

# LEARNING ASSESSMENT ON VOCATIONAL SUBJECT MATTERS OF THE BUILDING CONSTRUCTION PROGRAM OF THE VOCATIONAL HIGH SCHOOL IN APPROPRIATE TO CURRICULUM 2013

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## Abstract

Among the fundamental difference the Curriculum 2013 and the previous curriculum were in terms of learning and assessment. The learning of curriculum 2013 had oriented to the student's competence development as a whole person, includes of attitudes, knowledge, and skills aspects as an integrated manner. While the previous curriculum learning orientation was partially in accordance to the the subjects or competencies characteristics to be achieved. As a consequence, teachers have to really prepared and competent to be able to implementing the curriculum. On the other hand, every turned of the curriculum always will have been the turbulence, both regard to the lack of socialization, teacher's unpreparedness and other resources, as well as the attitude of the curriculum rejecting itself. Therefore, the problem concerning the teacher's readiness to the curriculum 2013 implementation, particularly in the learning assessment in accordance to the curriculum 2013 is an urgent issue to be studied. The result of study illustrates that the teacher's readiness to the curriculum implementing in accordance to the learning assessment can be divided into two aspects, namely: assessment planning, and assessment implementation. The results of the study by Amat Jaedun et al. (2014), pointed out the teachers readiness to implementing instructional assessment on planning, have been assessed using the availability and completeness of the learning assessment aids in the poor prepared category. Meanwhile, the teacher's readiness to implementing instructional assessment on implementation aspects have been assessed by the relevance of the learning assessment to the competency characteristics to be assessed, especially in vocational subjects matters, were also in the less ready condition. This suggests that the teacher's readiness to learning assessment implementing accordance to the curriculum 2013 both in the planning and implementation aspects were in the poor prepared category.

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**Keywords:** *Vocational Subject Matters Assessment Implementation*

## Preliminary

Changing the curriculum was the one efforts taken by the government improving the education quality. Changing the curriculum was a necessity, because the curriculum had to be adjusted periodically to: (1) the vision and mission of the institution of education; (2) the demands of society (including the workplace); (3) the development of science and technology; (4) input from the profession; and (5) the results of the task analysis.

The curriculum of 2013 was designed to prepare the Indonesian man who has the ability to live, both as a individuals and a citizens who have a believed, productive, creative, innovative and effective and able to contribute to society, nation, state, and world civilization.

This goal will be accomplished when government and all citizens, especially teachers, tried to implementing the curriculum of 2013 correctly.

Many signaled stated that the various improvement efforts have been implementing to improve the education quality (including the school curriculum changes) was not able yet to improving the education quality significantly. One of the factors caused its implementation weaknesses. Moreover, it was undeniable that every the school curriculum turning always was a turmoil, both related to the unpreparedness of the educational institution to implementing the new curriculum, unpreparedness human and other resources, lack of the socialization, and the resistance itself. Therefore, the success in the curriculum implementation, including the learning process and assessment, depends on the teacher's readiness and education institution (schools), in preparing and carrying out the learning assessment. Moreover, the problem statement was formulated as follows.

How far the implementation of learning assessment conducted by the Building Construction Program of the Vocational High School Teachers in Yogyakarta Special Region in accordance to the assessment principles of the Curriculum 2013 implementation?

## Discussion

### 1. Assessment of Learning

Educational Assessment, was defined the collecting and information processing to measure the students learning achievement (Permendikbud No. 66 tahun 2013). Basically, the assessment of learning can not be separated from the learning process. Therefore, the planning, implementing and developing of the learning assessment tools have to suited to the learning processes characteristics, tailored to the competencies characteristics set out in the school curriculum.

The structure of the High School Curriculum, consisting of compulsory subjects matters and a group of the optional courses. The compulsory subjects matters include nine subject matters with load of study were 24 hours per week, comprising: group of subjects in group A and group B. Compulsory subjects

In the vocational high school curriculum, subjects specialization group (C), consisting of: (1) Group of the Basic Expertise Subject (C1), (2) Group of the Basic Skills Program Subject (C2), and (3) groups of the Subjects Skills package (C3). The basic competences subjects in C2 and C3 grouping were set by the Directorate General of the Secondary Education, Ministry of Education and Culture, adapted to the technological developments and needs of the business and industry.

Those curriculum structure applies the principle that the students were the learning subject has the right to choose subjects matters according to their interests. Electives subject consist of academic options for SMA or MA as well as academic and vocational options for SMK or MAK. This elective subjects provides shades to function in education, and in it there is an option in accordance with the interests of learners.

