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IMPLEMENTATION OF BIOLOGY LEARNING IMPLEMENTATION IN THE INDEPENDENT CURRICULUM FOR TEACHERS AND GRADE X STUDENTS AT MAN 1 SOUTHWEST ACEH

Abstract

The independent curriculum was formalized by the Minister of Education and Culture which stipulates that there are several things that must be prepared before learning after that implementing independent curriculum learning by differentiating learning and assessment. The formulation of the problem in this study is “How is the application of an independent curriculum in biology learning by teachers and grade X students at MAN 1 Southwest Aceh and what are the obstacles experienced during the biology learning process on an independent curriculum by teachers and grade X students at MAN 1 Southwest Aceh”. The purpose of this study was to describe the implementation of biology learning in the independent curriculum by teachers and students of class X MAN 1 Southwest Aceh and describe the obstacles experienced in the biology learning process in the independent curriculum by teachers and students of class X MAN 1 Southwest Aceh. The method used in this research is a qualitative approach with descriptive research type with data collection techniques, namely observation carried out by observing learning, interview techniques by interviewing teachers and students, questionnaires conducted by giving research instruments to teachers and students, and documentation in the form of storage data collection during observation, questionnaire filling and during interviews. The data analysis technique used is qualitative data analysis technique. The results of this study indicate that teachers in class X biology subjects at MAN 1 Southwest Aceh have implemented the independent curriculum for the 2023/2024 school year, this is indicated by the existence of teachers carrying out lesson planning using the Project Based Learning model and including Learning Outcomes (CP), involving students in compiling the Flow of Learning Objectives and the existence of teaching modules. The obstacles experienced during the learning process are that not all students provide a reciprocal response in the implementation of the project, the teacher is still not effective in determining the hours for the implementation of the planned project and what challenges the teacher is the implementation of learning assessment. The implementation of teachers and students in biology learning in the independent curriculum has been carried out well.

Keywords: Implementation, Independent Curriculum, Biology Learning

INTRODUCTION

Education has a function and purpose that is none other than to develop the ability and shape the character of students of the nation's civilization, as well as to develop the potential of students to become human beings who are faithful and devoted to God Almighty, noble, healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens. Along with the times and an increasingly dynamic society, the education system has also undergone transformations in order to adjust to the globalization that has occurred. Education is a necessity in human life as a social living being, from education humans can also develop with their potential, education occurs from the learning process by teachers and students (Handayani, 2018: 6).

Biology learning includes concepts, symptoms, processes, life around, closely related to everyday life, both with humans, animals, plants, microorganisms with their environment. Biology is a subject that studies about finding out and understanding the surrounding nature so

that biology can be a discovery (Ziraluo, 2021). In the national curriculum, learning biology is needed to overcome the problems that exist in the natural environment in the 21st century. Biology is also used to preserve nature and human welfare (Curriculum Standards and Education Assessment Agency, 2022). The independent curriculum comes as an alternative in overcoming the decline in student learning during the pandemic which gives freedom of “independent learning” to the implementers of learning, namely teachers and principals and develops the curriculum at school and pays attention to the needs of students and their potential. The independent curriculum gives students more freedom in learning without feeling pressured, students are given the opportunity to develop their talents. In the independent learning process, the teacher only directs students and gives students space to explore (Restanti, 2020).

After making observations on February 13, 2024 in several schools in Southeast Aceh, MAN 1 Southeast Aceh is one of the favorite schools that has implemented an independent curriculum in class X. in biology learning, this can be caused by teacher turnover in these subjects. Seeing that there are many secondary schools in Southeast Aceh that have not implemented the independent curriculum and are still using K13, this is because many teachers do not understand the independent curriculum. The independent curriculum is present as a solution to the decline in student learning and gives students more freedom to explore their natural interests and talents within themselves, so as to create students who are religious, academically loving and responsible. Therefore, the researcher wants to raise the research title entitled “Implementation of Biology Learning Implementation in the Independent Curriculum for Teachers and Grade X Students at MAN 1 Southeast Aceh”.

