
Evaluation of natural science learning implementation plans grade 7 junior high schools: A reflection of the learning process

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Received: 6 September 2018; Revision: 20 September 2018; Accepted: 28 September 2018

Abstract

This research aimed to know: (1) the conformity of science lesson plan in Gunungkidul with process standard of education based on curriculum 2006 and curriculum 2013; (2) the conformity of science instruction process in of Gunungkidul with process standard of education based on curriculum 2006 and curriculum 2013; and (3) the conformity of science instruction evaluation in Gunungkidul with process standard of education based on curriculum 2006 and curriculum 2013. This research was evaluation research based on the CIPP model with the quantitative and qualitative approach. The quantitative data were analyzed with T-score, while the qualitative data were analyzed descriptively. The findings showed that: (1) the conformity of science lesson plan in Gunungkidul and the process standard of education based on curriculum 2006 and curriculum 2013 is consistent; (2) the conformity of science instruction process in Gunungkidul and the process standard of education based on curriculum 2006 and curriculum 2013 is consistent; and (3) the conformity of science instruction assessment in Gunungkidul and the process standard of education based on curriculum 2006 and curriculum 2013 is consistent.

Keywords: evaluation, science instruction, curriculum 2006, Curriculum 2013

How to Cite: Fithriyyati, N., & Maryani, I. (2018). Science lesson plan evaluation for 7th grade secondary school: A learning process reflection. *Psychology, Evaluation, and Technology in Educational Research*, 1(1), 9-18. Retrieved from <http://petier.org/index.php/PETIER/article/view/17>

INTRODUCTION

A good learning process might not separate from the curriculum that provides a program or learning plan. The curriculum is a guide for schools in the learning implementation (Kulsum, 1994). Therefore, the learning process must be in accordance with the applied curriculum. In its application, the curriculum undergoes improvements and changes in order to realize a better quality of education (Anwar, 2014).

Indonesia has undergone several changing in the curriculum. This changing occurred in 1947, 1964, 1968, 1973, 1975, 1984, 1994, 1997, 2004, 2006 and 2013. According to the Ministry of Education and Culture (2013) in the attachment to the regulation of the Minister of Education and Culture No. 68 of 2013, the curriculum development resulted the curriculum2013 which had background by the factors relating to national education standards and preparing the productive age population which assumed will reach its peak in 2020-2035. The preparation aims at human resources development so that they have competence and skills through education, and not become the problems for the community and country.

Through the implementation of curriculum 2013 in the learning process, students hopefully are able to integrate knowledge, attitudes, and skills to solve the phenomena in life. In addition, the students hopefully play an active role in finding out various sources and observations, able to formulate the problems and solve the problems, able to think on analysis (decision making) rather than mechanistic thinking (routine) and emphasize the importance of cooperation and collaboration in solving the problems. In its application, the curriculum2013 prioritizes a scientific approach that leads

the students not to stop at knowledge but always continues to have skills and attitude formation, as summarized in 5M, namely observing, asking, reasoning, trying, and building networks.

School learning activities refer to the curriculum applied at the school, including science learning. In the regulation of the Minister of National Education No. 22 of 2006 on Content Standards for Primary and Secondary Education Units, Science is the substance of subjects in SMP / MTs that implemented in an integrated way (Kemdiknas, 2006). IPA (Science learning) is a collection of investigatable objects and natural phenomena by applying scientific methods. This is in line with the implementation of the Curriculum 2013 which emphasizes the scientific approach and the implementation of 5M in all subjects, including science subjects. Through the implementation of 5M in science learning, students will gain learning experiences like scientists in investigating and finding natural phenomena, as well as their accompanying concepts (Maryani & Fatmawati, 2015).

Through the scientific approach, students can investigate the natural symptoms found in everyday life. Investigations in Sciences provide a place to find out and seek information in response to the curiosity. Collette & Chiappetta (1984) argue that science must be seen as a "way of thinking in the pursuit of understanding nature, as a way of investigating claims about phenomena, and as a body of knowledge that has come from inquiry."

Science involves human activities to gain knowledge. Science is a human activity that is organized to seek knowledge about nature through systematic ways (Wenno, 2010). The activity requires scientific methods to observe, identify, describe, and investigate the natural phenomena through an experiment (Wang, 2011). This scientific method usually conducted by scientists in carrying out their activities.

