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Research Article

Implementation Teaching at the Right Level (TaRL) Approach to Improve Learning Outcomes of X IPA 2 SMAN 2 Labuapi

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Abstract

Learning by using an approach that is in accordance with student characteristics will greatly affect student learning outcomes, so an approach that suits the learning needs and abilities of students is needed. One approach that can be used by considering the ability level of students is the TaRL (Teaching at the Right Level) Approach. TaRL is a learning approach that does not refer to the class level, but refers to the ability level of students. TaRL can be the answer to the problem of the ability gap that has been happening in the classroom. Teachers must know how the level of students' abilities so that they can provide appropriate learning based on these abilities. Thus, knowledge becomes easier for students to understand so that learning outcomes will improve. This study aims to improve the learning outcomes of students in class X IPA 2 by applying the TaRL approach. This research method is a class action research with the stages of planning, implementation, observation, and reflection. Data analysis techniques in this study used qualitative and quantitative analysis. The research results of the application of TaRL in cycle 1 reached 70.00, from the reflection data of cycle I, additional peer tutor treatment was given in cycle II, so that the results of cycle II increased to 85.00, this shows that the application of the TaRL approach in the learning process can improve the learning outcomes of students in class X IPA 2 on ecosystem material.

Keywords: Learning outcome, Class action Research, TaRL, Peer tutor, Level of Students

1. Introduction

The new paradigm of the independent curriculum is the latest curriculum developed to meet the needs of learners. The independent curriculum is defined as a learning design that allows students to learn comfortably without pressure in developing their natural talents (Rahayu, 2022). The independent curriculum is the basis for developing the potential of students where teachers are given the freedom to create learning tools that are in accordance with the situations and conditions experienced in learning activities. In the field of education, teachers act as educators who guide students to be able to develop knowledge and can change the condition of students from not knowing to knowing. Based on Law No.20 of 2003, it is explained that the task of a teacher is not only to convey knowledge but teachers must educate students to become complete human beings, thus it can be said that the teacher's task is heavier. A teacher is required to master various abilities as a professional teacher in their field (Sari, 2016).

Teachers are very influential in the success of the learning process. The teacher's ability to plan and apply learning models and methods that are suitable for learning conditions will affect the achievement of student learning outcomes and student activeness in participating in teaching and learning activities (Ifianti & Fitriani, 2022). One of the efforts that can be made in learning is that teachers must introduce and familiarize students with learning models that are more relevant and more favored by students because a teacher is required to have the ability as a professional teacher in his field (Sari, 2016). The ability in question starts from the way of teaching, mastery of material, selection of various teaching methods, approaches used that pay attention to the characteristics and abilities of students in the learning process.

The learning process in the classroom must pay attention to the ability level of students. Teachers must understand that each learner has their own characteristics, uniqueness and abilities. The ability of the human brain likes a challenge, but if the challenge in the learning process is too easy, there will be a feeling of boredom in students and a lack of brain training, if the challenge is so difficult, students will lose enthusiasm and motivation (Syahrian, 2022). Therefore, an approach that accommodates the different levels of ability is needed so that the learning process becomes more meaningful and easily understood by each student. The approach that can be used is the TaRL (Teaching at the Right Level) approach.

TaRL is an approach that is not based on grade level but on students' abilities. This approach aims to improve students' abilities in literacy and numeracy (Fitriani, 2022) TaRL focuses on the level of students' abilities in the learning process and does not look at age or grade level (Ahyar, 2022). The government through the Ministry of Education and Culture has provided a way and flexibility for teachers to design the learning process based on the level of students' abilities or according to the capacity of students through the design of the TaRL approach. The TaRL approach aims to improve student learning outcomes (Mubarokah, 2022). TaRL is closely related to student learning outcomes. The implementation of TaRL requires teachers to identify student learning outcomes through diagnostic assessment. The results of the assessment are used by teachers as a reference to plan learning according to student characteristics. Activities in order to improve student learning outcomes, TaRL allows teachers to customize their learning in ways that inspire, motivate, and enrich learning experiences, and according to the abilities of students so that students become more active and involved in learning (Tanthowi, 2023). Based on this, student learning outcomes will improve.

