An evaluation of the implementation of Curriculum 2013 at the building construction department of vocational high schoos in Yogyakarta

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Abstract: *This research aims to determine the readiness of the teachers of the building construction department of vocational high schools (SMK) in Yogyakarta in designing and implementing the teaching and assessment processes of Curriculum 2013 implementation.The population was the teachers of building construction departments of the SMK's in Yogyakarta, which had been selected as the pilots of Curriculum 2013 implementation in the academic year 2013/2014, namely: SMKN 2 Yogyakarta, SMKN 3 Yogyakarta, SMKN 2 Depok, SMKN 1 Seyegan, SMKN 2 Pengasih, and SMKN 2 Wonosari. A sample of 13 teachers was established using the quota sampling technique (three teachers for each package of specialization). The data were collected using a questionnaire and through documentation. The data were analyzed using the descriptive statistical, quantitative and qualitative descriptive analyses. The results of this research are as follows. (1) The teachers' readiness in lesson planning to implement Curriculum 2013 measured from the availability of the learning tools, and the teachers' ability to plan the learning processes, is in the less ready category. (2) The teachers' readiness in implementing the learning process to implement Curriculum 2013 is in the less prepared conditions. The findings show that: (a) the teachers do not understand the principles and application of the scientific learning models as an appropriate approach to Curriculum 2013 implementation; (b) though all teachers have formulated learning activities preliminarily, the core and ending of learning stages, the realization of these activities is not in accordance with the provisions, (c) the teachers do not apply the information and communication technology (ICT) in the learning activities. (3) The teachers' readiness in the learning assessment to implement Curriculum 2013 is in less prepared conditions. This is shown by the teachers' inadequate understanding of the principles, procedures, and techniques of the authentic assessment, and the given tasks for the students do not portray the authentic tasks.*

Keywords: *SMK's teachers' readiness to implement Curriculum 2013*

1. Introduction

Implementing a new curriculum is one of the efforts made by the government (Kemdikbud RI) to improve the quality of education. It is a necessity, because the curriculum needs to be adjusted periodically to: (1) the vision and mission of the institution

of education providers; (2) the demands of society (including the job market); and (3) the development of science and technology.

Curriculum 2013 was designed to prepare the Indonesian who have the ability to live, both as individuals and citizens, who have a belief, who are productive, creative, innovative and effective and able to contribute to society, nation, state, and world civilization. This objective will be achieved if the Government and the entire community, especially teachers as a practice learning agent, implement Curriculum 2013 in the best manner. Meanwhile, a lot of indicators reveal that the efforts to improve the quality of our education until now, including curriculum development, has not been able to improve the quality of education significantly. One of the factors that caused them was the weakness of the implementation of the education quality improvement efforts.

It is undeniable that every turn of the school curriculum is always a turmoil, due to the unpreparedness of the educational institution in implementing the new curriculum, unpreparedness human and other resources, lack of socialization, and the attitude of rejecting the curriculum.

This fact is also related to the fact that the implementation of Curriculum 2013 which was carried out in piloting schools and started in the academic year of 2013/2014 did not show a good implementation. The indication was based on the fact that among many school subjects, only in three subjects the teachers and learning tools are ready. Those subjects are Mathematics, Indonesian, and History. As to the other subjects, the syllabus, teachers' books and students' books are not yet ready.

The success in the implementation of a curriculum, including Curriculum 2013, greatly depends on the teachers' readiness and education institution (schools) in preparing and implementing their learning process and assessment. This is understandable because the quality of the education system is closely related to the quality of teachers. Teachers have a very strategic role in determining the quality of education, and even other educational resources often lack adequate means if they are not supported by the presence of qualified teachers. In other words, teachers are at the forefront of the efforts to improve the service quality and outcomes of education (Sulipan, http://www.ktiguru.org/index.php/profesi_guru).

Therefore, the evaluation of the teachers' readiness on implementing Curriculum 2013, with regard to the planning and implementing of the learning process and assessment, is a very urgent problem to be studied. Based on the background of the problem which has been described above, the research problem is formulated as follows: (a) What is the readiness of teachers of the building construction departments of SMK's in Yogyakarta in planning the teaching process in the implementation of Curriculum 2013 like?; (b) What is the readiness of teachers of the building construction departments of SMK's in Yogyakarta in implementing the teaching process in the implementation of Curriculum 2013 like?; (c) What is the readiness of teachers of the building construction departments of SMK's in Yogyakarta in implementing the learning assessment in the implementation of Curriculum 2013 like?

