

IMPLEMENTATION AND REMEDIAL PROBLEMS IN BIOLOGY LEARNING

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ARTICLE INFO:

Article History

Received July 6, 2020
Revised December 31, 2020
Accepted February 6, 2021

Keywords:

Biology learning, problems of remedial learning, remedial learning

ABSTRACT

Remedial learning is given to students through two main stages: the diagnosis of learning difficulties and remedial treatment. All remedial learning must end with a retest. The main stage of remedial learning is often overlooked in the implementation of remedial learning in schools. This study aims to determine the understanding, implementation, and problems of remedial learning in biology subjects in odd semester students of Class XI MIPA SMA. This research is descriptive qualitative research using data analysis techniques Miles and Huberman's model. The instruments used were questionnaires and interviews. The results showed that the teacher's understanding of remedial learning could be categorized as good. The implementation of remedial is in the very good category, except for the time for implementing remedial learning, which is in the category of less suitable remedial technical guidelines. The category of remedial learning problems in biology subjects is insufficient. However, the interview results showed a lack of time planning by schools related to remedial implementation at the end of each basic competency. Remedial learning in biology subjects in class XI SMA needs to pay attention to the time aspect in the implementation and planning of learning by schools and teachers.

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How to Cite:

Syahraini, S & Rezeqi, S. (2021). Implementation and Remedial Problems in Biology Learning. *Jurnal Pelita Pendidikan*, 9(3), 020-025.

INTRODUCTION

The implementation of learning in schools must be under applicable regulations so that learning objectives can be achieved. According to Permendikbud No. 20 of 2016, graduates' ability is divided into attitude dimensions, knowledge dimensions, and skills dimensions concerning the competency standards of primary and secondary education graduates. These dimensions are written in the Learning Implementation Plan (RPP). According to the learning material, there are indicators of competency achievement and learning objectives that students must obtain according to the Minimum Completeness Criteria (KKM) number for each Basic Competency).

The criteria that describe the student's achievement results' completeness at the lowest level are called the minimum completeness criteria. According to Permendikbud No. 23 of 2016 concerning educational assessment standards, the minimum completeness criteria are determined by considering students' characteristics, subjects, and academic unit conditions. The value of the minimum completeness criteria is determined based on the results of the teacher council meeting.

The minimum completeness criteria number is measured by assessing the teacher's learning outcomes, which can be done through tests, observations, assignments, and other forms as needed. Assessment serves to measure the achievement of basic competencies in core competencies. The assessment results are used as material for teacher analysis to determine follow-up remedial or enrichment learning.

The remedial learning program is intended for students to achieve competencies under completeness ([Direktorat Pembinaan SMA, 2017](#)). Remedials can be used as a solution for teachers' obligations to provide and fulfill students' rights to obtain quality education with services following their talents, interests, and abilities and complete educational programs according to their respective speeds (Law No. 20 of 2003). Remedial learning is a solution for students to achieve the minimum completeness criteria.

Remedial learning is carried out after the teacher analyzes the evaluation results and diagnoses student learning difficulties ([Direktorat Pembinaan SMA, 2015](#)). The analysis process is carried out to classify student learning outcomes, while the teacher's diagnostic is carried out to determine the causes of student difficulties in achieving the minimum completeness criteria on a basic competency. The teacher often overlooks the two stages because of the teacher's lack of

understanding of remedial implementation by the technical instructions that should be ([Mutmainah et al, 2015](#)).

The observations made by conducting interviews with biology teachers showed that remedial implementation was carried out to meet the minimum completeness criteria. This is a burden in itself for teachers to adjust students' abilities with the minimum completeness criteria value so that the scores received by students do not reflect their learning outcomes. Remedial learning is carried out mainly by retesting. Meanwhile, according to [Direktorat Pembinaan SMA \(2015\)](#), remedial implementation consists of re-learning, exceptional guidance, giving group assignments, and peer tutors. In practice, the teacher applies these forms by adjusting the percentage of remedial students. After implementing the remedial treatment, it must end with a retest.

The implementation of remedial learning in schools is often done only at the end of the semester. According to the teacher's statement, this is due to a lack of time to remediate each basic competency. This is in line with [Qibtiyah and Wibowo \(2017\)](#) research that the implementation of remedial in biology class XI subjects in public high schools in Sleman Regency has a low category of the time of remedial implementation. The time indicator indicates that the remedial program's implementation is not following the 2013 curriculum guidelines.

The primary materials in learning in class XI are as follows: 1) cells as the smallest unit of life, and cell bioprocessing, 2) structure and function of tissue making cells in plants and animals, 3) structure and function of tissue composing cells in the mobile system, 4)) structure and function of tissue composing cells in the circulatory system and 5) structure and function of tissue composing cells in the digestive system. Based on [Rapikah et al \(2017\)](#) on the human excretion system's subject matter, students experience learning difficulties because students do not understand the terms contained in the material. Whereas in [Kusumawati \(2016\)](#) study, the students' scores were below the KKM on the material on plant tissue structures. This result shows that there are learning difficulties of students in class XI who need to be assisted through a remedial learning program. Based on this background, it is deemed necessary to research the implementation and problems of remedial learning in biology subjects.

