

Exploring the Ability of Early Childhood Teachers to Carry Out Assessment

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Abstract

This study aims to determine how the application of authentic assessment in kindergarten by assessing the adequacy of aspects of assessment and implementation of assessment instruments. Research respondents are kindergarten teachers in North Sumatra Province, totaling 65 people. The data was collected using a questionnaire and document analysis, which consisted of lesson plans, children's work that had been analyzed by the teacher and the assessment instruments that had been used by the teacher. Data were analyzed using descriptive statistical techniques and qualitative analysis by linking existing data to obtain meaning. The results of the analysis showed that: (1) there were 100% of kindergarten teachers who stated that they had carried out an assessment every time they carried out the teaching process but most had difficulty indicating the assessment instrument used, (2) 97% of kindergarten teachers only used a checklist to collect developmental assessment data and children's learning activities by putting a check mark on one of the scales consisting of "developing very well", "developing as expected", "starting to develop", and "not developing", (3) 98% of kindergarten teachers use the instruments in the book assessment guide issued by the government and have never used an assessment rubric developed by the teacher to determine child development achievements, and (4) 89% of kindergarten teachers do not collect assessment data in the context of competencies being developed, (5) kindergarten teachers have difficulty using descriptive notes or class notes to record the child's behavior during the teaching process due to difficulties in to write down the child's behavior as seen by the teacher, and (6) as many as 89% of kindergarten teachers have not used an assessment instrument developed based on the principles of authentic assessment. The results of this study have implications for the need to develop an assessment model that is useful to help teachers conduct a valid and reliable assessment of child development.

Keywords

early childhood;
instruments
assessment;
assessment rubrics;
and authentic
assessment



I. Introduction

Education has an important role for every generation of the nation. Children as a subject of education, they must get proper education and in accordance with their age developmental level. Early childhood education is basic education that is implemented in accordance with the principles of physical development and growth, intelligence, social emotional, language and communication, in accordance with the uniqueness and developmental stages of early childhood.

Development is a change that lasts a lifetime with the addition of a more complex body structure and function in the ability to move, speak and language as well as socialization and independence. The characteristics of a child's growth and development include: causing change, correlating with growth, having sequential stages and having a fixed pattern. This development includes physical, intellectual, language, social-emotional development. A child at an early age from day to day will experience development, this development takes place quickly and is very influential on its subsequent development. But of course each child has not exactly the same achievement, some are really fast developing, some take a little longer.

The knowledge that develops in children can be seen from their achievements in the assessments made by the teacher during the learning process. Learning is a set of actions designed to support children's learning processes. Learning as a process carried out by individuals to obtain a whole new change in behavior, part of the individual's own experience in interactions with their environment. One component of learning is assessment.

Assessment is an important component in the delivery of education. In the assessment there is an assessment system and the quality of learning. A good learning system will produce good quality. A good assessment will encourage educators to determine good teaching strategies in motivating better students. Assessment is carried out in various ways, generally the assessment is grouped into two, namely test and non-test. The test assessment consists of standard tests and teacher-made tests, non-test assessments include assignments, conversations, observations, self-assessments, and portfolios. Assessment activities are a process of planning, obtaining data and providing information needed to make alternatives for making decisions (Yus, 2011). The four activities are planning and developing instruments, collecting data, analyzing data as information material and offering alternative solutions as a series of activities in the assessment process.

Assessment has an important role to achieve education but its implementation has not been in accordance with good assessment standards (Suyadi, 2016; Sofia, 2017). In addition, the assessment has not measured the achievement of character development (Wardah and Cahniyo, 2019). This condition raises the question of how teachers know the achievements of early childhood development appropriately. The impact of these conditions is especially on the design of learning activities that can really help children achieve maximum development.

Initial observations showed that the teacher made an assessment by observing the child's behavior and writing it down like "A is excited", "S is slow to do the task", "N, R, X and Y are talking when completing the task" on the note sheet after finishing teaching process. The teacher also collects the results of children's work, generally through LKS provided by the teacher and is immediately given a score without using an assessment rubric. the conclusion of the discussion with the teacher that the teacher has not used an authentic assessment strategy In addition, kindergarten teachers tend to only use checklists to collect assessment data on child development and learning, kindergarten teachers have not collected assessment data in the context of competencies being developed.

