The Influence of "Guru Penggerak" Competency and the Utilization of Learning Resources on the Quality of Education in Elementary Schools

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Abstract

Background - This study was motivated by the poor quality of education in elementary schools in Randublatung Subdistrict and the suspected influence of the suboptimal competence of "Guru Penggerak" and the suboptimal utilization of learning resources.

Purpose - The objectives of this study were to determine: (1) the influence of "Guru Penggerak" competency on the quality of education in elementary schools in Randublatung District, (2) the influence of learning resource utilization on the quality of education in elementary schools in Randublatung District, and (3) the simultaneous influence of "Guru Penggerak" competency and learning resource utilization on the quality of education in elementary schools in Randublatung District.

Method/approach - This study used a quantitative approach with an ex-post facto research design. The research population consisted of all teachers in 30 elementary schools where "Guru Penggerak" were assigned in Randublatung District, Blora Regency, with a sample of 176 peer teachers of "Guru Penggerak". Data collection techniques used questionnaires that had been tested for validity and reliability. Data analysis used correlation tests, simple regression, multiple regression, and determination tests.

Findings - The results of the study indicate that: (1) there is a significant influence of the competence of the "Guru Penggerak" on the quality of education in Randublatung Subdistrict, amounting to 82.3%, with the highest contribution from the personal competence dimension (80.6%) and the lowest from the professional competence dimension (28%), with the highest dimension of educational quality being the process dimension at 0.933 and the lowest being the input dimension at 0.930; (2) there is a significant influence of learning resource utilization on educational quality at 85.5%, with the highest contribution from the learning resource selection dimension (83.6%) and the lowest from the learning resource development dimension (62.8%); (3) there is a simultaneous influence of Guru Penggerak competencies and learning resource utilization on education quality of 91.4%.

Conclusions - This study also provides empirical evidence of a significant influence of the competence of the "Guru Penggerak" and learning resource utilization on educational quality in elementary schools.

Novelty/Originality/Value - The novelty of this study lies in its focus on the competence of "Guru Penggerak as other researchers have studied only the value and role of "Guru Penggerak".

Keywords: Guru Penggerak; learning resources; education quality; elementary education

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INTRODUCTION

One of the fundamental components of the United Nations' sustainable development 2030 agenda is quality education (Haleem, et.al., 2022). (Adesemowo & Sotonade, 2022) as cited by (Purnamasari & Lutriani, 2024) said that Education is a cumulative process of development of intellectual abilities, Skills and attitudes, all of which form our various outlooks and dispositions to action in life generally. Education is what enables us to become morally upright people and advances society. Through education, we not only acquire new knowledge but also pass on knowledge from earlier generations to the present. "Education is a power and makes a person powerful." (Sharma & Ankit, 2023).

Devi (2021) said that the quality of education is also said to be one way of measuring the effective and efficient management of education. So that it can create academic and non-academic excellence for students. In the educational industry, to teach systematically teachers must consider input, process and output and decide objectives, contents, methods and assessment (Salam, 2015). Gang & Tao (2022) defined the theoretical model of basic education quality monitoring and evaluation is a structured presentation of the connotation. It employs CIPO (Context-Input-Process-Output) as the framework, The definition of quality in the context of education includes the input, process, and output of education. The quality of education is a measure or value given to educational services based on objective considerations to meet or even exceed customer expectations (learners, teachers, educational staff, parents, and the community). Educational quality includes multiple factors that must work in synergy to achieve the satisfaction of all stakeholders (Rodriguez, et.al, 2022).

Mduwile & Goswami, (2024) said that several components of providing highquality education, including a standardized curriculum, excellent teachers, practical students, suitable resources, capable leaders, and understanding parents Quality in education is associated with the improvement of the learning process. This improvement results from the implementation of appropriate teaching practices and methods, from the design of a curriculum that meets students' needs to the improvement of services provided by schools. It is not only related to the curriculum and educational technology but also to the content of the education and teaching itself (Papanthymou & Darra, 2023). The quality of education is defined as the degree of conformity of the education process with predetermined standards, including aspects of input (resources), process (learning methods), and output (student learning outcomes) (Fattah, 2017).

There are several challenges and problems of education in Indonesia, including unbalanced education output, low quality of facilities and infrastructure, low quality and behavior of teachers, student moral behavior, and tolerance for racial intolerance (Madhakomala, Hakim & Syifauzzuhrah, 2022). One of the problems in education in Indonesia is the low quality of education, especially in primary and secondary schools. Various factors contribute to this problem, such as the suboptimal quality of teachers, inadequate facilities and infrastructure, and school management that still needs improvement. Although various efforts have been made, there has been no significant improvement in the indicators of education quality. (Arthur, 2024) stated that Character education should aim to form people so they can live well in a world worth living in. Primary education is an important foundation for character building, knowledge development, and mastery of basic skills for students. Elementary education plays a crucial role in shaping the foundation of knowledge and character of students (Qadir et al., 2022).

At this level, children not only learn to read, write, and count, but also understand the moral, ethical, and social values that shape their personalities. Early childhood stage is a critical time in which children learn moral values such as honesty, compassion, loyalty, respect, trust, and responsibility from teachers and parents (Birhan, et.al., 2021). schooling is a vital part of the development of basic skills for performing their roles and responsibilities in their families (Shohel, 2019) Therefore, quality basic education is the key to creating individuals who are ready to face the challenges of the future (Kwartawaty, et al. 2024). In measuring the quality of primary and secondary education, the Indonesian government uses the Education Report Card instead of the Education Quality Report Card. The education report is mandated by Government Regulation Number 57 of 2021 concerning National Education Standards.

