical and empirical exploration (Edelenbos & Van Buuren, 2005), the research focuses on a theoretical and empirical exploration of learning evaluation. Then the research was entitled Assessment revisited: a review of research in Assessment and Evaluation in Higher Education (Pereira, Flores, & Niklasson, 2016), the foci of the studies are aligned with assessment practices other than the written test, in accordance with a learner-oriented perspective. There is also research that focuses on general discussions about learning evaluation with the title Assessment and evaluation (Hattie & Brown, 2010), The use of evaluation to improve practice in learning and teaching (Macdonald, 2006), and Students' perceptions about evaluation and assessment in higher education: A review (Struyven, Dochy, & Janssens, 2005). All of these studies discuss tests from different perspectives, and we have discussed the characteristics of good assessments. Therefore, it is important to do this research, because it helps previous research and provides useful information for conducting a good assessment.



RESEARCH MODEL

For the topic of this research, the researcher uses systematic library research. This research has many special characteristics, including; First, this research deals directly with text or numerical data, not with the field or eyewitnesses, in the form of events, people, or other things. Second, the data is out-of-the-box, meaning the researcher doesn't go anywhere, except directly with resources that are already in the library. Third, the data in the library is generally a secondary source of data, in the sense that the researcher obtains data from second-hand, not originally from first-hand in the field. Fourth, the state of data in the library is not divided by time and space. Based on its characteristics, this research was conducted in a library that collected data about the characteristics of a good assessment. Apart from that, data is also in libraries, the Internet, and other data sources that are considered important. Among the various places, libraries are the most data-rich and easy to find (Connaway & Radford, 2021).

This research method is qualitative research. The following steps: First, recording all the findings about the characteristics of a good assessment in each research discussion obtained from the literature and sources, or the latest findings about the characteristics of a good assessment. After noting, Secondly, combining all results, both theoretical results and new results, becomes the characteristics of a good assessment. Third, analyze all the findings taken from different readings, regarding the shortcomings of each source, and the strengths or relationship of each with the discourse discussed in it. Finally, criticizing and providing critical ideas on the results of previous discourse research by presenting new results in collaboration with different ideas (Hennink, Bailey, & Hutter, 2020).

All of the above needs can be generated through libraries, bookstores, research centers, and internet networks through access to discourse and information about the research that will be discussed. Using data from various references, both primary and secondary. This data collection was done using documentation techniques, namely by reading, studying, studying, and recording literature related to the issues discussed in this study.

DATA ANALYSIS

The technique used in this paper is the Miles and Huberman model data analysis (Miles & Huberman, 1994). There are two stages in data analysis techniques in library research. First, the purpose of analysis during data collection is to further identify the core or core focus of the research to be done through sources collected and contained in the form of verbal language, and this process is done side by side.

Second, after the data collection process is done, analysis is then done again after determining that the collected data is raw data about each other. The data collected is not necessarily a complete answer to the problems raised in the research, therefore it is necessary to re-analyze the data that has been clarified.

In this model, qualitative analysis activities are done interactively and continuously until they are deemed adequate. The next step is data analysis. In this case, the data obtained will be analyzed for its content. This means that after the data has been described about the characteristics of a good assessment, using descriptive analysis, the researcher explains the content and compares the research objectives from one figure to another.

Data Validity

Data is validated using at least three categories (Miles & Huberman, 1994). First, the reliability of the researcher is taken into account according to the following aspects: whether the data is properly focused, the accuracy of selecting informants, and the implementation of data collection methods. Data analysis and data interpretation require consistency with each other. Second, the transferability of research findings in the future is used as a reference for similar research and studied further by other researchers. If the researcher understands and obtains a clear picture of the results of previous research, then the research results have met the transferability criteria. Third, research is dependent on the data obtained, in other words, research is the result of a track record of data tracked in the field.

RESULT AND DISCUSSION

A good and accurate assessment process provides an objective picture of the learning process and outcomes. In connection with this, (Caeiro, Sandoval Hamón, Martins, & Bayas Aldaz, 2020) stated that the evaluation system used in educational institutions must be able to:

• Provide accurate information.



- Encourage students to learn.
- Motivate education teachers.
- Improve institutional performance.
- Improve the quality of education.

Caeiro et al. (2020) assessment is a process through planning steps, collecting information from several pieces of evidence showing the achievement of student learning outcomes, preparing reports, and using information about student learning outcomes.

Evaluation is generally defined as a systematic process of determining the value of something (assessment, process, decision, performance, process, person, object, etc.) based on certain criteria through evaluation. The National Education Standards Agency explains that the assessment techniques that teachers can use are to assess a combination of science and technology topics, including: written tests, observations, practical tests, assignments, oral tests, portfolio and journal assessments, self-assessment, and peer assessment (Pendidikan, 2016). According to the application, evaluation is done in two ways, namely by test assessment and non-test assessment. Therefore, the assessment process in learning evaluation is an element that plays an important role in the learning process. Teachers must know how to do good assessments, according to needs, and hopefully be on target.

