
THE DEVELOPMENT OF PROJECT BASED LEARNING AFFECTIVE ASSESSMENT SERVICE ON COURSES THE BASIC CONCEPT OF SCIENCE STUDENT PRIMARY SCHOOL TEACHER EDUCATION

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Abstract

Understanding the concept is the level of one's learning outcomes so that it can define or explain a part of information in their own words. Assessment of student learning outcomes aim to find out. This research is the development of Research aimed at developing students' social assessment service through project-based learning through cooperative learning model of type Jigsaw. The subject of the test is the student teacher education elementary school class X₁ as many as 56 people. The technique of data collection conducted with interviews and tests the results of the study in the form of essay. Data analysis techniques using descriptive statistics analysis. Analysis of the validity of the Bivariate Correlate with Pearson correlation value obtained for each grain of matter bigger than 0,3 with a value of correlation based on SPSS is smaller than 0,05. Greater level of reliability i.e. 0,70, 0,798, respectively, and 0,811 0,804. Through the interview the students argue that learning is enjoyable, this causes the value of the students at each meeting.

Keywords: *Assessment Service, Affective, Learning Based Projects*

Introduction

Assesmen has the meaning of judgment or decision against unfounded or something to hold on to good or bad size, healthy or sick, clever or stupid (Anas, 2011). Print (1983) says the activities of evaluation is the final activity of the process of measurement and assessment so that obtained a decision from Anas (Anas, 2011). Measure is comparing something with one size. Measurement of quantitative in nature while the judge is a decision to take a step toward something good or bad size approximate Suharsimi (2012). Assessment is the process of comparing an object or symptoms using benchmark-specific benchmark as well is not good, adequate inadequate, eligible not eligible (Djaali and Pudji, 2008). The assessment is "it is essentially concerned with firstly making sense out of measurement data and and assigning a mark, a grade, a rank or some form of qualitative comment" (Pprint, 1993).

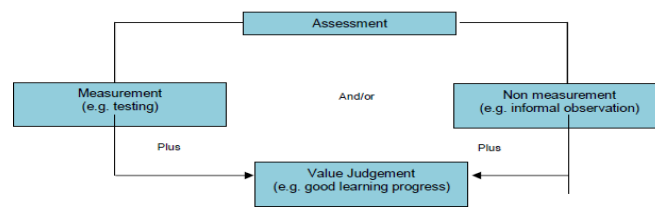


Figure 1. Assessment Chart

Any form of authentic assessment to be used in particular to develop a project, participants are able to demonstrate the full scope of their learning and at the same time can add to the knowledge and skills of learners. Authentic assessment service can also make learners more motivated by linking academic subjects with the real world in a way that is meaningful. Learners memorize facts but not using the skills of thinking in higher levels for the purpose of important context that affects their daily life (Johnson, 2007).

One of the absolute assessment done in the learning process is the affective assessment. It is the affective characteristics or elements that can be measured, interests, attitudes, motivation, self concept, value, appreciation, and so on. It can be seen from words or deeds that could bring positive behavior, neutral, or negative. Muslich (2010) explained that the assessment of the affective aspect is done during the teaching and learning activities both inside and outside the classroom. General assessment of the behavior of the teachers do as long as it is only by giving predictions or forecasts against the behaviour of learners. Teachers have difficulties to provide this kind of assessment categories because they do not have the criteria to establish the category. The indicators become tools of measurement assessment of aspects that must be judged, most not understood by teachers (Uno & Koni, 2012).

There are two things that are associated with the affective assessment must be judged. First, the affective competencies to be achieved in learning include awarding levels of response, appreciation, judgements and internalization. Second, the attitude and the interest of students towards subjects and learning process. In the process of learning, there are four types of affective characteristics are important concepts, interests, attitudes and values (Arifin, 2009). According to Popham 1995 in Mardapi (2004) that the affective domain determines the success of a person. People who don't have a good affective capabilities, difficult to achieve optimal study success. Cognitive and psychomotor learning results will be optimum if the learners have high affective capabilities. Arikunto (2003) explains that the measurement of the affective domain can not be done at any time (in the sense of formal measurement) due to changes in student behaviour cannot be changed at any time. Changing attitudes someone takes relatively long.

Measurement of affective domain in the education domain hierarchy consisting of 5 affective namely (1) the receipt or receiving, (2) responding answer or, (3) assessment or valuing, (4) the organization or organization, and (5) characterization of a value or a set of characterization by a value or value or value complex (Kirkendall dkk, 1982, Krathwohl, et al (1997). There are two methods that can be used to measure the affective aspect, namely the method of observation and self report methods. The use of observational methods are based on the assumption that the affective characteristics can be seen from the behavior or deed is shown and the reaction of psychology. Self report methods assume that the affective state of knowing a person is himself. However this demanding honesty in revealing the affective characteristics yourself.

Assessment is one of the jobs that are hard to do by an evaluator include teachers, primarily at the affective assessment so that the fact that the case that teachers rarely do an assessment on the affective. This development research aims to develop students' affective assessment service through project-based learning in cooperative learning model of type Jigsaw.

Research methods

The type of research that will be done is research development in students of primary school teacher education. Subjek is a test grade X₁ the even semesters with a total of 56 respondents primary school teacher Education Students divided into 6 homogeneously group and given tasks in the same project. The technique of data collection on the affective aspect of doing direct observation against the behavior of the subject thoroughly at the trial stage of the project-based learning. Observations of the behavior and capabilities of performance carried out by the observer using 3 pieces of observation. Analytical techniques used are descriptive statistical analysis of quantitative data to describe and give meaning to the data descriptions about the content against. The data analyzed are data validation results authentic assessment instrument-based affective aspects of the project. The analysis of the data obtained are grouped into three namely; (1) the analysis of validity; (2) analysis of reliability; and (3) analysis of praktibilitas.

