

An Analysis of the Biological Learning Quality of Grade X Sman Unggul, Dharmasraya, Assessed from the Teachers and the Student Aspects

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Abstract - This study was aimed at analyzing the biological learning based on the Minister of Education Regulation No. 41 of 2007 concerning the standard of the educational process which includes planning, implementation, and assessment of learning in grade X SMAN Unggul Dharmasraya. This study was a descriptive study with a qualitative approach. The informants of this study were the biology teachers of grade X, deputy headmasters and students of grade X MIPA SMAN Unggul Dharmasraya. The data collection techniques used in this study were interviews, study documentation, observation, recording of the learning process. The instruments used were interview sheets and assessment sheets adopted from UNP 106 area PLPG Learning Implementation Assessment Instrument, observation sheets, interview sheets, camcorders, and field notes. The data analysis technique in this study was quantitative data in the form of numbers obtained from the RPP assessment sheet and observation sheet analyzed by using statistical calculations. The data obtained from observations, documentation studies, interviews were processed by describing and analyzing the data until conclusions were obtained. The results of this study indicated that the planning made by the teachers obtained low result. The implementation of learning carried out received on the low criteria, as well as the assessment conducted by the teachers obtaining on the low criteria. Furthermore, the teachers had problems in terms of knowledge of planning making that fits the K13 curriculum. In the implementation of learning the teachers had not fully understood in applying the recommended learning model in the K13 curriculum. In terms of assessment the teachers did not carry out an affective and psychomotor assessment because the instruments were too many and the teachers did not know it. Thus, from this study it can be concluded that the process of the biology learning in grade X SMAN Unggul Dharmasraya is not appropriate with Minister of National Education No.41 of 2007 concerning the standard of the education process.

Keywords - *Analysis, Learning Quality of Biology, Teacher, Students.*

I. INTRODUCTION

The application of Law No.20 of 2003 concerning the National Education System is outlined in a number of regulations including PP No. 32 of 2013 which is the result of a revision of Government Regulation No. 19 of 2005 concerning National Education Standards. National Education Standards aim to guarantee the quality of national education in order to educate the nation's life, in accordance

with the objectives of the Indonesian state as stated in the opening of the 1945 Constitution. In Government Regulation No. 32 of 2013 concerning National Education Standards, eight standards must be met in the implementation and management of education. The eight standards referred to are: (1) content standards, (2) process standards, (3) graduate competency standards, (4) educators and education personnel standards, (5) facilities and

infrastructure standards, (6) management standards, (7) financing standards, and (8) educational assessment standards.

The quality of education is strongly influenced by the learning process in schools, this is in accordance with what was stated, Gore et al. (2017) that school systems throughout the world recognize that the quality of teaching is the most important factor in school that has an impact on student learning outcomes. The learning process determines the output produced. If the learning process is in accordance with the expected standards, it will produce satisfying results. The learning process in this school involves teachers, students, facilities and infrastructure. The learning process in schools needs to be studied and analyzed in order to improve the quality of education whether it has met the expected standards or not.

In schools there are still many obstacles and obstacles in meeting the standards of the education process. Among these obstacles can come from the teachers. The teachers are one of the most important factors that have an impact on the classroom environment, Bakirci et al. (2012). The point is that the teachers are a major factor in the success of the learning process. In this regard Mulyasa (2007) states that teachers are the most decisive component in the education system as a whole which must receive primary attention. Therefore, when the teachers experiences problems or problems, the process will be disrupted and have implications for the quality and learning outcomes. This obstacle can occur starting from the planning stage (RPP), implementation of learning and evaluation stages.

II. REVIEW OF RELATED LITERATURES

A. The National Education Standard

The Government Regulation No. 19 of 2005 concerning National Standards of Education is a reference that contains minimum criteria about the component of education that allows each level and path of education to develop education optimally in accordance with the characteristics of the program. The aim of the National Education Standard is to guarantee the quality of national education in order to educate the life of the nation and shape the character and civilization of a dignified nation. The National Standard of Education serves as the basis for planning, implementing and monitoring education in order to realize quality national education. The Government Regulation No. 19 of 2005 stated the content standards and process standards that must be carried out by teachers, both at the elementary and middle level.

