

THE INFLUENCE OF TEACHER COMPETENCY AND EDUCATIONAL INFRASTRUCTURE ON THE QUALITY OF JUNIOR HIGH SCHOOL EDUCATION IN THE CIKARANG UTARA DISTRICT

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ABSTRACT

The research was conducted to answer the question of whether teacher competence and educational facilities have a significant impact on the quality of education in public junior high schools in North Cikarang. The method used in this study is a quantitative approach with a survey method.

The research was conducted at public junior high schools in North Cikarang from February to May 2024, with a sample size of 72 individuals selected through purposive sampling. This study used a questionnaire instrument with a likert scale and simple linear regression analysis. The results showed a positive and significant effect of teacher competence (X^1) on the quality of education (Y) by 23%, a positive and significant effect of educational facilities (X^2) on the quality of education (Y) by 21.5%, and a significant simultaneous effect of teacher competence (X^1) and educational facilities (X^2) on the quality of education (Y), with the combined effect strengthening to 32.1%.

Based on these results, the author suggests that schools should continue to improve teacher competence as there is still considerable room for a positive impact on the quality of education. Schools should also examine other factors that may influence the quality of education for further study.

Keywords: *educational facilities, quality of education, teacher competency*

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Introduction

One of the fundamental problems of education in Indonesia is the quality of education itself. Where quality shows the quality of something. Good educational quality will describe the reliability of an education. The quality of education is often seen in the final results or quality of graduates. In fact, we need to look at educational input and how the educational process is carried out.

The curriculum suitability factor determines the quality of education. An appropriate curriculum has many considerations. Suitability to the needs and developmental abilities of students is one of them. Sometimes the curriculum in one place is very appropriate in that place but not necessarily well implemented in another place. Sometimes a curriculum can be implemented very well at one particular time but not necessarily well implemented at another time. Policy factors also influence the quality of education produced. The policies made are based on existing needs accompanied by various external factors that influence them. If appropriate policies are made, it

will certainly help the education process itself. But of course this is not easy, because it often deals with various interests that need to be accommodated.

We can see the picture of the quality of education in a country from the Program for International Student Assessment (PISA) test results. The test was taken by member countries of the Organization for Economic Co-operation and Development (OECD). Student achievement and the educational curriculum used can be evaluated through the PISA test. The PISA test was held in 2018 and took part in 79 participating countries. Meanwhile, in 2022 81 countries will participate. The PISA test measures literacy, mathematics and science abilities. From the results of these tests, in 2018 Indonesia's literacy test ability was ranked 73rd while in 2022 it was ranked 68th, the mathematics test was ranked 73rd in 2018 and ranked 68th in 2022 and while the science test was ranked 71st in 2018 and ranked 65th in 2022.

From the latest PISA 2022 data, it can be seen that Indonesia's ranking has increased from the previous year. But if we look at the value data, the value acquisition has actually decreased. In 2018, respectively, the literacy, mathematics and science ability scores obtained were 371, 379 and 396. In the 2022 PISA test, the literacy, mathematics and science ability scores were 359, 366 and 383 respectively. Average test score data PISA 2022 for all countries as a whole has indeed decreased compared to 2018, this is normal because learning between the 2018-2022 time period was affected by the Coronavirus Disease 2019 (Covid-19) pandemic.

So the conclusion that can be drawn is that Indonesia's score in PISA 2022 has not actually changed much compared to 2018. Through the results of the PISA test, it is known that many Indonesian students still have deficiencies in reasoning power, numerical thinking and literacy skills. Indonesia's education report card for 2023 reports on Indonesia's education results for 2022 and also shows that the quality of education in Indonesia is not good enough. Education report cards are obtained from the results of the National Assessment (AN) carried out on Elementary School (ES), Junior High School (SMP) and Senior High School (AMS) students at certain grade levels. Class V students attend AN at the elementary school level, class VIII students at the junior high school level, while class XI students attend the high school level. Education report card obtained by an educational unit based on the results of assessments given to the school community, namely students, parents, school committee, teachers and school principals. The education report describes the condition of the school.

