# ANALYSIS OF TEACHERS' PEDAGOGICAL COMPETENCE IN IMPLEMENTING MERDEKA CURRICULUM AT STATE ELEMENTARY SCHOOL 1 KALIBENDA

### Andhy Romadona Estiono<sup>1\*</sup>, Badarudin<sup>2</sup>

<sup>1\*</sup>Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, University of Muhammadiyah Purwokerto
 <sup>2</sup>Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, University of Muhammadiyah Purwokerto andhyromadona6@gmail.com badarudinbdg@gmail.com

**Abstract**: The purpose of this research is to describe the role of teachers and pedagogical competence in implementing the merdeka curriculum at SD Negeri 1 Kalibenda. The type of research carried out uses descriptive qualitative methods. The subjects of this research were class I and class IV teachers at SD Negeri 1 Kalibenda. Data were collected in the form of observations, interviews, and documentation. Data validity was determined by triangulating data collection techniques. The results illustrate that the implementation of the teacher's role in the merdeka curriculum at SD Negeri 1 Kalibenda has been carried out quite well, such as in planning, preparing, and developing a merdeka curriculum. In the planning, preparation, and development stages of the curriculum, SD negeri 1 Kalibenda formed a curriculum development team. Curriculum development is prepared jointly by the education unit and the characteristics of students. The achievement of teachers' pedagogic competence has been successfully reflected in the implementation of the merdeka curriculum at SD Negeri 1 Kalibenda. The aspects of teachers' pedagogic skills that have been well practiced by grade I and grade IV teachers: first, understanding the characteristics of students, second, understanding learning theories and values, third, curriculum development, fourth, educational learning process activities, fifth, communication with students, and sixth, assessment and evaluation. The aspects of teachers' pedagogic skills that have not been implemented optimally are the development of students' potential.

Keywords: teacher competence, implementation, merdeka curriculum

#### INTRODUCTION

Education is a series consisting of various components such as curriculum, facilities and infrastructure, methods, students and teachers, which are related to fulfill educational targets. Among these elements, the teacher element is one of the most important. Education requires a series of learning activities in which the teacher must carry out the learning process activities. Education has the role of instilling knowledge and values and plays a role in preserving and developing cultural wisdom in society through the process of character building.

To realize the role and objectives of national education activities, it is also necessary to have a medium so that education can be carried out properly, namely the curriculum. According to Badarudin (2018: 78), the curriculum is a collection of plans and agreements containing objectives, content, learning process materials, and methods used as a guide in carrying out learning activities to fulfill the specified educational objectives. The curriculum regulates what to learn and how to teach so that certain educational goals can be achieved. The curriculum is designed to facilitate the educational process. The curriculum explains how schools as a system must have clear directions and goals. The curriculum has a function as a means to achieve educational goals. When educational goals change, the curriculum will automatically change.

The situation of education in Indonesia that is increasingly behind is caused by the COVID-19 pandemic. The COVID-19 pandemic is a special situation that causes various disadvantages in the learning process on students' skill attainment. In addition, many national and international studies show that Indonesia has also been experiencing a learning crisis for a long time. Faced with this situation, the Ministry of Education and Culture is endeavoring to restore the learning process. One of the efforts to address the available problems is to introduce Merdeka Curriculum.

The Merdeka Curriculum is new to educators. It is a curriculum that emphasizes a diverse extracurricular learning process. It is designed by optimizing the content of the learning process to provide ample opportunities for students to explore concepts and develop their competencies. As such, students have the freedom to learn according to their needs and desires, which encourages a more independent and skill-orientated learning process. Teachers have the flexibility to choose a wide variety of learning media so that students can complete the learning process according to their learning needs and preferences. Based on certain themes determined by the government, sequences have been developed to raise the profile of Pancasila learners. Curriculum changes in education have created understandable difficulties and challenges for teachers in imparting knowledge to students. Teachers need skills, creativity, responsibility, time, and expertise to use various media, methodologies, and strategies to fulfill the curriculum objectives.