The characteristics of teaching and learning at any educational institution is closely related to the competency standards and the content standards. In this case, the graduate competency standards provide a conceptual framework of learning objectives to be achieved, while the content standards provide a conceptual framework of learning activities derived from the level of competence and scope of the material.

The structure of Curriculum 2013 on secondary education consists of the compulsory subjects and the optional subjects. The compulsory subjects include nine subjects with a load of learning 24 hours per week, which

consists of the compulsory subject group A, and compulsory subject group B.

The SMK/MAK's curriculum of specialization subjects of package C consists of: (a) subject matters of the basic expertise (C1), (b) subject matters of the basic skills (C2), and (c) the subjects of specialization package (C3). The basic competency subjects in groups C2 and C3 are set by the Directorate General of Secondary Education, Ministry of Education and Culture to adapt to technological developments and the needs of business and industry.

In accordance with the competency standards and content standards, the principles of learning process in Curriculum 2013 implementation are: (a) from learners being told, to the learners being encouraged to seek out; (b) from the teacher as the only one source of learning, into a variety of learning-based resources; (c) from the textual approach learning towards strengthening the use of the learning process as a scientific approach; (d) from the content-based learning toward the competency-based learning; and (e) learning by utilizing information and communication technologies to improve the efficiency and effectiveness of learning.

Educational assessment according to Permendikbud No. 66 of 2013, is the process for collecting and processing information to measure the students' achievement of learning outcomes. Basically, assessment for learning cannot be separated from the learning process. Therefore, planning, implementing, and developing the learning assessment tools have to be considered in the characteristics of learning process, and they could be fitted to the characteristics of competence stipulated in the school curriculum.

The assessment for learning process and the learning outcomes uses the authentic assessment and not authentic assessment approach. The authentic assessment has been done by the teachers on an ongoing process. The authentic assessment is a learner's behavior assessment which is a multi-dimensional aspect in the real situations.

Hargreaves and Lorna Earl in Kartowagiran (2013) state that an authentic assessment could motivate students to be more responsible for their own learning, make the assessment as an integral part of the learning process, encourage learners to be more creative, and apply knowledge rather than merely train memory.

A similar statement is expressed by Wiggins (Lund, 1997), who states that an authentic assessment is developed to facilitate learners to apply their knowledge and skills to solve their problems in real life by providing an authentic touch to their assignment. Berg (2006), based on the results of an interview with John Muller, reveals the difference between an authentic assessment and a traditional assessment, namely that traditional assessment measures how students have acquired their knowledge, as opposed to an authentic assessment to measure how students are able to apply their knowledge and skills to be more meaningful in their life.

Meanwhile, Gulikers (2004) defines an authentic assessment as assessment which the students have required to use the knowledge, skills and behaviors they possessed, applying to which will depend on the level of similarity of the situation they will face in the real world.

Based on the above opinion, it can be concluded that the authentic assessment is an assessment that requires learners not only to answer the test correctly, but also to apply their knowledge, skills and attitude to solve their problems of everyday life or professional life in the future. An authentic assessment can be done through many types of assignments. Therefore, the important point of the authentic assessment is that a similarity assignment is given in schools to the real-life context faced by learners.

In addition, Gulikers (2004) states that an authentic assessment has five characteristics, namely: (a) assignments are authentic, if

the task contains the problems faced by the young people in the community real life; (b) physical context, if the task requires students to demonstrate their ability both inside and outside of the classroom; (c) social context, if the tasks contain a social process in accordance with the students' real life, such as collaboration and task that can foster a climate of competition; (d) results of authentic assessment, if the tasks produce an authentic product, with the following characteristics: the quality of products or the students' performance is in accordance with their real life, it requires the demonstration that can illustrate a valid competence, it involves many indicators of learning, and it requires the work presentation to others, both orally and in writing; (e) using the reference or criteria, including realistic results, expliciting disclosure of the result characteristics, and based on a professional competence in a real situation.

An authentic assessment has to be implemented on an ongoing process and integrated in learning. Therefore, an authentic assessment is not only in accordance with the competencies that will be achieved, but also associated to the learning model that has been applied.

Learning activities in the building construction departments of SMK have been grouped into three, namely: (a) theoretical learning, (b) laboratory learning, and (c) practical learning. Practical learning in workshops and practical learning in laboratories are the application of the theory the students have learned. In terms of the emphasis in the three kinds of learning, there is a difference among theoretical learning, practical learning, and laboratory learning. Theoretical learning puts more emphasis on training cognitive skills (knowledge), whereas practical learning puts more emphasis on training psychomotor skills, but both are related and mutually supportive. From the three types of learning, the proportion of practical learning in the workshop is much greater than the proportion of vocational theoretical learning, and laboratory learning.