Nationally, the results obtained from the 2023 Education Report on Literacy Skills are that 61.53% of students have literacy competencies above the minimum at elementary school level, 59.00% of students have literacy competencies above the minimum at junior high school level and 49.26% students have literacy competencies above the minimum at high school level. This is influenced by students not being able to think critically about existing problems. Teacher competency abilities is one thing that influences the development of this literacy competency. From the 2023 Education Report, it was found that the results of students' numeracy abilities showed no better results. The results obtained were 46.67% of students had numeracy competencies above the minimum at elementary school level, 40.63% of students had numeracy competencies above the minimum at junior high school level and 41.14% of students had numeracy competencies above the minimum. This shows that many of our students are not yet able to apply the principles of numeracy used in their daily lives. The 2022 Education Statistics by the Central Statistics Agency conveys information regarding the condition of education in Indonesia. In the results of the report, matters relating to educational success are influenced by matters relating to the number of schools available, the number of students at each level of education, the quality of educators, and the condition of infrastructure.

The description above explains that there are problems in our educational process. The PISA test and National Assessment show that changes to classroom learning are needed. This needs to be accompanied by various other supporting things such as teacher factors. Teachers have a big influence on the success of the educational process. The teacher's ability greatly determines learning

progress in the classroom. Teachers are an important part of the educational process. Teachers are expected to be able to bring changes to students' knowledge and abilities. The level of learning outcomes in schools is one of the factors influenced by teacher competence. This competency is a competency obtained from the results of learning during education to be able to teach in the appropriate field. Teachers are responsible for the learning process because they interact directly.

The teacher's abilities and competencies will be influenced by the teacher's own education and teaching experience (Fitria & Eddy, 2021). Currently, the world of education is experiencing increasingly massive responsibility challenges. Challenges occur in education nationally and also down to the education unit level. The role of teachers as the spearhead of the world of education feels increasingly urgent. Teachers are the main players in education. Without the presence and ability of qualified teachers, any planning in the world of education cannot be achieved. So competent teachers are needed to carry out education effectively. What is also important is how the teacher who manages learning in the class is able to change his strategy according to the needs of the class. So, teacher competence will influence the course of improvement education sought.

Teachers as educational subjects who are responsible for the teaching and learning process are responsible for providing good learning. Teachers will design, teach and produce educational output that is expected to be good. Professional teachers with good qualifications and competencies are needed to achieve this goal. The reality that we often encounter is that students' educational output is still low. This shows that there is something that needs to be improved in classroom learning by the teacher. We encounter teachers who teach but do not have the appropriate qualifications. Another problem that we found is that there are many schools with teacher education levels that do not have bachelor's qualifications. This problem can then be addressed by improving the level of education by continuing their teacher studies. Another form is the opportunity provided by education providers for teachers to learn. However, this is not easy to implement because it often conflicts with other problems such as teacher motivation and funding (Sihotang et al., 2019). Some teachers are also unable to maintain students' learning motivation because teaching methods are less attractive to students. This is an obstacle to achieving good quality education. So to overcome this, teachers are needed with good competence in carrying out their educational duties. Teacher competency also needs to be updated. Teachers with old competencies are no longer suitable to today's educational needs.

The existing student input conditions are no longer the same from time to time. So there will definitely be changes and improvements in teacher competence. As one of the factors determining the quality of education, we need to encourage teachers who are members of the organization to enforce their obligations and rights. This strategic position of teachers needs to be accommodated with many efforts to increase teacher competence as well as improve their welfare, there are 10% of elementary schools that do not have a good water source

Based on data from the Ministry of Education and Culture, there are 6 out of 10 schools at each level that have adequate and separate sanitation in good condition or slightly damaged. At elementary school level, only 59 out of 100 schools have proper and separate toilets for boys and girls. There are 21% of elementary schools that do not have toilets or do not have proper toilets. The availability of basic sanitation is one of the main focuses of schools to support a child-friendly and gender-friendly learning environment. Efforts to improve the quality of education have also been made. Some of these include financial assistance to students and schools, education for teachers and student zoning arrangements. The efforts made are the result of evaluating needs from time to time. However, it seems that the evaluation results have not been able to answer educational problems as a whole. In the past there was a problem of access to education which was difficult for many people. The vast natural landscape makes it difficult to access education. But now it is relatively possible to solve it. But what is happening now is that the quality of education is not evenly distributed in every place. The number of low achieving students is actually increasing. Two

factors that we highlight are the issue of teacher competency and the availability of infrastructure. There has been quite a lot of negative news regarding the quality of education in Indonesia, especially in Bekasi Regency. There are many schools that were damaged in Bekasi Regency. Bekasi Regency, which is the largest industrial area in Southeast Asia, is actually lagging behind in terms of education. The Bekasi Regency Education Council expressed its seriousness in improving its schools in need. This aims to advance children around Bekasi Regency, especially for the State. They are aware

One way to improve the quality of education itself is to improve school infrastructure. On another occasion, the person in charge of the Regent, Dani Ramdan, said that he did not want to see any schools damaged in Bekasi Regency. Bekasi Regency needs to improve school infrastructure and teacher competency. According to him, this was done with the aim of improving the quality of elementary and middle school graduates so that they comply with National Graduate Standards. Collaboration with government and non-government organizations are several things that can be pursued.

