# The Effect of Teacher Pedagogic Competence on the Implementation of HOTS-Based Reading and Writing Learning in High-Grade Elementary School Students

# Pengaruh Kompetensi Pedagogik Guru terhadap Penerapan Pembelajaran Membaca dan Menulis Berbasis HOTS pada Siswa Sekolah Dasar Kelas Tinggi

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Received: 12-01-2023 Accepted: 25-04-2023 Published: 30-04-2023

#### How to cite this article:

Suharni, S., Azis, A., & Munirah. (2023). The Effect of Teacher Pedagogic Competence on the Implementation of HOTS-Based Reading and Writing Learning in High-Grade Elementary School Students. *Pedagogik Journal of Islamic Elementary School*, Vol. 6(1), 51–60. <a href="https://doi.org/10.24256/pijies.v6i1.3630">https://doi.org/10.24256/pijies.v6i1.3630</a>

## **Abstract**

This study aims to see the effect of teacher pedagogical competence on the ability to apply HOTS-based reading and writing learning in the upper grades of elementary schools. This research is a quantitative research with the expose facto method. The research was conducted in cluster I, North Galesong District, Takalar Regency. The study population was upper class teachers in cluster I, North Galesong District, Takalar Regency, totaling 24 people. Through the cluster random sampling technique, the research sample was teachers at Public Elementary School No. 93 Sawakung Beba, totaling 3 people and public elementary school No. 94 Beba, totaling 3 people. Data collection techniques were carried out through questionnaires, observation, and documentation. Data analysis was carried out through quantitative descriptive analysis. The results showed that the teacher's pedagogical competence influenced the ability to apply HOTS-based reading and writing learning in the upper grades of Gugus I Elementary School, North Galesong District, Takalar Regency.

**Keywords:** pedagogic competence; reading; writing; hots

# Abstrak

Penelitian ini bertujuan untuk melihat pengaruh kompetensi pedagogik guru terhadap kemampuan penerapan pembelajaran membaca dan menulis berbasis HOTS di kelas atas Sekolah Dasar. Penelitian ini merupakan penelitian kuantitatif dengan metode expose facto. Penelitian dilakukan di cluster I, Kecamatan Galesong Utara, Kabupaten Takalar. Populasi penelitian adalah guru kelas atas di gugus I Kecamatan Galesong Utara Kabupaten Takalar yang berjumlah 24 orang. Melalui teknik cluster random sampling, sampel penelitian adalah guru di Sekolah dasar negeri No. 93 Sawakung Beba yang berjumlah 3 orang dan sekolah dasar negeri No. 94 Beba yang berjumlah 3 orang. Teknik pengumpulan data dilakukan melalui teknik angket, observasi, dan dokumentasi. Analisis data dilakukan melalui analisis deskriptif

kuantitatif. Hasil penelitian menunjukkan bahwa kompetensi pedagogik guru berpengaruh terhadap kemampuan penerapan pembelajaran membaca dan menulis berbasis HOTS di kelas atas Sekolah Dasar Gugus I Kecamatan Galesong Utara Kabupaten Takalar.

Kata Kunci: kompetensi pedagogik; membaca; menulis; panas

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#### Introduction

Competence refers to a person's talent. Teacher competence is very important and vital in the learning process because it is one of the components in achieving educational goals. Teacher competence according to Government Regulation No. 74 of 2008, teacher competence is a collection of knowledge, skills and behaviors that must be possessed, mastered and actualized by teachers in carrying out their professional obligations. A teacher with a bachelor's degree does not necessarily mean they are competent. To ensure competent instructors, the government has been running a certification program for teachers since 2007.

Teacher professional development must be carried out not only by the government, but also by the teachers themselves; they must have a strong desire to become more professional in order to meet national education goals. This is in accordance with Article 10 paragraph 1 of Law Number 14 of 2005, which states that educators must have academic degrees, educator competence, be physically and mentally healthy, and be able to achieve national education goals.

Uno (2011: 8) says "the tendency to succeed is determined by motivation, which is influenced by a person's emotional intelligence". Both motivation from within and from outside is needed in teaching and learning activities. Competent teachers will be better equipped to build effective and enjoyable learning environments for their students, as well as manage their courses so that the learning process runs smoothly. In this scenario, pedagogical competency is seen as a complex issue. Teachers with strong pedagogical skills will be able to build effective and enjoyable learning environments and manage classes effectively.