Assessment in early childhood learning is intended to collect, analyze data in a systematic, measurable, sustainable, and comprehensive manner regarding the growth and development achieved by children during a certain period. time (Wortham, 2006; Lestarinigrum, 2016). For this reason, teachers need to have the ability to design, implement and conclude the assessment results accurately. teachers need to know that the assessment is carried out according to the principles of method suitability, the adequacy of the assessment instrument and carried out according to standard operating procedures for valid and reliable assessments.

II. Review of Literatures

Assessment is stated as a process related to three things, namely (1) collecting and recording information, (2) interpretation and evaluation, and (3) how to use the information and interpretation of assessment results (Feeney, et al, 2006; Yus, 2011) which aims to to determine the achievement or learning outcomes in cognitive, attitude and psychomotor aspects. Concretely assessment is an activity of interpreting data related to determining how far, in what respect, and in what part of educational goals have been achieved Ralph Tyler 1950 in Yus (2011). Assessment is an activity that cannot be separated from general learning activities. All learning activities carried out must always be followed or accompanied by assessment activities (Mindayani, 2020). The assessment instrument is a tool that can be used to measure or assess the level of competence achievement. In addition, the instrument is also interpreted as a tool that is selected and used in learning activities to collect so that the learning activities become systematic and facilitated by them (Pane, 2019). Assessment in educational institutions is very necessary to be a tool for educators to improve the quality of education and comply with institutional administrative rules or provide information to parents about the development of their children (Sitorus, 2020). Through the assessment, the child's behavior, development, and learning progress will be known (Spandel & Stiggins, 1990; Wortham, 2005;). Assessment is carried out continuously and holistically, authentic, individual, natural, multi-source and multi-contextual. (Suyanto, 2005).

In addition to assessment, it is known that there is an evaluation concept that is almost the same as assessment. The difference between the two is that assessment is intended to describe developmental achievements in the developmental range, while evaluation is intended to determine the quality of development using criteria (Yus, 2011). Assessment is more aimed at individuals or students while evaluating the process and teaching components.

Assessment is carried out using various strategies or models, one of which is authentic assessment. Authentic assessment is the process of collecting data on the ability and development of children when children are doing something or playing in a natural atmosphere and situation (Arends, 1997; Wyatt, Klenowski & Colbert, 2014).

The use of authentic assessments, especially those related to performance, needs to be supported by an understanding of the learning objectives to be achieved. For this reason, teachers need to determine criteria related to 1) what attitudes, skills, and knowledge will be assessed; 2) the focus of the assessment will be carried out (indicators), for example, relating to attitudes, skills, and knowledge; and 3) what level of knowledge will be assessed, such as reasoning, memory, or process.

Assessment related to the teaching process is carried out in stages as follows, namely 1) Determining indicators of basic competencies, 2) determining criteria for each indicator, 3) determining instruments, 4) writing/making instruments, 5) using instruments to collect data, 6) analyzing data, and 7) compiling a report on the results of the assessment. In this regard, it is known that there are several assessment methods. including observations using a recording technique or data recording (Jamaris, 2004) which is called an assessment instrument. There are several recording techniques, namely observation notes, check lists, rating scales, and rubrics.

III. Research Methods

Data were analyzed using descriptive statistics and qualitative analysis by linking existing data. Research respondents were Kindergarten teachers in North Sumatra Province who came from four regions totaling 65 people. The data was collected using a questionnaire

and document analysis consisting of the Daily Learning Implementation Plan, children's work and notes and assessment instruments used by the teacher. The questionnaire used in this study was to see how performance of early childhood education teachers in applying authentic assessment. The results of the questionnaire obtained were then documented and categorized into four categories, namely very high, high, medium and low using the interval formula. Document analysis was carried out to determine the assessment used by the teacher during the lesson from the Daily Learning Implementation Plan, the children's work and notes and assessment instruments used by the teacher.

IV. Discussions

Designing an assessment with reference to and understanding the type of authentic assessment which is an important thing to pay attention to before the teacher carries out teaching and learning activities. There are several types of authentic assessments that are designed and used, including assessment of work results, anecdotal notes, checklists and checklists. However, most teachers make observations to get the data to be poured, that is (1) every time they carry out learning, Kindergarten teachers carry out an assessment, which is to record what the child does and collect the children's work, generally through the worksheets provided by the teacher and immediately given a grade without using an assessment rubric, (2) kindergarten teachers -children have not used authentic assessment strategies, (3) kindergarten teachers only use checklists to collect assessment data for child development and learning, (4) kindergarten teachers have not used an assessment rubric to determine children's developmental achievement, and (5) kindergarten teachers do not collect assessment data in the context of competencies being developed. This study examines the performance of teachers in carrying out authentic assessments. The performance factor is seen from the product and process side. To obtain data on the understanding of Early Childhood Education teachers on authentic assessment, a questionnaire instrument was used which consisted of three aspects, namely 1) Early Childhood Education teacher understanding of the concept of authentic assessment, 2) Early Childhood Education teacher understanding of authentic assessment forms and 3) Early Childhood Education teacher understanding of the authentic assessment process. The research data obtained regarding the PAUD teacher's understanding of the concept of authentic assessment obtained the highest score of 100 and the lowest score of 10. The results of the categorization were as follows:

