

Implementation of the Independent Curriculum in Class VIII Science Learning with a Problem-Based Learning Model

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Abstract

Independent curriculum is a curriculum with intracurricular learning that focuses on basic material or important material that students need to understand, so that students have enough time to understand concepts and develop their competencies. The purpose of this study is to determine the supporting and inhibiting factors for the implementation of the independent curriculum at SMP Negeri 4 Golewa. This research method uses a qualitative approach. In collecting data, researchers use observation, interview, and documentation techniques. Data analysis carried out includes data condensation, data presentation and drawing conclusions. The results showed that supporting factors for the implementation of the independent curriculum include adequate facilities and infrastructure and teaching staff who want to learn about the independent curriculum, while inhibiting factors for implementation include lack of references, new teacher experience, and there are still teachers who do not attend the independent curriculum webinar

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INTRODUCTION

The independent learning curriculum is a type of curriculum that focuses on diverse intracurricular learning, the content of the lessons will be optimized so that students have adequate time to understand concepts and improve their competence (Aisyah et al., 2023). This curriculum is intended to provide flexibility to teachers in planning the learning process in accordance with the characteristics and needs of students. In this curriculum, teachers have the freedom to initiate learning innovations that are interesting and relevant to the context of student life. Renewal in the education system through the implementation of the independent learning policy is an important step in an effort to create quality Indonesian human resources, in accordance with the profile of students who prioritize Pancasila values (Vhalery et al., 2022). In the 21st century, cognitive ability is an undoubted measure of a student's success (Saduakassova, et al., 2023). Students need to be able to engage in critical thinking to survive in this competitive era (Irawan & Latifah, 2023). This will enable them to take initiative and design meaningful solutions to emerging problems (Suwastini et al., 2021). Students need to master the ability to communicate well and be able to work effectively with others to succeed in today's world where networking is essential for one's career (Akcanca, 2020)

Arifudin (2022) stated that education is needed as a means of self-development, because education is one of the foundations that determine the resilience and progress of a nation. The existing education pathways in Indonesia are currently available through formal, informal and non-formal education channels. Schools as formal educational institutions require a good and optimal learning process. As stated in Law of the Republic of Indonesia No. 20 of 2003 Chapter 1 Article 1 concerning the National Education System explains that education is a conscious and planned effort to create a learning atmosphere and learning process so that students can actively develop their potential to have religious spiritual strength, self-control, noble values and skills necessary for control, personality, intelligence, morality, self, society, nation and state.

Learning is a process organized by the teacher so that students can carry out learning activities. Learning activities are carried out based on a design that was first prepared by the teacher (Mayasari, 2021). In this design, the teacher determines all learning needs including objectives, learning approaches, and learning methods. If the plan has become a unified whole, then a learning model is formed. Sulaeman (2022) suggests the purpose of the learning model, which is a conceptual framework that describes a systematic procedure in organizing learning experiences to achieve certain learning goals, and serves as a guideline for learning designers and teachers in planning teaching and learning activities. This opinion is in line with Arifudin, (2021) who revealed that a learning model is a plan or a pattern used as a guide in planning classroom learning or learning in tutorials and to determine learning tools.

In teaching a particular material, a learning model must be chosen that best suits the goals to be achieved. Therefore, in choosing a learning model must have certain considerations such as subject matter, goals to be achieved, and available facilities. Hanafiah (2022) selects six teaching models that teachers often and practically use in teaching, namely: presentation, direct teaching, concept teaching, cooperative learning, problem-based teaching, and class discussion. Thus, what is meant by a learning model is a procedure as a teacher guide to plan learning in class in order to achieve a goal.

According to Adri (2015) that the implementation of learning has changed, and students are not only seen as learning objects, but must play an active role in the learning process, become a team in the learning process, and allow students to become active learners and teachers to become creative facilitators. Natural Sciences (IPA) is closer to learning science and thinking scientifically about science subjects (Astalini and kurniawan, 2019). Science is a science developed through scientific methods on the symptoms of environmental phenomena (Jumadi, 2015). Science is a subject that connects students to find out about natural knowledge systematically, through the process of experience and mastery of knowledge in the form of experience of concepts (Astalini dan kurniawan, 2019).