North Cikarang is a sub-district in Bekasi Regency. As stated previously, the Bekasi Regency area still needs to improve its infrastructure and teacher competency, so the title chosen for this research is The Influence of Teacher Competency and Educational Infrastructure on the Quality of Junior High School Education in North Cikarang District.

Teacher Competency

Based on the Big Indonesian Dictionary (KBBI), competence is authority, power in determining something. In this definition, competence is meant by the ability to decide on something. A person is able to do his job well because he is a person who is competent in his field. Meanwhile, according to Uzer Usman in Febriana (2021), competency shows a person's qualifications and abilities which can be demonstrated qualitatively or quantitatively. Usman shows that a person's degree of competence can be measured both on a numerical scale and through descriptions. A teacher whose competence is good can also be seen in his ability to follow up on his results. Nana Sudjana in Dhea Musdhalifa (2023) explains that competence is a requirement for the responsibilities of a profession. A job can be called a profession, one of which is if it has special skills. This expertise can be seen from the level of competence possessed. Competence must be possessed by someone in carrying out their duties because it is their basic ability. Teaching is a profession because teachers have the skills needed to carry out their duties. Lefrancois stated in Pianda (2018), competence shows the capacity to do something which is the result of the learning process. This explains that competence is the result of learning within a person which is the result of his experience. Learning can be learning that requires assistance with a trainer or other teachers but can also through learning through independent learning. According to Achsan in Pianda (2018), competence is the overall skills and knowledge that a person has in carrying out affective, cognitive and psychomotor activities well. In line with Achsan, Huda (2017) said that competence is a person's ability to act which he gets from affective, cognitive and skill learning. Someone will act based on the experience they have. The response a person shows will reflect the extent of their experience. His experience will influence his behavior in terms of his ability to think, feel and behave. According to Gordon in Rohman (2020), there are several aspects to the term competency, including:

- a. Knowledge (cognitive awareness). For example, a teacher is able to identify the learning needs of his students.
- b. Understanding (cognitive and affective depth). In a teacher, he understands the character and condition of his students to organize learning optimally.
- c. Skills are the teacher's ability to carry out the tasks assigned to him. For example, Teachers can create teaching media in the form of teaching aids so that students can understand the lesson.

- d. Values (standards of behavior). For example, standards for teacher behavior when conducting consensus deliberations. (values of openness and democracy).
- e. Attitude (reaction to external stimuli). For example, reactions in facing pandemics and disasters.
- f. Interest (tendency to act)

Who is a professional educator according to Law no. 14 of 2005 is a teacher. A teacher's job is not only limited to teaching students but also educating, training, as well as assessing and evaluating students. This is not easy to realize. Adequate competence is required to carry out their duties. Teacher competency standards are measures that are able to carry out the functions and goals of the school as a specific goal as well as educational goals as a goal general and professional (Febriana, 2019).

Indicators for measuring the competence of professional educators include:

- a. Can carry out responsibilities well.
- b. Can carry out roles and functions proportionally.
- c. Can carry out duties in realizing school educational goals.
- d. Can carry out learning roles and functions in class.

Republic of Indonesia Law no. 14 of 2005 article 1 paragraph 10 states that teacher competency is a set of knowledge, skills and behavior that teachers and lecturers possess and live by in carrying out their professional duties. This shows that education is not only carried out in schools or campuses but also in everyday life. Educators are not only a concern at school but also in society.

According to Mulyasa (in Mamnu'ah, 2022), science, technology, social and spiritual combine and work together to form teacher competence. These competencies include personal and professional development, mastery of material, and understanding of students (Febriana, 2019). In mastering the material, teachers must be able to recognize the character of science as a source of learning, then also understand the concepts and management of learning in scientific disciplines. Teachers also need to understand the development of each student and be able to apply it. This will help teachers in classroom learning. Meanwhile, personal and professional development includes attitude development and self-actualization. Teacher Competency Indicators in Government Regulation no. 74 of 2008, namely:

a. On Pedagogical Competence:

- 1). Teachers' understanding of educational insight
- 2). Understanding in students
- 3). Ability to design curriculum
- 5). The teacher's ability to organize and implement learning
- 6). Ability to utilize technology
- 7). Ability to evaluate learning and learning outcomes
- 8). The ability to develop students to achieve their potential.

