

## **Pedagogical Competence of Elementary School Teachers in Implementing Learning According to the Merdeka Curriculum**

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***Abstract.** This research identifies and evaluates teachers' pedagogical competencies in implementing the Independent Learning Curriculum at SD Muhammadiyah. The Independent Curriculum allows teachers to design learning that suits students' characteristics and potential, encourages active student participation, and utilizes technology in the learning process. The research method used is descriptive qualitative with a case study approach involving semistructured interviews, classroom observations, and document analysis. The research results show that most teachers understand the Independent Learning Curriculum and can implement it effectively. Teachers at SD Muhammadiyah demonstrate good pedagogical competence, especially in understanding student characteristics, designing learning, implementing the learning process, and conducting learning evaluations. Hopefully, these findings can positively contribute to improving the quality of education in Indonesia, especially in implementing the Independent Learning Curriculum.*

***Keywords -** Pedagogical Competence, Independent Learning Curriculum, Curriculum Implementation*

### **I. INTRODUCTION**

Education in Indonesia continues to experience curriculum evolution or transformation over time. Rapid and unpredictable developments demand that education be more responsive, requiring a thorough evaluation of the curriculum, which may still be less in line with the demands of modern times[1]. Throughout the years, the curriculum continues to be developed by educational needs. This development is expected to improve the quality of education and give birth to a generation of nations with superior quality and competitive resources [2] . The Merdeka Curriculum, an innovation in the Indonesian education system, is designed as a new paradigm to improve education quality. The Merdeka Curriculum is a curriculum that provides a variety of intracurricular learning options that are arranged based on competency levels, learner characteristics, local environment, culture, and surrounding habits with the aim that the content is optimized so that students can master concepts and increase potential more effectively. The Merdeka Curriculum is designed to give schools the authority to adapt learning to the needs and culture of their respective schools. The Merdeka Curriculum is more flexible and provides flexibility for teachers in implementing learning, where teachers can freely use various models, media, and teaching tools according to the needs of students. This aligns with the opinion of [3], which states that teachers are freer in choosing learning strategies suitable for classroom implementation while still referring to students' learning needs, characteristics, and interests.

Nadiem Anal Makarim, Minister of Education and Culture (Mendikbud) of the Republic of Indonesia, will certainly present a new development in the world of education: an independent learning curriculum [4]. The Merdeka education system is present as an alternative education system in overcoming the decline of education during the pandemic. This provides "Educational Freedom" to the creators of education, namely teachers and principals, to design the curriculum, implement and improve the learning process in their schools. In calculating student needs and [5]. The Merdeka Curriculum adopts the concept of "Merdeka Belajar" which is unique to the 2013 Curriculum. This means giving freedom to schools, teachers, and students for free and creative introduction to learning, and this freedom is shared by the driving teachers.

Thus, it can be concluded that the independent curriculum has 3 main characteristics or characteristics. First, the curriculum focuses more on essential material, making it easier for teachers to focus on the in-depth and unhurried learning process. Second, providing special or additional lesson hours for character development through the Pancasila profile project. Third, it gives freedom to schools and educators to design, organize, and implement learning or education programs tailored to the needs and characteristics of their respective students.

One of the schools that has implemented the Merdeka Belajar Curriculum is SD Muhammadiyah, which is located within Muhammadiyah, a leading Islamic organization in Indonesia. Implementing this curriculum in schools such as SD Muhammadiyah requires teachers to have strong pedagogical competence. They must be able to develop student-centered learning approaches, utilize technology, and facilitate active discussions in the classroom. The teacher's ability to make students qualified and ready to face future challenges.

Based on the above statement, pedagogical competence is an important value of learning activities and the most important part of improving educator professionalism [6]. Teachers should have pedagogical competence in managing student learning consisting of understanding students, planning and implementing learning, evaluating learning outcomes, and developing students to actualize their various potentials [7]. Therefore, teachers' knowledge of pedagogical competencies that need to be owned and developed is important so that teachers can optimally implement the independent curriculum in the learning process.

A professional teacher is a teacher who is trained in taking action by rethinking every action. A professional educator requires a mature understanding, mastery, skills, and an exemplary will and personality. Pedagogic competence is needed to carry out an educational pace of learning supported by an understanding of child psychology. Some findings state that pedagogical competence must also be developed through teachers' interpersonal intelligence. Pedagogical competence can be applied by developing pedagogical knowledge, emotional intelligence, reflective ability, and instructional communication patterns in partial and simultaneous ways [8]. Pedagogical competence positively influences student achievement and motivation to learn [9].