Definition of Assessment

Assessment is part of the assessment process. Assessment is a machine or procedure used to measure students' cognitive ability or adequacy. According to Wells, three things are important in understanding assessment (Wells & Wollack, 2003). The first is an assessment tool. The second is a tool to measure a person's knowledge or abilities. The third is interpreting the numbers obtained to find out whether students are good at achieving goals or not at achieving goals. Assessment is a type of instrument used to obtain numerical data or a tool for doing measurements whose results are used as a consideration in an evaluation.

The function of assessment is various, for example, as a tool to find out students' weaknesses from the material provided by the teacher (diagnostic test), as a tool to find out initial talents or abilities (pre-test), as a tool to find out student achievement (middle test and final test), as a tool for making decisions such as whether students are successful or not successful in their educational process (Shumway & Harden, 2003).

Characteristics of Excellent Assessment

Learning evaluation is done to find out the quality or value of the learning activities done about the objectives, materials, methods, media, learning resources, environment, and the assessment system itself (Pereira et al., 2016). To measure precisely and accurately what is to be measured, the test measuring instrument used must meet the measurement criteria.

There are many expert opinions about the characteristics of a good assessment, According to Weiner, the characteristics of a good assessment have four characteristics: validity, consistency, convenience, and practicality (Weiner et al., 2017). Convenience in this case is ease of implementation and practical application in terms of cost and implementation time and finally analysis of the elements. A good assessment means that the items contain good elements. Then, the characteristics of a good assessment are as follows:

Validity

It is usually equated with the term authenticity, either with the terms truth or validity. The word valid is often interpreted as appropriate, correct, legal, and appropriate. So the validity of the word is thoroughness, truth, and honesty. If it is related to the function of the assessment as a measuring tool, then the assessment is said to be valid if the measuring instrument can measure or detect what is to be measured strictly through an exam (Hattie & Brown, 2010). Therefore an assessment of learning outcomes can be said to be valid by accurately measuring or disclosing the learning outcomes achieved by students after taking the teaching and learning process within a certain time.

To provide a high level of validity for the assessment, it is also necessary to pay attention to the test, the content of the test must be related to the thing to be measured. Any minor, unrelated problems that may be more challenging than test-related difficulties should be excluded. The test is based on an accurate analysis of the skills or elements we are going to test, and the scores are highly correlated with the abilities we want to measure, this is



an indication that the test is valid (Biesta, 2009). So that leads to the desired goal. There are many types of validity, and the three types we will mention below are the most important for language teachers setting their tests: apparent validity, content validity, and empirical validity.

For testing learning outcomes, the most important aspect of validity is content validity. Content validity is a measure of how test scores relate to the test taker's mastery of the subject area tested by the test series (Pereira et al., 2016). To find out the level of validity of the test content, it is necessary to have an expert assessor who is an expert in the field of study.

Consistency

Consistency is one aspect that we can trust. A stability test if it gives consistent results if tested many times. If students are assessed in the form of the same test at different times, then each student will still be at the same (consistent) rank in the group. Validity is related to accuracy, while consistency is related to timelessness (Caeiro et al., 2020).

A test in the assessment process is said to be reliable if the measurement results are done using the test repeatedly on the same subject, and the results of the assessment remain the same or stable. What is meant by stable in the order of the group here is when the test is done repeatedly even though there is a change in the total value by the group but the sequence position remains the same or there is no change so far. So the focus is not on the fixed value but on the ranking order in a collection of assessment objects. Even though the test results on the second test were better because of the improvement experienced by all students, it can be said that the test used had high reliability. The second improvement in results could be due to the experience gained during the first test. According to DeVon, a test is called consistent if it is stable and reliable (DeVon et al., 2007).

Objectivity

Objectivity means the absence of personal elements that influence him non-subjectively. An assessment is said to be objective if there are no subjective factors that influence the scoring system when the assessment is done. When combined, objectivity emphasizes validity in the assessment system, while reliability emphasizes consistency in assessment results (Jeong & So, 2020). Two factors influence assessment objectivity: test format and measurement:

Test Format

There are various test formats, for example, multiple-choice, fill-in-the-blank, and description test formats. The test in the form of a description will provide many possibilities for the assessor to assess his way. For the inclusion of subjective items from the evaluator, the test design system can be implemented as well as possible, among others, by first establishing test design guidelines (Macdonald, 2006).

Measurement

The evaluator will be able to influence quite freely, especially in the essay test format. Factors that affect subjectivity include the evaluator's impression of students, written language, and fatigue so it must refer to measurement principles, especially those related to administrative matters, namely continuity and accuracy. Meanwhile learning test can be called an objective learning test if the test is structured and administered as it is. In terms of content or material, this means that the test material is taken or sourced from a material or topic provided by certain teaching or learning materials that have been studied by students as a reference in preparing learning outcomes (Hattie & Brown, 2010).

