Increasing Creativity of the 4th Grade Students at SDN Gebangan Using PjBL Model with TaRL Approach

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Abstract

Creativity is an important aspect for students that need to be developed in learning. Creativity can help students in developing the ability to think critically, innovatively and problem solving which is essential in facing challenges in the era of globalization. However, recent research has shown a decrease in the level of student creativity at various levels of education. PjBL or Project Based Learning model is a learning model that emphasizes projects or collaborative assignments that are relevant to students' real lives. Meanwhile, the Teaching at The Right Level (TaRL) approach is an approach in which learning is adjusted to the level of understanding of students. This study aims to explore the use of the Project Based Learning (PjBL) model with the Teaching at The Right Level (TaRL) approach in increasing the creativity of fourth grade students. In this study, students will be involved in real projects that will enable them to use critical thinking, collaboration and innovation skills in solving problems. In addition, the TaRL approach will ensure that students gain a solid foundational understanding before moving on to more complex concepts which will provide them with an important foundation from which to develop their creativity. The research method used was classroom action research involving fourth grade students at SD Negeri Gebangan as the main participants. Data will be collected through class observation and creativity tests. The results of this study are expected to provide concrete evidence about the effectiveness of using the PjBL model with the TaRL approach in increasing the creativity of fourth grade students at SD Negeri Gebangan.

Keywords: Creativity, PjBL, TaRL

INTRODUCTION

Creativity is one of the important aspects that must be developed in the world of education. Creativity refers to new ideas or ideas that emerge to create a real masterpiece. Creative passion according to Golden in Idat 2015 is a strong and encouraging desire to involve oneself in a creative endeavor such as writing, composing music, making pottery, photography, or digging and solving problems faced effectively and ethically. Creative passion is a driving force that drives oneself to immerse oneself in a continuous creative journey. When the individual is in that state, the creative passion will reflect all the major circuits of the creative endeavors of thoughts, feelings, and actions. Supriadi, in Idat: 2015 defines creativity as a person's ability to give birth to

something new, both in the form of ideas and real work, which is relatively different from what has existed before. Creativity relates to new things that can be created or created using pre-existing methods or methods. This is in line with the opinion of Titu, M.A (2015) which states that creativity is the ability of students to create new things in their learning either in the form of the ability to develop formation abilities obtained from teachers in the process of teaching and learning knowledge so that they can make new combinations in their learning. According to Munandar (2012), creativity is the ability to create something new, as the ability to provide new ideas that can be applied in solving problems, or as the ability to see new relationships between pre-existing elements. Meanwhile, according to Ghufron and Risnawita (2011), creativity is a reliable element of human resource power to drive human progress in exploring, developing and making new discoveries in the field of science and technology, as well as in all areas of human endeavor. In other words, creativity can be interpreted as the ability to create something new based on ideas or ideas for solving a problem in the field of science and technology as well as all areas of human endeavor. Many students actually have a high level of creativity, but they cannot develop this potential. This causes the low creativity they have.

If in the learning process, students are faced with a supportive learning environment, it is likely that the creativity that exists within them will emerge because of a strong motivation to develop. Creativity can help students develop the ability to think critically, innovatively and problem solving which are essential in facing challenges in the era of globalization. However, in several studies in recent years, it has been shown that there is a decrease in student creativity at various levels of education, one of the reasons being that the current learning process is still very monotonous. Referring to the results of research by UPI Campus Purwakarta students from 2012 to 2015 presented in their thesis, in the preliminary study, they found that the school was very used to teaching the lecture method, so students tended to feel monotonous and uncreative (Idat, M: 2015). The use of inappropriate learning models and approaches can lead to low levels of student creativity because students are unable to relate what they are learning and how this knowledge will be used (Titu, M. A: 2015).

The learning process must provide a pleasant atmosphere and adjust to the level of ability of students so that they can be motivated to participate in the learning process. Good learning is learning that activates all students to participate in the learning process, so that all students can express their ideas and ideas to create a work or innovation from the learning they have obtained. Of course, in this case the teacher's role in determining the appropriate learning model and approach is an effective effort to increase student creativity. With the increased creativity that students have, they will easily express their ideas and ideas to develop learning concepts they can to solve a problem or to create a work based on the theory or concept they have learned.

In order for learning to be fun and student-centered which has an impact on increasing student creativity, the effort that can be made by the teacher is to use appropriate