In essence, IPA (science) is a discipline of science that is closely related to everyday life. Various natural phenomena are studies in science. Science is a way of thinking, observing and seeing the information to solve the problems (Tillery, Enger, & Ross., 2004). Science is a way of thinking and the process of finding information to solve the problems. The science is a body of knowledge and a process (Sund & Trowbridge., 1973). These two statements mean that IPA provides a place for thinking, seeking information, and solving problems so that it can build knowledge through the process. Therefore, an investigation needed in problem-solving in the Natural Sciences aiming to find out the causes and impacts of the problem, namely through the learning using a scientific approach or also known as 5M.

The 5M implementation in schools is accompanied by learning resources. Learning resources of teacher books and student books are provided by the central government, and then the teachers can use them directly in learning and can modify the implementation of learning in accordance with their respective school environments. The teacher book and the student book might use as a guide in science learning and also need other references to complete or as additional knowledge for students.

The implementation of science learning in Junior High School refers to Permendikbud No. 103 of 2014 on Learning in Primary Education and Secondary Education. In the ministerial regulation, it is explained about planning, implementing, and evaluating the learning in schools. Therefore, the implementation of science learning in schools required to able to plan good learning in order they can carry out the optimum learning process, as well as an assessment process to achieve graduate competencies. The well of planning, implementation, and assessment process will effect on effective science learning. And, it can make graduates who have adequate knowledge, attitudes, and skills.

The problem faced in the field is that the teacher has not been fully able to implement the curriculum 2013 in science learning. The teachers' focus splits because during the learning process they need also to observe the students attitudes and skills. Meanwhile, the material must be completed to deliver immediately. The preparation of learning tools especially RPP (lesson plan) requires a long time to compile because they need to adjust with the format from the central government.

The government regulations relating to the preparation of RPP have changed several times, so the teacher must always adjust to the latest rules. The scientific approach, characteristic of the Curriculum 2013, must be implemented carefully in order all indicators might be observable. In addition, there is the number of facts on learning tools prepared by the teacher which are not in accordance with the format set by the Ministry of Education and Culture. The lack of readiness of teachers in implementing the Curriculum 2013 on natural science learning will also have an impact on students as learning subjects.

Planning the learning process is an activity carried out by the teacher such as preparation of the Lesson Plan. Lesson Plan is a plan describing the procedures and organization of learning to achieve the basic competency in the Content Standards and described in the syllabus (Majid & Rochman, 2014). The widest scope of the learning plan includes a basic competency consisting of one or several indicators for one or more meetings.

And then, the planning implements in a learning activity process. The learning activity implement in three stages, namely introduction, core, and closing. In the implementation of the learning process, there is an assessment of the students' activities assessed by the teacher. Therefore, an evaluation is needed to find out the implementation of science learning. Evaluation is the process of making decisions about the function, values, or benefits of educational programs, projects, materials, or techniques (Gullo, 2005).

This study used the CIPP evaluation model. The CIPP model is in line with the education and service system. CIPP not only focuses on directing individual learning, but also helps to provide consideration in policy making (Stufflebeam, Madaus, & Kellaghan, 2002). The model not only focuses on guiding individual learning but also focuses on preparing the evaluation services for decision-makers in an institution and stakeholders.

METHOD

This CIPP model is appropriate for use in the education system because not only focus on learning of student but also provides evaluation services for decision-makers in an institution and stakeholders.