The research is limited to analyzing implementation and remedial problems on the competence of knowledge of biology subjects in odd semester students of Class XI MIPA SMA N 1

Binjai. This study aims to determine teacher understanding, implementation, and remedial learning problems in biology subjects in class XI SMA N 1 Binjai.

METHOD

This research is descriptive qualitative research. According to [Sugiarto \(2015\)](#), qualitative research does not go through statistical calculations on its findings, aiming to uncover holistic-contextual symptoms through data collection with a natural background with the researcher as the vital instrument. So in this study, the researcher did not use statistical calculations in data processing and would reveal holistic-contextual symptoms regarding the implementation and problems of remedial learning.

The research instrument used was a questionnaire. The questionnaire aims to determine the teacher's understanding of remedial learning, know the implementation of remedial that have been carried out by teachers and experienced by students, and find out problems related to the implementation of remedial learning. There are also interview guidelines to strengthen data on remedial learning problems experienced by teachers.

The qualitative data analysis technique used is the Miles and Huberman model. Miles and Huberman argue that qualitative research data in interviews, observations, and documents must be processed first to be used ([Yusuf, 2014](#)). According to the Miles and Huber model, there are three stages: data reduction, data display, and conclusion/verification. At the data display stage, the respondent's answer is calculated using the formula for the amount of relative frequency (percentage) as follows ([Sudijono, 2008](#)):

$$p = \frac{f}{n} \times 100\%$$

Information:

P = Percentage number

f = The frequency of the respondent's answer

n = the number of individuals

The determination of the category follows the guidelines for converting the actual score into a qualitative value ([Widoyoko, 2009](#)).

The research was conducted at SMA Negeri 1 Binjai. Respondents of the research were two biology subject teachers in class XI MIPA and one class of XI MIPA students as many as 33 people.

Table 1. Categorizing Percentage

No	Percentage (%)	Category
1	$80 < X \leq 100$	Very good
2	$60 < X \leq 80$	Good
3	$40 < X \leq 60$	Moderate
4	$20 < X \leq 40$	Less
5	$0 < X \leq 20$	Very less

RESULTS AND DISCUSSION

Teachers' understanding of remedial learning

Teachers' understanding of remedial learning was categorized as good. The first respondent with a percentage rate of 71,4%, and the second respondent with 80%. These results indicate that based on knowledge, the teacher understands the concept of remedial learning programs well. Under Government Regulation No. 19 of 2015 concerning national education standards, teachers have four types of competencies that must be met. One of the four types of competencies is pedagogical competence. According to [Musfah \(2011\)](#), a teacher's pedagogical competence in the task of providing instruction to students requires knowledge and skills. This knowledge is not only related to the material but also insight into the educational foundation. According to [Gani et al \(2020\)](#), information literacy can help increase knowledge and improve analytical thinking. A biology teacher must know the nature and concepts of education. In this case, the teacher understands the concept of remedial learning in implementing classroom learning.

Remedial learning implementation

Remedial implementation is seen based on two respondents' perspectives, namely by teachers and students. Questionnaire indicators have been compiled to complement each other according to the flow of remedial learning work procedures. The results of the teacher's questionnaire were then confirmed through interview answers.

The implementation of remedial by biology subject teachers can be seen in Figure 1. Technical instructions for the remedial program have been implemented by the school. This technical guideline is the principal and vice principal's authority in the field of curriculum ([Direktorat Pembinaan SMA, 2015](#)). In line with that, diagnosing student learning difficulties, selecting methods, assessing, and reflecting on the remedial learning program has been implemented very well according to the technical guidelines for remedial learning.

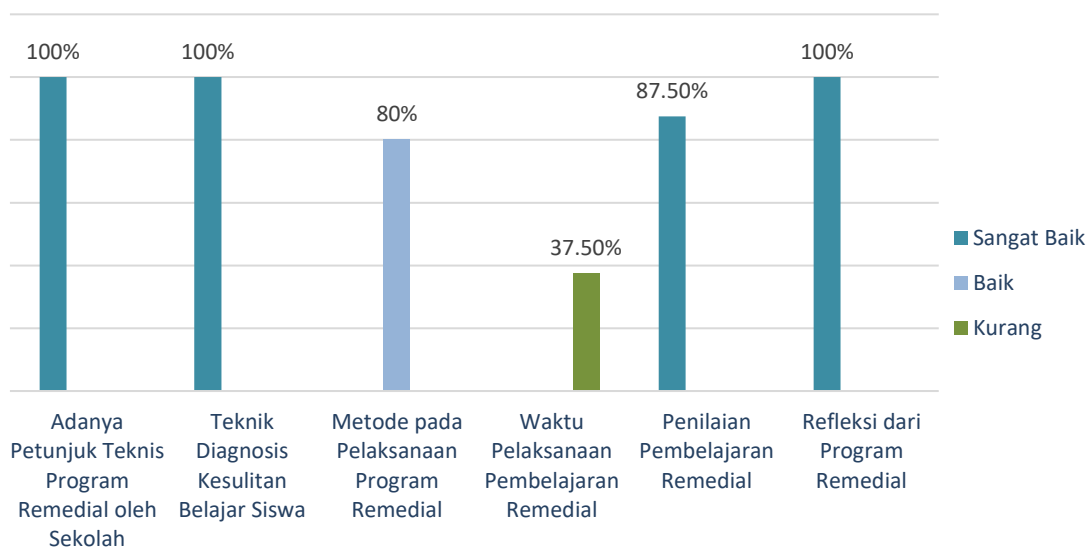


Figure 1. The results of the questionnaire on the implementation of remedial learning by the teacher based on indicators