The formulation of this problem based on the background above are: 1. How is the implementation of an independent curriculum in Biology learning by teachers and grade X students at MAN 1 Southeast Aceh? 2. what are the obstacles experienced during the Biology learning process on the independent curriculum by teachers and grade X students at MAN 1 Southeast Aceh. In order not to widen the author focuses. In the implementation of a special independent curriculum in class X MAN 1 Southeast Aceh only in the areas of planning, implementation, and evaluation. This research has several objectives as follows: 1. Describe the implementation of biology learning in the independent curriculum by teachers and students of class X MAN 1 Southeast Aceh 2. Describe the obstacles experienced in the biology learning process in the independent curriculum by teachers and students of class X MAN 1 Southeast Aceh.

This research is expected to provide good benefits for every reader both theoretically and practically: 1. Theoretical Benefits The research is expected to be able to make a good contribution to the reader. 2. Practical Benefits a. For Teachers This research is expected to add new insights for teachers in the process of implementing learning, especially in biology subjects so that students are more active in studying the natural world with new and interesting things. b. For Students The results of this study are expected to be able to make a good contribution to students to find their talents and develop them.

LITERATURE REVIEW

Implementation generally means implementation or application. The term implementation is usually associated with an activity carried out to achieve certain goals and also one of the efforts to realize in a system is implementation. In the Big Indonesian Dictionary (KBBI) implementation is an application, and a very important stage in determining effective policies, without implementation, policy decisions will not be successfully implemented. Brownie and Wildavsky (in Firdianti, 2018) suggest that implementation is an expansion of mutually adjusting activities. The independent curriculum is a curriculum with intracurricular learning with diverse content so that students can be more optimal and have enough time to explore concepts and strengthen competencies. The independent curriculum aims to realize holistic and contextual student learning, so that learning is more meaningful to students, not just memorizing material. Biology learning is a subject that has a relationship between plants, animals, and humans which can be interpreted as one of the sciences that develops through scientific steps that study the organization of living things. Biology is the study of life that includes aspects of the relationship between living things including microorganisms. Biology is also defined as one of the sciences that provides a variety of experiences to understand the

concepts and processes of science. Assessment of biology learning outcomes in students who have been carried out by teachers is to monitor the process of progress and development of students' learning outcomes in accordance with their interests and potentials that are expected to be themselves in students carried out by teachers to monitor the process, progress, development of students' learning outcomes in accordance with their potentials with sustainable abilities (Djulia et al, 2020).

METHOD

The approach used in this research is a qualitative approach with descriptive research. Qualitative research is descriptive research and tends to use analysis. Process and meaning are more emphasized in research.

Qualitative research is research that uses the interpretation of phenomena that occur by involving various methods, while according to Shank, a qualitative approach is a way of investigating systematically, which means planned and ordered and public (Roosinda et al., 2021). Qualitative research is a method of understanding a meaning by individuals and groups. Qualitative research also folds a number of procedures and efforts by asking questions to interpret the meaning of data (Cresswell, 2016). In the book research and design, qualitative research is an investigation that touches on various disciplines, fields, and themes (Rukin, 2021). This type of research is descriptive, descriptive research is a method aimed at describing a phenomenon that takes place today or in the past, the purpose of this research is to make a description of the painting empirically systematic, factual, and accurate regarding the phenomenon under investigation (Hamdi, 2014: 27). Due to this, qualitative research with this descriptive type was chosen by the author with the aim of obtaining accurate data sources regarding the application of the independent curriculum in class X MAN 1 Southeast Aceh.

This research was conducted at MAN 1 Southeast Aceh, which is located in the Babussalam student complex, Babel District, Southeast Aceh Regency. This research location was chosen by the author because MAN 1 Southeast Aceh is one of the public schools in Southeast Aceh that has implemented the Merdeka Curriculum.