In accordance to the Competency Standards, learning objectives includes the development realm attitudes, knowledge, and skills have been elaborated for each school. The three domains of competence has a path of a psychological processes were different. Attitude was obtained through "receiving, running, respecting, appreciating, and practicing" activity. The knowledge gained through the "remembering, understanding, applying, analyzing, evaluating and creating" activity. Meanwhile, the skills acquired through the "observing, asking, trying, reasoning, and creating" activity. Competence characteristic acquisition along the path difference (psychological processes) will greatly affect the characteristics of learning and assessment processes.

## 2. The Curriculum of 2013 Learning Assessment

The learning assessment conducted by the Building Construction Program of the Vocational High School Teachers in Yogyakarta Special Region was done in appropriate to Permendikbud No. 66 of 2013, on the Education Assessment Standard. Assessment has carried out meet to the objective, integrated, economical, transparent, accountable, and educative principles. In addition, the assessment must also satisfy the fair, valid, specific, and benefits principles.

Assessment of learning outcomes in primary and secondary education implemented by educators, schools, and the Government and / or independent agencies. Assessment of learning outcomes was done in the form of authentic assessment, self-assessment, project assessment, daily testing, midterm testing, the end of semester testing, the level of competence testing (UTK), the quality level of competency exams (UMTK), school exams and national exams.

Assessment on process and learning outcomes in curriculum 2013 implementation using the authentic assessment approach. The authentic assessment was done by teachers on an ongoing process. The authentic assessment was an assessment technique gathering an information can describe the learner's actual competence, includes the student readiness, processes, and learning outcomes assessment. It was an assessment to the multi-dimensional learner's behavior in real situations. Such assessments were not only using paper pencil test or written test, but also using a various techniques in accordance to the competencies have to assessed, such as performance testing, assignments, observations, and portfolios.

Hargreaves and Lorna Earl was quoted by Badrun Kartowagiran (2013), stating that the Authentic assessment could motivated students to be more responsible for their own learning, make judgments as an integral part of the learning processes, encouraging students to be more creative and apply their knowledge rather than just train the memory.

A similar statement was expressed by Grant Wiggins (Lund, 1997: 25) have pointed out that the authentic assessment has developed to facilitate of the learners in applying their knowledge and skills to solve real-life problems by providing an authentic aspect to their assignment. The authentic assessment was becoming popular because it offers a variety of shift from traditional assessment, particularly focusing on the usefulness of the knowledge and skills possessed to solve a real life problems, and appropriate to the professional world demands.

Similarly, Berg (2006: 7) based on an interview to John Muller revealed that differences between an authentic and a traditional assessment, that the traditional assessment measures how students have acquired the knowledge while the authentic assessment measures how students were able to apply their knowledge and skills to make it more meaningfulness for their life.

Furthermore, Gulikers (2004: 67) defines the authentic assessment was an assessment that requires students to use knowledge, skills and behaviors competencies be applied to solve the future professional life problems, in which the level of the assessment authenticity depend on the level a task resemblance to the real world situation he would faced.

Meanwhile, Lina (2000: 181) revealed that authentic assessment was a useful tools to provide a change evidence and evaluating the individual performance in a group working that may not be recorded by a traditional assessment instrument. In other words, authentic assessment was more sensitive to learner's changes as the learning process result.

Based on the above opinion, it can be concluded that the authentic assessment was an assessment that required learners not only answer the test correctly, but applied the knowledge, skills and attitude solved the daily life or professional life in the future problems. The authentic assessment can be done through many different types of assignments. So, the important points was a similarity assignment has given in school to the learner's real-life contexts faced by them.

Meanwhile, the characteristics of authentic assessment have five dimensions (Gulikers, 2004: 67), namely:

- a. Assignments were authentic, if the task containing the community in real life problems faced by students.

- b. Physical context, i.e. a tasks required students to demonstrate their capabilities both inside and outside the classroom.
- c. Social context, includes the social processes tasks in accordance to the student's real life, such as: co-operation, and task that can foster a climate of competition.
- d. Authentic assessment results, i.e. the tasks produce an authentic products, with characteristics: (1) the student's product quality or performance in accordance to real life, (2) requires the demonstration has illustrated a valid competence, (3) involves a lot of learning indicators, and (4) requires the work presentation to others both orally and in writing.
- e. Using the criteria include the realistic results, explicit disclosure of the characteristics of the results, based on its professional competence in a real situation.

Authentic assessment was done based on an ongoing and integrated to learning processes. Therefore, the authentic assessment in accordance to the competencies characteristic was be achieved, and also linked to the model of learning applied.

