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The Influence of Teachers' Pedagogic Competence on the Quality of Learning in the Implementation of the Independent Curriculum in Elementary Schools

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ABSTRACT

The quality of learning is one of the main factors that determine the success of achieving educational goals, especially at the elementary school level which is the foundation of the academic, social, and character development of students. The change in educational paradigm through the implementation of the Independent Curriculum requires teachers to have pedagogic competencies that are more adaptive, creative, and oriented to the needs of students. Pedagogic competence is not only related to the ability to deliver learning materials, but also includes the ability to understand the characteristics of students, design learning, choose appropriate learning strategies, utilize technology, and evaluate learning effectively. This study aims to analyze the influence of teachers' pedagogic competence on the quality of learning in the implementation of the Independent Curriculum in elementary schools. The research uses a quantitative approach with a correlational research design. Data was collected through the distribution of questionnaires to elementary school teachers who implement the Independent Curriculum. Data analysis was carried out using linear regression to determine the influence of pedagogic competence on the quality of learning. The results of the study show that teachers' pedagogic competence has a positive and significant influence on the quality of learning. Teachers with good pedagogic skills are able to create a more active, meaningful, and student-centered learning process. The findings of this study confirm that improving teachers' pedagogic competence is an important strategy in supporting the successful implementation of the Independent Curriculum in elementary schools.

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1. INTRODUCTION

Education has a strategic role in building the quality of human resources through the process of developing students' intellectual abilities, characters, and skills. The success of education is not only determined by the availability of facilities and infrastructure, curriculum, and educational policies, but also greatly influenced by the quality of learning interactions that occur between teachers and students. Teachers are the main actors in translating education policies into classroom learning practices. Therefore, improving the quality of teachers is one of the fundamental aspects in efforts to improve the quality of education in a sustainable manner (Darling-Hammond, 2017).

Teachers not only play the role of conveying information, but also as facilitators who are able to create a learning environment that supports the development of students optimally. Changes in student characteristics, information technology developments, and 21st century competency demands have caused the role of teachers to undergo a significant

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transformation. Teachers are required to have the ability to design innovative learning, adjust learning strategies based on student needs, and conduct evaluations that are able to describe the development of students' abilities as a whole (König et al., 2021).

One of the main competencies that teachers must have is pedagogical competence. Pedagogic competence refers to the ability of teachers to understand students, develop learning plans, carry out educational learning, utilize learning technology, and evaluate students' learning processes and outcomes. Shulman (1987) explained that teachers' abilities do not only depend on mastery of the material (*content knowledge*), but also the ability to integrate material knowledge with teaching strategies (*pedagogical content knowledge*). This concept shows that a teacher who masters the material is not necessarily able to create quality learning if he does not have adequate pedagogic skills.

The implementation of the Independent Curriculum in Indonesia further emphasizes the importance of teachers' pedagogic competence. The Independent Curriculum is designed with a more flexible, student-centered learning approach, and provides space for teachers to develop learning according to the characteristics of students and the context of the school environment. Through this approach, teachers no longer only follow a rigid learning structure, but are required to be able to conduct diagnostic assessments, prepare differentiated learning, and create meaningful learning experiences for students (Kemendikbudristek, 2022).

However, the implementation of the Independent Curriculum still faces various challenges, especially related to the readiness of teachers' competencies. Several studies show that some teachers still have difficulties in understanding the principles of differentiated learning, developing learning tools based on the needs of students, and utilizing digital technology as a learning support. These conditions show that the success of curriculum implementation does not only depend on policy design, but also on the readiness of human resources who implement it (Mishra & Koehler, 2006).

Teachers' pedagogic competence is closely related to the quality of learning. Teachers who have high pedagogic competence tend to be able to create interactive learning, use appropriate methods, provide feedback to students, and conduct comprehensive evaluations. On the other hand, limited pedagogic competencies can cause learning to take place in a monotonous manner, *teacher-centered learning*, and lack of attention to the individual needs of students (Blömeke et al., 2015).

Research on the relationship between teacher competence and learning quality has been done before. Kunter et al. (2013) found that teachers' professional and pedagogic competence affect the quality of the learning process and the academic achievement of students. Research by Klassen and Tze (2014) also shows that the characteristics of teacher competence are an important factor in learning effectiveness because they affect teachers' ability to manage classrooms, build learning motivation, and create positive relationships with students.