Determined purposively. Purposive is a technique in determining a sample based on considerations that are considered suitable according to the characteristics of the specified sample. Purposive is a method in qualitative research sampling where the data comes from the consideration of the person who is considered to know the most about what is being studied (Sugiyono, 2017). When conducting interviews with biology teachers and students regarding the Implementation of Biology Learning Implementation in the Merdeka Curriculum for Teachers and Grade X Students at MAN 1 Southeast Aceh, first one informant was selected, namely the biology teacher, then the researcher interviewed one or two students who produced almost the same answer. This process continues until the required data is fulfilled or until the data is saturated. The research subject is a source of information that is explored to reveal facts in the field. The informants in this study, namely people who provide information about research problems are as follows: 1. Biology teachers because biology teachers at MAN 1 Southeast Aceh are informants involved in the biology learning process. As well as being the object of the research to be carried out. 2. X grade students. Because students are also actors in learning and as recipients of subject matter. are also actors in learning and as recipients of subject matter.

Data Collection Technique

is a method used to collect real materials used in research, this technique needs strategic and systematic steps to obtain valid data and in accordance with reality. The main step in research and one of the methods used to collect research material, because the main purpose of research is to obtain data. Without knowing the data collection technique, the researcher cannot find data that meets the specified data standards.

1. Observation is the act of paying attention or seeing, when described, observation is an activity carried out to directly observe a certain object with the aim of obtaining a number of data and information related to that object. According to Nasution, observation is the basis of all science based on data that facts are obtained by involving all five senses, observations made in this study to collect data related to the learning and teaching activities of teachers and students in making project assignments. The type of observation used in this research is

passive participation observation. Passive participation is that the researcher comes to the place of activity of the person being observed, but does not participate in the activity (Sugiyono, 2022).

2. An interview is a conversation between two or more people to extract information from a source and takes place between the source and the interviewer. According to Kerlinger (in Fadhallah 2021) interviews are interpersonal face-to-face actions where one person is the questioner, and the other asks one interviewee and with several questions made to get answers related to research problems. Interviews conducted in this study to explore information about the implementation of biology learning, making projects during biology learning. The type of interview used in this research is structured interview. Structured interviews are interviews conducted in detail in accordance with the interview guidelines that have been provided (Siyoto, 2015).
3. Questionnaire is a data collection technique by asking written questions to be answered in writing by respondents. Data collection techniques with this type of research are closed by providing answer choices and respondents just have to choose according to the conditions experienced. According to Sugiyono (2020) a questionnaire is a data collection technique that is carried out in order to provide written statements which are then responded to by respondents.

The data collection technique of this research is a closed research type by providing answer choices and respondents only need to choose the one that suits the conditions experienced. The scoring given to positive questions is score 1 for low answers, score 2 for medium answers, score 3 for good answers, and score 4 for very good answers.

Data Analysis

Qualitative research is the process of studying and processing data to identify patterns, relationships, and important information contained therein. In qualitative research, data is obtained from various sources, using various data collection techniques, and is carried out continuously until the data is saturated (Abdussamad, 2021).

Qualitative data analysis is carried out interactively as proposed by Miles and Huberman, who state that activities in qualitative data analysis are carried out interactively which takes place continuously so that the data is saturated.

Data Validity

is data that does not differ between the data obtained and the data that actually occurs on the object of research so that the validity of the data that has been presented can be accounted for.

Research in data validity testing results are obtained using triangulation techniques. Triangulation is defined as a data collection technique that combines various data collection techniques. The purpose of triangulation is not to find the truth about some phenomena, but rather to increase the researcher's understanding of what has been found (Sugiyono, 2017).

Research Stages

In this research there are several stages of research, among others:

Pre-Field Stage The pre-field research stage includes choosing a research field, researchers chose MAN 1 Southeast Aceh Babel District as the research location. Furthermore, taking care of licensing to conduct research to the educational institution or school, then, conducting field research to better understand the background of the research object and the research environment, selecting and utilizing informants who are considered to provide appropriate and valid information. And continued with preparing research equipment.

1. Field Implementation Phase

At this stage the researcher begins to plunge into the research location. Understanding the phenomena that occur in the field to be recorded as research, researchers conduct observations, interviews with informants and conduct documentation as evidence of research.