From the details above, we see that pedagogical competence concerns understanding learning theories that are appropriate to students' level of development and learning strategies. With good pedagogical competence, a teacher will be able to adapt himself to the abilities of his students.

b. Personality Competency: This competency can be seen from the attitude of faith and piety, morals, wisdom and prudence, democracy, stability, authority, honesty, stability and sportsmanship of a teacher. Through these abilities and competencies, a teacher will become a role model that the community and students pay attention to. Good personality competencies will also encourage them to develop. Teachers will evaluate the results of their efforts and try to improve their quality. Teachers will improve themselves through self-evaluation. They will also adapt to

every change that occurs. They will be able to teach their students through the examples they teach. Teachers are aware that they need this for the progress of their students.

c. Professional Competence nTeacher professional competence can be seen from several things that is:

- 1). Teachers master knowledge and knowledge according to the field they cover broadly and in depth. The knowledge provided by a teacher is one of the main things provided in an education. So it is a must for a teacher to master knowledge and the knowledge he holds.
- 2). Teachers master the concepts of technology, science and art according to their field. In delivery In teaching materials, a teacher must also have mastery of matters related to his field. This is necessary so that students understand things related to the application being taught. From the description of professional competencies above, we see that teachers need to master the field they will teach their students.
- 3) Mastery of the teaching field is not only understanding the material but also technological concepts related to the field, including appropriate technology and culture.

Social Competence In the social field, teachers are expected to be able to become part of society, including the competence to communicate verbally, in writing and/or in polite ways. The job of a teacher is still a job that concerns many people. A polite way of communicating will be an example for society in general. In utilizing communication and information technology, a teacher is also expected to use it in the school environment and in society. Currently, communication can be done using various technologies. Communication via email, cellphone and others must be mastered by the teacher. The quality and quality of educational services provided by teachers shows the quality of the teacher's own competence. Problems related to teacher competency include what teacher competencies are, how teachers can master their teacher competencies, how to measure teacher competency, and also what the social impact is if there are teachers who do not master their competency (Samana, 2014).

Thus, it can be concluded that teacher competency is a set of knowledge, skills, attitudes and values that can be seen in action behavior and the ability to think in carrying out the duties and functions of the teaching profession. Ideal teacher competencies are those that a teacher is expected to have. Teachers who have good competence must meet standard 4, namely: pedagogical competence, professional competence, social competence and personality competence.

Educational infrastructure

According to Suharsimi Purnamaningsih and Purbangkara (2022), educational facilities are tools used to facilitate teaching in delivering lessons by teachers. For students, educational facilities are all the tools used to facilitate students' learning in studying subjects. Meanwhile, according to Daryanto in Purnamaningsih and Purbangkara (2022), educational infrastructure is tools and equipment to assist the educational process used by teachers and students.

The use of tools by students in the learning process is very necessary and given freedom by the teacher. Apart from helping with learning, it also helps train students' skills. In the field of education, the availability of infrastructure is very necessary for learning in schools. Schools that have complete physical structures and basic logistics such as libraries, computer facilities and information technology infrastructure will improve school organization efficiently (Singh and Singh, 2014).

According to Trisnawati and Usman in Amini (2022), in the learning process, infrastructure is needed to help achieve maximum educational goals, both in the form of moving and immovable objects. In line with the understanding conveyed by Trisna and Usman, Suryadi and Rahmawati (in Ibrahim, et al; 2022) convey that facilities are aimed at objects that move or can be moved easily such as books, notebooks, machines, while infrastructure is aimed at immovable objects such as buildings and fields. . Sartika (in Ibrahim et al; 2022) explains that educational infrastructure is all movable and immovable objects that support learning activities in schools directly or indirectly.