Research Results and Discussion

A). Affective Assessment Rubric Validation

Affective assessment rubric validation by the validator, as follows:

Table 1. Affective Assessment Rubric Validation Results the development of Learning Based Project Autentic assessment service

No	Assessment aspects	\bar{x}	Ket
1.	aspect guage aspects	3,58	Valid Valid
2.	ontent Aspects	3,65	Valid
3.	-	4,00	
Average total rating		3,74	Valid

Based on Table 4.3 results validation assessment rubric affective as follows:

1. The average value of the validity assessment rubric pointers affective aspect is $\bar{x} = 3,56$ stated in the category of "valid" ($3,5 \leq \bar{x} \leq 4,5$)
2. The average value of the validity assessment rubric affective language aspect $\bar{x} = 3,67$ stated in the category of "valid" ($3,5 \leq \bar{x} \leq 4,5$).
3. The average value of the validity assessment rubric affective content aspect is $\bar{x} = 4,00$ stated in the category of "valid" ($3,5 \leq \bar{x} \leq 4,5$)

Based on the above analysis, the results of the breakdown of the average value of the total validity of the affective assessment rubric is $\bar{x} = 3.77$ of 5 criteria ideal score is valid (Dervish in Arwiyani, 2010), this value is invalid " ($3,5 \leq \bar{x} \leq 4,5$). So the overall aspects are reviewed, then the instrument meets the criteria stated affective assessment is valid.

B). Validation assessment instruments affective

Affective assessment instruments that have been developed are validated by experts. The results of the assessment instrument validation complete affective Attachment served on It and the details of the results of the validation in summary presented in Table 2 as follows:

Table 2. Affective Assessment instrument Validation Results Development of authentic assessment service-based projects.

No	Assessment aspects	\bar{x}	Ket
1.	stance struction anguage	4,00	Valid Valid Valid
2.		4,05	
3.		4,14	
Average total rating		4,06	Valid

Based on the results of the validation of the Assessment table 4.6 Affective Development project-based assessment service Authentic Assessment as follows:

1. The average value of valid assessment instrument for affective aspects of substance is $\bar{x} = 4,00$ stated in the category of ' valid ' ($3,5 \leq \bar{x} \leq 4,5$)
2. The average value of valid assessment instrument for the affective aspect of language is $\bar{x} = 4,08$ stated in the category of ' valid ' ($3,5 \leq \bar{x} \leq 4,5$)
3. The average value of valid assessment instrument for affective aspects of content is $\bar{x} = 4,17$ stated in the category of ' valid ' ($3,5 \leq \bar{x} \leq 4,5$)

Based on the above analysis, the results of the breakdown of the average value of the total affective assessment instrument is valid $\bar{x} = 4,08$ from the ideal score 5 criteria valid (Dervish in Arwiyani, 2010), this value is invalid " ($3,5 \leq \bar{x} \leq 4,5$). So the overall aspects are reviewed, then the instrument meets the criteria stated affective assessment is valid.

C). Test the validity of the assessment of the affective

Based on the results of the analysis of affective assessment instrument against valid by using Correlate analysis Bivariate Pearson correlation value obtained for each meeting of the 1, 2, and 3 respectively are 0,910; 0,935; dan 0,801 greater than 0.3. According to the criteria of minimal standards correlation coefficient of

Cronbach as a reference validities is 0.30, then the entire value of the correlation for 1, 2 and 3, 2005.

Likewise, if the reference that is used for the significance of 0.05 is used, obtained that for 1, 2, and 3 respectively 0.000; 0.002 0.000 and less than 0.05. The overall value of the significance of each meeting is smaller than 0.05 so that it can be said that the affective assessment some valid meetings overall.

D). Cronbach Alpha coefficient test of reliability assessment of affective

Based on the results of the analysis performed using SPSS, then retrieved the results analysis Cronbach coefficient Alpha for testing on affective assessment of 0.858. According to Sudijino, a test is said to have a high level of reliability in the coefficient reliabelnya is equal to or greater than 0.70. From the results of the assessment of the correlation coefficient SPSS affective of 0.858 greater than 0.70, then it can be said that the reliability is affective assessment.

Although in the implementation of the results of the assessment service test tool development is successful, however, in applying the results of this development has several obstacles, namely the time used is very much that must have certain times in the prooses implementation, this corresponds to the theory advanced by Sa'dijah (2009) that one of the disadvantages of authentic assessment service is an assessment of the implementation time is relatively long. Moreover the assessment done less relevant caused rubric assessment developed very complicated and many of the teachers in question and therefore the chances are not able to assess properly in accordance with the theories expressed by Sa'dijah (2009) that there is a trend of teacher's subjective attitude in assessing and unsure whether the assessment is less relevant.

Conclusions and recommendations

1. Valid as evidenced by the existence of the correlation coefficient of the cognitive appraisal, assessment of psychomotor, and affective assessment greater than 0.30 and a value less than the significance level 5% significance
2. Reliability. Based on the results of test reliability in the empirical formula by using Cronbach Alpha coefficient obtained correlation cognitive assessment device, the assessment of psychomotor, affective assessment and overall greater than 0.70

Based on the results obtained from this research, some suggestions as deemed necessary as follows;

1. Expected to teachers of biology in particular high school teacher Makassar to apply this device within the scope of the school.
2. Expected to teachers of biology and the researchers in order to develop authentic assessment service on other materials so that an assessment can be carried out objectively.

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