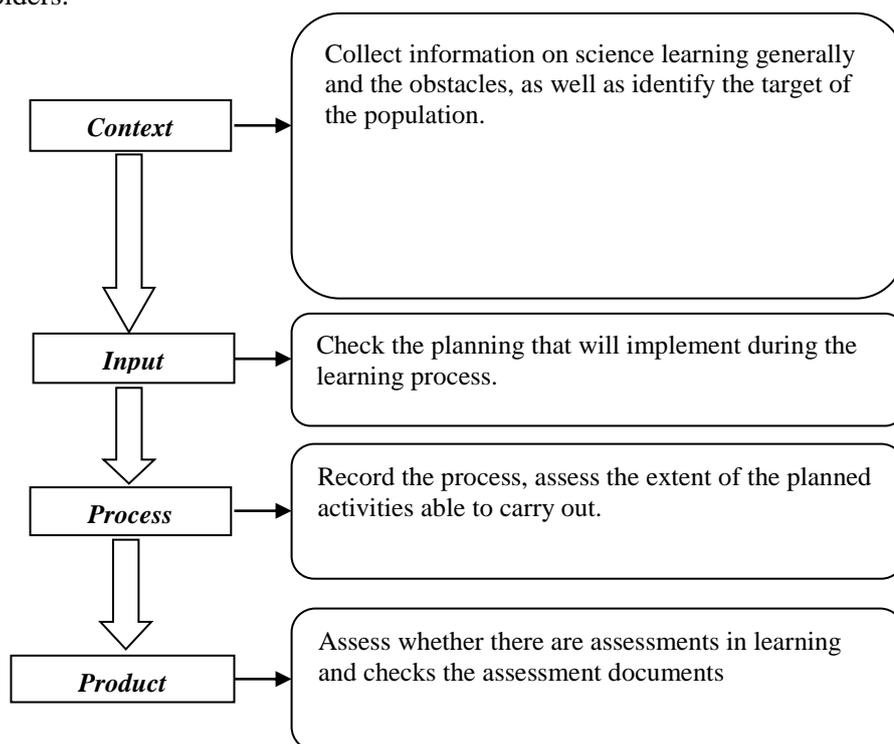


Figure 1. Research Steps

This research conducted in SMPN (Public Junior High School) Gunungkidul regency that applies Curriculum 2006 and Curriculum 2013. This research conducted in the even semester of 2015/2016 school year that was on March-June 2016.

The population in this study was all teachers and students in SMPN (Public Junior High School) Gunungkidul regency that uses Curriculum 2006 and Curriculum 2013 in the science learning. And, the total of the population was 5 schools for each curriculum. The sampling selection of teachers used purposive sampling technique, specifically for science teachers who teach in class VII, which selected a teacher for each school. The sampling selection of students was determined based on the Slovin formula with a significant level of 5% (Sarjono, H & Julianita, 2011), described as following.

$$n = \frac{N}{1 + Ne^2} \dots\dots\dots (1)$$

Where:

n = sample size

N = total of population

e = tolerated error value

Based on the school data, the total of the population is 500 students on the school that apply Curriculum 2006 and 680 students on the school that apply Curriculum 2013. The error value determined by the researcher is 5%, so that there are 222 students for the school that apply Curriculum 2006 and 252 students for the school that apply Curriculum 2013. The next step is determining the number of students proportionally toward the population with the following equation.

$$n_i = \frac{N_i}{N} \times n \dots\dots\dots (2)$$

Where:

ni = The number of students by *cluster*

n = The total size of students

Ni = The number of population by *cluster*

N = Total population

Based on equation (2) the proportional samples for 5 schools that apply Curriculum 2006 are 67 students, 49 students, 24 students, 53 students, and 29 students. Meanwhile, the proportional samples for 5 schools that apply Curriculum 2013 are 71 students, 35 students, 44 students, 59 students, and 42 students.

Data collection techniques were non-test techniques, and the combination of observation techniques, questionnaires, interviews, and documentation. The data collection instruments were observation sheets, questionnaire sheets, document checklists, and interview guidelines.

Observation sheets used to determine the ongoing learning process and to determine the conformability of the implementation of the learning process with the planning designed by the teacher. Questionnaire sheet is an instrument including the perception of science teachers about the implementation of science learning in junior high school which includes planning, implementation, and assessment, as well as the students' perceptions in the implementation of the Curriculum 2006 and Curriculum 2013 which includes the implementation and assessment of the learning process.

The document checklist used to find out the teachers' documents relating to the planning and assessment of science learning and the availability of learning facilities such as textbooks and media in learning. Interview guidelines used to find out the planning, implementation, and assessment, as well as the problems faced by the teacher in the learning process.

Data analysis used quantitative and qualitative analysis techniques, which are through describing and interpreting the data from each evaluated aspect both quantitative and qualitative data. Questionnaire data, document checklists, and observations were analyzed quantitatively. Meanwhile, the interview data were analyzed qualitatively.