In classroom learning, teachers often bring tools that are used to help deliver teaching material in class. This tool will directly help learning activities, especially as a teaching medium. Tools like this, according to Martin in Ananda and Banurea (2017), are called means. Facilities are used directly in the educational process, whether in the form of furniture or other equipment. Meanwhile, the classroom which is a place of learning is an infrastructure. Infrastructure is all the basic equipment that is indirectly needed in school education. In line with Martin, Minister of National Education Regulation Number 24 of 2007 states that educational facilities are very mobile for use. All equipment that can be moved easily will help learning. Educational infrastructure is a facility that is quite basic for the continuity of school performance. The National Education Standards (SNP) that need to be achieved by schools are regulated in the Republic of Indonesia Minister of Education and Culture Regulation Number 28 of 2016 concerning Quality Assurance Systems

Primary and Secondary Education. SNP regulates educational infrastructure standards. Education units at the junior high school and madrasa levels have minimum criteria for educational infrastructure. Facilities consist of furniture, educational equipment, educational media, books and other learning resources such as information and communication technology as well as other equipment that needs to be owned. Meanwhile, the minimum criteria for infrastructure are land, buildings, rooms, as well as electrical installations and other services. In accordance with Minister of National Education Regulation Number 24 of 2007, a SMP/MTs must have at least the following infrastructure: rooms (for example: classroom, library, science laboratory room, leadership room, teacher's room, administration room, place of worship, counseling room, UKS, student organization room, toilet, warehouse, circulation room, play/exercise area.

According to Mulyasa, infrastructure and facilities are taken in Dian Amaliyani (2017), namely:

- i. Classroom Learning Facilities, namely the completeness of the tools available in the class.
- ii. Sports Facilities, namely the scarcity of tools and objects to support sports learning
- iii. Worship facilities such as mosques
- iv. Administrative Service Facilities, namely completeness of tools and equipment in the field of administration.
- v. Internet facilities, namely network connections such as WiFi.
- vi. School Infrastructure, namely complete facilities that can be used either directly or indirectly in teaching and learning activities, such as teachers' rooms, canteens, study rooms, laboratories, fields, parking lots.

Thus it can be synthesized that educational infrastructure is all school equipment that is used directly and indirectly for learning and can be moved or cannot be moved to carry out the functions of an educational unit. To see the readiness of good educational infrastructure, we will look at the condition of: school furniture, educational equipment, educational media and books and learning resources in the educational unit.

Quality of Education

Quality is expected to be a measure of the ability to fulfill the needs of something. To assess the quality of something, you can look at its quality. The International Organization for Standardization (ISO) states that quality is the ability to fulfill needs that have been determined from the overall characteristics of a product or service. The higher the quality of a product or service, the better the product and service will meet its target standards. In line with the understanding above, Goetsch & Davis (2014) state that quality is the ability to fulfill customer needs from the overall characteristics or features of a product or service. Existing products and services will be assessed for their quality based on their ability to fulfill their duties and functions.

Arcaro's view in Lubis (2022) also provides the same understanding, namely, quality is a complete description of a good/service that can show the expected capabilities. Phillip Crosby in Zairur (2019) states that quality is conformity to what is desired as a requirement. The conditions contained are about the value of the process of making a product or service. Quality requirements such as raw materials and the product manufacturing process determine a quality product. Compliance with these conditions will provide the value of an item products, and differentiate their quality from similar products or services. Quality is determined by the input, process and output of the goods or services. Each of these definitions reflects a focus on meeting needs or requirements, and these concepts can be applied to a variety of contexts, including products, processes or services. From all the definitions presented by the hali

So it can be concluded that quality is a measure of the conformity of the desired requirements of a product to fulfill what is expected. In other words, the quality of a product can be seen starting from the input, process and output produced.

In Law No. 20 of 2003 concerning the Education System, it is stated that education is a planned effort that creates students who are able to learn actively in a good atmosphere and produce people who can later enter society well. Based on this description, it is found that education has a plan from the start and the process is structured and has clear objectives. The word "Education" in the Big Indonesian Dictionary (KBBI) comes from the word "didik" and the affix "pe-an" which gives the meaning of a way of guiding action. In other words, education is carried out by an educator for his students to educate, be a role model, learn, and teach ethics and knowledge to students. Teaching is not always in the form of formal education which is driven by power holders, but also by families and communities which function very importantly as a place of guidance to generate and develop knowledge (Marisyah et al., 2019). According to Innana (2023), in the broadest sense education is all actions to influence other parties to act correctly according to their goals. Education is passed on in the form of research and teaching, namely the process of learning knowledge and skills.

