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Improving Science Learning Achievement and Creativity through Surrounding Natural Environment Approach

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Abstract

The research aimed to improve the learning process on science competence, improve the students' creativity, and improve the students' science learning achievement of grade V SD Negeri Karangreja 01, Cipari district, Cilacap regency through surrounding natural environment approach. The research was Classroom Action Research. The study was conducted in two cycles. This research was conducted in SDN Karangreja 01 Cipari, Cilacap from November to December 2014. The objects were all students of grade V consisting of 17 students. The data were collected using observation, paper and pencil tests, interviews, and documentation. The results showed the implementation of surrounding natural environment approach in science instruction could improve the students' creativity and science learning achievement of grade V. The improvement of learning process indicated through the mean score at cycle I and II which are 13 and 14 respectively. The improvement of students' creativity and learning achievement was indicated through the mean score of creativity test, the mean score of learning achievement on the aspects of affective, psychomotor, and cognitive at cycle I and cycle II. The improvement of creativity test score at cycle I and II were 11.56 and 13.31 respectively. The improvement of affective score at cycle I and II were 2.99 and 3.58 respectively. The improvement of psychomotor score at cycle I and II were 2.50 and 3.42 respectively. The improvement of cognitive score at cycle I and II were 75.36 and 86 respectively.

Keywords: creativity, learning achievement, surrounding natural environment approach

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Introduction

The success of a nation in the development depends on the ability to improve the quality of human resources. The quality of human resources depends on education. Education is a process to influence the learners to adapt to their environment. Schools as formal educational institutions systematically plan various educational environments that provide opportunities to learners in conducting various learning activities. The opportunity may lead the development of learners to achieve the goals. The environment is organized and arranged in a curriculum that implementat in the learning process.

Curriculum is one of the elements that contribute to realize the development process of learner quality. Currently, curriculum in Indonesia is Curriculum 2013 (K13). According to Permendikbud RI (Regulation of Education and Culture Board of Indonesian Republic) No. 65 of 2013 on Standard Process of Primary and Secondary Education, specifically the learning at the level of primary school uses integrative thematic (Menteri Pendidikan dan Kebudayaan Republik Indonesia, 2013). Integrative thematic is integrating some subjects into a topic/theme in order the students learn in an integrated way. In the implementation, teacher must use a scientific approach in the learning process.

Based on Permendikbud (Regulation of Education and Culture Board) No. 81 A Year 2013, the learning scientific approach includes of observing, questionning, reasoning, experimenting, processing, displaying, concluding, and communicating. The scientific approach is almost identical to the process skills of science, as Goldston & Downey (2013, p. 130), "science process skills fall into two broad categories. The first category, known as the basic science

prcsess skills, includes common everyday skills such as observing, inferring, predicting, estimating, classifying, and measuring. The second category, entitled integrated process skills, builds on the basic process skills".

According to Goldston & Downey (2013, p. 130), one of the categories of the process skill in IPA (science) is common everyday skills such as observing, inferring, predicting, estimating, classifying, and measuring. In the practice, the categories are not always consecutive because every subject has different characteristic, therefore to explain it requires examples.

Students in the learning process are required to master the competencies and learning goal, includes knowledge, attitude, and skills. Competence and learning goal have contained in the syllabus that made by each educational unit based on the content standards of government regulation. The pattern of current education, students is centre-point toward learning process and subject through learning experience. Teachers play role as facilitators and motivators, assist the students to learn, and create well learning conditions in order the students obtain appropriate learning experience based on needs and abilities. In the last, the learning process is active and meaningful according to the principle of integrative thematic learning (Prihatin, 2008, p. 62).

Integrative thematic learning is a learning that integrates the various competencies of the various subjects. The overall competence of the various subjects is integrated into the various themes. The theme acts as combining several contents in the learning activity. The subjects in the integrated learning are PPKn (Civil Education), Bahasa Indonesia (Indonesian Language), IPS (Social Science), IPA (Science), Mathematics, Cultural Art and Workshop, and Physical Education of Sport and Health.

