

# The Physical Education Teachers' Skill in Arranging Authentic Assessment Rubrics

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**Abstract:** This research aims to identify the competency of physical education teachers in arranging the authentic assessment instrument. This study used mixed method research with exploratory sequential design which was a modification from the model (Creswell, 2012). The research participants were 40 physical education teachers in Junior High Schools at Kulonprogo Regency, Yogyakarta with the purposive sampling. The quantitative data in this research were analyzed with the quantitative descriptive statistic using the method by Miles & Huberman (1994). From the result of data analysis, there were 70% of the teachers who did not understand about authentic assessment, 25% of the teachers did not well understand, and 5% of the teachers had good understanding, 90% of the teachers did not have authentic assessment rubric, 7% of the teachers had rubric but it still did not find the demand of authentic assessment, and 3% of the teachers already had appropriate rubric. 92,5% of the teachers was difficult to implement authentic assessment, 5% of the teachers had few difficulties in doing so, and 2,5% of the teachers did not face the problem. Also, 95% of the teachers stated that they were unable to develop authentic assessment rubric, and 5% of the teachers were still unable to make assessment rubric, and none of the teachers were able to arrange an assessment rubric.

## 1 INTRODUCTION

The competency in arranging assessment instrument is a part of teacher's pedagogy competence, is one of competences which should be mastered by every teacher. It is because this competence is one of the three dimensions which are related in producing good education (Penney, Brooker, Hay & Gillespie, 2009) especially in physical education. It places the assessment aspect as an unseparated aspect in developing the quality of education. Moreover, Tomoliyus, et al., (2016) state that learning will be better if the learning materials taught in class and the learning assessment are good and otherwise, the learning materials and learning assessment will be better if the learning strategy involved is good.

Even though many studies have examined the importance of assessment aspect in the learning process, (Lopez-Pastor et al, 2013) the popular assessment often used in school is still the traditional one. Moreover, that kind of assessment method is irrelevant with the recent needs because it is partial in assessing student's learning achievement, but

nowadays teachers of physical education realize that the test fails to produce information of what is possible to be learned by children through the physical education in school (Lopez-Pastor et al, 2013). One of the assessment methods which is appropriately considered and comprehensive is the authentic assessment (Callison, 1998). This kind of assessment is appropriately implemented in assessing student's learning development in physical education.

The changing in curriculum 2006 becoming curriculum 2013 demands the change in student's learning achievement of physical education. Previously, the assessment was conducted in the middle of semester and in the end of semester. Recently, in curriculum 2013 (Regulation of Ministry of Education and Culture of Republic of Indonesia No. 66 Year 2013 about the standard of assessment), the assessment is conducted daily, in the middle of semester, and at the end of semester. In the previous curriculum, in assessing the results of physical education learning in school, teachers usually use the instrument of sport skill test which is

conducted in the middle and in the end of semester. This thing is reinforced by the finding from Komarudin (2016) which found that teachers of physical education assess the learning achievement of students 100 % by using traditional assessment (sport skill test). In curriculum 2013, when a teacher assesses the students, the teacher should use authentic assessment in the daily assessment (Permendikbud RI No. 66 Thn. 2013 Tentang Standar Penilaian Penilaian), whereas the final semester assessment can use skill test or authentic assessment only. Because of the changing of curriculum, do physical education teachers already have competence in arranging and conducting the authentic assessment instrument? Then, this research aims to analyze teachers' competence in arranging and using authentic assessment instrument.

One of the most important things to be considered in increasing students' learning achievement is the quality of teachers (Report & Objectives, 2003). As a professional worker, teacher certainly should have competence to be mastered, in the Constitution of Republic of Indonesia No. 14 Year 2005 about teachers and lecturer which is included in the Department of National Education (2005:16) which states that teacher's competence is "A set of knowledge, skill, and behaviour which should be possessed and mastered by teachers or lecturers in implementing their professional duty". Therefore, every teacher should possess each competence which will support the learning process. To be able to create a good learning, a teacher should master a least four professional competences. In the Constitution of Republic of Indonesia No.19 Year 2005 Article 28 about national education standard, competence in the level of elementary, early child and middle school consist of: a. Pedagogical Competence; b. Personality Competence; c. Professional Competence; and d. Social Competence.

The pedagogy competence is a competence which has a significant effect as the factor in deciding the learning achievement of students (Ada & Azisah, 2016). Many studied show that teacher's pedagogy competence has influence to the improvement of students' learning achievement (Goldhaber & Brewer, 2000; Darling-Hammond, Berry & Thoreson, 2001; Goldhaber & Anthony, 2004; Vandervoort et al., 2004; Suci & Mata, 2011; Ada & Azisah, 2016). For that reason, in improving students' learning achievement, all related institutions should give attention to increase teacher's pedagogy skill.

The ability in assessing and evaluating is a part of teacher's pedagogy competence (Report & Objectives, 2003), without a good assessing ability, teacher will not able to know whether the learning that they did is successful or not. For that, teacher should master the assessing competence and also evaluate the learning achievement.