Generally, education takes place through a guidance process with other people, however, it can also occur autodidactically through learning from other people's experiences. In line with this understanding, Kurniawan (2018) said that education transfers knowledge, experience, values and skills from one generation to another with the aim of preparing the next generation for a better life in all things physically and spiritually. Education will help a generation to advance their level of living based on direct or indirect assistance from previous generations. According to Mudyahardjo (2014), education can broadly be interpreted as all experiences that are lifelong learning throughout life. Education is a situation experienced that has an influence on the individual's own growth. Individuals will learn from their experiences from an early age. This experience will guide his life in making good decisions. This will continue until a higher level of maturity to enrich the individual's abilities. In a narrow sense, education can be said to be a school.

The father of education, Ki Hajar Dewantara, with his guidelines that we know, Ing Ngarso Sung Tulada, Ing Madyo Mangun Karsa, and Tut Wuri Handayani, illustrated the picture of a person whose role was very central. Through these guidelines, the role of teachers as the main players in national education is known. Teachers will help students to encourage them in the learning process at school. The encouragement given can be in the form of a teacher's role model should be given. Teachers must also be able to accompany students to guide them on the best path. Quality shows the level of excellence in something. At the educational level, the quality of education is influenced by several factors, including appropriate curriculum, teaching methods, teacher quality and competency, infrastructure, facilities and learning outcomes.

Quality education is supported by external and internal factors. According to Ansyar in Saponco (2018), educator, curriculum and leadership factors are three factors determining the quality of education. Educators will be represented by teachers. The curriculum will be the program design and the leadership including the institution. A teacher will be the person responsible for

providing education in the classroom. The provision of existing education is in accordance with a curriculum that has been designed or prepared for a specified period. The role of the school principal is a leader who will be an evaluator and supervisor of the curriculum implementation process in the school by teachers. Good quality of education can be realized if these three components can be prepared and implemented well.

Process planning is the first step before it will be executed jointly by all school members with their respective duties. Before then, this must be maintained to become a culture in the school environment. Sumra and Katabaro (2014), more specifically, explain that quality education, especially quality education, can be achieved from an adequate number of trained and motivated teachers. We can develop the best curriculum, but implementing learning in schools is the teacher's responsibility. Quality education reform can be carried out through teacher pedagogy training that focuses on capacity development. According to Tilaar in Lubis (2022), quality of education is the ability of the education system to improve the quality of input factors so as to obtain the maximum possible output. In the educational environment,

Quality assurance will be a demand that schools focus on for the good of all their stakeholders. The implementation of school education will be supervised by parents, the community and the relevant government authorities. Each component has its own role in providing quality education. Juliantoro (2017), states that the quality of education is the ability to maximize educational resources in increasing learning competence by educational institutions. One source of this education is teacher competency. The quality of education is seen from the level of ability of the people who provide education. The better educational practitioners work, the better the quality of education provided. The government regulates educational standards that need to be implemented by schools through National Education Standards (SNP). Education unit profiles can use SNP as a reference. In accordance with Government Regulation no. 32 of 2013 SMP consists of 8 standards, namely:

- i. Management Standards
- ii. Graduate competence standard
- iii. Content Standards
- iv. Process standards
- v. Standards for Educators and Education Personnel
- vi. Infrastructure Standards
- vii. Financing Standards
- viii. Assessment Standards

This National Education Standard can be a reference for an educational unit to achieve good quality education. All SNPs accommodate the input, process and output components provided by the school. The Standards for Educators and Educators also include maintaining the quality of existing teacher competencies. Meanwhile, Standards for Facilities and Infrastructure are also regulated to see the readiness of educational units not only in teaching media but also other learning infrastructure with predetermined standards.

Thus, the description above provides an overview of the quality of education which continues to change due to differences in needs from time to time. It was even stated that there is a trend of decreasing quality of education currently. The research above also shows that there is an influence on teacher competence and the availability of educational infrastructure to improve the quality of education.

Based on the theoretical framework presented, the research hypothesis which is the author's initial conclusion is:

1. There is a positive and significant influence between teacher competency on the quality of junior high school education in North Cikarang.
2. There is a positive and significant influence between educational facilities and infrastructure on the quality of junior high school education in North Cikarang.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.479 ^a	.230	.219	3.320	.230	20.881	1	70	.000

a. Predictors: (Constant), **Teacher Competence**

From the table above we see that the coefficient of determination for Teacher Competency on Education Quality is 0.23. This means that teacher competency has a 23% influence on the quality of education. Meanwhile, 77% determined other factors not discussed in this study.