Based on the standard of contents in Curriculum 2013, it involves the competence for Natural Science (IPA) in grade V (five) including asking the question of what, why, and how about the surrounding natural, presenting data of observation result of surroundings natural in the tables or graph, and making conclusions and simply report the observation results of natural both oral and writing. Development of Curriculum 2013 based on the competence is needed to lead the learners become qualified human beings who capable and proactive to answer the challenges of changing times, believe to God the Almighty, have noble character, healthy, knowledgeable, skilled, creative, independent, and democratic citizen and responsible. The creativity is able to learn and apply in anywhere, and then the education should lead to strength the skills and creative thinking. According to Santrock (2009, p. 328), "creative thinking is the ability to think in novel and unusual ways and to come up with unique solutions to problems".

The reality in SD Negeri (State Elementary School) Karangreja 01 Cipari District, Cilacap Regency, Central Java province; the learning activities is not fully accordance with the contents standard of the Curriculum 2013. Based on observation conducted at the beginning of September 2014, there are a number of students who have not shown the indicators of creative thinking such as authenticity, flexibility, fluency, and the detail of the learning activities of Science's content.

Creative Aspects in learning are often abandoned because the learning more emphasis on mastery of the material. The less of time and material is the main reason of teachers in abandon the creative aspect (Budiharti & Jailani, 2014, p. 29). Students have less opportunity to more active and creative in a pleasant atmosphere. Learning activity emphasizes only on teacher-centered activities, as the result, the students are not freely to express their creative ideas. Students have not able to express and lack confidence toward their originality idea, students have no flexibility initiative and free to express various problems in the class, students are not dare in answer question spontaneously and fluency, students are not able to explain clearly and in detail when teacher request to explain the learning material, otherwise the creative indicators is an integral part in the learning activities.

Learning that encourage the students' creativity is lead to divergent thinking by giving many possible answers in solving a problem. Divergent thinking is a foundation of creativity, Romero, Hyvonen, & Barbera (2012, p. 424) states, "divergent thinking provides the foundation for creative production, because it requires ideational searching without directional boundaries and is determined by fluency, flexibility and originality".

In science learning should encourage the students to express their ideas and arguments freely and without pressure, because by its situation, it will make the student comfortable and will not think their ideas and arguments are

wrong. It stated by Hadzigeorgiou, Fokialis, & Kabouropoulou (2012, p. 608), "encouraging creativity in the context of school science means encouraging the idea of generation in a non-threatening and critique-free environment."

Reality in the field, the science learning activity is less of direct learning experience activities. In other words, the variation method of teaching learning is still less. During learning activities, teachers mostly use lecturing and assignments method. Teachers are still as centers in learning activity. It shows that the teacher is merely a transfer of information. Whereas in science lesson of Curriculum 2013, students should encouraged to discover knowledge and transfer information. The most basic of learning is-the knowledge that comes from the teacher is not simply transferred to the students. Support to students is necessary to build knowledge in order student understand and apply the knowledge, solve problems, and discover something new.

Provide an ease, opportunity, and guidance to students in the learning process to discover their ideas and apply. As stated by Agranovich & Assaraf (2013, p. 56), "children have indicated teacher conduct in science class as an influential factor in developing their attitudes and their views about science in science and science in general". Students must be inventors of knowledge, not just as knowledge memorizers. Teachers should be facilitators and mentors for students.

Teachers play a role in learning activities. The role of teachers in science learning based on curriculum 2013 is providing both questions and tasks which containing problems, and need to solve by students. The process of problem solving may be through discussion or guiding of the teacher in order the students solve the problems. Osman (2012, p. 6) states that "teacher's role changes from one just presenting information to one of helping children to develop and use their own ideas". Teacher guidance is needed in order the students gain experience to solve a problem. The best student experience is through directly interaction with the surrounding environment.

