

The Achievement of the Independent Curriculum on Biology Subject in Senior High School

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Abstract

This study aimed to analyze the achievement of the Independent Curriculum implemented in Biology subject. The research method used is a survey conducted at one of the senior high schools at Lahewa, North Nias, Indonesia. The Independent Curriculum is the latest curriculum targeted by the Ministry of Education and Culture of the Republic of Indonesia to be implemented at every level of education. This curriculum optimizes intracurricular learning content. This is intended so that students can explore concepts and strengthen competencies according to the learning needs and interests of students. Biology lessons in high school as one of the intracurricular lessons are implemented based on the Independent Curriculum. The research instrument used is a measurement of the implementation of Biology learning designed based on the indicators of the Independent Curriculum. The data analysis technique was carried out qualitatively. The results showed that the Independent Curriculum in Biology lessons has been well implemented in high schools with the expectation that Biology teachers must be able to coordinate the learning process optimally. Thus, achieving the Independent Curriculum in Biology lessons must be supported by teacher competence to optimally direct students in the learning process.

Keywords: Achievement, Independent Curriculum, Biology Lesson

INTRODUCTION

The Independent Curriculum, introduced as part of Indonesia's education reform, is essential in improving the quality of learning at the senior secondary school (SMA) level. The curriculum aims to enable holistic student development, prepare for global demands, and respond to local needs by giving schools more freedom to design curriculum and learning. (Directorate, 2020). The introduction of the Independent Curriculum brought significant changes in the teaching of biology in high school. Biology, as a subject that covers various aspects of life, requires relevant and situated learning approaches to help students understand complex scientific concepts (Lou & MacGregor, 2020).

The Independent Curriculum was developed to provide students with a more exciting and meaningful learning experience by emphasizing active, collaborative, and in-depth learning (Dpkri, 2021). This study aims to evaluate the results of the Independent Curriculum in high school biology subjects. This evaluation is needed to understand the extent to which the Independent Curriculum can meet the needs of students and support them in achieving the expected competencies in biology subjects (Cepeda et al., 2015). In this evaluation, a survey

will be conducted using a case study approach in high schools implementing The Independent Curriculum.

The results of this study are expected to provide a better understanding of the effectiveness of The Independent Curriculum in achieving high school biology learning objectives. The results of this study will provide essential insights for education stakeholders, including teachers, school leaders, and policymakers, to improve the quality of biology education in secondary schools according to the principles of The Independent Curriculum (Hattie & Timperley, 2016). Understanding the factors that influence the achievement of the Independent Curriculum in the context of biology learning is hoped to open the door to developing more effective learning strategies and practices.

METHOD

The research method used in this study is a survey method in high schools that implement the Independent Curriculum. The survey method approach was chosen because it allows researchers to gain an in-depth understanding of implementing the Independent Curriculum in high school biology subjects (Yin, 2017). Data collection occurs in several steps. First, classroom observations were conducted to observe the biology learning process implemented according to the Independent Curriculum. Observations were carried out systematically, and various aspects of learning related to implementing the independent curriculum were recorded. Furthermore, interviews were conducted to obtain biology teachers' opinions and experiences implementing the Independent Curriculum.

Interviews were structured to obtain more detailed information about the challenges and strategies for teaching biology according to the Independent Curriculum. Third, curriculum documents were analyzed to understand better the content and objectives of the independent curriculum implemented in the high school that was the focus of the study. The documents analyzed include official documents from the Ministry of Education and documents prepared by schools and teachers as guidelines for implementing the Independent Curriculum. All data collected will be analyzed qualitatively through the Miles and Huberman approach (Miles et al., 2015). This analysis involves the process of coding, categorizing, and thematizing data to identify relevant patterns and findings related to the application of the Independent Curriculum in high school biology subjects (Patton, 2015).

RESULT AND DISCUSSION

The results showed that the independent curriculum is ready to be implemented by educational units from elementary to senior high school levels. One of the senior high schools

at Lahewa, North Nias, Indonesia, which has implemented the independent curriculum. Based on the results of our interview, our informant, who is also a teacher at this school, explained that the implementation of the independent curriculum has been applied to grade 10 in the 2023/2024 school year. The independent curriculum is a curriculum that is present as a voter option. The independent curriculum is a curriculum that comes as a recovery option in education in Indonesia after the covid 19 pandemic launched by the Ministry of Education, culture, and Technology (Kemdikbudristek). Initially, the independent curriculum was only implemented in driving schools.

The independent curriculum is a new curriculum in which not a few students or even education personnel are still unfamiliar with this curriculum. Therefore, it is essential to socialize the independent curriculum. One of the senior high schools at Lahewa, North Nias, Indonesia., has conducted socialization regarding the independent curriculum aimed at teachers and students. For socialization with teachers, the school has conducted soundings regarding the independent curriculum, shared information regarding webinars and teacher training, and can also access the independent teaching platform. For socialization to students the school held a socialization for students at the beginning of the semester to provide information by presenting material related to the independent curriculum. With this socialization, it is hoped that every teacher and student can understand the functions and objectives of this new curriculum so that the independent curriculum can be implemented optimally.