Table 2. Simple Regression of Education Quality and Teacher Competency

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero Order	Partial	Part
1	(Constant)	47.126	5.985		7.874	.000			
	Competence Teachers	.251	.055	.479	4.570	.000	.479	.479	.479

a. Dependent Variable: Quality of Education

In table 2, it is found that the sig value of the independent variable is 0.000 (<0.05). This shows that the teacher competency variable has a significant effect on the quality of education.

The influence of teacher competence on the quality of education produces a regression coefficient of 0.251 and a constant of 47.126. Thus, the influence of teacher competence on the quality of education produces a regression equation: $\hat{Y} = 47.126 + 0.251X_1$.

2. Test the Second Hypothesis: the influence of educational infrastructure on the quality of education Junior High School in North Cikarang

Hypothesis testing using SPSS. The second hypothesis test aims to determine the influence of facilities and infrastructure on the quality of junior high school education in North Cikarang

Table 3, Coefficient of Determination of Education Quality and Educational Infrastructure

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.463 ^a	.215	.204	3,352	.215	19.146	1	70	.000

a. Predictors: (Constant), Educational infrastructure

From the table above we see that the coefficient of determination for Educational Infrastructure and Quality of Education is 0.215. This means that educational infrastructure has a

21.5% influence on the quality of education. Meanwhile, 78.5% determined other factors not discussed in this study.

Table 4. Simple Regression of Educational Infrastructure on Education Quality

Coefficients ^a									
Model		Unstandardized		Standardized	t	Sig.	Correlations		
		Coefficients		Coefficients			Zero	Partial	Part
		B	Std. Error	Beta					
1	(Constant)	59.387	3.458		17.176	.000			
	Educational Infrastructure	.235	.054	.463	4.376	.000	.463	.463	.463

b. Dependent Variable: Quality of Education

In table 4, it is found that the sig value of the independent variable is 0.000 (<0.05). This shows that the infrastructure variable has a significant effect on the quality of education.

The influence of educational infrastructure on the quality of education produces a regression coefficient of 0.235 and a constant of 59.387. Thus, the influence of educational facilities on the quality of education produces a regression equation: $\hat{Y} = 59.387 + 0.235X_2$.

3. Third Hypothesis Test: Simultaneous influence of teacher competency and educational infrastructure on the quality of junior high school education in North Cikarang.

This third hypothesis test uses X_1 and regression X_2 simultaneously with Y . In this regression test the variables of teacher competence and educational infrastructure are independent variables, the variable of educational quality is the dependent variable

Table 5, Multiple Regression, Teacher Competency and Educational Infrastructure simultaneously on Education Quality.

Coefficients ^a									
Model		Unstandardized		Standardized	t	Sig.			
		Coefficients		Coefficients					
		B	Std. Error	Beta					
1	(Constant)								
	1. Teacher Competency	47.126	5.985		7.874	.000			
	2. Educational Infrastructure	.251	.055	.479	4.570	.000			
	3. Interaction	-.002	.008	-.621	-.278	.782			

c. Dependent Variable: Education Quality

In table 5, it is found that the sig value of the interaction between the Teacher Competency and Educational Facilities variables is 0.782 (>0.05). This shows that the teacher competency and educational facilities variables simultaneously influence the education quality variable. The resulting regression equation is: $\hat{Y} = 28.729 + 0.323X_1 + 0.401X_2$

Table 6, Coefficient of Determination, Teacher Competency and Educational Infrastructure on Education Quality Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.566a	.321	.291	3.163

a. Predictors: (Constant), Interaction, Teacher Competency and Educational Infrastructure

From table 6 we see that the coefficient of determination for this regression test is 0.321. This means that simultaneously teacher competency and educational facilities have an influence of 32.1% on the quality of education. Meanwhile, 67.9% determined other factors not discussed in this study. This shows that the influence given by both variables simultaneously is greater than if given partially.