In fact, the students of grade V of SD Negeri Karangreja 01 Cipari district, Cilacap regency are not invited to interact with the surrounding natural environment during the learning activities with the science content. And then, it make the students' understanding to the material became low and the achievement of students' learning especially in the science content has not reached the maximal competence. It based on the score of UAS (Final Exam) of science that obtained by students for consecutive three years are less than the Minimum Completeness Criteria (KKM) with a score of 70. Achievement of competence has not maximal, not only indicated by the low achievement of student knowledge, but also low of attitude and skills. These facts are seen from the students' activities during the learning activities.

The majority of students is not active involved to the learning activity. It is seen by the attitude of students who are less response to learning activities, students have no willingness to express curiosity by asking or responding, whereas the students' questions may use as a "ladder" (bridge) to reach the higher level of knowledge (Handika & Wangid, 2013, p. 86). Students in learning reflect the unexpected attitudes such as lack of interest in learning, lack of discipline in learning activities, and less respect to friends are seen by disturbing other students in group discussion activities, lack of collaboration to learn in a group, and have no responsibility in group activities.

The groups discussions seem to be less collaboration among the students, the tasks are not done according to the teacher's instruction. As the result, the aspect of the skilled student has not implement maximal when following the activities / observations, such as lack of skill in preparing tools and materials, organizing data and making reports from activities / observations, and communicate it to teachers and classmates.

The efforts at the students achieving toward the three aspects in learning, teachers must able to present learning activities that make students active and creative in discover and processing the knowledge. In order, the students able to build concept, improve the creativity, and achievement. It may conducted by teachers in learning activities through the Surrounding Natural Environment Approach (Pendekatan Lingkungan Alam Sekitar/PLAS).

The learning activities through the surrounding environment approach allow the students to learn deeply and contribute to the students' understanding of the material by giving opportunity to observe and examine directly from the real. For example is in the students understanding to the science material content in the theme 5 semester 1 competence

about knowing the plants, functions, and benefits for humans; students will more understand if through direct observation to the plant. Students will be more interest and motivate their creativity by providing the opportunity and facilitate them to learn in the surrounding environment directly, especially in the surrounding of the school environment.

Learning through the surrounding natural environment approach allows the students to think creative and emergence of creative attitude by conducting the experience of learning directly and real in the environment. Stan & Humberstone (2011, p. 255) argues that "the outdoor classroom should be an ideal environment for ensuring that opportunity, where creativity, challenge and excitement are perpetuated". The activities may stimulate the students' creativity in solving the problems when learning until able to conceptualize something.

Learning through the surrounding natural environment approach is certainly conducted outside the classroom because by studying outside the classroom, it may explore the students' skills and foster the creativity. As Wilson (2008, p. 82) states, "suitable environments in the out-of-doors are perhaps the most ideal environments for learning, in which they foster creativity and exploration and are appealing to children".

The surrounding environment of the school may develop as an interactive and vibrant learning place (Johnson & Duffek, 2008, p. 1). The surrounding natural environment of the school may also use as a natural laboratory because provide various types of natural elements both inanimate and living objects.

Natural laboratory is an unlimited source of learning. In natural laboratory, we can find various kinds of learning materials. By a variety of objects and living things, it may support to the learning process. Through learning outside the classroom, students will be more careful to observe various learning resources directly.

The surrounding environment in SD Negeri Karangreja 01 Cipari District, Cilacap Regency has supported environment for learning activities. Surrounding environment of the school, there are many species of plants that can use as the object of student observation, but it has not used properly. Therefore, it would be more meaningful if the teacher invites the students to study outside the classroom by using the surrounding environment in order to increase the students' knowledge and understanding about the materials.

Learning will be more meaningful and easier to understand by students when students experience the learning directly in the environment, because it can affect to the students' mental and intellectual development. It is explained by Osman (2012, p. 6), states "the provision of direct experience with objects and events around them through scientific process skills is undoubtedly essential to their mental and intellectual development". The kind of learning activities have been known by the teachers, but the kind of learning activities in the implementation still become theoretical knowledge that requires a concrete example in the field in order it can be imitated in practice.