B. Teacher Competence

Based on the Regulation of the Minister of National Education No. 16 of 2007 concerning Academic Qualification Standards and Teacher Competencies, it is explained that Teacher Competency Standards are developed in their entirety from 4 main competencies, namely: (1) pedagogical, (2) personal, (3) social and (4) professionals competences.

C. Basic Teacher Skills

These skills are: (1) asking skills (basic and advanced), (2) strengthening skills, (3) variation skills, (4) explaining skills, (5) opening and closing skills, (6) discussion leading small group skills, (7) classroom management skills and (8) teaching skills of small groups and individuals (Lufri, 2009).

D. Teacher Performance Indicators

For more effective teacher performance appraisal, the following matters need to be considered: (1) holding on to facts, evaluation must be based on facts, not rumors or gossip. (2) Seeing for you, the information must be collected from various sources such as students, other teachers. (3) Being honest and confidential, effective judgment must depend on trust and evaluation feedback must be shared privately by the evaluator and the person being evaluated. (4) Focus on problems not people. (5) The purpose of the assessment must be to improve performances. (6) Make observations correctly, plan class visits, record accurately, and conduct post-assessment conferences correctly (Daresh, 1992 in Üstünlüoglu 2009). According to Clipa (2014) the purpose of teacher assessment / evaluation is to improve the quality of teaching in accordance with the mission and objectives of the institution, so that it is also seen in the quality of students and implicitly also seen in the quality of schools.

E. Student Learning Outcomes

Learning and teaching as a process contain three elements that can be distinguished: the teaching goals (instructional), the experience (process) of teaching and learning, and the learning outcomes. The instructional objectives in essence are changes in the desired behavior of students, therefore in the assessment should be examined the extent to which changes in student behavior have occurred through the learning process, as revealed by Contreras in Barrio et al. (2015) that assessment is the process of obtaining reliable information about students (goals, knowledge, talents, skills, behaviors, etc.), establishing judgments and results (acceptable, suitable, good, good adequate, etc.) and making decisions (to receive, pass,

recommend, promote, release, recognize, etc. The learning process is an activity carried out by students in achieving the learning outcomes while the learning outcomes are abilities possessed by students after he receives his learning experience. (Sudjana, 2008)

III. RESEACH METHOD

This study was a descriptive study with a qualitative approach. This research was carried out in grade X of MIPA SMAN Unggul Dharmasraya, Km 18 Cross Sumatra, Koto Padang, Koto Baru District, Dharmasraya Regency. This study was conducted on the 2018/2019 school year (February - September 2018). The informants of this study were the biology teachers of grade X, deputy headmasters and students of grade X MIPA SMAN Unggul Dharmasraya.

IV. FINDING AND DISCUSS

A. Finding

1. Lesson plan

Table 1. The Results of RPP Assessment

Meeting	Results of RPP Assessment	
	Results of RPP Assessment	Criteria
First	47,5	low
Second	50,0	low
Third	50,0	low
Fourth	57,0	average
Fifth	57,0	average
Mean	52,4	low

From Table 2, it can be seen, the RPP made by the teachers at the first meeting, the second meeting, and the third meeting was in the low criteria. However, the RPP at meeting IV, meeting V had the criteria of being. This difference was caused because in the meeting IV and V RPP on the suitability of the learning materials with indicators of competency achievement to be achieved got good grades while in RPP meetings I, II, and III got poor grades. This finding shows that the teachers' preparation is still not optimal in the lesson plan.

2. Learning Implementation

Information:

- A. Introduction Activities
- B. Mastery of Learning Materials
- C. Application of Educating Learning Strategies
- D. Application of the Scientific Approach
- E. Use of learning resources / media in learning
- F. Implementation of Process and Results Assessments
- G. Student Engagement in Learning
- H. Use of the worth and appropriate Language in Learning
- I. Closing of Learning

From Table 2, it can be seen that the mean of the results of the implementation of learning by teachers was 48.2 with low criteria. The teachers obtained adequate criteria on the aspects of student involvement in learning. For aspects of the preliminary activities, mastery of learning material, application of the scientific approach, and aspects of the use

Table 2. The Results of The Learning Implementation Assessment

Observed aspects	Results of The Learning Implementation Assesmen Meeting					Mean	
	I	II	III	IV	V	Results	Criteria
A	19	19	19	21	18	59,9	average
B	9	10	8	9	8	55,0	average
C	22	23	21	18	21	58,3	average
D	11	10	9	12	12	54,0	average
E	10	10	11	9	7	47,0	Low
F	3	3	3	3	3	25,0	Low
G	12	13	12	12	13	62,0	Adequate
H	5	5	4	4	4	55,0	average
I	4	5	0	4	5	18,0	low
	Mean					48,2	Low

of correct and appropriate language in learning teachers obtained average criteria. However, in the aspect of using learning resources / media in learning, the implementation of the process and results assessment and closing of learning obtained low criteria.