One of the most important characteristics of a good assessment is the objectivity with which it is measured. Objectivity can be achieved in assessment by understanding the test aspects, learning objectives, and directions in one understanding as desired by the test creator (Clark & Watson, 2016). The test is also considered objective if it gives psychological scores, regardless of who corrected them, so the questions are designed in such a way that scores can be obtained without self-assessment from the proofreader.



Ease of Application

An assessment is said to have a high probability if the test is practical. practice assessment is (Barnard et al., 2016):

- It is easy to implement, does not require a lot of equipment, and gives freedom to students to work on parts that are considered easy first. Because it is simple in the sense that it does not require equipment that is difficult to provide.
- An easy exam means that the questions contain answer keys and assessment guidelines. It is done with clear
 instructions so that other people can measure students' abilities with the test easily and are not wrong in
 measuring the final results.
- It is done with clear instructions so that each student can use the test without any mistakes in using the test and supervisors can more easily supervise and guide students in its use.

Economical

The implementation of the assessment does not require tools that are difficult to obtain and expensive, a lot of energy, and a lot of time. I like doing assessments that don't cost a lot, because the purpose of the assessment is to find out students' abilities, not to make it difficult for teachers or students (Gibbs & Simpson, 2005). So an assessment that is cheap or doesn't require a lot of money and doesn't require tools that are difficult to provide can make it easier for schools to do that.

Principles of Preparation of Assessments

Several basic principles need to be considered when preparing assessments to find out student learning outcomes, namely (Hattie & Brown, 2010):

- 1. Identify Learning Outcomes, This must be done to be able to measure the specified learning outcomes. Then, competency aspects, including the assigned core competencies, also need to be considered in the assessment preparation process. Clarity regarding the measurement of desired learning outcomes will make it easier for teachers to compile test items in assessments.
- 2. Test questions in the assessment must be representative examples of the content of the subjects being taught. So it can be considered to represent the performance obtained by students after the implementation of the teaching process and the target themes in the teaching process have been achieved.
- 3. In the assessment process, the form of questions issued in the test must be varied, so that it is truly appropriate to measure the required learning outcomes by the objectives of the assessment itself. To measure learning outcomes in the form of psychomotor skills, for example, it is not appropriate to only use questions in the form of test questions, which only describe the answer and do nothing else. Likewise, to measure the ability to analyze a principle, it is not appropriate to use questions in the form of multiple-choice tests, most of which only reveal students' memory.
- 4. The assessment process which aims to find out learning outcomes must be designed according to its use to obtain the desired results. This means that the test design must be adapted to the uses of each type of test. The design must be varied so that student learning outcomes can be analyzed well. Assessment takes the form of formative tests, summative tests, and diagnostic tests, as well as other types of tests.
- 5. The assessment must be reliable. This means that after doing many tests on the same subject, the results are always the same or relatively the same. Thus, testing of learning outcomes must have some level of good reliability.
- 6. The assessment that is prepared must be able to be used as a tool to search for data or find useful information to improve the way students learn and the way teachers teach. In addition, the assessment must also be used as a measure of student learning success.

CONCLUSION

Assessment is part of the learning evaluation process, and one of the tools used for assessment is tests. Tests are tools or procedures used to measure students' cognitive abilities or adequacy. According to Garnlon and Lane, three things are important in understanding assessment, the first is tests as a measuring tool. The second is a tool



to measure a person's knowledge or abilities. The third is interpreting the numbers obtained to find out whether students are good at achieving goals or not good at achieving goals.

The characteristics of a good assessment are assessments that meet five criteria, namely: validity, consistency, objectivity, ease of application, and economical. Convenience in this case is ease of implementation and practicality in its application. Then practical in terms of cost and implementation time and finally adjusting the analysis of the elements. A good test means that the items have the following qualities: Validity is said to be valid if the measuring instrument can measure or detect exactly what is measured by the test. The consistency in question is the results of measurements done using repeated tests on the same subjects and the results remain the same or stable in that group. Objectivity means that when the assessment is done, there are no subjective factors that affect the point system. Practical practices related to the implementation of assessments. What is meant by the economy is that it does not require a lot of money, energy, and time.

The basic principle that must be considered in preparing assessments to find out learning outcomes is that the assessment process using tests must be able to measure the learning outcomes find outd against competencies including core learning competencies. Test questions must be a representative example of the content of the subject being taught. The format of the questions issued in the test must be varied so that it is truly appropriate to measure the learning outcomes required according to the objectives of the test itself. Tests must be designed according to their use to obtain the desired results and tests must be reliable.

According to the explanation above, this research is lacking in terms of explaining the problem of comprehensive learning evaluation. Researchers hope that this research needs to be developed with other researchers. Therefore, it is hoped that the researcher will be given suggestions to improve this research so that this research can be useful.

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