2. Post-Field Stage

This stage is the final stage of the research process at this stage the researcher goes directly to the research location and directly analyzes the data and processes the data that has been obtained from various existing sources. Making conclusions compiled

RESULTS AND DISCUSSION

Based on the results of closed research instruments with biology teachers in class X MAN 1 Southeast Aceh with 3 indicators, namely planning, implementation, and evaluation, and each indicator with 5 statements. The recapitulation of scores on the biology teacher instrument is very good, this can be seen from the planning indicator with a score of 90% excellent category, the implementation indicator with a score of 85% excellent category, and the evaluation indicator with a score of 70% fair category. Based on the results of data collection of respondents with closed research instruments with grade X students of MAN 1 Southeast Aceh taken as much as 25%, the data obtained has been previously verified to discard invalid data that can affect the results of the study.

Based on the results of the assessment, it is summed up with the formula $\% \text{ Index} = \text{Total Score} / Y \times 100$. The following are the results of data collection with instruments for biology teachers as follows: The value of the results of the student instrument was recapitulated with the same score and category from the 25% data of 50 students, the results of the X grade student instrument were 2 respondents in the very good category, 29 respondents in the good category, 16 respondents in the sufficient category, and 2 respondents in the less category.

Based on the results of interviews with the biology teacher of class X MAN 1 Southeast Aceh by Mrs. Sri Sumarni, S.Pd stated that at MAN 1 Southeast Aceh, especially class X in the 2023/2024 academic year, where this curriculum is more supportive of student activeness. Mrs. Sri Sumarni, S.Pd also stated that it is easier to implement an independent curriculum than the previous curriculum, this is supported by the existence of the Pancasila Student Profile where students are required to be more active and creative while the teacher only directs this based on student interests and talents.

Based on the results of questionnaires and interviews conducted in April for 1 week at MAN 1 Southeast Aceh in class X biology learning, it is clear that class X teachers and students in biology learning have implemented the independent curriculum well, this is shown by the results of the value of the closed research instrument with the teacher with 3 indicators, namely planning, implementation, and evaluation with scores: planning 90%, implementation 85%, and evaluation 70% with the results of these instruments the teacher has implemented the independent curriculum in class X well. This is supported by the results of the closed research instrument for class X students by combining the same answer recapitulation with the number of respondents 25% with 5 statements. It can be seen based on the first statement that the teacher has carried out learning and teaching using Project Based Learning (PBL), the second statement is that the teacher involves students in determining the objectives of Merdeka Belajar practice, in the third statement, the teacher still uses books and lecture methods, the fourth statement is that students are active in group learning discussions, and the last one presents the results of project work.

Based on the results of interviews with grade X biology teachers, the independent curriculum has been implemented in the 2023/2024 academic year, and in the opinion of the grade X biology teacher, it is easier to implement the independent curriculum with the Pancasila Student Profile where students are required to be more active and creative according to their interests and talents. In the preparation of lesson plans, teachers have included Learning Outcomes (CP), involved students in compiling the Flow of Learning Objectives, there are teaching modules and carry out differentiation of learning based on processes and products. Learning resources that teachers often use are biology textbooks, and references from various sources both from the internet and additional references from other students. By implementing Project Based Learning (PBL) based learning, teachers more easily shape student character by providing direction and guidance according to students' interests and talents by giving assignments to students to design, solve, assess, and make independent conclusions one with group work.

CONCLUSION

Implementasi The implementation of biology learning implementation in the independent curriculum is very beneficial for schools and students to be more advanced and develop and be able to compete globally by highlighting talents and utilizing local wisdom. MAN 1 Southeast Aceh has implemented an independent curriculum in class X biology learning and runs effectively and systematically.

The obstacles faced in the implementation of the independent curriculum include the challenges of assessing the implementation of learning and the lack of reciprocal responses from students and teachers are still not effective in determining the hours for the planned projects.

ADVICE

The implementation of an independent curriculum can be felt as a benefit, in the teaching unit the implementation of an independent curriculum makes it easier for schools to produce a higher quality of education, this is easily obtained if there is collaboration in the management of education in each school by carrying out policy points such as the National Examination which is replaced by an Assessment by the school. Assessment is also based on student character, this is related to the profile of Pancasila students and the preparation of teaching modules is more student-oriented. It is hoped that further research can add to the focus of the problem in learning activities for better results.

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