Nadiem Makarim's Merdeka Belajar concept is a response to the challenges faced by teachers in the classroom. This concept reduces the professional burden on teachers. This is done through the freedom to use various types of instruments to assess student learning, freedom from cumbersome administration, and freedom from teacher pressure and politicization. The concept of Merdeka Belajar opens insights to have a better understanding of the various difficulties that have an understanding faced by educators in the tasks of the learning process at school. This includes challenges such as new student problems, the management of class preparation by teachers, a series of learning activities, and assessment issues such as the National Standardised School Examination (USBN) and the National Examination (UN). Teachers are the main key to shaping the future of the nation through learning activities. Therefore, it is essential to create a more comfortable learning environment in the classroom. According to Nadiem Makarim, Merdeka Curriculum must be created by teachers before teaching students. Without the core competencies and curriculum translation process available, there is no series of learning activities for all levels of teacher competence.

The implementation of Merdeka Belajar policy facilitates the function of educators in the curriculum development process and a series of learning activities. Teachers in the curriculum development process are essential because it allows curriculum content to be better adapted in line with the needs and characteristics of students in the classroom. According to Alsubaie (2016: 107), teachers can have an understanding of student psychology and have an understanding of various teaching methods and designs. Teachers also act as assessors to evaluate student learning outcomes. Therefore, in the process of curriculum expansion, teachers are required to have competencies such as planning, designing, managing, evaluating, researching, deciding, and managing. Teachers can fulfill these responsibilities throughout all steps of the curriculum development process, Jaghay & Patankar (2013: 1077).

According to Dhani (2020: 48), the teacher's task in the development activities of developing the Merdeka Curriculum is to design specific learning process objectives that are in line with curriculum objectives, the characteristics of subjects and students, and the classroom situation, and ensure that students have met the planned targets, design a series of learning activities that effectively serve the implementation of learning process objectives or competencies, carry out a series of learning activities as an application of the curriculum, carry out process assessments and learning outcomes, conduct evaluations for the relationship between the implemented curriculum components.

According to Daga (2021: 1077), collaboration and active participation of teachers in school curriculum development are very important in developing and organizing teaching materials, textbooks, and learning process content. Teachers also act

as facilitators of the learning process based on their intelligence, abilities, and core values that are reflected in their behavior and mindset. These teacher competencies enable them to effectively implement independent learning strategies and policy objectives. With this involvement and role, teachers can support meaningful curriculum implementation in line with Merdeka Belajar principles.

This breakthrough in changing the new curriculum is certainly inseparable from the demands faced by teachers when implementing the Merdeka Curriculum. Teachers at least in the implementation of Merdeka Curriculum to explore Merdeka Learning knowledge through participation in training, several requirements require a minimum experience of Merdeka Curriculum. Teachers are expected to act as facilitators, provide services, support learning experiences, and help ensure that a series of learning activities are aligned with the needs and characteristics of students. A teacher must be able to master teaching techniques competently and appropriately. Teachers must have a high understanding of teaching skills by the Merdeka Curriculum. Teachers must have the skills to assess the learning process of their students. In this way, Merdeka Curriculum learning can be implemented properly and optimally. These changes are of course a concern for all parties involved in the implementation of education, especially schools that will implement the new curriculum and teachers need to develop their pedagogical competencies by the demands of the curriculum.

Pedagogical competencies that must be acquired and developed include mastery of learning materials, theoretical values of developing learning processes and educational learning activities, facilitating the development of student potential to realize several potentials that are owned with a compatible approach, assessing the learning process or educational education in general. This includes teachers evaluating what is known in general and conducting assessments. Therefore, to keep up with curriculum changes and developments, teachers must constantly improve their pedagogic competence to integrate curriculum content into a series of learning activities.