In the independent curriculum, the implementation of learning is divided into 6 phases, in which grade 10 is included. Based on this, the resource person has admitted to feeling a significant difference in teaching biology material. This is because there is no major in the independent curriculum, which causes all grade 10 classes to learn science and social studies specialization material. Science subjects include physics, chemistry, and biology. Three teachers also teach technical subjects according to their respective fields. In the independent curriculum, grade 10 only studies biology material regarding biodiversity, classification of living things, viruses, ecosystems, and the environment. However, the teacher still inserts other material, such as bacteria, but needs to go into better detail. Seeing the reduction of chapters or learning materials, those who learn biology material are automatically reduced.

In addition to the reduction in material and learning hours, there are other differences, namely the assessment on the report card. Unlike the 2013 curriculum, where students' grades are divided into knowledge and skills grades, in the independent curriculum, students' grades are combined between knowledge, skills, and attitudes. According to the source, it is rather tricky for teachers to help students improve their abilities with such a report card model

because they need to know whether the student is vital in assessing knowledge or skills. In the independent curriculum, the assessment system is divided into formative assessment and summative assessment. Rahayu et al. (2022) also reported that formative assessment is carried out to monitor and improve the learning process and evaluate the achievement of learning objectives. Generally, formative assessment is carried out in the learning process of a material being taught. Anggraena et al. (2022) also reported that summative assessment is an assessment that aims to achieve student learning achievement as a basis for determining grade promotion or graduation. A summative assessment is carried out after several informative assessments that can be carried out at the end of learning. In addition, skill values include attitude, activeness, and the ability to answer questions.

The methods and media used are similar in carrying out learning. Our informant said that when in class, he used sources and media, namely package books because there are still incomplete facilities such as PowerPoint in this school. By our informant, no Q quizzes were ever held. The learning methods used also combine student-based learning and conventional learning methods, namely teacher-centered learning methods. This is because the level of activeness of each student is different. Therefore, it cannot be generalized to only use one learning method. The same thing was also stated by Ikhtiar et al. (2022), who stated that every teacher tries to get every student involved in learning by utilizing the available teaching media. For example, they are holding question-and-answer games so that students are focused and not sleepy. Learning biology is closely related to practicum, but this school still does not have a laboratory. This laboratory is essential for science majors because it can hone students' abilities in using laboratory equipment properly. Because there is no laboratory, this school needs to teach laboratory equipment. After carrying out learning, an assessment is needed to determine the ability of students to relate to the material taught.

The implementation of the independent curriculum has several impacts on students. The impact felt by students is in the form of positive and negative impacts. Positive impacts include students interacting more with their peers because of the demand to work on projects together, learning time being shorter than the learning time enforced in the previous curriculum era, and the material studied in their curriculum shrunk so that the burden of the material studied is not too much. Sumarsih et al. (2022) also emphasized that some of the new things that have begun to be implemented in the independent curriculum are also felt to provide benefits, one of which is because students' skills are honed during the implementation of projects by competencies that refer to the values of Pancasila.

Meanwhile, the impact of the implementation of the independent curriculum by students is the confusion felt because they are the first generation since the implementation of the

independent curriculum. Students have less time to work on the assignments because most of the time is used to work on projects. The same thing was also reported by Sabriadi & Wakia (2021) that students also complained that the time to go home from school was getting late; the implementation of the project, which was carried out after teaching and learning activities were over, also drained students' energy. Ariga (2022) added that in terms of readiness, students considered the school quite ready to implement the independent curriculum. However, the available learning resources, such as package books, laboratory space, laboratory equipment, and learning tools, such as focuses, still needed to be completed.

The problems students face, such as focusing on learning, are solved because students also have to work on projects. Barlian and Solekah (2022) added the difficulty of dividing time between doing assignments and time working on projects. Friends who are less cooperative when invited to teach projects and learning resources for incomplete textbooks, so students have to look for other supporting learning resources. Cholilah et al. (2023) also explained that some students feel more comfortable learning with the previous curriculum system than the independent curriculum. This is because the independent curriculum is currently only being implemented, so many aspects still need to be addressed in the future. Suryani et al. (2023) added that in the end, implementing an independent curriculum requires cooperation, responsibility, commitment, and seriousness from various parties so that the values of Pancasila are properly instilled in all students.

CONCLUSION

Based on the research, students experience educational problems in learning using the Independent Curriculum at school, including lack of focus, low literacy skills, inability to collaborate with friends, and inability to manage time properly. These things cannot be separated from the online learning factor due to the COVID-19 pandemic. However, besides these problems, with the Independent Curriculum, teachers can get to know students better and reshape students with high integrity. Students also feel the benefits of the Independent Curriculum, including the material being easily understood because it is conveyed directly, they can interact more with friends, and the burden of the material studied is manageable. Suggestions that can be given for the problems that occur include the teacher holding ice-breaking so that students learn more deeply independently and learn to manage time. Some students are still adjusting to the learning process and materials using the Independent Curriculum. Therefore, the role of the teacher is essential in guiding and explaining the material to students.

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