The strategic position of the teacher as a teacher and guide for students in learning, the teacher is a profession that demands professionalism in his work, especially in teaching. The teacher is a very decisive component in the implementation of a lesson, greatly determining student success. This requires special expertise, namely pedagogical competence.

Teacher pedagogical competence is a set of job-related aptitudes that require various skills in teacher education or training as a minimum requirement. The importance of the teacher's function as an educator must be able to increase awareness that the teacher's task is more than just conveying information. The teacher must be

competent to plan and coordinate student learning activities. According to Rifa'i (2012: 7) understanding students, designing and implementing learning, evaluating learning outcomes, and developing students to realize their unique potential are examples of pedagogic competence. The high and low learning outcomes obtained by students are one indicator of achieving learning objectives. Educators in this way contribute to the factors that cause low student learning outcomes.

Teacher pedagogy is seen as a challenging problem. Indonesian language teachers must also manage student learning, which includes student understanding, designing and implementing learning, evaluating learning outcomes, and developing students to actualize pedagogical competence. The level of learning outcomes obtained by students is one indicator of achieving learning objectives.

One of the learning that can be implemented is learning by utilizing Higher Order Thinking Skills (higher order thinking), which is often referred to as HOTS. Starting at the level of knowing, understanding, applying, analyzing, evaluating, and producing, the 2013 curriculum adopts Bloom's Taxonomy which was changed by Anderson. According to the 2013 curriculum, students must be able to reach the level of creating, which requires ongoing training. Meanwhile, learning in elementary schools is currently more emphasizing the use of lower-level thinking skills, which are only able to answer rote factual questions, is not the case. Not many learning media are designed to help students build Higher-Order Thinking Skills.

Higher Order Thinking Skills is a higher order thinking process that is built from various cognitive concepts and approaches, as well as learning taxonomies such as problem solving methods, bloom taxonomy, and learning, teaching, and evaluation taxonomy. Hendriawan (2019) states that actually the teacher's ability to implement this is difficult because apart from having a deep understanding of the material being taught and appropriate learning methodologies, they also have their own obstacles when working with students. Sometimes the teacher tries as much as possible in carrying out an interesting learning process, but the students' answers are still passive and unrelated to what has been done, and the learning process is ultimately limited to sitting, listening, and taking notes. As part of their competence, a teacher must understand the material lessons and teaching methods. Without it, teachers will not be able to fulfill their responsibilities. Because a teacher's teaching competence is determined by his ability to

manage educational activities, students must also be able to provide relevant learning methods, media and approaches to ensure students master the subjects presented.

The implementation of the 2013 curriculum is expected to result in a shift in the way learning is carried out in schools. The assessment model in the 2013 curriculum is based on international standard assessment. Teachers are expected to be able to provide learning to students in a more creative and inventive way, one of the basic skills that must be mastered by students in elementary schools which is useful for providing knowledge in high grades, namely reading and writing skills.

The ability of students in reading and writing lessons is the desire and strong will to always read and write at every opportunity. Writing and reading have a very important role in learning in elementary school, because reading and writing can provide benefits for the reader. The advantage of reading and writing is that they will get information, science and technology education, fun and entertainment.

The pedagogic competence of teachers at Gugus 1 Public Elementary School, North Galesong District, Takalar Regency is required to master student characteristics, as well as master learning theory and educational principles of learning, especially reading and writing. Obstacles found by students such as the inability to recognize the letters of the alphabet are often encountered by teachers who find it difficult to distinguish uppercase/capital and lowercase letters, also obstacles in writing usually do fragments of words and sentences in inappropriate places or do not pay attention to punctuation marks, especially commas, so that the pedagogic competency skills of teachers at Gugus 1 State Elementary School, North Galesong District, Takalar Regency, are needed to be able to communicate with students effectively, empathetically, and pleasantly, and to be able to analyze and evaluate learning processes and outcomes.