The data obtained from respondents' responses were then further summed, averaged, and find out the standard deviations. By the obtained standard deviation, continue to obtain Z score aiming to determine the mean score distance in the standard deviation unit. The calculation of Z scores produces negative and positive signs. The score below the mean is negative. And, aiming to eliminate the negative sign, the Z score is converted into a standardized score, which is the T score.

Then, the T scores grouped according to the aspects of learning, which are aspects of planning, implementation, and assessment. The next step is to calculate the T score. Based on each T score, it obtained the composite score, which then can be categorized, either as wholeness or in the category of each aspect of learning. Data from teacher interviews were analyzed descriptive qualitative to support the obtaining the composite scores.

The success criteria in this study must fulfill the context, input, process, and product components. The success criteria for the implementation of the science learning program are reviewed based on the characteristics of Curriculum 2006 and Curriculum 2013, including aspects of planning, implementing, and assessing the science learning. This characteristic is according to the regulation of

Minister of National Education No. 41 of 2007 on Process Standards for Primary and Secondary Education Units and regulation of Minister of National Education No. 103 of 2014 on the Process Standards for Primary and Secondary Education Processes. This study used five categories of science learning implementation, which are very appropriate, appropriate, adequate appropriate, inappropriate, and very inappropriate.

RESULTS AND DISCUSSION

Results

The results of the interviews to each teacher showed; all respondents understood well about the implementation of the curriculum in schools; the guidelines used in science learning; and the learning objectives of science. Based on the interviews, it obtained information about the general implementation of science learning and the obstacles faced by teachers in science learning.

Planning Aspects

The schools that apply Curriculum 2006 are SMP N 3 Wonosari, SMP N 3 Karangmojo, SMP N 4 Semin, SMP N 4 Patuk, and SMP N 2 Paliyan. The learning plan is carried out by the teacher through making learning tools, such as syllabus, lesson plans, assessment instruments, and other tools to support science learning in the Ecosystems material. The references used in evaluating the implementation of science learning are the standard learning process in line with the regulation of Minister of National Education No. 41 of 2007 on Process Standards for Primary and Secondary Education Units.

Planning evaluation of science learning conducted by providing a questionnaire to the teachers who teach science in the school. The questionnaire sheet contains statements and compiles according to the Process Standard for Primary and Secondary Education Units in the learning planning section, which is CHAPTER II and consisting 35 statements items. Besides the questionnaire sheet, the instrument used in the planning aspect is a document checklist consisting of 9 items of documents. The purpose of the checklist instrument is to find out the teacher document prepared for science learning planning on the Ecosystems material.

Evaluation results in this planning aspect are; obtaining the 49.51 of T score model from the questionnaire for teacher and the 56.92 of T score model from the document checklist. Furthermore, based on the two assessed scores, obtained a composite value of 53.21 and included in a quite appropriate category.

The schools that apply Curriculum 2013 are SMP N 2 Patuk, SMP N 1 Wonosari, SMP N 1 Paliyan, SMP N 1 Karangmojo, and SMP N 1 Semin. Aspect evaluation of learning planning known from the data of questionnaire sheet filled by the teacher consisting of 23 items statements and document checklist consisting of 9 items statements.

The results of the evaluation on the planning aspects of the questionnaire for teacher obtained 56.61 of T score model and 56.62 of T score model from the document checklist. Both scores then assessed, and obtained a composite value of 56.11 and included in a quite appropriate category.

Implementation Aspect

The instruments used in evaluating the implementation aspects are the questionnaire for the teacher, the questionnaire for the student, and the observation. In this study, the total of observers involved in the learning process is a person due to the instrument of observation has been valid and reliable in data collection.

The evaluation aspects of the implementation of science learning on schools that apply curriculum 2006 have 49.51 of T score model from the questionnaire for the teacher. Evaluation from the questionnaire for the students has 49.34 of T score model. Meanwhile, the evaluation of observations has 50 of T score model. Those scores are then calculated and have a composite value of 49.64, and included in the quite appropriate category.

The results of evaluation on the implementation of science learning on schools that apply curriculum 2013 have 50.09 of T score model from the questionnaire for the teacher. Evaluation from the questionnaire for the students has 49.34 of T score model. Meanwhile, the evaluation of observations has 50 of T score model. Those scores are then calculated and have a composite value of 51.11, and included in the quite appropriate category.