Based on the problems of the classroom, this research is focused on foster the creativity and achievement of learning science competence to know the parts of plants, functions, and benefits for humans through the surrounding natural environment approach to students in grade V SD Negeri Karangreja 01 Cipari District, Cilacap regency, academic year 2014/2015. The formulation of the problem are: (1) how to improve the learning process on science competence to know the parts of plant, functions, and benefits for humans through the surrounding natural environment approach to students of grade V ?; (2) How is the effort to increase the students' creativity of the grade V on science competence to know the parts of plants, functions, and benefits for humans through the surrounding natural environment approach ?; (3) How is effort to improve students' achievement of grade V on science competence to know the parts of plant, functions, and benefits for human through the surrounding natural environment approach?.

This study aimed to: (1) Improving the learning process on science competence to know the parts of plants, functions, and benefits for humans through the surrounding natural environment approach to students of grade V; (2) Increasing the students' creativity of the grade V on science competence to know the parts of plants, functions, and benefits for humans; (3) Increasing the students' achievement of grade V through the surrounding natural environment approach on science competence to know the parts of plants, functions, and benefits for humans.

This research is expected to have benefits for students, teachers, and schools. For students,

learning activities through the surrounding natural environment approach provide a real experience directly and the learning process conducts with the real things of the students' surrounding environment. By its way, it will make the students active and creative to follow the learning activities in order able to improve the creativity and achievement of students' learning competence including of knowledge, attitude, and skills. For teachers, the research adds knowledge and insight to solve the science-learning problem in grade V, also add experience and skills to design classroom action research processes in order it can develop to solve the classroom problems and improve the learning process. For schools, this research is useful to foster the ability of teachers in designing, implementing, and evaluating the learning process.

Method

The research was Classroom Action Research (PTK). The research was conducted in two cycles. The research procedure was based on the research model by Kemmis and McTaggart which define as form of collective self-reflection research conducted by its participants in social situations to improve the quality of reasoning and fair education practice and social practice toward the practices and situations of the place. Each cycle consists of planning, implementation, observation, and reflection. Implementation conducted from November to December 2014. The research was conducted in grade V SD Negeri Karangreja 01 Cipari district, Cilacap regency, Central Java province. The subjects of the research were grade v of elementary school students and the total subjects were 17 students consisting of 7 female students and 10 male students.

In the early stages, researcher conducted test and observation to find out the condition of the class. The researcher also discussed the problems during the lesson.

Each cycle consists of two sessions of learning. In each of learning consists of compiling planning of learning, learning implementation according to RPP (Lesson Plan), observation as an effort to observe the learning implementation, and reflection as reference to design the next learning.

Data collection technique was observation with checklist instrument of science learning implementation through surrounding natural environment approach, compound scale for attitude and skill aspect. The test is written test for aspects of students' knowledge and creativity. The test is conducted at the end of each cycle. Interview is used to follow-up the student answers to find out the one of creative indicators which is detail (elaboration). Documentation is conducted by observe to various data of the research including photo during the learning activities.

The success criterias of class action research include of: the learning implementation through surrounding natural environment approach is in very good category, the improving of attitude aspects with the success criteria of 75-100% of students predicate of good and very good, the improving of skill aspects with the success criteria of 75-100% of students reached the optimum score of $\geq$ 2.67, the achievement of the completeness knowledge aspects with the success criteria of KKM (Minimum Completeness Criteria) $\geq$70 with the completeness of class $\geq$75%, there changes of students' creativity better with the success criteria if $\geq$75% of students reach the criteria of creative and very creative. The research implementation finished after all the success criterias are achieved.