According to Soeprijanto (Kartowagiran, 2013), the vocational practical learning process consists of lesson planning, lesson preparation, teaching practice, and assessment for learning outcomes. The planning of practical lesson consists of a preparation of job sheets, preparation of classroom activities, workshop, and equipments for practical training. The implementation of the practical learning can be preceded by the presentation of the material by the teacher (shop talk activities), followed by practice by the students, and the assessment for process and students' learning outcomes.

2. Method

This study is an evaluation of Curriculum 2013 implementation, focusing on the availability of instructional aids and the teachers' readiness in planning, implementing, and assessing the learning in the implementation of Curriculum 2013 in the building construction departments of vocational high schools in Yogyakarta.

The population of this research is the teachers of building construction departments of vocational high schools (SMK's) in Yogyakarta, which have been the piloting schools for Curriculum 2013 implementation in the academic year 2013/2014, namely: SMKN 2 Yogyakarta, SMKN 3 Yogyakarta, SMKN 2 Depok, SMKN 1 Seyegan, SMKN 2 Pengasih, and SMKN 2 Wonosari. A sample of 33 teachers of the piloting schools is established using the quota sampling technique, by which three teachers represent each of the 11 specialization packages. The sample teachers are grouped into: (a) basic field expertise subject matter (C1), (b) basic program expertise subject matter (C2), and (c) expertise package subjects matter (C3) teachers.

The data were collected using a questionnaire and through documentation.

The questionnaire (both closed-form and open questionnaire) was used to collect the data on the teachers' readiness in planning and implementing learning and assessing Curriculum 2013 implementation. Meanwhile, the documentation was done to collect the lesson plan documents which have been prepared by the teachers in implementing the curriculum. In this case, the teachers' readiness in implementing Curriculum 2013 can be judged by the quality and relevance of the lesson plan that has been prepared by the teachers. The quality and relevance of the lesson plan include: (a) the suitability of the lesson plan format, (b) the completeness of the lesson plan components, (c) the suitability of the models and methods of learning applied, and (d) the suitability of the procedures, techniques, and learning assessment instruments with the provisions of Curriculum 2013 implementation.

The validation of the research instruments is associated to the logical validity, which was done through discussion in seminar on the design and research instrument. The data analysis was performed using the descriptive statistical analysis techniques, and the quantitative and qualitative descriptive analysis. The criteria used to evaluate the teachers' readiness in implementing Curriculum 2013 are based on the provisions concerning the implementation of Curriculum 2013, especially with regard to the learning implementation by reference to Permendikbud No. 81A of 2013 or Permendikbud No. 103 of 2014, and Permendikbud Number 66 Year of 2013 or Permendikbud Number 104 of 2014, on the assessment standards.

3. Findings and Discussion

The data on the readiness of the teachers of the building construction departments of SMKs in Yogyakarta in implementing Curriculum 2013 include the availability of learning aids, teachers' preparedness in planning and implementing teaching, and conducting assessment for learning were collected using a questionnaire (closed and open forms), and analyzing the lesson plans that have been prepared by the teacher.

Teachers' readiness in planning the lessons

The data on the teachers' readiness in planning the teaching process were measured using a closed form questionnaire, revealing the availability of learning aids that have been prepared by the teachers, consisting of five questions. The data regarding the teachers' readiness in planning the lesson plan has a score ranging from 6.0 to 20.0 with the mean value of 11.39; median and mode of 11.0; with a standard deviation of 3.41. Based on the established classification, the teachers' readiness in planning the lessons is in the under-prepared category (with a score ranging from Mi to Mi - 1.5 SDI).

The data collected using an open questionnaire show that the low teachers' readiness in planning the learning process is demonstrated by the finding that: (1) the majority (57.6%) of the teachers have never attended a training on Curriculum 2013 implementation, (2) as many as 78.8% of the teachers stated that the students' books for the vocational subject matters (C1, C2, and C3) are not yet available; (3) as many as 93.9% of the teachers stated that teachers' books for the vocational subjects (C1, C2, and C3) are not yet available; (4) as many as 66.7% of the teachers stated that the example of learning assessment instruments that has conformed to Curriculum 2013 is not yet available; (5) even though the teachers have developed the lesson plans according to the specified format in Curriculum 2013, the majority (78.8%) still have difficulties; and (6) although the teachers have started to develop the learning assessment instrument in accordance with Curriculum 2013, the majority (87.9%) still have trouble.