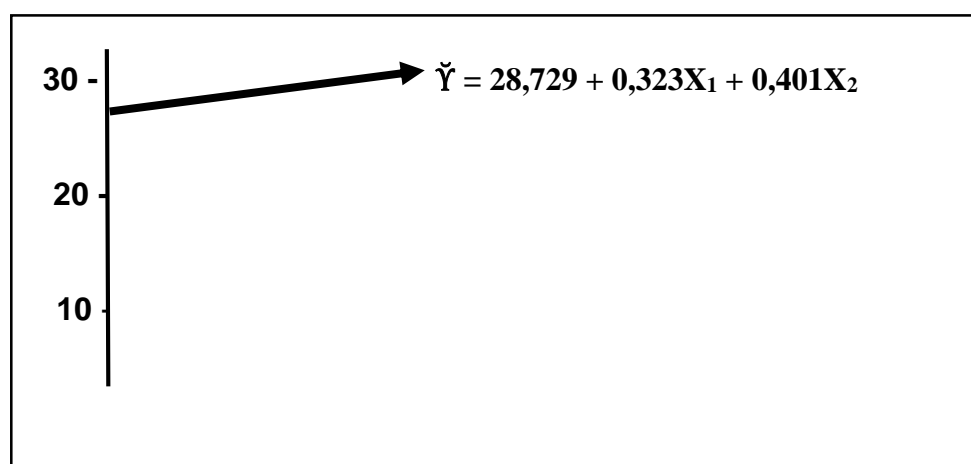
Table 7, Anova of Education Quality, Teacher Competency and Educational Infrastructure ANOVAa

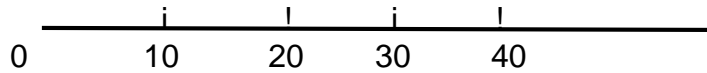
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	320.993	3	106.998	10.692	.000b
	Residual	680.507	68	10.007		
	Total	1001.500	71			

a. Dependent Variable: Education Quality

Predictors: (Constant), Interaction, Teacher Competence, Educational Infrastructure In the Anova table above we get the Regression Sig value is 0.000 (< 0.05). This shows that there is a significant influence of Teacher Competency (X_1) and educational facilities (X_2) simultaneously on the quality of education (Y). The resulting regression equation is: $\hat{Y} = 28.729 + 0.323X_1 + 0.401X_2$

Figure 2. Regression $\hat{Y} = 28,729 + 0,323X_1 + 0,401X_2$





Conclusion

Based on the theoretical description and analysis, the following conclusions can be drawn:

1. There is a positive and significant influence of teacher competency (X1) on the quality of education (Y) of schools in North Cikarang with a coefficient of determination of 23% and a correlation coefficient of 0.479. So Ho1 which states that teacher competency does not influence the quality of education in North Cikarang is rejected, and Ha1 which states that teacher competency influences the quality of education in North Cikarang is accepted.

2. There is a positive and significant influence of educational infrastructure (X2) on the quality of education (Y) of schools in North Cikarang with a coefficient of determination of 21.5%, a correlation coefficient of 0.463. So Ho2 which states that educational infrastructure does not influence the quality of education in North Cikarang is rejected, and Ha2 which states that educational infrastructure influences the quality of education in North Cikarang is accepted.

3. There is a positive and significant influence of teacher competence (X1) and educational infrastructure (X2) simultaneously on the quality of education (Y) of schools in North Cikarang with a coefficient of determination of 32.1%. So Ho3 which states that teacher competency (X1) and educational infrastructure (X2) do not simultaneously influence the quality of education in North Cikarang is rejected, and Ha3 which states that teacher competency (X1) and educational infrastructure (X2) simultaneously influence the quality of education in North Cikarang is accepted.

Implications

To be able to maintain and further improve the quality of education in North Cikarang, teacher competency variables and the infrastructure that influence them can be improved through:

1. Efforts to improve the quality of education include increasing teacher competency. Based on the data, teacher competency has a positive and significant effect on the quality of school education in North Cikarang District. This shows that teachers with good competence are needed to obtain good quality education as well.

2. Efforts to improve the quality of education can also be pursued through improving educational infrastructure. Based on the data obtained, educational advice and infrastructure have a positive and significant effect on the quality of education. This shows that quality education can also be achieved through improving educational infrastructure.

3. Efforts to improve the quality of education can be pursued through increasing teacher competency and good infrastructure. The results of the analysis show that the coefficient of determination of teacher competence, which was previously 23%, increased to 32.1% after being interacted with educational infrastructure. This shows that improving the quality of education can be done by improving other factors.

Recommendation

Based on the research results, conclusions and implications, recommendations that researchers can propose are:

1. The contribution of teachers' competence can still be maximized because the amount of influence they have can still be increased.

2. Teachers are expected to be able to improve their competence so that they can support a good educational process so that good quality education is achieved.

3. Schools must be able to improve their educational infrastructure in a sustainable manner. Good facilities and infrastructure will provide support for teachers to be able to accommodate their competencies in supporting learning.

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