Table 1. Application of Kindergarten Teachers to Authentic Assessment

Category	score	f	%
Very high	78 - 100	9	13,84
High	55 - 77	11	16,92
Moderate	33 - 54	16	24,62
Low	10 - 32	29	44,62
Total		65	100

Table 1 shows that Kindergarten teachers' understanding of the authentic assessment of 65 teachers in the very high category was 9 teachers or 13.84%, in the high category it was 11 or 16.92%, and in the moderate category it was 16 or 24.62 %, while the rest in the low category were 29 teachers or 44.62% who had low understanding. This shows that most teachers do not yet have an understanding of authentic assessment.

In addition, the percentage of Kindergarten Teachers' application and understanding of Authentic Assessment Forms can be seen from the following table:

Table 2. Application and Understanding of Kindergarten Teachers to Authentic Assessment Forms

Category	score	f	%
Very high	78 - 100	7	10,76
High	55 - 77	9	13,84
Moderate	33 - 54	17	26,16
Low	10 - 32	32	49,24
Total		65	100

Table 2 shows that the application and understanding of Kindergarten teachers towards authentic assessment of 65 teachers in the very high category were 7 teachers or 10.76%, in the high category as many as 9 or 13.84%, and in the moderate category as many as 17 people teachers or 26.16%, while the rest in the low category were 32 teachers or 49.24% who had low understanding. This shows that most teachers do not yet have an understanding of the form of authentic assessment.

Table 3. The Application of Kindergarten Teachers to the Authentic Assessment Process

Application of Kindergarten Teachers to the Mathematics Assessment			
Category		f	%
Very high	78 - 100	8	12,31
High	55 – 77	14	21,53
Moderate	33 – 54	18	27,69
Low	10 – 32	25	38,47
Total		65	100

Table 3 shows that the application of Kindergarten teachers to the authentic assessment process of 65 teachers in the very high category was 8 teachers or 12.31%, in the high category there were 14 or 21.53%, and in the medium category there were 18 teachers. or

27.69%, while the rest in the low category were 25 teachers or 38.47%. This shows that most Kindergarten teachers have not implemented an Authentic assessment process. As for the three categories from tables 1,2 and 3 regarding the application of Kindergarten teachers to authentic assessment can be recapitulated in the following table:

Table 4. Recapitulation of Authentic Assessment Application

Aspect	Category			
	Very High	High	Moderate	low
Application of Authentic Assessment	13,84	16,92	24,62	44,62
Authentic Form of Assessment	10,76	13,84	26,16	49,24
Authentic Assessment Process	12,31	21,53	27,69	38,47
Average	12,30	17,43	26,15	44,11

From table 4 it can be seen that from the 3 aspects assessed, namely from 65 teachers as respondents, it was found that 36.91% of the application of authentic assessment was very high, 52.29% of the application of high authentic assessment, 78.47% of the application of assessment moderate authentic and 132.33% to the application of low authentic assessment.

In designing an assessment by referring to and understanding the type of authentic assessment is an important thing for Kindergarten teachers to know beforehand before the teacher carries out the process of teaching and learning activities. The following are the findings related to the performance of kindergarten teachers in implementing authentic assessment:

Table 5. Data on the Distribution of Authentic Assessment Implementation Indicators

NO	INDICATOR Planning Stage	Sub indicators	Respondent Result Data	
			Number of Respondents	%
1.	Planning Stage			
	1. Formulation of assessment objectives	1) The teacher uses the results of the assessment as input in designing further learning activities.	64	98 %
		2) The teacher conducts an assessment to describe the development of each child	65	100%