The data were qualitative data and quantitative data. Qualitative data obtained from field notes and documentation. Then, it described based on the observed aspects such as description of the learning implementation through the surrounding natural environment approach, and the description of students' behavior related to aspects of attitude, skills, and creativity. Quantitative data obtained from written test and observation. Quantitative data is analyzed descriptive quantitatively by calculating the average of obtained score and percentage, then describing the data and making conclusions about each aspects and indicators based on the specified criteria.

Results and Discussions

Learning implementation through surrounding natural environment approach in the Science content learning of competence on recognize the parts of plants, functions, and benefits for human in grade V SD Negeri Karangreja 01 Cipari district Cilacap Regency conducted through 2 cycles that aim to improve the creativity and achievement of learning science. Preliminary activities by researcher before the research are; discover the initial conditions such as the learning implementation,

the students' condition before the implementation of action including analyzing the results of the evaluation, and creativity tests. In general, the data of research results of the learning implementation through surrounding natural environment approach during the cycle I to cycle II is presented in Table 1.

Table 1 show that from cycle to cycle there is an increase of the learning implementation through surrounding natural environment approach by the teacher. In cycle I, the average score is 13 with a success percentage of 93%. In cycle II, there is increase by an average score of 14 and the percentage of success reached 100%.

Table 1. Learning Implementation through the Surrounding Natural Environment Approach

Cycle	Average Score	Percentage	Criteria
I	13	93%	Very Good
II	14	100%	Very Good

The increase may achieve through preparation and implementation of learning through the surrounding natural environment approach that is implemented very well by the teacher according to the stages and steps of learning through the surrounding natural environment approach. Teachers are maximally plan and implement the learning by observing the important aspects of learning including designing the learning based on the material and availability of learning resources in the surrounding environment. As Ward, Roden, Hewlett, & Foreman (2008, p. 8) states, "teachers need to weave a carpet of provision of scinece for primary-age children where knowledge and understanding develop alongside scientific procedures, skills and attitudes towards and in science".

Students' creativity toward science content learning through surrounding natural environment approach increased. This increase are based on the results of student creativity test analysis before the action, cycle I until cycle II is presented in Table 2.

Table 2. The increase of Students' Creativity before the Action, Cycle I, Cycle II

Meeting	Average Score	% Category				
		Very Creative	Creative	Creative	Less Creative	Very Less Creative
Before Action	10	12	29	18	24	18
Cycle I	11,35	18	41	12	24	6
Cycle II	13	25	53	18	0	0

Table 2 shows that there is an increase in student creativity both the average score and percentage of each cycle. In the creativity test before the action, the average score was 10 with the percentage of creative and highly creative category students was 41%. In the cycle I, there is an increase in the average score of 11.35 with the percentage of creative and creative category students of 59%. In the cycle II, the average score increased to 13 with percentage of creative and highly creative category students was 82%.

Students' conditions before learning through the surrounding natural environment approach, students still have not shown their creativity in learning. It based on the less active of students during the learning, there are not many students who deliver question, and students are still hesitant to express ideas and arguments, only follow the teacher's instructions, and other friends. In the cycle I, students seem not hesitant to express their ideas and creative ideas, it based on the few number of student who ask questions. In cycle II, there are increase of students who ask questions, brave to express their ideas without worry to wrong, have their own initiative to express ideas without copying other friends' ideas, and fluent in explaining and more detailed the information.

The increasing is occured because teachers taught through surrounding natural environment approach by invite the students directly to conduct activities/observations toward the objects in the environment. Not only aims to improve the students' understanding and knowledge, but also to make and create the students creativity. Appropriate to Sternberg's argument (Sigelman & Rider, 2012, p. 295) "the ingredient for creativity includes the intellectual skills that make up intelligence, the knowledge of the field in which the creativity might emerge, the mind that is open to of thinking, personality characteristics that include calculateed risk taking and willingness to pursue and overcome obstacles, motivation, and environment that is supportive of creative ideas." It is means; there are things to create students' creativity-field in which might emerge the creativity. By learning directly in the surrounding environment, it may support students to arise ideas or new ideas as a representation of creativity.