Learning outcomes are the overall learning achievement of students which is an indicator of the achievement of learning objectives, basic competencies and the degree of change in the behavior of the students concerned (Mulyasa, 2010). Learning outcomes consist of three domains, namely, aspects of knowledge (cognitive), aspects of skills (psychomotor), and aspects of attitudes (affective). The cognitive domain of learning outcomes according to Bloom includes mastery of concepts, ideas, factual knowledge, and is concerned with intellectual skills (Jufri, 2017). Teaching in schools generally still uses

teacher-centered learning, students only act as listeners and recipients of all information provided by the teacher. Learning that is not student-centered can affect the learning outcomes achieved by students.

Based on the results of observations made at SMA Negeri 2 Labuapi during guided learning, the results show that in the learning process there is a problem where student interest in learning is still lacking because it still applies the teacher center in the learning process. Given the importance of learning interest in student learning completeness. So interest in learning must be considered. Responding to this fact, improvements must be made in classroom learning practices, one of which is by using the TaRl approach and integrated with the Problem Based Learning (PBL) model. This learning model orientates students to a problem and then develops skills in solving the problem. The implementation of this model is carried out with the TaRL approach on ecosystem material to improve learning outcomes and can provide ample opportunities for students to understand learning, formulate and determine solutions to problems in learning materials according to the level of student abilities.

2. Material and Method

The research method used in this research is Classroom Action Research. Classroom Action Research is conducted by teachers to solve learning problems faced to improve the quality and results of learning by trying new things. This research was conducted over two cycles. Each cycle consists of planning, action, observation, and reflection stages. Data analysis techniques in this study used qualitative and quantitative analysis. Qualitative data analysis was carried out by observation during the learning process using the Teaching at the Right Level approach integrated with the PBL model. Quantitative data analysis was carried out by pre-test and post-test to determine the effect of the Teaching at the Right Level approach on improving student learning outcomes.

Classroom Action Research (PTK) can be said to be continuous experimental research depending on the teacher's satisfaction with the results obtained. The four stages in the research are formed into 2 cycles, including planning, implementation, observation and reflection (Arikunto, et al, 2019).

The data and data sources used in this study used all observations of learning activities that took place and contained information relevant to the research conducted. The research data were collected from various sources, including the biology teacher of class X IPA 2 and all students. In addition, data was also obtained from the results of the learning that took place. Data collection techniques used observation and tests as the main data collection techniques. Other data collection techniques are using interviews and documentation.

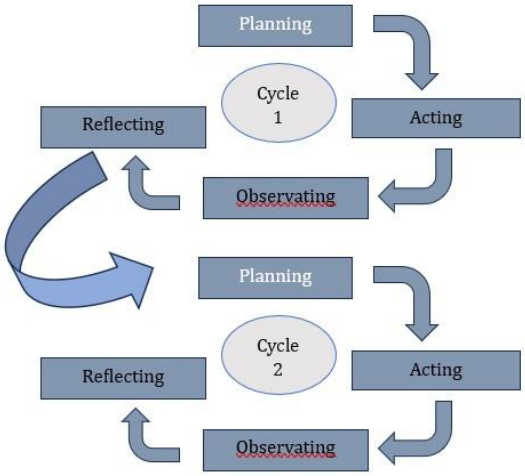

Figure 1. Picture of the stages of class action research

3. Results and Discussion

3.1. Results

Initial data from the condition of students in class X IPA 2 was obtained by the author through observation and pre-test. Based on the results of observations and pre-test as a pre-action, several problems were found in learning biology class X IPA 2, namely the low student learning outcomes with a class average of 45.00. Furthermore, researchers conducted research with 2 cycles. Each cycle has 4 stages, which are planning, action, observation, and reflection. cycle I planning stage is carried out by preparing lesson plans using the TaRL approach based on the results of observations and pre-tests to improve the learning outcomes of students in class X IPA 2 SMAN 2 Labuapi on ecosystem material.