This research aims to add insight into the pedagogical competence of Muhammadiyah elementary school teachers in implementing learning according to the independence curriculum in elementary schools. Pedagogical competence needs to be mastered and developed consisting of mastery of learning theory and the principles of educational learning, facilitating the development of students' potential for renewal in various potentials through appropriate approaches, and conducting assessment and evaluation of the learning outcome process. This study analyzes elementary schools that have implemented the independent curriculum. In its implementation, the Merdeka Curriculum at SD Muhammadiyah is not yet implemented in all grades, whereas grades 3 and 4 still use the K13 curriculum. This research will focus on teachers' pedagogical competence in implementing learning according to the curriculum. (1) How is the understanding of the independent learning curriculum for students in elementary schools? (2) How has the independent learning curriculum been implemented? and (3) What pedagogical competency factors are involved in implementing the independent learning curriculum?

## **II. METHODS**

The research method used is descriptive qualitative. The qualitative approach was chosen because it allows researchers to understand teachers' pedagogical competence in implementing the

Merdeka Belajar Curriculum at SD Muhammadiyah. Case studies will allow researchers to explore concrete situations at the school.

Research respondents are grade I, II, and V teachers. The research will use semi-structured interviews focusing on teachers' understanding and experiences related to the Merdeka Belajar Curriculum and their teaching strategies. The research will involve classroom observations to directly observe teachers' teaching methods and how they integrate Merdeka Belajar Curriculum principles in their teaching. Documents related to the school curriculum, lesson plans, and teaching notes will be analyzed to support interview and observation data.

Interviews will be conducted with selected teachers and school principals as information supporting pedagogical competence research. Classroom observations will be scheduled and conducted to observe teaching practices. School documents and learning materials will be analyzed in parallel with the interview and observation process. Data from interviews, observations, and document analysis will be thematically analyzed.

Data triangulation is an accurate validation by combining data and sources in data collection (interviews and observations). With this research method, researchers can provide an in-depth understanding of the pedagogical competence of teachers and the factors influencing the implementation of the Merdeka Belajar Curriculum at SD Muhammadiyah. The results of this study are used as a basis for educational improvement in other schools that run similar curricula in Indonesia.

### **III. RESULTS AND DISCUSSION**

#### **A. Understanding of the Merdeka Belajar Curriculum**

From interviews with Muhammadiyah Elementary School teachers, most understand the Merdeka Belajar Curriculum well. They recognize that this curriculum gives teachers more freedom in designing innovative learning according to students' needs. Most teachers show a positive understanding of the concept of the Merdeka Belajar Curriculum, describing it as an approach that gives teachers more freedom to design innovative learning according to the needs of students.

Teachers feel that the Merdeka Belajar Curriculum allows them to be more creative and flexible in developing teaching materials and methods to increase students' interest and involvement in learning. They also emphasized that this curriculum allows better adaptation to individual differences in the classroom regarding students' talents, interests, and ability levels. Thus, teachers feel more empowered to create an inclusive and effective learning environment where learners can develop according to their potential.

#### **B. Implementation of the Merdeka Belajar Curriculum**

Implementation is an effort to implement something. Implementation is an action of a plan that has been compiled carefully and in detail. Implementation is carried out when the planning is perfect, which boils down to activity, action, action, or the mechanism of a planned system[10]. The Merdeka curriculum can be written with several conditions. First are fundamental regulations, such as Government Regulation Number 57 of 2021 concerning National Education Standards. Second, looking at the national assessment aims to measure how the reasoning of students is not only knowledge. Third, if the publication becomes more widespread, it is unlikely that the Merdeka Curriculum will be stopped [11].

So, implementing the Merdeka Curriculum aims to answer complaints and problems in the previous curriculum. The implementation of the Merdeka Curriculum can be seen in the driving school. Implementing this curriculum emphasizes students' talents and interests in developing their potential. Implementing this curriculum can make students competent in their fields and develop according to the development of science and technology today. Implementation is defined as an action of a plan that has been carefully and in detail prepared.

The Merdeka curriculum in primary schools/madrasa schools uses project-based learning to create a philosophical student profile. This is relevant to modern education, where the focus of education is knowledge and emphasis on character, literacy, skills and technology. The self-contained curriculum returns to the subject approach. Preparing the schedule for the curriculum is quite easy for teachers because the division of time per week uses subjects. Thus, the preparation of the schedule for the 2013 curriculum must consider the details of the effective days and weeks.