During the learning, students conduct activities/observations toward plants and objects in the surrounding environment of the school. By the activities/observations, it may encourage

the students' curiousity about the object in order students are possible to be creative. Kail & Cavanaugh (2013, p. 223) states, "youngsters are more likely to be creative when their home and school environments value nonconformity and encourage children to be curious." Students' curiosity is same as with the sense of curiosity that includes in the internal factors and affect to students' creativity. Appropriate to Naim (2011, p. 229) including in internal factors are cognitive aspects (intelligence and enriching the thinking materials which are skills and experience), and aspects of personality (curiosity, self-esteem, self-confidence, independent, risk-taking, and assertiveness).

The role of teachers in improving the students' creativity in learning is very important. Teachers guide the students not only providing learning materials and information, but also help the students to develop their ideas. As stated by Osman (2012, p. 6), "teacher's role changes from one just presenting information to one of helping children to develop and use their own ideas". Therefore, learning through the surrounding natural environment approach is very important to improve the students' creativity because creativity is not merely an innate talent but it may arise as a result of the interaction between person's creative potential and learning process and experience of the environment (Asrori, 2007, p. 63).

Student learning achievement of attitude aspect on science learning through surrounding natural environment approach increased during cycle I to cycle II; is presented in Table 3.

Table 3. The increasing of students' achievement of attitude aspect of cycle I to Cycle II

Cycle	Average Score	Percentage Completion Score
I	2,99	71%
II	3,58	100%

Table 3 shows that the average score of cycle I is 2.99 with the percentage 71% of learning completeness. In the cycle II, the score increased by an average score of 3.58 with the percentage 100% of learning completeness.

In the cycle I, students seem able to implement the attitude aspects in the learning although it is not maximal. It is based on the students' condition that they are ready in the class before the learning; most of the students have prepared their stationery (pen, pencil, eraser, ect), printed book, and tools/things of learning.

Students have interest and enthusiasm toward the learning although their enthusiasm is low; students are able to observe in groups, disciplines, and responsibilities in groups. The student co-operation in the group is natural. There are some students who do the task well, report the data according to the observation. In contrast, there are some students who are still hesitant to ask or give a response toward the teacher's explanation or in the discussion session. Students are able to communicate in receiving and expressing their opinions if there is teacher instruction.

In cycle II, the assessment of students' attitude have shown the improvement when compared to cycle I, most of students continue to show their excellent cooperative attitude in their group, almost all students are interested to do activities/observations that indicated by the students' interest do the activity / observation, and enthusiasm to follow the learning, the tolerance atiitude is good that indicated by the mutual help and not interfere with each other during the learning, show the independent's attitude which means they have initiative to do activities / observations well and moreover they are able to help friends during in groups, most students show their discipline in following activities / observations that indicated by orderly students during activities / observations and are also not interfere other students, the students show their responsible in the group that indicated do the task according to the job desk by the group leader, also help each other in the activities / observations.

The improvement may achieve because the teacher has made well preparations in presenting the learning subject material through the surrounding natural environment approach, moreover learning through the surrounding natural environment approach able to improve the students' attitudes toward science learning, appropriate to Holmes (2011, p. 227) states that "school and college can improve attitudes toward school science and stimulate further learning".

Students' learning achievement of skill aspect in science learning through the surrounding natural environment approach has increased during cycle I until cycle II, it is presented in Table 4.

Table 4. The increasing of students' achievement of skill aspects of cycle I to Cycle II

Cycle	Average Score	Percentage Completion Score
I	2,50	65%
II	3,42	100%

Table 4 shows the average score is 2.50 with a percentage of learning completion score of 65% in the cycle I. In the cycle II, the score increased by average score of 3.42 and the percentage of learning completion reached 100%.