Based on data obtained from interviews with grade I and grade IV teachers at Kalibenda State Elementary School 1, there are teacher obstacles in implementing the Merdeka Curriculum, including some teachers who do not understand the Merdeka Curriculum policy. Teachers are also still adjusting to the policies and implementation of the Merdeka Curriculum. Then, in implementing the Independent Curriculum, there are limitations to textbooks that are considered to be of low quality, both teacher books and

student books produced by the book center or private publishers. Teacher books and student books produced by the center and private publishers have relatively few references to help teachers get references on how to facilitate an efficient learning process for students. This makes teachers less than optimal in carrying out their competence. Then the difficulties that have an understanding experienced by teachers regarding the limited time to dissect and change the learning process outcomes of the Merdeka Curriculum because it is different from the previous curriculum.

Teachers do not have a good understanding of the concept of Merdeka Curriculum so they face problems in implementing Merdeka Curriculum in a series of learning activities. According to Daga, (2021: 1077) Teachers have difficulty finding references to design and implement Merdeka Belajar because they have no experience with the concept of Merdeka Belajar and the literature is limited. As a result, teachers do not have an understanding of the concept of independent learning. This situation causes teachers and students to be trapped in the education system experienced. For example, Hussein (2020: 63) explains that teachers do not need to burden themselves with tedious administration to meet the demands of the series or superiors. The main spirit of the Merdeka Belajar process is freedom of learning and the learning process for students and teachers. Freedom of learning will emerge and manifest in the learning process if teachers and students both realize the importance of this freedom. In addition, teachers need to understand their role in creating and supporting freedom of learning. By having a strong understand of the concept of Merdeka Belajar, teachers can create a learning process environment that is inclusive, supportive, and provides opportunities for each student to develop their potential optimally. The process and determination of the meaning and value of Merdeka Belajar can provide impact and become a consideration in the implementation and results obtained.

Based on the background, the author has an interest in conducting more comprehensive research on how the pedagogical competence of teachers in implementing the Merdeka Curriculum at the State Elementary School 1 Kalibenda. The research carried out aims to describe the role of teachers in the Merdeka Curriculum, and the pedagogical competencies that teachers must have in implementing the Merdeka Curriculum at the State Elementary School 1 Kalibenda.

#### RESEARCH METHODS

The research conducted applied descriptive qualitative research techniques. According to Sugiyono, (2016: 15) Descriptive qualitative research techniques are a research method research natural object situations which are important tools for researchers, using sample data sources and using data collection methods in the form of triangulation, data analysis has an inductive/qualitative nature, focusing more on understanding than generalization. The data sources used in qualitative research are primary and secondar. Primary data sources include the supervisor of Kalibenda State Elementary School 1, KORWILCAM Sigaluh, the school principal, as well as class I and class IV teachers. Secondary data sources consist of interview sheets, observation, and documentation.

The data analysis technique is a method implemented by researchers to collect and process data results. According to Sugiyono, (2016: 335) Data analysis is a series of activities to organize data that has been collected in relevant categories or units. The data is then described, synthesized, and arranged into meaningful patterns. In addition, data analysis also involves selecting data that is considered important for further study or as the focus of research. This whole process aims to make conclusions referring to the results of interviews, observations, and documentation. Based on Miles and Huberman (in Sugiyono, 2016: 338), the process of finding and compiling data systematically from the data analysis stages is composed of four stages, namely (1) data collection, (2) data reduction, (3) data presentation, and (4) conclusions.

#### RESULT AND DISCUSSION

## 1. Implementation of the Teacher's Role in the Merdeka Curriculum at State Elementary School 1 Kalibenda

The Merdeka Curriculum is the latest invention for educators. According to Gandasari, et al (2022: 1618), the Merdeka Curriculum is a diverse arrangement of extracurricular learning processes, with optimized content to provide enough time for students to explore concepts and improve their competencies. The teacher's role in the learning process provides freedom to choose from a range of educational resources. This flexibility allows teachers to choose learning techniques to suit learners' learning needs and desires. Projects to raise the profile of Pancasila learners are designed around specific themes identified by the government. Curriculum changes in education provide challenges and requirements for teachers to provide knowledge to

students. Teachers need skills, creativity, responsibility, time, and expertise to use various media, methodologies, and strategies to fulfill the curriculum objectives. The changes are certainly a concern for schools by all parties involved in the implementation of education, especially in terms of teachers' readiness to implement the Merdeka Curriculum and the need to develop teachers' pedagogical competence in line with curriculum demands.