While the timetable is fairly straightforward, teachers should take note of a few things in the independent curriculum related to the Pancasila Learner Profile Strengthening Project (P5). This is an amalgamation of cross-disciplinary, project- or practice-based learning about understanding material and solving problems that students solve directly. Schedules should include P5 with options that can be done per lesson end, week or period. This study lasted for almost 1 week, from April 29 to May 4, 2023. Data collection was conducted at the Muhammadiyah primary school level.

Next, the researcher will present the interview results with the principal based on the important points made.

1. Until 2023, there is still a choice to run curriculum 13, emergency curriculum, or standalone curriculum, but in 2024, it will run the standalone curriculum without selection again; and in 2024, it will run the standalone curriculum without selection. 2024, it will run the independent curriculum without selection again;
2. For now, the independent curriculum is implemented only for grades I, II, V, and VI;
3. Learners become the center of learning;
4. Learning is mostly carried out in groups so that cooperation is built in students according to the profile of Pancasila learners.
5. There are learners with disabilities in certain classes and it is highly valued to do learning together;
6. Project-based learning. It does not always result in products, but rather habituation and changes in attitude/character (cooperation, critical reasoning, independence, creativity, and others, according to the Pancasila Learner Profile) within a certain time target;

Results of the teacher SD Muhammadiyah's implementation of the Merdeka curriculum include the teacher providing ice breaking as a pre-lesson stimulus prior to instruction. When the teacher gives advice to the students, the students behave well and work together to complete tasks. Very few students who are actively engaged ask questions during exploration. As a result, the learning object is the student, and the teacher only serves as a mediator between the student and the learning material. It is expected of didik students to pay attention to the material being studied. In addition, SD Muhammadiyah states that it has implemented the Merdeka curriculum in accordance with the formative and sumative assessment methods, project-based learning modules, student-centered learning in classrooms, and diagnostic assessment methods.

## **1. Pedagogical Competence**

### **a. Understanding Students**

Understanding students' character is necessary in classroom learning activities, especially in implementing the Merdeka Curriculum. To find out the character of each learner, teachers can communicate and observe students' attitudes during learning activities, making it easier for teachers to recognize the nature of students and their learning styles. These learner characteristics can be an important consideration for teachers in determining the learning strategy that best suits the needs and potential of students. If teachers can understand the characteristics of their learners, then they can determine the most appropriate learning strategy [12].

Based on the results of interviews and observations conducted by researchers, it can be concluded that teachers at SD Muhammadiyah can understand the characteristics of students in their classes. This is evidenced by the similarity of answers from the four interviewees. To understand the development of learners, teachers have made early observations to adjust the approach to the character of the learners. Teachers recognize learners' potential through their interest in extracurricular activities, questions and answers, assignments, and behavior outside the classroom. One way to develop learners' abilities, potential, talents, or interests is through extracurricular activities with potential development carried out at SD Muhammadiyah, which has several extracurricular activities, including the following: extracurricular dance, painting, English, music, scouting, and swimming. From these extracurricular activities intended for students who want to pursue their respective talents and potentials, the role of the teacher is to find out what talents and potentials their students have so that the teacher also provides socialization so that students know which extracurricular activities are by the talents and potential of their students, as is done by the first-grade teacher who initially asks individual students about their preferences from the four extracurricular activities. So that teachers will be more helped by the statements of their students. The school is also very supportive of the extracurricular activities held at the school, as seen when the principal tries to find extracurricular teachers who are competent in their fields.

This is done because that way, students' potential and talents will develop and can achieve glory in the future. Therefore, teachers should also recognize the character to be able to balance between one character and another because a teacher can't give the same treatment to different characters. Teachers who can recognize the characteristics of their students, the teacher will find it much easier to control the class and students so that students can develop themselves. The development of students' potential is a process that is deliberately carried out so that students can have a skill in the learning process. Therefore, the teacher is tasked with creating conditions in such a way that students' various potentials and diverse abilities can be optimally developed [13].

### **b. Ability to Design Learning**

In learning the Merdeka Curriculum, there are seven stages of learning design. The first stage is analyzing learning outcomes (CP) for the development of learning objectives and pathways. The second stage is planning and implementing diagnostic assessments, followed by the third stage, namely developing learning modules. The fourth stage is the adaptation of learning according to the stages of learning outcomes and the character of students. The fifth stage is planning, implementing and managing formative and summative assessments. The sixth stage is learning progress reporting, and the last is learning evaluation [14].