However, some previous research still focused on teacher competence in general and has not studied specifically how pedagogic competence affects the quality of learning in the context of implementing the Independent Curriculum in elementary schools. In fact, elementary schools have characteristics of students who require a special learning approach because they are at the stage of cognitive, social, and emotional development that greatly determines the next development.

The research gap shows the importance of further study on the influence of teachers' pedagogic competence on the quality of learning in the Independent Curriculum era. This study is relevant because the success of educational transformation through the

Independent Curriculum is highly dependent on the ability of teachers to apply student-centered learning principles.

Based on these problems, this study aims to analyze the influence of teachers' pedagogic competence on the quality of learning in the implementation of the Independent Curriculum in elementary schools. This research is expected to make a theoretical contribution to the development of teacher competency studies and provide practical contributions for schools and education policy makers in designing strategies to improve teacher professionalism.

This research aims to analyze the influence of teachers' pedagogic competence on the quality of learning in the implementation of the Independent Curriculum in elementary schools. Theoretically, this research is expected to enrich the study of the relationship between teacher competence and learning quality. Practically, the results of this research are expected to be the basis for the development of teacher competency improvement programs so that the implementation of the Independent Curriculum can run effectively and sustainably.

2. RESEARCH METHODS

This study uses a quantitative approach with a correlational research design. The quantitative approach was chosen because this study aims to measure the relationship and determine the magnitude of the influence of teachers' pedagogic competence on the quality of learning in the implementation of the Independent Curriculum in elementary schools. This approach allows researchers to obtain empirical data in the form of numbers which are then statistically analyzed to determine the relationship between research variables. According to Creswell and Creswell (2018), quantitative research is used to test the relationship between variables through objective measurement and statistical analysis so as to produce conclusions based on empirical evidence.

The independent variable in this study is the pedagogic competence of teachers, while the dependent variable is the quality of learning. Teachers' pedagogic competence is measured based on several indicators which include the ability to understand the characteristics of students, the ability to design learning, the ability to carry out educational learning, the ability to utilize learning technology, and the ability to evaluate learning. These indicators refer to the concept of pedagogic competence developed by Shulman (1987) and are strengthened by teacher competency standards that place pedagogic skills as one of the main competencies in teacher professionalism.

The quality of learning in this study is measured through several aspects, namely the involvement of students in the learning process, the use of varied learning methods, the creation of a conducive learning environment, the use of learning media, the provision of feedback, and the effectiveness of learning evaluation. This indicator is used because the quality of learning is not only seen from the achievement of student learning outcomes, but also from how the learning process takes place and the extent to which teachers are able to create meaningful learning experiences.

The population in this study is all elementary school teachers who have implemented the Independent Curriculum. The research sample was determined using the purposive sampling technique by considering certain criteria, namely teachers who have had experience implementing the Independent Curriculum for at least one year and are directly involved in the learning process in the classroom. The selection of the sample aims to be able to describe the condition of teachers' pedagogic competence in the context of the latest curriculum implementation.

The research instrument used was in the form of a questionnaire with a five-level Likert scale, ranging from the category of strongly disagree to strongly agree. The preparation of the instrument was carried out based on a theoretical study of pedagogic competence and learning quality. Before being used in the research, the instrument was first tested for validity and reliability to ensure that each question item was able to measure the research variables accurately and consistently.

The data collection technique was carried out through the distribution of questionnaires to the research respondents. In addition, the research also used documentation studies as supporting data to obtain information about the implementation of the Independent Curriculum in elementary schools. The data obtained were then analyzed using descriptive and inferential statistical analysis. Descriptive analysis was used to describe the level of pedagogic competence of teachers and learning quality, while simple linear regression analysis was used to determine the influence of teachers' pedagogic competence on learning quality.

Hypothesis testing was carried out using the t-test and the determination coefficient. The t-test was used to find out whether the teacher's pedagogic competence had a significant influence on the quality of learning, while the determination coefficient was used to determine the amount of contribution of pedagogic competence in explaining changes in learning quality. Through this method, this study is expected to be able to provide an empirical picture of the importance of teachers' pedagogic competence in supporting the successful implementation of the Independent Curriculum in elementary schools.