Learning activities on building construction program of SMK were divided into three, grouping, namely: (1) the theoretical learning, (2) the practicum learning in lab, and (3) the practice learning in workshop. Practice learning and practicum in lab were applications of the theoretical competences have students learned. In this case, there was a difference between theoretical learning and practice and practicum learning. The theoretical learning more emphasis on the cognitive (knowledge) training, whereas in practicum and practice learning more emphasis on the psychomotor or skills training. Among the three types of learning, the proportion of practice learning in the workshop was much greater than the proportion of theoretical learning, and laboratory experimental learning.

According to Soeprijanto (2010), the vocational practice learning process, consisting of lesson planning, lesson preparation, teaching practices, and assessment of learning outcomes. The planning of practice learning could consist of the job sheets preparation, class preparation, workshops preparation, and or the equipment used. The implementation of learning may be preceded by the presenting the material by the teacher (shop talk activity), followed by the students practices, and assessed to the process and student learning outcomes.

Mills (1977), stated that in the practice learning teacher has to: (1) determine the learning objectives, (2) analyze the skills and operating steps, (3) demonstrate the skill was accompanied by a brief description, to give attention to the key points and difficult parts, (4) provide an opportunity for students trying their own skills with supervision and guidance (simulation), and (5) provide an assessment of the student effort.

Meanwhile, Leighbody and Kidds (1968) states that steps in practices teaching were: (1) preparation, (2) the stage of student activities (practice), and (3) the stage of assessment of students' work. Thus, it can be summarized that the skill practice learning in the Building Construction program of SMK, includes three phases, namely: (1) planning, (2) the implementation phase of learning consisting of: (a) presentation by the teacher (shop talk) and (b) student's learning activities (practices), and (3) assessing to student's learning outcomes.

Meanwhile, student's competence achievement assessment of the building construction program of SMK includes the attitudes, knowledge, and skills competencies have done in a balanced way so that it can be used to determine the learner's relative position against the established standards. The techniques and instruments have used for assessing the attitudes, knowledge, and skills competencies were as follows.

a. Assessing the attitude competence

In this case, a teacher assessing the attitude competency through observation, self-assessment, peer assessment or peer evaluation, and journals.

- 1) Observation, was an assessment technique have done on an ongoing or continuing process using the senses, either directly or indirectly, using the observation guide that contains a number of observed behavior indicators.
- 2) Self-assessment, was an assessment technique by asking to learners expressing themselves advantages and disadvantages in the competence achievement context. The instruments was used was the self-assessment form.
- 3) Peer assessment was the assessment techniques by asking students to assess each other related to the competence achievement. The instruments was used the peer assessment sheet.
- 4) Journal, was a teacher's notes inside and outside the classroom observations containing information about the strengths and weaknesses of students regard to attitudes and behavior.

b. Assessment Knowledge Competency

Teacher assessed the knowledge competence through written tests, oral tests, and assignments.

- 1) The instruments of a written test were a multiple choice test, short answer, true-false, matching, and essay test. Essay test instrument should be equipped scoring guidelines (rubrics).
- 2) The oral test consist of a list of questions.

- 3) The instrument of assignment were a homework assignments and / or projects was done individually or in groups according to the characteristics of the task.

### c. Skills Competency Assessment

Teacher assess skills competency through performance assessment, i.e. assessment have required the students to demonstrate a particular competency using practice test, project, and portfolio assessment. The instruments have used were a check list or rating scale have equipped with a rubric.

- 1) The practice test, was the assessment have demanded the skill response activity or behavior in accordance to the demands of competence.
- 2) Project, was a learning tasks which includes the design, implementation, and reporting of both written and spoken in a certain time.
- 3) Portfolio assessment, was the assessment carried out by assessing the entire collection of the student's work in certain fields which are reflective-integrative to determine the interests, developments, achievements, and / or learner's creativity in a certain time. The work could be in real action reflecting the students concern to the environment.

### 3. Graduation Criteria

Each student's learning outcomes will include the attitude, knowledge and skills competency, although its evaluated separately. The competency assessment was displayed in two forms, namely performance and descriptions. Assessment of knowledge and competence skills attainment initially was expressed in score (1-100), which was converted to a scale (1 - 4). Assessment of achievement attitudes was expressed by the level of quality, namely: Very Good (VG), Good (G), Fair (F), and less (L).