Assessment Aspect

Evaluation of assessment aspects on science learning on schools that apply curriculum 2006 taken from the 19 items on the questionnaire for the teacher, 19 items on questionnaires for the student, and 9 items on for document checklists.

The result of evaluation of assessment aspects on the questionnaire for teacher obtained 51.81 of T score model, on the questionnaire for students obtained 51.91 of T score model, and on the checklist document obtained 43.08 of T score. Those scores are then calculated and have a composite value of 48.51, and included in the quite appropriate category. Overall evaluation results on aspects of planning, implementation, and assessment obtained 50.46 and included in the quite appropriate category.

The categories on each aspect of science learning presented in Table 1 and Table 2.

Table 1. The evaluation results on the Implementation of Science Learning Using the Curriculum 2006

Evaluation Aspect	Score by Number	Score by letter	Category
Planning	53,21	C	quite appropriate
Implementation	49,64	C	quite appropriate
Assessment	48,51	C	quite appropriate
Average	50,46	C	quite appropriate

Table 2. The evaluation results on the Implementation of Science Learning Using the Curriculum 2013

Evaluation Aspect	Score by Number	Score by letter	Category
Planning	56,11	B	appropriate
Implementation	51,11	C	quite appropriate
Assessment	44,91	C	quite appropriate
Average	50,71	C	quite appropriate

Discussion

The results of interviews to 10 teachers showed that in general, the teacher understood the curriculum applied in schools. The teacher also has guidelines of process standards that use as a reference in the implementation of science learning in schools. These results are in line with research conducted by Natital (2009) and found out the level of teacher's understanding of the curriculum applied in schools that are in the good category. Based on the interviews, it obtained information that the teacher meets obstacles in the implementation of science learning.

The obstacles faced by teachers vary, but most of the teachers stated that the time allocation for remedial and enrichment is used to complete the material due to the learning time is cut off by the preparation for class IX in following the national exams. Moreover, there is a teacher who has problems in carrying out assessments for students during the learning process. Furthermore, the evaluation of the three aspects of learning described as follows.

Planning Aspect

The results of the evaluation on the science learning planning for the school applying Curriculum 2006 showed that learning planning was sufficient in line with the learning process standards. Based on the questionnaire filled by the teacher, 4 aspects of indicators used to find out the implementation of science learning planning in the Ecosystem material. These four aspects include the development of syllabi, preparation of Lesson Plan, media and learning resources, and the preparation of assessment tools.

The results of the questionnaire filled by the teacher showed that the teacher had prepared the learning plan sufficiently in line with the standard process, which seen from the T score model of 49.51. The teacher has reviewed the regulation of Minister of Education no. 41 of 2007 on Process Standards for Primary and Secondary Education Units, which become a reference in the implementation of learning. The teacher has understood well the competence standard and basic competence, as well as developing the syllabus. In addition, the teachers able to preparing the Lesson Plan, preparing the media and learning resources, and preparing the assessment tools in accordance with the standard competencies.

Based on the checklist on the document of the teacher, there are two schools; SMP 4 Patuk and SMP 3 Karangmojo, which do not prepare LKPD during the learning process in the Ecosystem

material. Meanwhile, other three schools have completed all documents. Viewed from the subject on teaching, surely, learning will be more focused if the students have guidelines in conducting activities because the Ecosystem material provides an opportunity for students to learn outside the classroom and observe directly the components of the ecosystem in the environment. Based on the T-score calculation, obtained a score of 56.92 which indicated the assessment document is in line with the reference for the implementation of learning.

Based on the results of the two instruments on science learning planning evaluation, concluded that there are differences in the level of conformability of the results of the questionnaire for the teacher with the results of checking on documents of teacher's planning. However, when the two scores compiled; and then, it obtained score of 53.21 with quite appropriate category. So, it concluded that the planning of science learning using the curriculum 2006 has quite accordance with the learning guidelines. This category is in accordance with Marwanto (2008), stated that the application of the Curriculum 2006 is quite good in terms of the conformability on teaching patterns.

Evaluation of the planning of science learning implementation in the school that applies the Curriculum 2013 is carried out on the subject of the Interaction of Living Beings to the environment. The evaluation results of planning aspects from the results of the questionnaire for teacher indicated that the science learning planning is quite in line with the guidelines. This assessed from the T score of 55.61. The questionnaire filled by the teacher consists of 4 aspects that are used as indicators to assess the science planning.