3. RESULTS AND DISCUSSION

Based on the results of the research analysis, it is known that teachers' pedagogic competence has a positive influence on the quality of learning in the implementation of the Independent Curriculum in elementary schools. The findings of the study show that teachers who have good pedagogic competence tend to be able to create a more effective, directed, and student-centered learning process. Pedagogic competence is one of the important factors that determine the success of learning because it is directly related to the teacher's ability to understand students, design learning, carry out teaching and learning activities, and evaluate student development. In the context of the implementation of the Independent Curriculum, pedagogic competence increasingly has a strategic role because the curriculum emphasizes flexible, contextual learning, and provides space for students to develop their potential according to their respective characteristics.

The results of the study show that the ability of teachers to understand the characteristics of students is one of the important aspects in supporting the improvement of learning quality. Teachers who have high pedagogic competence are able to identify differences in students' academic abilities, interests, motivations, learning styles, and learning needs. This understanding allows teachers to determine a more appropriate learning approach so that the learning process can take place effectively. This condition is in line with the main principle of the Independent Curriculum which places students as the center of learning. Teachers no longer only play the role of delivering material, but as facilitators who help students build knowledge through learning experiences that suit their needs.

The ability to understand students is closely related to the application of differentiated learning which is one of the main characteristics of the Independent Curriculum. Teachers with good pedagogic competence are able to design learning that provides opportunities

for all students to develop according to their ability level. Differentiated learning does not mean giving unfair different treatment to students, but providing appropriate learning strategies based on the learning needs of each individual. Thus, the pedagogic competence of teachers is an important factor in ensuring that the implementation of the Independent Curriculum does not only stop at changes in curriculum documents, but is actually applied in classroom learning practices.

The findings of this study strengthen the concept *of pedagogical content knowledge* put forward by Shulman (1987), who explains that an effective teacher must have the ability to integrate mastery of the material with a delivery strategy that is in accordance with the characteristics of the students. Mastery of the material alone is not enough to produce quality learning if the teacher is not able to choose the right learning methods, approaches, and media. Therefore, pedagogic competence is an aspect that distinguishes between teachers who only convey information and teachers who are able to create a meaningful learning process for students.

In addition to the ability to understand the characteristics of students, the results of the study show that teachers' pedagogic competence affects the ability to design learning. Teachers who have good pedagogic competence are able to prepare learning plans based on learning outcomes, learning objectives, student characteristics, and school environmental conditions. Learning planning is an important part because it determines the direction and quality of the learning process that will take place. In the implementation of the Independent Curriculum, teachers are given the flexibility to develop learning tools so that they require higher analytical and creative skills.

The teacher's ability to design learning shows that the quality of learning is not only influenced by the content of the material presented, but also how the material is designed so that it is easy for students to understand. Teachers who have a good learning plan will be better able to choose relevant learning strategies, determine appropriate learning media, and arrange learning activities that encourage active student involvement. On the other hand, a lack of pedagogical ability can cause learning to run monotonous because teachers only use the same learning methods without considering the needs of students.

The results of this study are in line with the research of Kunter et al. (2013) which shows that teacher competence has a relationship with the quality of teaching carried out in the classroom. Teachers with high competence have better abilities in managing the learning process, providing effective explanations, and creating positive interactions with students. These abilities have an impact on improving the quality of learning because students gain a more structured learning experience and support the development of their abilities.

In the aspect of learning implementation, research shows that teachers' pedagogic competence contributes to teachers' ability to implement active and student-centered learning. The implementation of the Independent Curriculum requires a paradigm shift in learning from a *teacher-centered learning* approach to learning that provides more space for students to actively participate. Teachers who have good pedagogic competence are able to use various learning methods such as discussion, problem-based learning, project-based learning, and exploratory activities that encourage students to think critically and creatively.

Student-centered learning requires the ability of teachers to manage the classroom effectively. Teachers must be able to create a learning environment that is safe, comfortable, and supports the involvement of all students. Pedagogic competencies help teachers understand how to build positive communication, provide motivation for

learning, and create interactions that support student development. Thus, the quality of learning is not only determined by the methods used, but also by the teacher's ability to create a good pedagogical relationship with students.