At the stage of implementing learning that has been designed in the lesson plan with the TaRL approach, learning is carried out with learning that has been determined based on student abilities through the division of Slow Learner and Fast Learner groups. At the observation stage, the TaRL approach has been implemented well but the results obtained from the class average are still below the KKM which is 70.00. Some students still find it difficult to catch up with the material. This is based on the lack of student literacy possessed by the Slow Learner group. Furthermore, at the reflection stage, students' reactions to the learning process with the TaRL approach were very good. This can be seen from the enthusiasm of students in following the learning process even though there are still some obstacles. Students argue that learning with the TaRL approach is very enjoyable because they understand the material a little better because it matches the level of understanding of the students themselves.

The planning carried out in cycle II was carried out based on the obstacles and weaknesses found in cycle I from the results of observations of the application of learning with the TaRL approach. so that the obstacles and weaknesses in cycle I no longer occur, the authors make every effort to control learning conditions with learning referring to the

level of ability possessed by the students themselves, so that the first stage of planning is revised in the preparation of lesson plans with the TaRL approach, the planning stage implements learning in accordance with the results of the revised lesson plans with the TaRL approach, then in the division of groups, some students from the Fast Learner group are divided into Slow Learner groups to become peer tutors. So that students are helped in the learning process seen in the results of reflection students become more enthusiastic in learning and the results of the post test obtained on the class average are 85.00 above the KKM where these results show significant changes from the previous pre-action and cycle 1. The following is a summary table of the comparison of student learning outcomes in pre-action, cycle I, cycle II as well as a table of the stages of the learning cycle.

Table 1. Comparison of Student Learning Outcomes of Class XI IPA 2 SMA Negeri 2 Labuapi in Pre-Cycle, Cycle I and Cycle II

Numb	Phases	Average Student Learning Outcomes
1	Pre-action	45,00
2	Cycle I	70,00
3	Cycle II	85,00

Table 2. Stages of the Learning Cycle

Cycle	Planning	Acting	Observating	Reflecting
I	Preparation of lesson plans with TaRL approach - Orienting students to the problem - Organizing students in learning (division of groups based on students' abilities) - Guiding group investigations - Formulate and develop solutions - Analyze and evaluate the problem-solving process	Implementation of learning that has been designed in the lesson plan with the TaRL approach on the material that has been determined.	The TaRL approach has been implemented well but students still have difficulty understanding the material.	The reaction of some students is still there who do not understand the material well
II	Revision of lesson plan preparation with TaRL approach - Orienting students to the problem - Organizing students in learning (division of groups based on students' abilities) - Guiding group investigations (providing peer tutor activities) - Formulate and develop solutions - Analyze and evaluate the problem-solving process	Implementation of learning that has been designed in the revised lesson plan with the TaRL approach	Learning refers to the abilities possessed by students and the division of groups with additional peer tutors so that students become assisted in learning.	Students' reaction to the learning process with TaRL approach is very good.

3.2. Discussion

Learning with the TaRL approach integrated with PBL is implemented because of the low student learning outcomes. TaRL consists of an approach where the implementation pays attention to the level of students' abilities and then groups the students into one group to facilitate the delivery of material so that students can properly understand the material according to their level of understanding. Integration with PBL is done to increase students' literacy in a material when trying to solve a problem given by the teacher in one of the materials. Problem-based learning (PBL) has been carried out in various fields and educational contexts to encourage critical thinking and problem solving by students in authentic learning situations (Elaine, 2016). PBL is a study used to improve students' self-regulation skills. This research can be conducted with two methods derived from the PBL method, namely applying conventional problem-based learning methods and creative problem-based learning methods (Flavia, 2023).

Learning with the TaRL approach integrated with PBL by forming student creativity from giving a problem was carried out in IPA 2 class on ecosystem material with the Classroom Action Research method. Classroom Action Research is an active research that fully changes and improves learning practices in order to get maximum learning results. The implementation of learning with the TaRL approach integrated with PBL results in a significant increase in learning outcomes with several modified designs such as placing peer tutors in TaRL learning groups, especially in groups that are in slow learners, then paying attention and guiding step by step in the learning process integrated into PBL, this is done so that the implementation of the learning process goes well and produces a learning outcome in accordance with the objectives and completes.