Science is one of the disciplines that aims to find curiosity and positive attitudes towards science, technology and society, develop process skills to understand the environment, solve problems and make decisions (Tanjung, 2020). Learning uses the application of the Problem Based Learning (PBL) model to increase student activeness in temperature and heat material. This material is very close to the daily lives of students at SMP Negeri 4 Golewa. In teaching and learning activities, according to (Ulfah, 2020) that the task of a teacher is to convey knowledge to students. The expected goal is that students' knowledge increases from not knowing to knowing. Therefore, an appropriate learning model is needed so that the process of transferring knowledge from teachers to students takes place effectively. Problem Based Learning is one of the many learning models that can be done for students in schools.

Problem Based Learning (PBL) is a teaching approach that uses real-world problems as a context for students to learn critical thinking and problem skills, as well as

to acquire essential knowledge and concepts from the subject matter (Kusmiati, 2019). This was also conveyed by Arends in (Musyadad, 2022) stated that the problem-based learning model is a learning approach where students work on authentic problems with the intention of compiling their own knowledge, developing inquiry, and higher-order thinking skills, developing independence and confidence. PBL is a form of learning based on the constructivism paradigm, which is oriented towards student learning process (student-centered learning). PBL focuses on presenting a problem (real or simulated) to students, then students are asked to find solutions through a series of research and investigations based on theory, principle concepts learned from various sciences. Problems as a focus, stimulus and guide of the learning process, while teachers become facilitators and guides (Siregar, 2011).

Through this independent learning curriculum and students can be actively involved in learning. This is in accordance with the opinion (Marta, Fitriya, hadyanto, & Zikri, 2020) which states that "learning the independent learning curriculum emphasizes more on the involvement of students in the learning process, so that students can get direct experience and be trained to be able to find for themselves the various knowledge they learn".

This research is to determine the application of the Problem Based Learning (PBL) learning model in science subjects at the junior high school level at SMP Negeri 4 Golewa. Problem-based learning (PBL) is a learning approach that uses real-world problems as a context for students to learn about how to think critically, problem-solving skills to obtain essential knowledge and concepts from learning materials based on data from initial observations made by researchers at SMP Negeri 4 Golewa, researchers conducted interviews with the waka curriculum, From the interview, researchers obtained data that SMP Negeri 4 Golewa is a driving school that has implemented an independent curriculum as well as its P5. SMP Negeri 4 Golewa implements an independent curriculum with an independent sharing category, meaning that the school develops its own teaching tools. Interviews were also conducted with class VIII science subject teachers, where the teacher concerned designed science learning in the classroom with differentiated learning, because the independent curriculum is a curriculum with differentiated learning or learning that facilitates student learning needs. Teachers use problem-based learning, to lead to well being student or student happiness in learning (Rifai,2020)

METHOD

Qualitative research method is a research method based on the philosophy of postpositivism or entrepreneurship, used to examine the condition of the almah object, where the researcher is as a key instrument, data collection techniques are triangulated (combined observation, interview, and documentation). Data analysis is inductive/qualitative, and the results of research are to understand meaning, understand, uniqueness, construct phenomena, and find hypotheses (Sugyono, 2022). This research was conducted at SMP Negeri 4 Golewa, Golewa District, Ngada Regency. SMP Negeri 4 Golewa is a driving school that has implemented an independent curriculum at the beginning of new lessons in 2023/2024. Therefore, it is necessary to conduct research at the school to determine the supporting and inhibiting factors in implementing the independent curriculum at SMP Negeri 4 Golewa

RESULTS AND DISCUSSION

Based on observations made at SMPN 4 Golewa in general, it can be seen that students in the VIII class of SMPN 4 Golewa have a good level of activity. This observation is related to science learning about ecosystems. During science learning,

teachers carry out teaching and learning activities using the PBL model. The main problem in learning science at SMPN 4 Golewa is the supporting and inhibiting factors in the implementation of the independent curriculum at SMPN 4 Golewa. An inhibiting factor internally at SMPN 4 Golewa is that some teachers consider webinars or Worskshop to add insight into the Independent Curriculum. An external inhibiting factor is the lack of references in the implementation of the Merdeka curriculum.