This shows that teachers can choose methods, diagnostic techniques, conduct evaluations, assessments, and have reflected on remedial learning results in biology subjects. The choice of remedial learning forms is different from ordinary learning methods, which can be generalized for all students. Remedial learning methods must be adapted to the learning background. In this case, it is adjusted to the percentage of students who have learning difficulties or students who do not complete to experience remedial (Hasibuan, 2014).

Different results are shown in the timing of the implementation of remedial learning. There is an implementation of remedial learning in biology subjects after midterm exams and final semester exams. According to Qibtiyah (2017), remedial learning carried out after midterm exams and after semester exams is not real remedial learning because remedial does not aim to overcome student learning difficulties as soon as possible according to the principles of remedial learning. According to Direktorat Pembinaan SMA (2015), remedial learning is carried out after a particular assessment, not at the end of the semester. According to Karyanto (2011), the alternative time for implementing remedial learning is after the completion of a specific competency standard. One competency standard may consist of more than one basic competency.

Remedial learning problems

The problems experienced by the teacher while implementing remedial learning in biology subjects can be categorized as less problematic.

Respondent 1 with a percentage rate of 33.0%, and respondent 2 with 26.7%. These results indicate that teachers do not experience many obstacles and problems in implementing the remedial learning program. The problems identified relate to the existence of technical instructions for remedial programs by schools, the stage before implementation, the implementation stage, and the stage after implementing remedial learning.

The work procedure described for implementing remedial learning states that teachers and the school both have objective and systematic tasks (Direktorat Pembinaan SMA, 2010). Principals and vice-principals in curriculum areas are obliged to provide direct technical direction to teachers. Direction by the principal regarding implementation, objectives, benefits, expected results, and the elements involved in implementing remedial learning programs in schools. The curriculum field's vice-principal is obliged to prepare an activity plan, signs, and a schedule for implementing remedial learning. Based on the interview results, the respondents confirmed that there was a schedule for implementing remedial learning set by the vice principal in the field of curriculum, only that the scheduled time was after midterm tests and after the final semester exams.

Before implementing remedial, teachers need to analyze the results of student work/assignments and diagnose student learning difficulties. According to Ismail (2016), not all students are aware of their learning difficulties; only some students are able to understand that

they have problems in learning. The teacher's role is very helpful for students to understand student learning difficulties and then find solutions for students. Based on the teacher's interviews, it was stated that all assignments given to students were still directly corrected personally by the teacher and together with the students when learning in the classroom. The value of correcting student assignments will be the daily scores in the teacher assessment journal. This value is also used to diagnose student learning difficulties apart from the value of the daily test results. According to [Hidayat et al \(2013\)](#), student errors in working on questions can indicate student understanding of learning material. By analyzing student learning outcomes, the teacher will determine the causes of student learning difficulties ([Satoto et al, 2013](#)).

The implementation of remedial in schools needs to pay attention to the aspects of time and implementation. According to [Direktorat Pembinaan SMA \(2015\)](#), the form of remedial implementation is adjusted to the percentage of students who have not completed it. However, based on the interview, the teacher experienced problems adjusting remedial learning time with ordinary learning. This is because the teacher does not arrange the time at the beginning of the semester to implement remedial learning. According to [Hermawati et al \(2018\)](#), planning for remedial implementation needs to be made at the beginning of the semester. Remedial learning in schools has time-limiting factors such as unpredictable national holidays and holidays.

After analyzing and diagnosing student learning difficulties, the learning ended with a retest ([Direktorat Pembinaan SMA, 2010](#)). According to [Apriliani et al \(2019\)](#), the retest then entered the assessment stage, which aims to measure student learning progress after remedial activities.

Evaluation, assessment, and reflection of remedial results are the final stages of a series of remedial learning. Assessment of each lesson should be calculated per indicator in the RPP so that the assessment can be carried out more specifically ([Direktorat Pembinaan SMA, 2015](#)). Based on the interview results, the teacher stated that the assessment did not make an assessment per indicator for each student. If doing this assessment, the teacher must make questions that pay attention to the need for assessment per indicator. Meanwhile, the teacher has to complete the work hours load and other administrative matters at school.

CONCLUSION

The biology subject teacher's understanding of remedial learning is in a good category. According to the technical guidelines for remedial learning, remedial implementation in biology subjects is very good. However, the time for implementing remedial learning was categorized as less implemented according to technical guidelines. Even though the implementation time of remedial learning in biology subjects is essential to be adequately planned, class XI SMA's material is quite dense and complex. Teachers only experience a few problems in implementing remedial learning in biology subjects.

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