	2. The period of conducting the assessment	3) The teacher makes an assessment when the child carries out activities according to the Daily Learning Implementation Plan?	63	97%
		4) The teacher assesses development through children's work	64	98%
		5) The teacher makes an assessment while the child is in kindergarten.	58	89,2%
		6) The teacher makes an assessment when the core learning takes place	49	75,3%
	3. Determination of the method of assessment	7) The teacher assesses the child who has been determined in the learning	47	72,3%
		8) The teacher assesses the child's development achievement once for one development indicator	47	72,3%
		9) The teacher makes an assessment using a method like the following ... - Observation	61	94%
		- Test	38	58,4%
		- Questionnaire	10	15,3%
		- Interview	21	32,3%
	4. Determination of the assessment instrument	10) If the teacher wants to see the achievement of the child's discipline development, the teacher needs to use the observation method with techniques (May choose more than one) - running record	28	43%
		- time sampling	16	24%
		- even sampling	18	27,6%
		- Anecdotal record	25	38,4%
		- Checklist	22	34%
		- Assessment rubric	27	41,5%
	5. Availability of assessment instrument format	11) Teachers use open notes if they want to find out about children's learning problems	54	83%
		12) The teacher uses an assessment rubric instrument if you want to see the quality of aspects of	47	72,3%

		children's self-development		
		13) The teacher uses time sampling notes to see children's creativity	49	75,3%
	6. Determination of scale	14) The teacher uses data obtained from one instrument to determine the child's developmental achievements	50	78%
	7. Assessment criteria	15) The teacher gives value to the children's work so that parents are happy	54	83%
2	Implementation Stage			
	8. Instruments that have been used	16) The teacher makes his own assessment instrument format to be used in learning	52	80%
		17) The assessment instrument most often used by teachers is ...	38	58,4%
		18)- Tests (for example, pairing, drawing lines)		
		- Performance instruments	6	9,2%
		- Assessment rubric	9	13,8%
		- Special note	12	18,4%
	9. Data obtained	19) - Religious and Moral Values	20	30,7%
		- Emotional social	21	32,3%
		- Cognitive	2	3%
		Language	32	49,2%
		- Motoric physics	11	17%
		- Art	11	17%
		20) The teacher determines the scale of the assessment based on the level of achievement of children's development standards	62	95,3%
3	Reporting Stage	21) The teacher makes an assessment when the child is doing activities	60	92,3%

		(for example, when the child is playing freely)		
	10. Determining the form of the assessment report	22) Teachers feel that the time available at PAUD institutions is not enough to assess children's development	41	63%
	11. Time to report the assessment	23) As a kindergarten teacher, I have implemented authentic assessment to assess children's development outcomes	55	84,6%

From the table above, it can be seen that 100% Kindergarten teachers carry out an assessment, which is to record what the child does and collect the children's work, generally through the worksheets provided by the teacher and immediately given a score without using an assessment rubric, (2) 89% of the teachers Kindergartens have not used authentic assessment strategies, (3) 97% of kindergarten teachers only use checklists to collect assessment data for child development and learning, (4) 98% of kindergarten teachers have not used assessment rubrics to determine achievement child development, and (5) 89% of kindergarten teachers do not collect assessment data in the context of competencies being developed. This study examines the performance of teachers in carrying out authentic assessments. The performance factor is seen from the product and process side. This research is still studying the product, while the process performance will be the target of further research. The results of this study are useful as a basis for developing an authentic assessment model in early childhood education.

In essence, authentic assessment is very good to be applied in Kindergarten education. In its implementation, authentic assessment must be carried out through careful and systematic planning so that Kindergarten teachers do not experience confusion when carrying out authentic assessments. One of the components that need to be considered in authentic assessment is the type of assessment that will be applied by kindergarten teachers, authentic assessment is adjusted to the needs and indicators of achievement so that in the end learning can run well.

V. Conclusion

The assessment carried out by 65 kindergarten teachers was basically not fully carried out in accordance with the standards for implementing a good assessment. Every time the teacher makes an assessment, the teacher performs several activities, namely recording what the child does and collecting the results of the child's work. The notes made by the teacher are a combination of facts and teacher interpretations, for example "the child is less enthusiastic about completing the given task". Children's worksheets are immediately given a grade without using an assessment rubric. In addition, most kindergarten teachers have not used authentic assessment strategies. Kindergarten teachers also only use checklists to collect assessment data on children's development and learning. Some kindergarten teachers have not used the assessment rubric to determine the achievement of children's development. Kindergarten teachers do not collect assessment data based on competencies developed in learning. The teacher's assessment is more focused on product assessment. Teachers still have difficulty in assessing the process, especially because the teacher has not been able to formulate an instrument to assess the process.

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