Meanwhile, the results of the analysis of the lesson plans that have been prepared by the teachers show that the majority (85%) of the teachers have developed the lesson plans according to the specified format in Curriculum 2013 implementation, while as many as 15% of the teachers are still working out the appropriate lesson plan format for Curriculum 2006 implementation. Thus, it can be concluded that based on the available documents that have been prepared by teachers, basically the teachers had adequate preparation to plan the appropriate learning to implement Curriculum 2013. However, viewed from the contents and components of the lesson plans, it seems that the teachers' ability to prepare the complete lesson plans, especially in planning learning activities and assessment, still needs improvement.

The Teachers' Readiness in Implementing the Reaching Process

The data on the teachers' readiness in implementing the teaching process in Curriculum 2013 implementation were measured by using a closed-form questionnaire, consisting of 19 questions. The data revealed about the teachers' understanding of the approach, models, methods, and teaching principles that should be applied in carrying out Curriculum 2013. The data on the teachers' readiness in implementing the teaching process has a score ranging from 39.0 to 73.0 with a mean of 57.82; median 58.0 and mode 60.0; with a standard deviation of 8.57. Based on the established classification, the teachers' readiness in implementing the teaching process to implement Curriculum 2013 is in the ready category (ranging from Mi to Mi + 1.5 SDi).

However, the data collected using the opened questionnaire showed that the teachers of the building construction departments of SMKs were not yet fully prepared to implement the teaching process in implementing Curriculum 2013. This is shown by the finding that: (a) the majority (81.8%) of teachers expressed that they did not understand about the application of the teaching model that corresponds to Curriculum 2013 implementation; (b) although the teachers have tried to implement a teaching model that corresponds to Curriculum 2013, the majority (84.8%) of them stated that they did not yet fully understand.

Meanwhile, the result of the lesson plan analysis indicates that all of the teachers have formulated teaching activities in a preliminary event, the core, and the ending activities, but only a small proportion (6%) of the teachers in the preliminary activities have associated learning materials to be delivered to learners' experience or material that has been mastered by learners. Similarly, in the core activities there are also many teachers who do not apply the scientific approach. This is shown by the following data: (a) as many as 45% of the teachers do not facilitate learners to make observations (activity of viewing) appropriately, (b) only 35% of the teachers facilitate asking activities precisely, while as many as 65% do the asking activities by asking the students some questions, (c) only 20% of the teachers facilitate gathering information activities by learners appropriately, (d) only 35% of the teachers facilitate the information processing appropriately, (e) only 30% of the teachers provide the students with the opportunity to communicate their conclusions either in writing or orally, and (f) only 5% of the teachers actually implement the information and communication technology (ICT) in teaching activities, because the use of ICT in the teaching activity conducted by the teacher was merely using the power points when delivering learning materials.

Permendikbud No. 81 a of 2013 states that the teaching process in Curriculum 2013 implementation consists of five basic learning experiences, which describe the learning activities to do and competencies to be developed in learners, namely: observing,

asking, gathering information, associating (information processing, or reasoning), and communicating.

Meanwhile, the results of the lesson plan analysis also show that the design of the ending activities: (a) as many as 35% of the teachers make a summary/conclusion which does not involve the students, (b) as many as 55% of the teachers did not conduct the assessment, (c) only 40% of the teachers gave feedbacks, (d) only 15% of the teachers did follow up activities, either in the form of a remedial program or enrichment, and (e) only 35% of the teachers promulgate a lesson topic at the next meeting.

Teachers' Readiness Implementing the Assessment for Learning

The teachers' readiness in implementing the assessment for learning is in accordance with Curriculum 2013 implementation as measured by using a closed form questionnaire consisting of 18 questions. The questionnaire reveals the teachers' understanding of the principles, approaches, and assessment techniques that should be applied in the learning assessment according to Curriculum 2013 implementation, which is an authentic assessment. The data regarding the teachers' readiness in implementing the learning assessment in accordance with Curriculum 2013 implementation have scores ranging from 18.0 to 70.0 with a mean value of 48.36; median of 48.0 and mode of 42.0; with a standard deviation of 11.31. Based on the established classification, the teachers' readiness in implementing the learning assessment in Curriculum 2013 implementation is in the ready category (with the scores range of Mi and Mi + 1.5 SDi).

However, the data gathered using an opened questionnaire show that the teachers of the building construction department are not fully prepared to carry out the learning assessment in Curriculum 2013 implementation. This is demonstrated by the fact that even though the teachers have developed a learning assessment instrument outlined in the lesson plan, the majority (87.9%) of them still do not understand the principles, techniques and application of the authentic assessment.