Teachers have a crucial function in the process of curriculum development and implementation. Teachers also contribute to the implementation of Merdeka Belajar regulations. Teachers can collaborate effectively in school curriculum development for the organization, and planning of teaching materials, textbooks and learning content. Including teachers in the curriculum development process is necessary to adapt curriculum content to the needs of students in the classroom, Yulianti, M. et al, (2022: 295). As educators, teachers have an awareness of learner psychology and understand various teaching methods and strategies. Teachers also function as assessors to evaluate student learning achievement. Therefore, in the development of an independent curriculum, teachers are required to have the skills of designers, managers, evaluators, researchers, decision makers, and administrators. Teachers can apply these skills at all levels of curriculum development activities.

Based on the research results, the implementation of the Merdeka Curriculum at State Elementary School 1 Kalibenda has only started in 2022. The implementation of the Merdeka Curriculum at State Elementary School 1 Kalibenda is currently being implemented in stages in class I and class IV, while classes II, V, and VI are still implementing the 2013 curriculum. In implementing the Merdeka Curriculum, State Elementary School 1 Kalibenda has made preparations in terms of planning, preparing, and developing the Merdeka Curriculum. In terms of planning and preparing the Merdeka Curriculum, State Elementary School 1 Kalibenda formed a curriculum development team, which was compiled jointly by looking for references/guidelines related to the Merdeka Curriculum such as manufacturing guidelines, regulations, both government regulations and ministerial regulations, and learning outcomes. Then, in terms of curriculum development, it is in line with the characteristics of the education unit and students.

The readiness of public primary school teachers in 1 Kalibenda in implementing the Merdeka Curriculum is quite good because teachers want to learn

to look for references about having an understanding of the Merdeka Curriculum and how the learning process works, then the teacher's readiness by conducting diagnostic tests at the beginning to adjust to the needs of students' willingness, ability and ability so that teachers have the opportunity to develop techniques and design learning processes that are aligned with their profiles. Collaborative learning processes in the form of projects can improve the profile of Pancasila learners through learning experiences. Another teacher readiness is that they have made learning process tools such as ATP and teaching modules. Teaching modules are aligned with the situation of the school environment.

# 2. Teachers' Pedagogical Competence in Implementing the Merdeka Curriculum at State Elementary School 1 Kalibenda

Pedagogic competence is the teacher's expertise when assisting with student learning activities. This competence includes having an understanding of the basis or foundation of education, having an understanding of learners, curriculum or syllabus development, designing the learning process, implementing an educational and interactive learning process, using learning process technology, assessing learning outcomes, and enabling learners to realize some of their potentials. Another view considers pedagogical expertise as an important part of the teacher expertise system (Sergeeva, et al., 2020: 137).

Pedagogic competence requires educators to have an understanding of the diversity of students and concerns all their potential and personality. According to Surahmi, Y.D. et al. (2022: 139-142) Educational expertise includes several dimensions. (1) comprehension of student characteristics, (2) comprehension of learning theory and the values of an educational learning process, (3) curriculum development, (4) learning process activities that have an educational impact, (5) development of student abilities, (6) communication with students, (7) assessment and evaluation.