learning models and approaches. According to Surya, et al (2018) in Hekmah, N (2022) states that PjBL is an innovative learning activity centered on students and teachers as motivators and facilitators and students work autonomously. The Project Based Learning (PjBL) model is an effort that can be applied by educators to increase student creativity. According to Daryanto and Raharjo (2012), Project Based Learning (PjBL) is a learning model that uses problems as a basis for gathering and integrating new knowledge based on real experiences and activities. This learning model is designed to be used on complex problems that students need to investigate and understand. Meanwhile, according to Fathurrohman (2016) argues that project-based learning is a project- or activity-based learning model in order to achieve attitude, knowledge and skill competencies. This learning besides students understanding something but also can produce products that are meaningful and useful. Saefudin (2014) argues that project-based learning is a project-based learning method that focuses on contextual problems that students may experience directly, in this learning it trains students to think critically and is able to increase creativity through the development of a product or service. In the Project Based Learning learning model, students are required to produce a product or work which is an interpretation of the concept of the subject matter they have learned. Mulyasa (2014) explains the notion of Project Based Learning or abbreviated as PjBL is a learning model that has the goal of guiding students through a collaborative project that integrates various subjects or curriculum materials and provides students with opportunities to explore material using various meaningful ways for themselves, and experiment with collaborative. Satoto Endar Nayono, et al., (2013) stated that PjBL is an innovative contextual learning model through complex activities. Project Based Learning (PjBL) learning is designed for complex problems where students carry out investigative activities to understand, emphasize learning with long activities, then the assignments given are multidisciplinary, and product oriented. Meanwhile, Isriani (2015) explained simply about project-based learning, namely a learning model that provides opportunities for teachers to manage learning in class by involving project work. Based on the explanation regarding the Project Based Learning (PjBL) learning model put forward by the experts above, it can be concluded that Project Based Learning or abbreviated as PjBL is a project-based learning model that enables students to think critically and creatively in developing a product, both goods and services. . In addition, PjBL trains students in developing skills in carrying out investigative activities to solve complex problems that are product oriented.

In addition to using the right learning model, learning must also be adjusted to the level of student ability so that all students can actively participate in the learning process. According to the Ministry of Education and Culture, learning according to the stage of student learning achievement (teaching at the right level) is a learning approach that focuses on student learning readiness, not at the grade level. In this case students in the same developmental phase may have different levels of understanding and readiness. Therefore, in this learning model, learning methods and materials are varied based on the level of understanding and readiness of students. Phases or levels of development

are learning outcomes that must be achieved by students, which are adapted to their characteristics, potential, and needs. According to Cahyono, S. D (2022), Teaching at the right level (TaRL) is a learning approach that does not refer to the class level, but rather refers to the ability level of students. This is what makes TaRL different from the usual approach. Teaching at the right level (TaRL) can be the answer to the problem of understanding gaps that have been occurring in the classroom. The stages in the implementation of learning and the first assessment are the planning stage. In the planning stage the teacher prepares a lesson plan, which includes a formative assessment plan to be carried out at the beginning of the lesson and a summative assessment at the end of the lesson. The second stage is the early learning assessment (diagnostic assessment). The initial assessment aims to assess the readiness of each student to learn the material that has been designed. Thus, the teacher can group students based on the same level of readiness. The third stage is the learning stage. During the learning process, the teacher will conduct formative assessments periodically. At the end of the learning process, the teacher will conduct a summative assessment as a process of evaluating the achievement of learning objectives. This assessment can also be used as an initial assessment in the next lesson. The progress of student learning outcomes can be done through the results of learning evaluations or assessments that have been implemented. Students who have not achieved learning outcomes will receive assistance to achieve learning outcomes. In other words, Teaching at The Right Level is teaching that is adjusted to the level of students' ability to achieve learning outcomes. Through the results of a summative assessment at the end of learning, the teacher can determine whether students have achieved learning outcomes with an increase in summative test results at the end of learning. Cahyono, D.S (2022) also revealed that teaching using the TaRL approach is grouped based on developmental phases or according to the ability level of the same students. This refers to learning outcomes which are of course adapted to the characteristics, potential, needs of their students. Likewise with the learning outcomes, also determined based on the evaluation of learning in accordance with the phase/level. Students who have not achieved learning outcomes in their phase, will receive assistance from educators to be able to achieve learning outcomes.

Based on the problems encountered in the fourth grade students at SD Negeri Gebangan namely the low creativity of students, the researchers applied learning models and approaches that could construct students' understanding and skills through the preparation of products both goods and services so that student creativity could increase while still paying attention to student ability levels. Project Based Learning with the Teaching at The Right Level Approach will help the teacher to manage the class and make the teacher's role as a motivator as well as a facilitator for students during the implementation of the learning process by involving project work and adjusted to the level of student understanding so that student creativity will increase.

METHOD

This research is a Classroom Action Research (CAR). CAR is a research method that is carried out in a classroom context. CAR aims to improve and enhance the learning process and student learning outcomes through cycles of planning, action, observation and reflection. Data collection techniques that used are observation and test. Observation was made by direct observation of student creativity and ongoing learning activities using the Project Based Learning model with the Teaching at The Right Level approach. Subjects who were the main participants in the research observed were fourth grade students of SD Negeri Gebangan with an observational aspect, namely the level of creativity of students in participating in Indonesian language lessons. This observation was made to find out whether the application of the Project Based Learning model with the Teaching at The Right Level approach can increase student creativity. In addition, the data collection techniques also use product results test produced by students at the end of each cycle. The test used is a written test in the form of narrative text writing skills using conjunctions. The research instrument used was an observation sheet containing student activities during the learning process to see the level of creativity in each student.