Then, authentic assessment is an assessment which is conducted by directly observing the learning process, and the score given in the time so it is also called as work performance assessment (Lund, 1997; Lund, 2010; Mardapi, 2016; & Komaruddin, 2016). According to the Regulation of Ministry of Education and Culture No. 66 Year 2013 about the standard of Education Assessment, it is stated that authentic learning is a whole assessment in every competence which consists of attitude, knowledge, and skill by using various assessment techniques both during the process and in the result of the learning. Conceptually, an authentic assessment indicates the repair in the assessment process conducted by teacher to the learning achievement of students. Because in the authentic assessment, teacher is demanded to do assessment based on the three domains possessed by students, the scores which are produced will be more objective for all students. In implementing an authentic assessment, rubric becomes important thing to be used in avoiding the subjectivities of teacher (Menedez-Verela & Gregori-Giralt, 2015). Besides, according to Lund (2006), the authentic assessment is crucial in the report of program, and a good rubric is very essential for the assessment.

Shaw (2014) states that rubric is an important assessment tool for giving students' learning evidences. Tomolius (2012) and Majid (2014) state that rubric is an assessment guidance which gives description of assignment criteria or competence which is wanted by teachers and training in assessing or scoring based on the students' work result. Rubric consists of two types: holistic and analytic rubric (Majid, 2014). Besides, the function of rubric in assessment will help to decrease hesitation of teacher in giving assessment (Arends, 2012). Birrky (2012) states that rubric can help to assess the quality of skill which is conducted or the result to give feedback to students. Also, the rubric can help students in understanding target for their learning and the quality standard for certain assignment, and also to make good assessment about their works which can inform revision and their performance improvement (Reddy & Andrade, 2009).

A good rubric should describe verbal description

and identify important components which are expected from the assessment, and target the knowledge and relevant skill which need assessment by teachers to be demonstrated (Lund, 2006). Besides, rubric is also well considered if it has high validity and reliability (Kimberlin & Winterstein, 2008; Rihtiana & Tomoliyus, 2014; Tomoliyus, et al., 2016). Valid means the size which shows the validity or similarity of the result which is obtained from the provided instrument, that is a tool used to measure something (Arikunto, 2001; Kimberlin & Winterstein, 2008; Sugiyono, 2017). Whereas, reliable is the consistence of an instrument, that is an instrument which can be used which should have same results although the quantity or period given is different (Miller, 2002; Kimberlin & Winterstein, 2008; Sugiyono, 2017).

## 2 METHODS

This research employed mix type research with exploratory sequential design. Therefore, the first procedure is to collect quantitative data by distributing questionnaires to obtain early data from the research subjects. After that, the next procedure is to collect qualitative data through the interview and also collecting the assessment instrument which can be used by teachers as an effort in explaining the relationship found in quantitative data, this model is a modification of model (Creswell, 2012). The instrument used is questionnaire and interview sheet. Questionnaire is used to see teachers' understanding of authentic assessment, the implementation and also suggestions of assessment repairment. The qualitative instrument is interview sheet used to see the truth of questionnaire data given by the teacher, and also assessment instrument usually given by the teacher.

The number of population in this research was 62 physical education teachers, and the object in this research was physical education teachers in junior high school at Kulon Progo Regency which consisted of 40 teachers. Whereas, 22 other people were not included into the criteria required by researchers. Totally, there were 32 male teachers and 8 female teachers. The sample of the research was purposively selected by considering the period of teaching and status of teachers as the civil servants. This research was conducted at the *Musyawah Guru Mata Pelajaran* (MGMP) or the discussion of subject teachers in the level of Junior High School.

The quantitative data were analyzed by quantitative descriptive statistic. Whereas, its

qualitative data were qualitatively analyzed by using the method from Miles & Huberman (1994) which covers three steps, they are: data reduction, data display, and conclusion and verification. Qualitative descriptive was used to explain qualitative data, which consist of respondent's opinion about their understanding, and the instrument which is usually used, and also suggestions of respondents' assessment repairment.

## 3 RESULTS

Standard competency of teacher in doing assessment should be skilful in some ways: selecting and developing assessment method; manage, print, and interpret the interpretation; use assessment result to take decision and grading; communicate the assessment; and admit the unethical assessment practices (Mertler, Green, & Campbell, 2005). As an effort to see teacher's ability in arranging authentic assessment rubric, teacher is supposed to possess some additional understandings, they are: (1) Teachers' understanding towards authentic learning, (2) Teachers' assessment sheet/rubric, (3) the difficulty in the implementation of authentic assessment, (4) Steps in developing assessment rubric. To develop and use good assessment instrument, a teacher should previously know about the assessment. To make it easier, see the table .1 below;

Table 1: The level of teachers' understanding towards the authentic assessment

Competence Factor	Understand	Less Understand	Not Understand
Pemahaman Terhadap Penilaian Autentik Secara Teoritik	5%	25%	70%

The table above shows information that 70% of teachers does not understand authentic assessment, 25% of teachers has less understanding towards the authentic assessment, and 5% of teachers has good understanding about authentic assessment.