Based on the results of the research conducted, the pedagogical competence of teachers in implementing the Merdeka Curriculum at State Elementary School 1 Kalibenda is as follows:

#### a. Comprehension of student characteristics

At the beginning of the learning process, teachers provide diagnostic assessments to students to gain knowledge about student's learning abilities. By conducting

diagnostic assessments, teachers will gain knowledge about the literacy and numeracy abilities of students to provide equal learning opportunities to all students who have different skills. The purpose of teachers providing diagnostic assessments is to gain knowledge about students' initial abilities so that teachers can create strategies, methods, and ways of educating learning processes creatively in line with the needs of students' abilities and willingness. While in the aspect of mastering the characteristics of students, class IV teachers of State Elementary School 1 Kalibenda are good enough, because they first observe the situation of the classroom environment, observe the characteristics of student learning, then conduct diagnostic assessments to gain knowledge about student learning practices so that later teachers will find it easier to determine the learning process in line with the needs and desires of all students with different learning skills.

b. Comprehension of learning theory and educational learning process values In terms of understanding learning theories and applying the values of an educative learning process, Grade I teachers have demonstrated good quality. They have adopted a variety of creative learning approaches, strategies, methods, and techniques in line with the Merdeka Curriculum, although not all of them have been fully successful. In essence, grade I teachers have implemented and maximized as much as possible to create a creative educational learning process. For example, in the mathematics map, the first grade teacher uses learning process strategies and methods using media in the student's classroom environment. Grade IV teachers have demonstrated a good ability to master learning theory and the values of an educational learning process. They have applied various approaches, strategies, methods, and techniques of the learning process creatively in implementing the Merdeka Curriculum, although not all of them were fully successful. Then always apply a fun learning process by utilizing the media available around the students' environment in every learning process. In this aspect, there are still difficulties, which means that teachers have not tried new innovative and creative approaches, strategies, methods and techniques for learning, because they are new to teachers, then the lack of references regarding learning process theories and learning process values.

#### c. Curriculum development

In the aspect of curriculum development, class I and IV teachers have poor expertise at the beginning of time. Class I and IV teachers still have difficulties understanding the development of the Merdeka Curriculum due to a lack of references or a lack of understanding of curriculum development. This is experienced by class I and IV teachers because they only received training several times and there they only explained or socialized the development of the Merdeka Curriculum and did not practice it. So when developing the curriculum there are still difficulties that have an understanding because they do not understand the development of the Merdeka Curriculum. Over time, class I and IV teachers at State Elementary School 1 Kalibenda began to get learning references regarding the development of the Merdeka Curriculum through the curriculum development team between elementary schools, through KKG, attending the Merdeka Teaching Platform, and learning independently. In developing the Merdeka Curriculum, the ability of public elementary school teachers in 1 Kalibenda is quite good because now they can develop ATP and teaching modules, then they can implement a collaborative learning process in the form of a Pancasila Student Profile project. The teacher's ability to develop indicators and assessment instruments in implementing the Merdeka Curriculum at State Elementary School 1 Kalibenda is quite good. Teachers in developing indicators, looks at the abilities of students who are equalized with students' abilities. For example, in 1 class, 4 groups of children are very capable, capable, less capable, and not capable, which means using 4 different methods in line with student abilities.

#### d. Educational learning process activities

In the aspect of educational learning process activities, the ability of grade I and IV teachers at State Elementary School 1 Kalibenda is quite good. In the educational learning process, each teacher carries out activities in line with the plan that has been prepared previously. The purpose of these activities is to help students in the learning process and line with the predetermined curriculum. In the activities of the educational learning process, teachers of class I and IV of State Elementary School 1 Kalibenda provide an educational learning process using learning process media and learning resources, namely Croem-book. Providing this learning process media to provide a fun and creative learning process makes students easily understand the material taught by the teacher.

#### e. Developing students' abilities

In the aspect of developing students' potential, class I and IV teachers at State Elementary School 1 Kalibenda are not good, although they have implemented the development of students' potential. Teachers have not fully explored the potential of students due to the limited facilities owned by State Elementary School 1 Kalibenda. Teachers only develop students' potential abilities through extracurricular activities at school such as Scouts, Volleyball, etc. Then during the preparation for the competition, students are just being coached to develop their potential.