The evaluation results of the planning aspect of the document checklist indicated that the completeness of the teacher's planning document is in line with the guidelines of learning. The score obtained from the document checklist is 56.62 so that there are differences in categories between the two instruments in science learning planning. Furthermore, the evaluation results of the two instruments compiled and obtained a score of 56.11, which indicates the learning planning prepared by the teacher is in line with the learning guidelines.

In general, the science learning planning conducted by the teacher is good. But, there is one item that does not fulfill by 4 schools, that is the conformity of the lesson plan format with the format provided by the attachment of regulation of Minister of National Education No. 103 of 2014 on Learning in Primary and Secondary Education. Meanwhile, they have followed training for the preparation of lesson plan using the new guidelines. The finding matches with the study (Ariyanti & Kuswanto, 2014; Supianto, Matsum, & Rosyid, 2014), stated that the teacher's ability to prepare the science learning still needs improvement.

Implementation Aspect

The results of the evaluation of science learning in the material of Ecosystems and the Interaction of Living Beings with the Environment indicated that the implementation process is sufficiently appropriate. The quite appropriate criteria are seen based on the questionnaire for the teacher, the questionnaire for the student, and the observation on the learning implementation. In the evaluation of science learning implementation, there are three aspects assessed by the teacher, students, and observers that are the introduction, core activities, and closing.

The criteria for quite appropriate based on the score of the questionnaire for teacher was 49.51; the score of the questionnaire for student was 49.35; and the observation result on the learning implementation was 50. The results are in line with the findings by Sudarmini, Suarni, & I Wayan Lasmana (2014), found that the application of PAIKEM learning was effective in terms of context, input, process, product aspects. There are three aspects assessed by the teacher, students, and observers in evaluating the implementation of science learning, which are the introduction, core activities, and closing. The core activities consist of exploration, elaboration, and confirmation conducted by the teacher in creating a learning atmosphere, both inside and outside the classroom.

In the core activities, not all teachers have taught science in an integrated way. In the implementation, science learning still teaches separately between physics and biology. The schedule of science classes for grade VII at the school also still separated, which are science biology and physical science. The implementation contrasts with the Ministry of National Education (2006, p. 9) in the attachment of the regulation of Minister of National Education No. 22 of 2006 on Content Standards for Primary and Secondary Education Units, stated that the substance of science and social studies

subjects in SMP/MTs (Junior High School/Islamic High School) is "Integrated Science" and "Social Science Integrated."

Ideally, science teaches in an integrated way in a cohesive model that allows and adapted to the subjects of material. The idea of learning is student-centered learning, but it has not fully carried out. The factor caused by the students have not fully understood the activities if they have not guided directly by the teacher. And, it needs to make the limitation on teacher guidance, aiming at students have experience and develop their scientific attitudes in carrying out activities. The result, they will have independent learning (not depend on teachers)

Evaluation of the implementation of science learning in school applying Curriculum 2013 showed that the implementation of science learning is sufficient in line with the learning guidelines. In the evaluation, the instruments were questionnaires for the teacher, questionnaires for the student, and observations conducted by observers. This aspect of implementation included preliminary activities, core activities, and closing activities. The score obtained from the questionnaire for the teacher was 50.09, the scores obtained from the questionnaire for students was 53.78, and the score obtained from the observation was 50 - then, the score indicated that the implementation of science learning was sufficient in line with the science learning guidelines. The three scores compiled and obtained a score of 49.64 with a quite appropriate category.

Evaluation of the implementation of learning showed that the teachers have a good ability in preparing the students for learning, conveying the competencies, and providing apperception. At the core activities, the teacher has been good enough in guiding the students to do the 5 M which is the characteristic of Curriculum 13. However, not all schools can run 5 M fully because the time for learning in the material of Interaction with Living Environment has been severely cut off by preparation for class IX in following the national exams, then the learning might be conducted according to planning.

In the preparation of students in class IX for the national examinations, one school still teach the subject of the Interaction of Living Beings with the Environment fully. The school has a solution so that the students in grades VII and VIII continue to study effectively in school. Along, with the strengthening the class IX for national examinations, class VII and class VIII learn in certain spaces; as the impact, the learning can run effectively.