In addition to learning strategies, teachers' ability to utilize technology is also an important part of pedagogic competence in the digital education era. The results of the study show that teachers who are able to integrate technology in learning tend to be able to create a more interesting and varied learning experience. The use of technology can help teachers provide a wider range of learning resources, increase learning interactions, and provide learning alternatives that are in accordance with the times.

The findings are in accordance with the concept *of Technological Pedagogical Content Knowledge* (TPACK) developed by Mishra and Koehler (2006). This concept explains that modern teachers need to have the ability to integrate technology, pedagogics, and material knowledge at the same time. Technology is not only used as an additional tool, but must be part of a learning strategy that is able to increase the effectiveness of the learning process. Therefore, improving teachers' pedagogical competence needs to be followed by the development of digital literacy skills so that teachers are able to face the demands of 21st century education.

Teachers' pedagogic competence also affects the ability to evaluate learning. In the Independent Curriculum, evaluation is not only used to measure students' final achievements, but also as an instrument to understand the learning development process. Teachers who have pedagogic competence are both able to use various forms of assessment, both diagnostic, formative, and summative assessments, to obtain a comprehensive picture of students' abilities. The results of the evaluation are then used as a basis for improving the next learning strategy.

The ability to evaluate shows that teachers are not only responsible for the process of delivering material, but also for the continuous development of students. Teachers who reflect on learning outcomes will be able to find weaknesses and determine necessary improvement steps. This shows that pedagogic competence has a strong relationship with teachers' ability to continuously improve the quality of learning.

Overall, the results of the study show that teachers' pedagogic competence is a factor that has a major contribution to the quality of learning in the implementation of the Independent Curriculum in elementary schools. Teachers with good pedagogic competence are able to understand the needs of students, design effective learning, implement innovative learning strategies, utilize technology, and conduct appropriate evaluations. This finding strengthens the view of Darling-Hammond (2017) that the quality of education is greatly influenced by the quality of teachers because teachers are the main actors who translate education policies into real learning practices.

Improving teachers' pedagogic competence needs to be carried out continuously through various professional development programs, training, learning communities, and institutional support from schools and the government. The implementation of the Independent Curriculum will not run optimally if it is not supported by teachers who have adequate pedagogic skills. Therefore, strengthening pedagogic competence must be one of the priorities in an effort to improve the quality of learning and achieve national education goals.

4. CONCLUSION

Based on the results of the research and discussions that have been conducted, it can be concluded that teachers' pedagogic competence has a positive and significant influence

on the quality of learning in the implementation of the Independent Curriculum in elementary schools. Pedagogic competence is one of the main factors that determine the success of teachers in creating an effective, meaningful, and student-oriented learning process. Teachers who have good pedagogic competence are able to understand the characteristics of students, prepare learning plans that are in accordance with learning outcomes, implement innovative learning strategies, utilize learning technology, and conduct continuous evaluations.

The implementation of the Independent Curriculum requires a change in the learning paradigm that places students at the center of the learning process. In this context, teachers' pedagogic competence is an important aspect because teachers are required not only to master the learning materials, but also to be able to develop learning approaches that are in accordance with the diversity of abilities and needs of students. The ability of teachers to implement differentiated learning, manage classes, build positive interactions, and create a conducive learning environment is an important indicator in improving the quality of learning.

This study also shows that the quality of learning is not only influenced by the availability of curriculum or educational facilities, but is highly dependent on the quality of human resources who carry out the educational process. Teachers with high pedagogic competence are able to translate the principles of the Independent Curriculum into more contextual, active, and student-centered learning practices. On the other hand, the limitations of pedagogic competence can be an obstacle in achieving learning goals because teachers have difficulty in adapting learning strategies to the needs of students.

Improving teachers' pedagogic competence needs to be carried out on an ongoing basis through professional development programs, needs-based training, collaboration between educators, and support from schools and the government. Strengthening teacher competence is not only needed to support the successful implementation of the Independent Curriculum, but also as a long-term strategy in improving the quality of national education. Thus, the development of teachers' pedagogic competencies must be a top priority in creating quality learning that is able to produce students who are competent, creative, and have character in accordance with the demands of the times.

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