#### f. Communication with learners

In a series of learning activities, teacher communication with students is important because the teacher is a facilitator of students. The ability to communicate with students owned by class I and IV teachers of State Elementary School 1 Kalibenda is very good. Class I and IV teachers at State Elementary School 1 Kalibenda have a very friendly attitude towards students and have high enthusiasm to provide a creative educational learning process. Equipped with this attitude, it automatically has good service to students in terms of delivering material, the teacher asks students, the teacher answers students' questions, then re-explains the material that has been delivered so that students understand the material. In the teaching and learning process in classes I and IV, there is good interaction, the class is always active, between teachers and students, and students (two-way interaction).

#### g. Assessment and evaluation

The ability of grade 1 and 4 teachers at Kalibenda 1 state elementary school in the aspect of assessment and evaluation is quite good. These teachers are able to carry out diagnostic, formative, and summative assessments without much difficulty that has the understanding faced. Grade I and IV teachers at SD Negeri 1 Kalibenda have carried out assessments in the learning process both diagnostic, formative and summative assessments. The assessment was carried out by class I and IV teachers of SD Negeri 1 Kalibenda at the beginning of the learning process so that the learning process to be carried out has adjusted to the needs of the willingness and ability of students. Then doing formative assessment can be in the form of an assessment at the beginning and assessment during the learning process, while summative assessment is an assessment carried out to ensure the

achievement of the overall learning process objectives, so this assessment is often carried out at the end of a series of learning activities, the end of the school year or the end of the education level.

#### CONCLUSION

The implementation of the Merdeka Curriculum at State Elementary School 1 Kalibenda is currently being implemented in stages for classes I and IV, while the 2013 curriculum will continue to be used for classes II, V and VI. In implementing the Merdeka Curriculum, State Elementary School 1 Kalibenda has prepared itself well in terms of planning, preparing, and developing the Merdeka Curriculum. For planning, preparing and developing the Merdeka Curriculum, State Elementary School 1 Kalibenda formed a collaborative team of curriculum developers. The curriculum is then aligned with the education unit and the characteristics of the participants. Class I and grade V teachers at Sekolah Dasar Negeri 1 Kalibenda are very ready for the implementation of the Merdeka Curriculum. This is because teachers are willing to learn to look for references to have an understanding of the Merdeka Curriculum and improve their readiness by conducting diagnostic tests first. This adjusts to the needs of students' willingness, ability and ability so that teachers can develop learning process methods and strategies that are in line with student profiles and the collaborative learning process in the form of projects can improve the Pancasila Learner Profile through learning experiences. Other preparations made by teachers are developing learning process tools such as ATP and teaching modules.

The pedagogical competence of class I and class IV teachers in implementing the Merdeka Curriculum at Kalibenda 1 State Elementary School is quite good. Aspects of the teacher's pedagogical competence can carry out the implementation quite well, such as the comprehension of student characteristics, comprehension of learning theories and values of the learning process by educating, development of the Merdeka Curriculum, educational learning process activities, communication with students, and assessment and evaluation. However, there are aspects of pedagogical competence that are not running well, namely the development of student potential. This aspect has not been fully implemented by class I and class IV teachers due to the limited facilities owned by Sekolah Dasar Negeri 1 Kalibenda. Teachers can only develop students' potential through extracurricular activities such as scouts. Therefore, the pedagagoic competence of grade

I and grade IV teachers in implementing the Merdeka Curriculum at State Elementary School 1 Kalibenda is categorized as quite good.

#### **ACKNOWLEDGEMENTS**

This journal article was written by Andhy Romadona Estiono from the results of research focusing on the Analysis of Teachers' Pedagogical Competence in Implementing the Merdeka Curriculum at State Elementary School 1 Kalibenda as the final assignment to complete his studies at the Elementary School Teacher Education Study Programme, Faculty of Teacher Training and Education, University of Muhammadiyah Purwokerto. The research carried out can be carried out properly with the cooperation of several parties. Therefore, the researcher gives thanks to the supervisor, Mr Badarudin, M.Pd and the entire education community of Sekolah Dasar Negeri 1 Kalibenda and KORWILCAM Sigaluh for their assistance in the research carried out. The author knows that this article still has several shortcomings, so the author hopes for constructive criticism and suggestions from the readers.