Figure 1. Observation of Science Learning Process at SMPN 4 Golewa

The implementation of the independent curriculum is inseparable from several obstacles, there are several supporting factors and inhibiting factors in its implementation. This was also felt by SMP Negeri 4 Golewa. In the implementation of the independent curriculum, preparation is needed in several aspects, such as teacher readiness, infrastructure facilities and the condition of the school itself whether it supports the implementation of the independent curriculum or not.



Figure 2. Documentation of Facilities and Infrastructure at SMPN 4 Golewa

Through an interview, one of VII's class science teachers explained the adequate facilities and infrastructure at SMPN 4 Golewa as shown in Figure 2 above. Through the results of our interviews, if at SMPN 4 Golewa the infrastructure facilities, such as digital learning media are adequate, even though in the science learning process we refer to learning based on the nature of nature, it is indeed lacking in SMPN 4 Golewa, from the

science teacher ordering children to plant 1 child one plant so that they can make a small garden in front of their respective classes so that children are in nature-based learning, The example is ecosystem material and that children have fulfilled for the media. For complete lab equipment, there is no conflict with other teachers because it is scheduled. The independent curriculum is a new curriculum so that there can be several obstacles or inhibiting factors in implementing it. The following is an explanation from Waka of SMPN 4 Golewa curriculum regarding inhibiting factors in the implementation of the independent curriculum at SMPN 4 Golewa.



Figure 3. Interview with the Deputy Head of curriculum at SMPN 4 Golewa

The first is of course from the teacher himself, because this changes the new curriculum, because the others have not implemented it. Because SMPN 4 Golewa is a driving school that needs to be changed to new learning. Then the second about the implementation of the new curriculum has not been fully implemented, only independent learning, online webinars, that is an obstacle.

Based on observations, interviews and documentation, SMPN 4 Golewa is a school that has implemented an independent curriculum, so that in its implementation when finding an obstacle, the school cannot exchange ideas or share with other schools. The independent curriculum team that has been formed by the school must find its own solution to overcome the inhibiting factors faced. An inhibiting factor internally at SMPN 4 Golewa is that some teachers consider webinars or workshops to add insight into the Independent Curriculum. An external inhibiting factor is the lack of references in the implementation of the Merdeka curriculum. The new Merdeka curriculum was inaugurated in February 2022, at SMPN 4 Golewa. Started implementing it in July 2022. The implementation is periodic, not all schools implement an independent curriculum, so there are still few that can be used as references in the implementation.

The implementation of the Merdeka curriculum is inseparable from supporting and inhibiting factors, it is also felt by SMPN 4 Golewa. In its implementation, there are several factors that support the implementation of the Independent Curriculum, including adequate facilities and infrastructure. Supportive school conditions and teachers who are willing to learn about the Independent Curriculum. In science learning, infrastructure facilities are also adequate, including the Science Laboratory.

There are several things that can affect the success of the curriculum including the leadership of the principal, teachers, infrastructure, student activities, learning resources and school committees. The teacher is the implementation of learning in the classroom to be the party that deals directly with students. So that teacher readiness needs to adapt and understand changes in the independent curriculum as well as possible in order to carry out learning in accordance with the objectives of the curriculum applied. Supporting and adequate facilities also help the learning process to run well. Lack of learning resources and media can hinder the learning process.

The condition of schools that are ready to implement the Independent Curriculum from various aspects allows the implementation to run well and the expected goals can be achieved. However, even though the implementation has been prepared as well as possible, it is undeniable that schools will face an obstacle or factor that becomes an obstacle in the implementation of the Independent Curriculum. Some inhibiting factors at SMPN 4 Golewa in the implementation of the Independent Curriculum include a new experience of the Independent Curriculum, lack of references related to the implementation of the Independent Curriculum, there are still some teachers who do not attend webinars about the Independent Curriculum and The school does not have a school garden that serves as a learning resource in science learning

CONCLUSION

Based on the results of research, factors supporting the implementation of the independent curriculum include the completeness of facilities and infrastructure and teachers who want to know about the independent curriculum. Factors inhibiting the implementation of the independent curriculum, namely the lack of references to the implementation of the independent curriculum and new experiences, do not have a school garden and there are still teachers who do not participate in the independent curriculum webinar. There is no school garden that can be overcome by science teachers, by holding a one man one plant program or 1 student 1 plant so that a small garden in front of the classroom can be used as a learning resource.

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