Assessment Aspect

Evaluation of the learning process assessment is carried out using instruments in the form of questionnaires for the teacher, questionnaires for the student, and document checklists. The evaluation results on the learning aspect are quite good, which includes the application of cognitive, affective, and psychomotor assessment, assessment techniques, implementation of assessment, and follow-up assessment. In assessing the learning process, there are obstacles experienced by the teacher. The obstacles are the time of remedial implementation and enrichment that is not in line with the schedule.

According to the interview with the teacher, the obstacle caused by the learning time that should use for science learning was cut off by the preparation of class IX for the national examination. Then, it makes students in grade VII and VIII goes school alternately, and impacts to disrupted the learning activities, including science learning.

The evaluation results on the learning aspect in the school applying Curriculum 2006 are quite consistent in line with the guidelines, which include the application of cognitive, affective, and psychomotor assessment, assessment techniques, implementation of assessment, and follow-up assessment. The score obtained from the questionnaire for the teacher was 51.81 with a quite appropriate category, the score of the questionnaire for students was 51.19 with a quite appropriate category, and the score of the document checklist was 43.08 with an inappropriate category. The results of the three instruments showed that there are differences in the results of tendencies; therefore, the three scores are composite and obtained the score of 48.51 with an adequate appropriate category or it might state that the assessment of the science learning process is consistent in line with the learning guidelines. These results are a bit contrary to Natital (2009) which revealed that learning assessment included in a very good category with a score of 82.44%.

Evaluation aspects of science learning assessment in the school applying Curriculum 2013 used instruments in the form of questionnaires for the teacher, questionnaires for the student, and document checklists. The scores obtained from the questionnaire for the teacher were 41.86 with less appropriate

categories, the scores obtained from the questionnaire for students were 48.56 with quite appropriate categories, and the scores obtained from the document checklist were 45.04 with a quite appropriate category. The three results indicate that there are differences in tendencies so that the three scores compiled and obtained a score of 44.91 with a quite appropriate category. The scores indicated that there is a need for improvement in the assessment aspects of science learning, and in line with the research by Maryani & Martaningsih (2017), stated that the ability of teachers to prepare authentic assessments still needs to be improved.

In its implementation, the assessment is carried out by the teacher during the learning process. Then, at the end of the learning, the teacher gives project assignments and daily tests as an assessment of students' understanding of the material that has taught by the teacher.

Based on interviews with teachers in a school, the assessments that based on the curriculum 2013 have simplified. In practice, the teacher does not have to give an assessment to each student during the learning, but the teacher can give special notes to students who are considered lacking in learning activities. This makes easy the teacher in performing an assessment, and also the learning implementation might also not disturbed.

CONCLUSION

Based on the research results, concluded that the evaluation of the science learning implementation using curriculum2006 and curriculum 2013 in Gunungkidul district, are: (1) the conformability of science learning planning using curriculum 2006 in Gunungkidul district with educational process standards included in the quite appropriate category, meanwhile the planning of science learning using curriculum 2013 included in the appropriate category, (2) the conformability of the science learning implementation using curriculum2006 and curriculum 2013 in Gunungkidul district with educational process standards included in quite appropriate category, and (3) the conformability of science learning assessment using curriculum2006 and curriculum 2013 in Gunungkidul district with the standard of education process included in quite appropriate category.

Based on the conclusions, this article propose suggestions as follows: (1) science teachers in Gunungkidul Regency are hopefully able to adjust the learning tools with the government regulation in order all schools have the same format, (2) science teachers in Gunungkidul Regency should carry the science learning according to designed planning, so that there is a match between the planning and implementation of science learning, and (3) the school of curriculum division should provide understanding and motivation to teachers to improve the performance of learning implementation, then the teaching and learning process can run effectively in line with the standards of the educational process.