The graduation criteria for the knowledge competence was the achievement of minimum competence, i.e. when students are able to apply the knowledge gained; or if it was declared by a score  $\geq 75$ . The graduation criteria for skill competency when a student was able to demonstrate (show) the substance of the skills correctly; or if it was expressed by a score  $\geq 75$ . The passing criteria for the attitude was if students are well behaved, or when he or her expressed in terms of the value of  $\geq 2,67$ . Meanwhile, the school institution can determine the graduation criteria for the student's competence above the criteria have been established in accordance to the school institution conditions.

#### 4. Assessment of learning in Building Construction Program of SMK

Teacher readiness on implementing learning assessment in accordance to the curriculum of 2013 measured based on the teacher's ability to plan and implement learning assessment in accordance to the the standard of educational assessment in the Permendikbud No. 66 of 2013. Data on the teacher readiness to learning assessment implementation in accordance to the curriculum of 2013 was collected using an enclosed questionnaire, open questionnaire, and documentation.

Results of the research was conducted by Amat Jaedun et al. (2014), shows that based on the enclosed questionnaire results the teacher's readiness to the learning assessment implementation in the curriculum of 2013 on the fairly ready. Nevertheless, the data was collected by the opened questionnaire showed that teacher's of Building Construction Program of SMK actually have not been fully readiness for assessing learning in the curriculum of 2013 implementation. It has been indicated by: (1) although the teachers have developed an evaluation instrument of learning in the lesson plan documents (RPP), but most teachers still do not understand the authentic assessment principles and application, (2) the teachers still need to the principles, procedures, techniques, and authentic assessment instruments examples to the curriculum of 2013 implementation, and (3) the design of learning assessment have been prepared by teachers in the lesson plan mostly not meet to the characteristics of authentic assessment.

Meanwhile, the result of the lesson plan document analysis also showed that even though the teachers had prepared the learning evaluation instrument in the lesson plan document, but the assessment instrument which had been prepared by teacher in the lesson plan has not met to the characteristics of authentic assessment. This was shown by the following data.

- a. Learning assessment instruments to assess the knowledge competence included in the lesson plan document, generally in the test questions form that does not contain the problems faced by the students in the real life community, or the problems will be faced by the students on the job (his profession).
- b. The tasks given to the students mostly do not required students demonstrating their capabilities both inside and outside of the classroom.
- c. The tasks given to the students mostly do not contain social processes that correspond to real-life learners, such as: cooperation, and foster a climate of competition.
- d. The tasks given to the students mostly do not produced the authentic products, have the characteristics: (1) the quality of product or the student performance was not in accordance to the student's real life, (2) the tasks given to learners were not calling for describes a valid



competency demonstration, (3) the tasks given to the students mostly do not involved a lot of indicators of learning, and (4) the tasks have not required the work presentation to others both orally and in writing.

- e. The tasks given to the students mostly do not use the reference / criteria including the realistic results, that based on his professional competence in a real situation.

## 5. Teacher's constraints in implementing the Learning Assessment

Regard to the lack of the teacher's preparedness in the learning assessment for curriculum of 2013 implementation, so many obstacles faced by teachers in implementing learning assessment. The constraints in implementing learning assessment faced by teachers, due to:

- a. Most of vocational teachers (subject matter of C1, C2, and C3) have not trained yet the curriculum of 2013 implementation,
- b. The lack of teacher's understanding to implementing the curriculum of 2013,
- c. The lack of guidance in implementing the curriculum of 2013 have easily understood by teachers, and
- d. The absence of examples of the learning and assessment models in curriculum of 2013 implementation.

## Conclusion

Based on the results of the above review, it can be concluded as follows:

1. The teacher of Building Construction of SMK readiness for assessing of learning outcomes according to the authentic assessment principles of the curriculum of 2013 implementation has not been well prepared. Data from open questionnaire results showed that: (1) although the teachers have developed an learning assessment instrument in the lesson plan documents, but most of teachers still do not understand the authentic assessment principles and application, (2) the teachers still need an examples of the principles, procedures, techniques, and authentic assessment instruments to implementing the curriculum of 2013, and (3) the design of learning assessment that teachers have been developed in lesson plans document do not meet to the authentic assessment characteristics.
2. The lack of the Building Construction of SMK conducting the learning assessment according to the curriculum implementation of 2013 principles, mainly due to the following constraints:

- a. Many vocational teachers (groups C1, C2, and C3 subject) have not training yet in the curriculum of 2013 implementation,
- b. Lack of teachers understanding to implementing instructional assessment in implementing the curriculum of 2013,
- c. The lack of guidance in implementing the curriculum of 2013 have easily understood by teachers,
- d. The absence of examples of the learning and assessment models in the curriculum of 2013 implementation.

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