This is evidenced by the results of interviews conducted in the field. Before conducting learning, teachers prepare learning plans called teaching modules for implementing learning. This teaching module is a new term for lesson plans in the Merdeka Curriculum, which teachers develop according to the conditions of their respective classes.

Choosing the right teaching material is one of the important factors to support successful learning. Other supporting factors include using other learning resources and the seating arrangement of students. Each teacher implements All lesson planning indicators as well as possible, although in different ways. For example, some teachers use visual media such as comics, magazines, books with different publishers, material summaries, and interactive media using LCD. However, the use of interactive media is rarely done and only on certain materials due to the lack of LCD facilities at SD Muhammadiyah.

The arrangement of classrooms by teachers at SD Muhammadiyah, based on the results of observations in the field, on average, is done by arranging seating in groups and changing seats. This aims to create a classroom atmosphere that is not boring for students.

### **c. Implementing the Learning Process**

From the observations made by researchers, implementing learning at SD Muhammadiyah uses differentiated learning. Differentiated learning unites the elements of learning (content, process, product, and learning environment) with different students' learning readiness, interests, and learning profiles (styles). Teachers must be able to process a variety of differentiation in four aspects appropriately. Namely, the content (material learned), the process (learning approach taken), the product (what is produced after learning it), and the learning environment and climate [15]. Differentiated learning also emphasizes collaboration between learners, and the opportunity to become a peer tutor will be challenging for learners with comprehension skills. It will also facilitate learning space for learners with learning disabilities. The learning climate is built with mutual trust, respect for one another, and growing together without one being left behind (No Child is Left Behind) [16]. In addition, teachers can apply various approaches to support more creative learning, such as the concept approach, process approach, open-ended approach, and so on.

To keep the class conducive so that students feel comfortable while learning and stay focused during learning, teachers provide interludes between lessons to arouse students' enthusiasm for learning, such as doing ice breaking. In addition, teachers can control the class both during group and individual work by giving individual assignments, challenging questions and encouraging collaboration in groups to complement each other.

### **d. Learning Evaluation**

In implementing the Merdeka curriculum at SD Muhammadiyah, learning outcomes evaluation uses three types of assessments: diagnostic assessment (initial assessment), formative assessment, and summative assessment. This is in line with the journal proposed by David Darwin in his research on the assessment of the Merdeka curriculum. Darwin stated that formative assessment aims to monitor and improve the learning process and evaluate the achievement of learning objectives [17]. This assessment identifies students' learning needs, obstacles, or difficulties and obtains information about their development. Teachers carry out formative assessments during teaching and learning activities (KBM) to see the success of the KBM itself. The teacher can use

this assessment as feedback to evaluate and improve the KBM in the future. Formative assessment can be carried out in writing or orally, formally and informally, using test and non-test instruments. A quiz is an example of a formative assessment that uses a test.

Summative assessments are usually completed after a semester or term of study, such as at the conclusion of a course. As part of the fundamental education programme, summative assessments are conducted to determine how well students are meeting learning objectives and/or course completion points (CP). The learning outcomes of students are evaluated by comparing them to the criteria for meeting the learning objectives. It is important to note that teachers are capable of using various tools and techniques to conduct summative assessments, including tests and quizzes.

Asesmen diagnostik is a sort of research designed to pinpoint the patient's strengths, limitations, and capacities in order to better use the patient's condition and competence in educational settings. Finding the pupils' strengths and shortcomings in the current learning task is the aim of the diagnostic evaluation. Teachers can utilise the results of the diagnostic evaluation as an entry point (beginning point) to direct the learning activities that follow. In a given scenario, instructors can make use of data on student attitude, learning motivation, school performance, and family history [18]

## **VII. CONCLUSION**

Education in Indonesia has undergone several changes in recent years. One of the significant changes is the introduction of the Merdeka Belajar Curriculum. This curriculum offers greater flexibility for teachers in developing lesson plans tailored to each learner's characteristics and potential. This research shows that most teachers at SD Muhammadiyah understand the Merdeka Belajar Curriculum and recognize that this curriculum gives teachers more freedom to design innovative learning according to student's needs.

However, implementing this curriculum still requires improving teachers' pedagogical competencies, especially in developing learner-centered learning approaches and utilizing technology. Teachers must have four competencies formulated by the government: pedagogical, personality, social, and professional competencies. Pedagogical competence, in particular, is very important in implementing the Merdeka Belajar Curriculum because it allows teachers to find innovations in delivering material in the classroom so that learning becomes more effective and interesting.

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***Conflict of Interest Statement:***

*The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.*