Teachers have varying pedagogic competencies in teaching, based on initial observations through question and answer and observation at Gugus 1 Public Elementary School, North Galesong District, Takalar Regency, most teachers appear to be more mechanized in teaching and lacking in terms of pedagogic competence so that preparation for implementing HOTS (High Order Thinking Skills) in participating in less than ideal learning. Learning will not be achieved if students are not enthusiastic in following the lesson. Teachers must be able to master and improve the material being

taught, as well as manage classes, control, and evaluate students' understanding of the material.

Based on this description, the authors decided to choose the title The Influence of Teacher Pedagogic Competence on the Ability to Apply HOTS (High Order Thinking Skills) Based Reading and Writing in High School Grade 1 Elementary School, Gelesong Utara District, Takalar Regency.

#### Method

This research is a quantitative research with the expose facto method. The research was conducted in cluster I, North Galesong District, Takalar Regency. The study population was high class teachers in cluster I, North Galesong District, Takalar Regency, consisting of 24 people. Through the cluster random sampling technique, the research sample was high school teachers at SDN No. 93 Sawakung Beba, totaling 3 people and SDN No. 94 Beba, totaling 3 people. Data collection techniques were carried out through questionnaire techniques, observation, and documentation. Data analysis was carried out through quantitative descriptive analysis.

#### Results

Teacher Pedagogic Competence in Reading and Writing Learning in Higher Grades

Research related to teacher pedagogic competency abilities was identified based on pedagogic competency indicators in Permendiknas Number 16 of 2007 concerning Teacher Qualification and Competency Standards. Pedagogic competence consists of seven competencies, namely 1) mastering the characteristics (physical, moral, spiritual, social, cultural, emotional, and intellectual characteristics) of students, 2) mastering learning theory and principles of educational learning, 3) curriculum development (compiling a syllabus according to the curriculum, designing lesson plans), 4) educational learning activities, 5) developing the potential of students, 6) communicating with students (effectively, empathetically, and politely), and 7) assessment and evaluation. The seven competencies must be owned by the teacher in carrying out learning.

Based on the results of observations, the pedagogic competence of high grade teachers at SDN No. 93 Sawakung Beba implements the seven competencies well. As for teachers at SDN No. 94 Beba is able to implement several pedagogic competencies very

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well, namely mastering student character, developing student potential, communicating with students. The other four competencies, namely mastering learning theory and principles of educational learning, curriculum development, educational learning activities, assessment and evaluation are included in the good category.

Table 1 Analysis of Teachers' Pedagogical Ability

No	Competence	Score	Category
1	Mastering the characteristics of students	240	Very Good
2	Mastering learning theory and learning principles	229	Good
3	Curriculum development	230	Good
4	Educational learning activities	250	Very Good
5	Development of potential learners	242	Very Good
6	Communication with students	220	Good
7	Assessment and evaluation	213	Good
	Avarage	232	Good

The table above shows that the pedagogic abilities of teachers at SDN No. 93 Beba and SDN No. 94 Beba is generally included in the good category.

Application of HOTS-Based Learning to Learning to Read and Write

HOTS learning and assessment practices were carried out 3 times in classes IV, V, and VI learning 1, learning 2 and learning 3 for each class theme. To obtain data that is consistent with the data obtained, the researcher collected the lesson plan documents and then analyzed the contents of the lesson plan and observed the teacher's learning activities in class. Learning carried out by the teacher in learning 1, 2 and 3 can be concluded that learning is carried out through 3 stages, namely planning, implementing/implementing, as well as evaluating and reflecting on learning.

Based on the results of observations, the implementation of HOTS-based reading and writing learning in high grades. In general, they are able and have implemented HOTS-based reading and writing learning. This is also supported by some of the results of previous student portfolio assignments that are displayed on the classroom walls. In addition, based on the analysis of the practice questions the teacher has provided a number of HOTS evaluation questions. So it can be concluded that teachers at SDN No. 93 and SDN No. 94 Beba has implemented HOTS learning well. As for the results of students' reading comprehension tests, they are presented in the following table.

**Table 2** Results of the HOTS-Based Reading Comprehension Test for Class VI

Score intervals	Category	Frequency	Percentage
85 - 100	Very Good	20	100 %
70 - 84	Good	-	-
55 – 69	Acceptable	-	-
40 – 54	Poor	-	-
0 - 39	Very Poor	-	-
	20	100 %	

Based on the table above, it can be seen that the results of the students' reading comprehension test results were 100% in the very good category. Then a writing test was carried out to see how students' writing abilities were.