#### REFERENCES

- Ainia, D. K. (2020). Merdeka Belajar Dalam Pandangan Ki Hadjar Dewantara dan Relevansinya Bagi Pengembangan Pendidikan Karakter. Jurnal Filsafat Indonesia, 3(3), 95–101.
- Alsubaie, M. A. (2016). Curriculum Development: Teacher Involvement in Curriculum Development. Journal of Education and Practice, 7(9), 106–107.
- Badarudin, B. (2019). Peran kepala sekolah dasar dalam mempersiapkan sumber daya pendidik menghadapi implementasi Kurikulum 2013. Dinamika Jurnal Ilmiah Pendidikan Dasar, 10(2).
- Creswell, John W. (2013). Research Design Pendekatan Kualitatif, Kuantitatif Dan Mixed. Edited by Achmad Fawaid, Saifuddin Zuhri Qudsy, Haitamy El Jaid, and Bima Bayu Atijah. Yogyakarta: Tiga Pustaka Pelajar.
- Daga, A. T. (2021). Makna merdeka belajar dan penguatan peran guru di sekolah dasar. Jurnal Educatio Fkip Unma, 7(3), 1075-1090.
- Dhani, R. R. (2020). Peran Guru Dalam Pengembangan Kurikulum. Jurnal Serunai Adminstrasi Pendidikan, 9(1), 45–50.
- Gandasari, A., Sopia, N., & Ege, B. (2022). Penyuluhan Pendidikan Tentang Kurikulum Merdeka Bagi Guru Sekolah Dasar. JPPM: Jurnal Pelayanan dan Pemberdayaan Masyarakat, 1(2), 67-76.
- Husein, M. Bin. (2020). Kesulitan Belajar Pada Siswa Sekolah Dasar: Studi kasus di Sekolah Dasar Muhammadiyah Karangwaru Yogyakarta. Jurnal Cahaya Pendidikan, 6(1), 56–67.
- Jaghav, M. S., & Patankar, P. S. (2013). Role teachers In Curriculum Development For Tearcher Education. National Confecence on Challenges in Teacher Education, Physical Education and Sports, Department of Education and Physical Education Mahavir Mahavidyalaya, Kolhapur 2013, 1–9.
- Kemendikbud (2020). Buku Panduan Merdeka Belajar Kampus Merdeka. Edisi ke-3. Jakarta: Direktorat Jenderal Pendidikan Tinggi Kemdikbud RI
- Rahman, M. H. 2014. Professional Competence, Peagogical Competence and the Performance of Junior High School of Science Teachers. Journal of Education and Practice, 5 (9), 75-80.
- Sergeeva, M., Khvastunov, A., Latipov, Z., Stadulskaya, N., Ponkratenko, G., & Burovkina, L. (2020). Formation of pedagogical competence of teachers of professional educational organizations. Journal of Critical Reviews, 7(9), 528-532.

- Sugiyono (2016). Metode Penelitian Pendidikan ( Kuantitatif, Kualitatif, RnD dan Penelitian Pendidikan). Bandung: Alfabeta.
- Surahmi, Y. D., Fitriani, E., Pradita, A. A., Ummah, S. A., & Aeni, A. N. (2022). Keahlian Pedagogik Guru Sekolah Dasar Dalam Mengelola Proses belajar Terpadu Pada Kurikulum 2013. Jurnal Cakrawala Pendas, 8(1), 135-146.
- Yulianti, M., Anggraini, D. L., Nurfaizah, S., & Pandiangan, A. P. B. (2022). Peran guru dalam mengembangan kurikulum merdeka. Jurnal Ilmu Pendidikan dan Sosial, 1(3), 290-298.