Meanwhile, the result of the lesson plan analysis also shows that although the teachers have made a learning assessment instrument in the lesson plan, the facts show that: (a) only 20% of the designs of the learning assessment prepared by the teacher describe the authentic assessment, (b) there are 30% of the teachers who do not describe the aspects of attitude assessment, (c) there are 25% of the teachers who have not described the aspects of knowledge, (d) there are 50% of the teachers who have not described the aspects of skills, (e) there are 40% of the assessment instruments not in accordance with the indicators that have been assessed, (f) only 10% of the teachers assess the knowledge that measures the ability to apply principles, while the other 90% of the teachers assess the aspects of knowledge only at the low level of cognitive domain (knowledge and understanding), (g) only 5 % of the teachers assess the knowledge that requires cognitive abilities at a high level (High Order Thinking Skills or HOTS), while 95% are assessing aspects of knowledge only at the level of knowledge and understanding, (h) as many as 45% of the teachers assess the skills without the use of task or test performance, (i) only 45% of the teachers include the proper assessment rubric.

The results of the the lesson plan analysis also show that the design of learning assessment has been prepared by the teachers in the lesson plan, which does not meet the characteristics of authentic assessment. This is shown by the following data. (a) The tasks given to students do not contain the problems they faced in the real life in community. (b) The tasks given to students do not require the students to demonstrate their ability, both inside and

outside the classroom. (c) The tasks given to students have not included a social process in accordance with the students' real life, such as: a collaboration, and foster a competition climate. (d) The tasks given to students do not produce a products, with characteristics as follows: (1) the quality of the product or the students' performance do not correspond to the students' real life or profession demands in the future, (2) the tasks given to students do not involve a lot of learning indicators, and (3) the tasks given to the students have not demanded the presentation of the work to others both orally and in a writing. (e) The tasks given to students do not use the criteria which include the realistic results based on professional competence in a real situation.

Based on the description above, it can be concluded that the readiness of the teachers of the building construction departments of SMK's in Yogyakarta in carrying out the learning assessment appropriate to Curriculum 2013 implementation is still in the poorly ready category. This is demonstrated by the fact that teachers' understanding of the principles, procedures, and assessment techniques in accordance with the principles of authentic assessment is inadequate. The results of the lesson plan analysis also show that the teachers' understanding of the concepts, principles, and techniques of authentic assessment is still low. The term authentic assessment is basically not a new term in the field of education in Indonesia, because since the piloting of the Competency-Based Curriculum (KBK) in 2004, this term has been talked about much.

Wiggins (Lund, 1997) states that an authentic assessment is developed to facilitate learners in applying their knowledge and skills to solve their problems in real life by providing an authentic touch to their assignment. Similarly, Berg (2006) reveals the difference between an authentic assessment and a traditional assessment, namely that traditional assessment measures how students have acquired knowledge while an authentic assessment measures how students are able to apply their knowledge and skills to be more meaningful in their life.

In line with the above opinion, Gulikers (2004) defines authentic assessment as an assessment that requires students to use their knowledge, skills and behavior competencies to be applied to solve their problems in their future professional life, in which the level of authenticity of an assessment will depend on the level of task's similarity to the situation that will be faced in the real world.

Thus, it can be concluded that authentic assessment is an assessment that requires learners not only to answer the test correctly, but also to apply their knowledge, skills and attitude to solve their problems of everyday life or professional life in the future.

4. Conclusions

Based on the results described above, the following conclusions can be drawn. *First*, the readiness of the teachers of building construction departments of SMK's in Yogyakarta in plannning the teaching activities in implementing Curriculum 2013 is in the poorly ready category. This is demonstrated by the inavailability of learning tools, and the content and substance of the lesson plans that describe that the teachers' ability to prepare a complete and correct lesson plan still needs improvement. *Second*, the readiness of the teachers of building construction departments of SMK's in Yogyakarta in implementing the teaching activities in implementing Curriculum 2013 is in the poorly prepared condition. This is shown by the data as follows: (1) the majority (81.8%) of the teachers do not understand the principles and application of learning models using the scientific approach in Curriculum 2013 implementation; (2) although all teachers have formulated teaching activities in a preliminary event, the core, and the end, the

realization of these activities are still not in accordance with the provisions, (3) almost all of the teachers have not applied the information and communication technology (ICT) in their teaching activities. *Third*, the readiness of the teachers of building construction departments of SMK's in Yogyakarta in implementing the learning assessment in implementing Curriculum 2013 is in the poorly prepared condition. This is demonstrated by the teachers' inadequate understanding of the principles, procedures, and assessment techniques in accordance with the principles of authentic assessment. It is also supported by the fact that even though the teachers have developed a learning assessment instrument, the tasks given to students do note portray authentic tasks.

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