**Table 3** Student Writing Ability Test Results

Score intervals	Category	Frequency	Percentage
85 - 100	Very Good	3	8
70 - 84	Good	17	82
55 – 69	Acceptable	-	-
40 – 54	Poor	-	-
0 - 39	Very Poor	-	_
	Total	20	100

Based on the table above, it can be seen that the writing ability of high grade students who are in the very good category are as many as 3 students or around 8%, 17 students are in the good category with a percentage of 82%. There are no students who are in the category of enough, less, and very less. So it can be concluded that students' writing skills are generally in the good category.

Normality Test

**Table 4** One-Sample Kolmogorov-Smirnov Test

		Pedagogic Ability	Application of HOTS Learning
N		125	125
	Mean	54.5120	90.6560
Normal Parametersa,b	Std.	4.43704	5.51699
	Deviation		3.31099
	Absolute	.108	.066
Most Extreme Differences	Positive	.100	.066
	Negative	108	058
Kolmogorov-Smirnov Z		1.209	.741
Asymp. Sig. (2-tailed)		.108	.643

a. Test distribution is Normal.

b. Calculated from data.

The test results show that the data for the two variables have a significance level of 0.108 and 0.643. This indicates that the resulting significance level is greater than 0.05. Thus the data analyzed in this study were normally distributed.

Homogeneity Test

The results of the data requirement test are said to be homogeneous if the calculated significance value is greater than the 5% significance level or the Sig value. >0.05. Following are the results of the homogeneity test of the teacher's pedagogic competence data variance on the ability to apply HOTS learning. The results of the homogeneity test using levene statistics obtained a significance number of 0.105. So it can be concluded that the teacher's pedagogic competency data on the ability to apply HOTS learning is said to be homogeneous because the Sig. of 0.105 > significance level of 0.05.

Linearity Test

The linearity test aims to determine the relationship between the independent variable and the dependent variable whether it is linear or not. A variable is said to have a linear relationship if it has a significance greater than 0.05. The test results are obtained as follows: The test results show that the linearity of the teacher's pedagogic skills on the ability to apply HOTS learning produces a significance of 1.944. This shows the resulting significance is greater than 0.05. Thus the influence of the teacher's pedagogical skills on the ability to apply HOTS learning is linear. This means that the better the pedagogic competence of a teacher, the better the ability to apply HOTS-based reading and writing learning. The results of this study prove previous research (Rizqiyah, 2020; Naibaho, 2020; Permatasari dkk, 2022; Wahyuningsih, 2021) that teacher pedagogic competence influences the ability to apply HOTS-based learning. The test results show that the linearity of the teacher's pedagogic skills on the ability to apply HOTS learning produces a significance of 1.944. This shows the resulting significance is greater than 0.05. Thus the influence of the teacher's pedagogical skills on the ability to apply HOTS learning is linear. This means that the better the pedagogic competence of a teacher, the better the ability to apply HOTS-based reading and writing learning. The results of this study prove previous research (Rizqiyah, 2020) that teacher pedagogic competence influences the ability to apply HOTS-based learning.

Through the use of the High Order Thinking Skill Based Learning method in Reading and Writing Learning it is hoped that it can improve the results of higher reading and writing skills, so that students can learn independently and solve the problems they face. The Ability to Apply High Order Thinking Skill Based Learning has a positive impact on high grade students at SD Gugus I Kec. Galut Kab. Takalar namely: a) students are more active in learning and question and answer activities in class, b) students are more likely to accept the material provided by the teacher, c) students are more responsible for the assignments given by the teacher, d) students can also work well with their group mates, and e) students can solve problems.

## Conclusion

Based on the results of the research, it can be concluded that the teacher's pedagogic competence in reading and writing as a whole meets the teacher's pedagogic competency indicators. The implementation of HOTS-based reading and writing learning in cluster 1, North Galesong District, Takalar Regency has referred to HOTS-based questions using C4, C5, and C6. The teacher's pedagogic competence has a significant effect on the implementation of HOTS-based reading and writing learning.

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