The learning process is carried out with initial activities in the form of pre-action to see the pure results of student learning, from pre-action activities obtained results of 45.00. This shows that student learning outcomes are still very low and even incomplete because they are far below the KKM (Minimum Completeness Criteria), because student learning outcomes are complete if they reach ≥ 75.00. After obtaining initial results through pre-action, then a design for implementing learning with the TaRL approach integrated with PBL at the first cycle stage was prepared. The results obtained at the cycle 1 stage are the implementation of learning well but still found reflection material, namely some students in the slow learner group still have difficulty in understanding the material, and lagging behind the fast learner group, seen from the results of the post test in cycle I, the class average reached 70.00 which means that the value is still below the KKM (Minimum Completeness Criteria).

The cause is the low literacy and prior knowledge possessed by students and the inability of some students to understand the material well so that the slow learner group lags behind the fast learner group. The lag is based on the fact that some students who are members of the slow learner group both have low-level abilities so that these students are less capable of understanding the material provided, then the material provided

according to the level of ability causes students in the slow learner group to only be able to understand low-level material and take a little longer to master and understand material with a more difficult level. This makes the learning objectives not achieved for all students which causes the class average to be below the KKM.

The results of the reflection based on observations in cycle I suggest further improvements to the actions that will be carried out in cycle II so that learning outcomes can improve. Actions that can be taken include the teacher paying more attention to students who are still difficult to understand the material. Giving attention to students will generate high student interest in the material because the attention shown can provide a sense of teacher care for students and make students comfortable in learning and asking questions to understand the material so that students become more active and even fully active in the learning process which will have an impact on learning outcomes and learning goals that are achieved. then the teacher must try to fully involve students in the learning process by carrying out guidance both individually and in groups to get a good student response in the learning process (Ma'ruf, 2022: 1409). Involving students fully in the learning process means that all learning activities can create a meaningful experience for students. such as learning with PBL, students are given a problem then analyze the problem, find a solution and solve the problem themselves. The role of the teacher in this case is only as a bridge for students to achieve problem solving of the material provided.

The action taken based on the results of the reflection from cycle I is to form a slow learner group where one of the members has more ability to become a peer tutor. A peer tutor is someone chosen by the teacher to assist the teacher in providing guidance to classmates, the determination of peer tutors pays attention to several criteria from the selected students both in terms of grades, achievement and learning motivation (Abd. Rahim, 2022: 119). This activity is a modification of the TaRL design. The original design of TaRL is the division of groups with 2 types of groups, namely fast learners who contain students with higher ability levels and are given material with more difficult levels. Then the slow learner group contains students with low ability levels and is given material with an easier level so that students can understand the material well according to their abilities, but these actions have not been fully able to produce complete student learning outcomes with an average above the KKM because some students who are divided into groups with low levels of understanding are unable to understand the entire material properly. So it should be done by dividing groups according to ability levels, but placing one student or several students with higher abilities to become tutors in the group, this will help and facilitate all students in the learning process in achieving complete and good learning goals.

In cycle II teaching practice activities were changed based on the results of the reflection of cycle I with the formation of student groups changed by placing peer tutors in slow learner groups. the provision of material in cycle II is given evenly and gradually from easy material to material with a high level of difficulty in all groups, so that the

overall balanced learning outcomes of both fast learners and slow learners achieve the same learning objectives and complete. Integration with PBL makes students fully involved in learning activities, so that in addition to students understanding the material based on their ability level, students also have a meaningful experience in the learning process which adds more points to produce lifelong learning outcomes.

After improving the action by applying peer tutors and providing material with the same level based on the results of the reflection of cycle I at the cycle II stage. Students get an average class score of 85.00. This shows that student learning outcomes have increased from cycle I and are above the KKM, which means that the learning outcomes have been completed as a whole. The change in class average from 75.00 in cycle I to 85.00 in cycle II and the achievement of scores above the KKM shows that students have improved learning outcomes through the provision of peer tutor actions and the provision of material with the same level gradually in TaRL learning integrated with PBL.

Conclusion

The application of learning with the Teaching at the Right Level (TaRL) approach carried out for two cycles in this study can improve the learning outcomes of students in class X IPA 1 SMAN 2 Labuapi on ecosystem material which can be seen from the increase in student learning activities due to learning that is in accordance with their level of ability. This is based on the increase in the average learning outcomes from pre-action of 45.00 increased to 70.00 in cycle I and 85.00 in cycle II thus proving that learning with the Teaching at the Right Level (TaRL) approach can improve student learning outcomes.

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