REFERENCES

- Anwar, R. (2014). Hal-hal yang mendasari penerapan Kurikulum 2013. *Humaniora*, 5(1), 97. <http://doi.org/10.21512/humaniora.v5i1.2987>
- Ariyanti, D., & Kuswanto, H. (2014). Evaluasi guru dalam pembelajaran sains pada implementasi kurikulum 2013. In *Seminar Nasional Fisika dan Pendidikan Fisika*. Surakarta: Universitas Sebelas Maret.
- Collette, A. T., & Chiappetta, E. L. (1984). *Science instruction in the middle and secondary schools*. New York, NY: Times Mirror/Mosby College Pub. Retrieved from <https://eric.ed.gov/?id=ED249054>
- Gullo, D. F. (2005). *Understanding assesment and evaluation in early childhood education*. New York, NY: Teachers College Press.
- Kemdikbud. Peraturan Menteri Pendidikan Dan Kebudayaan RI Nomor 68, Tahun 2013, Tentang Kerangka Dasar Dan Struktur Kurikulum Sekolah Menengah Pertama/Madrasah Tsanawiyah (2013). Indonesia.
- Kemdiknas. Peraturan Menteri Pendidikan Nasional RI Nomor 22, Tahun 2006, tentang Standar Isi untuk Satuan Pendidikan Dasar dan Menengah (2006).
- Kulsum, U. (1994, October 13). *Undang - undang sisdiknas no 20 tahun 2003 tentang kurikulum pendidikan diniyah formal dan implementasinya di pondok pesantren Nurul Qodim Kalikajar kecamatan Paiton kabupaten Probolinggo*. Retrieved from <http://digilib.uinsby.ac.id/16422/>

- Majid, A., & Rochman, C. (2014). *Pendekatan ilmiah dalam implementasi Kurikulum 2013*. Bandung: Rosda Karya.
- Marwanto, A. (2008). Kesesuaian pola mengajar guru SMK di DIY dengan tuntutan pembelajaran dalam penerapan kurikulum tingkat satuan pendidikan (KTSP). *Jurnal Pendidikan Teknologi Dan Kejuruan*, 17(1), 23–38. <http://doi.org/10.21831/JPTK.V17I1.7649>
- Maryani, I., & Fatmawati, L. (2015). *Pendekatan scientific dalam pembelajaran di sekolah dasar: teori dan praktik*. Yogyakarta: Deepublish.
- Maryani, I., & Martaningsih, S. T. (2017). Primary school teachers' perception about curriculum 2013 assessment system. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 7(2), 153. <http://doi.org/10.24246/j.scholaria.2017.v7.i2.p153-164>
- Natital, J. (2009). *Evaluasi penerapan Kurikulum 2006 pada SMA Negeri di Kota Ambon*. Universitas Negeri Yogyakarta.
- Sarjono, H & Julianita, W. (2011). *SPSS vs LISREL sebuah pengantar, aplikasi untuk riset*. Jakarta: Salemba Humanika.
- Stufflebeam, D. L., Madaus, G. F., & Kellaghan, T. (2002). *Evaluation models viewpoints on educational and human services evaluation*. Boston, MA: Kluwer, Njihoff Publishing.
- Sudarmini, N. W., Suarni, N. K., & Lasmana, I. W. (2014). Studi evaluatif implementasi pendekatan paikem pada sekolah dasar di kecamatan payangan. *Jurnal Penelitian Dan Evaluasi Pendidikan Indonesia*, 4(0). Retrieved from http://119.252.161.254/e-journal/index.php/jurnal_ep/article/view/1220
- Sund, R. B., & Trowbridge., L. W. (1973). *Teaching science by inquiry in the secondary school*. Columbus, OH: Merrill Publishing Company.
- Supianto, A., Matsum, J. H., & Rosyid, R. (2014). Persepsi guru IPS terhadap Kurikulum 2013 (Studi kasus pada SMP Negeri 10 Pontianak). *Jurnal Pendidikan Dan Pembelajaran*, 3(8). Retrieved from <http://jurnal.untan.ac.id/index.php/jpdpb/article/view/6671>
- Tillery, B. W., Enger, E. D., & Ross., F. C. (2004). *Integrated science*. McGraw-Hill.
- Wang, Y. (2011). Inquiry-Based Science Instruction and performance literacy for students who are deaf or hard of hearing. *American Annals of the Deaf*, 156, 239–254. <http://doi.org/10.2307/26235154>
- Wenno, I. H. (2010). Pengembangan model modul IPA berbasis problem solving method berdasarkan karakteristik siswa dalam pembelajaran di SMP/MTs. *Cakrawala Pendidikan*, 2(2).