"Teacher states that he does not agree with the type of assessment used in curriculum 2013. Since the stipulation of curriculum 2013, teachers are only asked to change the old assessment system with the new assessment system which is set by government".

The statement of teacher above shows that government does not obviously give understandings to teachers related to the assessment used in curriculum 2013, government only asks teachers to practice the assessment which already became national provision.

After teachers understand about authentic assessment, the assessment instrument used by teachers after the stipulation of curriculum 2013 should be looked. The description of the research can be seen in the table 2 below:

Table 2: The use of rubric by teachers

Competence Factor	Have the Aauthentic Assessment Rubric	Have the Unapropriate Authentic Assessment	Don't Have
Assessment Instrument Used	3%	7%	90%

From the table above it can be obtained some information that 90% of teachers state that they have authentic assessment rubric, 7% of teachers has rubric but it is not totally appropriate with authentic assessment, whereas 3% of the rest states that they already had rubric.

"Teacher stated that all this time in assessing students' learning standards, they more frequently used skill test, and they did not use the rubric as a guidance in assessing students".

The statement of teacher above shows that there are many teachers who use traditional assessment in assessing students' learning achievement, especially in physical education. Because this kind of assessment does not need rubric and many of them already mastered the way how to conduct the test and the measurement.

Furthermore, the factor of teachers' competency which should be fulfilled is whether teacher has difficulty or not and what kind of difficulty that they face. To see the description, see table 3 below:

Table 3: The difficulty of teachers in implementing authentic assessment

Competence Factor	No Difficulty	Few Difficulties	Many Difficulties
The Difficulties in the Implementation of Authentic Learning	2,5%	5%	92,5%

From the table above, it can be obtained information that, teachers are difficult to implement

authentic assessment in assessing students' learning achievement. It is seen from 92,5% of teachers faces difficulties in implementing authentic assessment at school, 5% of teachers has few difficulties, and 2,5% of the rest has no problem.

"Teacher states that many factors cause difficulties which are experienced by teachers. Because of the lack of understanding, the lack of training conducted by the related institution, lack of time which is available in conducting an assessment, and there is no clear guidance in giving score to students".

The statement of teacher above shows that, many factors which complicate them in implementing authentic assessment in learning, whether from teacher's individual factor or the factor from government.

Then, one last thing that should be known is teacher's knowledge about the steps in developing and using assessment instrument. The description can be seen in the table 4 below:

Table 4: Teacher's Knowledge about Steps in Developing the Rubric

Competence Factor	Able	Less Able	Unable
Steps in Developing the Assessment Instrument	0%	5%	95%

From the table above, it can be obtained the information that, 95% of teachers was unable to develop the authentic assessment rubric, and 5% of teachers was still unable to make assessment rubric and 0% of teachers stated that they could develop and arrange authentic assessment rubric by themselves.

"Almost all teachers state that they do not have the ability to develop and some of them say they were still doubtful whether they could or not to develop the assessment instruments. It is because there is no specific training given to teachers related to the way to develop assessment instruments which are suitable for the purpose of learning and have the standards of each school."

The statement from the teacher above shows that, the government is still not paying attention to teacher's need for training in the development and preparation of assessment instrument, so it makes teachers are difficult to make assessment instrument which are appropriate with the standards of each school.



## 4 DISCUSSION

Based on the analysis from all answers given by teachers, the assessment conducted gives difficulties for every teacher in the effort to evaluate the learning conducted at school. The assessment in physical education becomes a problem that complicates teachers even for more than 40 years ago (Lopez-Pastor et al, 2013). Physical education teacher cannot perfectly do the assessment aspect at school (Ali, Som & Salimin, 2018). Besides, teachers do not have skill to make their own assessment instrument which fulfills the requirements as a good assessment (Aji & Winarno, 2016), it is because a few of trainings which is conducted in how to make and use rubric (Jonsson, 2014). Assessment is a process which is difficult for teachers especially for physical education teachers (Lorente & Kirk, 2016). Physical education teachers usually spend 40% until 60% of his/her time to solve the children's assessment problem (Birky, 2012). Therefore, the making of assessment rubric is important to ease teachers' performance in assessment (Birky, 2012). Rubrics could provide information to teachers about criteria which are assessed from students' assignment and teachers will be no longer busy in assessing (Lund, 2006).

## 5 CONCLUSIONS

**From the data analysis conducted by the author,** assessment still remains a problem especially for physical education teachers. Many teachers assess students' learning achievement without using rubric. There are some teachers who are able to give the good and transparent assessment by using rubric which can be seen directly by students as a way to give more focused assignment and also as a way to reinforce students as the assessor of themselves.

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