Generally, the students have shown their quite well skills aspects in cycle I. Most of students have been more skilled in preparing the tools and materials completely although it is not accordance with the guidelines, and then the students can perform activities/observations without disturbing other groups. Most of students are skilled to observe, it is indicated by the students' orderly during observing the objects of plants in the surrounding school environment, although there are still some not careful (do careless). The aspects of recording and organizing the observation data, most of students have able to write it systematically and neatly, but there are some not careful. Students seem diligent and skilled under teacher guidance; students look active, and creative in working and discussing.

In cycle II, the students have more skilled in preparing tools and materials without teacher instruction. Students are very diligent in working and doing activities/observations. Students are also able to communicate the results of activities / observations in coherent, clear, and communicative language. Students are skilled in recording and organizing the observation data and making conclusions, although they still require teacher guidance. Also in the ability of making observation report, there is an improvement to report correctly, simply, and easy to understand.

The improving is caused by learning through surrounding Natural Environment Approach involving the students directly in activities/observations learning the objects, which are plants and objects from plants in the surrounding environment of the school. This is supported by argument of Torquati, Gabriel, Jones-Branch, & Leeper-Miller (2010, p. 99) argue that "nature provides opportunities and issues involved in science through questioning, observation, prediction, and experimentation". Appropriate to Broda (2007, p. 98), states that "teaching with an outdoor twist may provide the enthusiasm and engagement that helps students see the skills of observing, describing, classifying, organizing, predicting, and evaluating in new ways".

The learning achievement of the knowledge aspect in each cycle has increased from the evaluation before the action, cycle I to cycle II. The increase is presented in Table 5.

Table 5. The increasing of students' achievement of knowledge aspects before action, cycle I to Cycle II

Meeting	**Average Score**	**Percentage Completion Score**
Before action	70,29	59%
Cycle I	75,15	71%
Cycle II	84,79	100%

Table 5 shows that before the action, the average score is 70.43 with the percentage of learning completion score of 59%. In cycle I, the average score is 75.36 with the percentage of learning completion score of 71%. In cycle II, the score increased by average score of 84.79 and the percentage of learning completion reached 100%.

The improving is caused by learning through surrounding Natural Environment Approach involving the students directly in the environment where fact or phenomenon of nature is located. The students will more understand about object and increase the concept understanding. It is appropriate to Golob's argument, states that "the use of outdoor learning in learning content environments proved efficient for achieving cognitive goals and actions in pupils" (Golob, 2011).

The research results showed that the students' responses toward the science learning through surrounding Natural Environment Approach increased from cycle to cycle. By the approach, students' creativity and student learning achievement able to increase because the approach create the stronger of students' retention to the learning materials due to the teacher does not teach material by way of memorization, but students obtained material through activities / observations directly to the learning object in the surrounding natural environment.

Conclusion

Learning through surrounding Natural Environment Approach on the students of grade

V SD Negeri Karangreja 01 Cipari District, Cilacap regency, can improve the students' creativity and student achievement in learning science competence to know the parts of plants, functions, and benefits for humans. It is because the teacher has implemented the learning process through surrounding Natural Environment Approach dynamically and participatively by bringing students to learn directly in the surrounding environment of the school.

Learning through surrounding Natural Environment Approach able to improve the students' creativity in learning science competence and it is indicated by increasing of the average score of creativity test achievement, which are; the average score of cycle I is 11.56 with the percentage of students creative and very creative category is 59% and the average score of the cycle II is 13 with the percentage of students creative and very creative category is 82%.

Learning through surrounding Natural Environment Approach in grade V students that is able to improve the students' learning achievement on science learning competence is indicated by increasing the average score of learning achievement in each cycle. The increasing of learning achievement of attitude aspects on cycle I, the average score is 2.99 with 71% of learning completion, and then, on cycle II, the average score is 3.58 with 100% of learning completion. In skill aspect on cycle I, the average score is 2.50 with 65% learning completion, and then, on cycle II the average score is 3.42 with 100% of learning completion. In knowledge aspect on cycle I, the average score is 75.15 with 71% of learning completion, and then, cycle II, the average score is 84.79 with 100% learning completion.

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