3. Learning Assessment

The findings of researchers in the field, the teachers did not use authentic assessments that assessed the student readiness and the student learning in learning. From the interviews it was known that the teachers did not prepare all the assessment tools for all students at each meeting. In addition, the assessment is also not based on the 2013 curriculum standards. Good assessment procedures must have a complete assessment tool. The complete assessment tool consists of questions, answer keys, rubrics and scoring guidelines. But the author's findings in the field, the teachers only made questions to make an assessment of students. The teachers do not have a complete assessment tool that is appropriate with the implementation of the learning activities carried out.

B. Discussion

The findings of researchers in the field, the teachers did not design their own RPP used. This is recognized by the teachers concerned. Even though according to Minister of Education and Culture Regulation number 65 of 2013 concerning the standard of the education process, every educator in the education unit is obliged to prepare a lesson plan in a complete and systematic manner. In line with that Abdullah et al. (2015) states that appropriate planning will help teachers focus more on teaching and this will result in meaningful learning. Thus, the lesson plan will determine the process and results.

Furthermore, the teaching materials did not contain facts, concepts, principles, and procedures that should be written in the form of items based on indicators of achievement of competence. Whereas according to Lufri (2007: 17) the teachers must vary the material between facts, concepts, principles, laws, and theories. Learning material must be designed attractive and easily understood or communicated in a simple language. The teachers do not vary the material because the teachers do not have the competence to make changes that support the implementation of the 2013 curriculum.

The average results of the learning implementation of the teachers get low criteria. From the findings of the learning process the teachers do not have a good class management. The class management determines the success

of the learning process. This was revealed by Sadik et al. (2015) that classroom management is one of the skills teachers must possess for effective teaching. Class management is an ongoing process that requires the teachers to make decisions about situations such as where and with whom students must sit, which teaching methods to follow, how to ensure student motivation and participation, which materials to use; how to deal with bad behavior, etc. The ability of teachers in classroom management depends on their academic and pedagogical background.

On the aspect of student involvement in the learning, the teachers have not been able to activate and involve all students in the learning process. From the research findings in the learning implementation process, there are students who do other activities such as playing cellphones, chatting with friends, and even sleeping. The teachers' main task is to involve all the students in the learning process with certain methods and techniques. As expressed by Özdemir (2010) that teachers must adopt a student-centered approach that will allow all students to actively participate in learning activities inside and outside the classroom, and they must arrange their appropriate learning environment.

The findings of researchers in the field, the teachers did not use authentic assessments that assess the student readiness and student learning in learning. Even though related to Minister of Education and Culture Republic of Indonesia Regulation number 81A, one of the characteristics of assessment in the 2013 curriculum is an authentic assessment. Authentic assessment has very complex stages, starting from assessing student readiness, process and learning outcomes. According to Utambarta et al. (2011) state that the role of assessment shifts, current assessment is considered as a mean to promote learning rather than monitoring it, and assessment is for learning.

V. CONCLUSION

Lesson plan, implementation of learning and assessment carried out by teachers scored with low criteria. The results of this assessment can describe the quality of the lesson plan possessed by the biology teachers of SMA Unggul Dharmasraya. The draft of the RPP (lesson plan) is not appropriate with the 2013 curriculum. This happens because the teachers are only guided by RPP sourced from the internet. The learning process is not in accordance with the 2013 curriculum. This happens because the teachers have not followed all the guidelines in the 2013 curriculum process standards. The teachers have not carried out an attitude assessment and skills assessment during the learning process. The teachers also do not carry out an assessment of

attitudes and skills after the learning has been carried out. In addition, the teachers do not carry out the assessment in accordance with the plans made by the teachers.

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