FINDINGS AND DISCUSSION

The results of the research data were obtained from the findings of observations and the results of products that students had made after the action was carried out. The results of the research and discussion consist of two cycles in which each cycle describes several aspects, which include: Learning Planning, Learning Implementation which consists of preliminary activities, core activities, and closing activities, observations of student creativity, and reflection. This research was conducted in two cycles, where each cycle required one meeting. The data studied was an increase in the creativity of the fourth grade students at SDN Gebangan, Pengasih, Kulon Progo. In the observation stage the researcher prepared an instrument in the form of an observation sheet which included an assessment of indicators or aspects of the level of student creativity.

Table 1 Student Creativity Level Observation Sheet

No.	Indicator / Aspect	Score			
		1	2	3	4
1	Mendengarkan penjelasan guru				
2	Menjawab pertanyaan guru				
3	Mengajukan pertanyaan				
4	Memiliki motivasi yang tinggi				
5	Antusias dalam pembelajaran				
6	Berperan aktif dalam diskusi kelompok				
7	Memberikan ide dan gagasan dalam diskusi				
8	Memiliki daya imajinasi yang tinggi				
9	Mempunyai dan menghargai keindahan				
10	Menghargai waktu				

Information: 1 = not visible 2 = quite visible 3 = visible 4 = very visible

Through the observations made, the results obtained from the level of student creativity in cycles I and II showed an increase in the level of student creativity in each indicator / aspect of the level of student creativity. Observation made by researchers directly during the learning process takes place.

Table 2 Percentage of Increased Student Creativity Score

Indicator / Aspect	Cycle I	Cycle II	Increasing Percentage (%)
1	49	68	26
2	45	62	24
3	47	62	21
4	49	63	19
5	51	61	14
6	49	62	18
7	49	60	15
8	47	58	15
9	51	66	21
10	47	62	21

Total	484	624	19

Based on the table of results of calculating the percentage of student creativity, it shows that the use of the PjBL learning model with the TaRL approach can increase the level of student creativity as seen from the increase in the percentage in each indicator / aspect of student creativity. To strengthen the observation results, the product assessment results produced by students in cycles I and II obtained through the assessment rubric are also calculated.

Table 3 Student Product Assessment Rubric

No.	**Indicator / Aspect**	**Score**			
		1	**2**	**3**	**4**
1	Kesesuaian cerita dengan materi				
2	Alur cerita berurutan				
3	Penggunaan konjungsi				
4.	Ketepatan waktu				
5	Estetika / keindahan				

Information: 1 = not visible 2 = quite visible 3 = visible 4 = very visible

From the results of the calculation of the assessment rubric for a number of 18 of the fourth grade students at SD Negeri Gebangan through the product made, namely narrative stories with the use of conjunctions in Indonesian subjects also showed an increase of 14% from cycles I and II.

Table 4 Comparison of Student Product Scores Cycles I and II

Indicator / Aspect	Cycle I	Cycle II	Increasing percentage (%)
1	57	64	10
2	68	71	4
3	55	64	13
4	36	59	32
5	55	62	10
Total	271	320	14

To analyze the effectiveness of the observations made to determine the level of student creativity, it was analyzed using N-Gain analysis, with the acquisition category of N-

Gain g> 0.70 (high), 0.30 ≥ g ≤0.70 (medium), and g <0 ,30 (Siswanto; 2018 in Ridha, M. R., Zuhdi, M., & Ayub, S. (2022)). While the categories of interpretation are <40 (not effective), 40-55 (less effective), 56-57 (quite effective) and >76 (effective).

Then it is analyzed by the formula:

$$\boldsymbol{N - gain = \frac{Spost - Spre}{Smax - Spre}}$$

Information:
S$post$ = $postest$ score
Spre = $pretest$ score
Smax = $maximum$ score

Table 5 Creativity Effectiveness Level Students Using PjBL model and TaRL Approach

Value Acquisition	Cycle I	Cycle II	Post-Pre	Ideal score (100-Pre)	N-Gain Score	N-Gain Score (%)
Amount	1210	1560	350	590	0.59	1126.21
Average	67.22	86.67	19.44	32.78	0.63	62.57

From the analysis using the N-Gain Score formula, it is obtained that the average N-Gain value is 0.63 indicating that the level of student creativity is at the moderate level with a fairly effective category with a presentation of an N-Gain value of 62.57%. Through the stages of the learning implementation process using the PjBL model with the TaRL approach, students are visible and actively involved and enthusiastic in learning. The learning process becomes more fun for students because it can channel creativity in activities and products produced during the learning process.

CONCLUSION

Through the PjBL model students are directly involved in real projects that encourage active involvement, collaboration and problem solving. The TaRL approach ensures that the learning process is adapted to the level of ability of students so that they get a strong foundation for developing their creativity. The creativity of the fourth grade students at SD Negeri Gebangan can increase through the Project Based Learning Model with a Teaching at The Right Level Approach as evidenced by an increase in the results of observations of creativity and product value produced in cycles I and II. Implementation of this learning model and approach can be a recommendation for educators and policymakers in an effort to improve the quality of learning and develop students' creative potential.

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