Based on the 2024 Education Report, the quality of primary education in Randublatung District, Blora Regency, Central Java is at the "Intermediate" level for all indicators which include Literacy Skills, Numeracy Skills, Student Character, Quality of Learning, School Safety Climate, and School Diversity Climate. The ratings in the 2024 education report card are divided into five levels: High, Upper-Middle, Middle, Lower-Middle, and Low. These results show that the quality of primary education in Randublatung subdistrict still needs improvement to reach the Upper-Middle or High levels. According to (Elezovic, Lamela & Breese, 2022) Around the world, education authorities are interested in identifying factors that have an effect on their students' achievement, instigating educational reforms that enhance positive elements of their systems and diminish any negative effects.

Idris and Jamal (2014) state that the quality of education is influenced by several factors such as the purpose factor (school vision and mission), teacher factor (educator), student factor, tool factor (facilities and infrastructure), and environmental factor. Based on the 2024 Blora Regency Education-Report Card, the quality of elementary education has increased from 2023 for most indicators, except for the Learning Quality indicator. To overcome this, the Blora Regency Education Office issued a policy in the 2025 Work Plan which is a derivative of the 2021-2026 Work Plan. One of the main programs is the Facilitation of Learning Communities for Educators and Education Personnel at the levels of elementary school, junior high school, early childhood education, and non-formal/equivalency education with "Guru Penggerak" as the implementers of the activities. The target in 2025 is to facilitate 16 learning communities for educators and teaching staff at each level of education, with a budget allocation of around IDR 100,000,000 - IDR 200,000,000 per level.

Elementary schools in Randublatung sub-district under the Principal Working Group (KKKS) have formed a learning community with "Guru Penggerak" as the driving force. Currently, there are 50 "Guru Penggerak" who are graduates of the "Guru Penggerak" education program, ranging from batch 5 (graduating in December 2022) to batch 11. However, over the past two years, the competence of "Guru Penggerak" has not been optimized in activities to improve the quality of education. According to the Regulation of the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia Number 26 of 2022, a "Guru Penggerak" is a teacher who has a "Guru Penggerak" certificate. (Sibagariang, et.a., 2021) states that a "Guru Penggerak" is an independent, innovative teacher who is committed to developing the potential of students, establishing partnerships with parents and the community, and has a mature and ethical personality. (Aditiya & Fatonah, 2023) stated that "Guru Penggerak" plays a role as a driving force for the learning community for teachers in schools/regions, as a facilitator of teaching practices for teachers, as a motivator and facilitator of leadership for students, discussing and collaborating with fellow teachers and various parties in improving the quality of learning, as a learning leader who facilitates the good of the education community. The teachers' competencies influence students' academic achievement and level of engagement in science. This includes the teachers' effectiveness of the teaching design and materials, confidence, and pedagogical abilities (Canuto, Choycawen, & Pagdawan, 2024).

The competencies that a "Guru Penggerak" must have, according to the Ministry of Education and Culture (2021), include the ability to develop the quality of oneself and fellow teachers through reflection, sharing, and collaboration; moral, emotional, and spiritual maturity in accordance with the code of ethics; the ability to plan, implement, reflect on, and evaluate student-centered learning; the ability to collaborate with parents and the community; and the ability to develop and lead efforts to realize the school's vision. The competencies of the "Guru Penggerak" are expected to be optimized in elementary schools in Randublatung District, so that the quality of education in the area can be improved. The reality in the field shows that during the two years since the graduation of "Guru Penggerak"s, their competencies have not been optimally implemented in schools in Randublatung District. This can be seen from the reading of the Education Report Card, which has not improved. (Purba, 2024) stated that the competencies for "Guru Penggerak", are to lead learning, develop themselves and others, lead school management, and lead school development. As a learning leader, "Guru Penggerak" must be able to build a healthy and enjoyable learning environment, create teaching and learning plans that favor the

student, and conduct continuous reflection and evaluation.

Another important factor that affects the quality of education is the utilization of learning resources (Owoaka, 2022). While teaching and learning conditions, teachers are central to the question of education's quality and performance. The student's achievement level can be analyzed based on the teacher's competency. For the improvement of student's outcomes, the teachers have to face a lot of challenges while in serving mode. The education system must prepare a new genre of skilled teachers to align learner's experiences with the changing realities of performance (Yousuf & Abdulqadeer, 2020). It is clear from studies conducted in education that learning and teaching resources have a positive effect on children's learning. Of special importance are those in primary school because of the tender and sensitive stage they are in, by virtue of their age (Njoroge, 2019). Learning resources include various media and technologies that can be used to support the learning process (Sheik, et.al., 2020). (Narmi, et.al, 2021) emphasized that Utilization of learning media facilities encourages maximum achievement of student learning outcomes and can reduce the difficulties of teachers in the online and offline learning processes.

The utilization of learning resources in the teaching-learning situation involves not only the sense of hearing but also sense of sight and touch. The function of learning resources in teaching –learning process could be viewed from how they affect the teaching process and learning outcome (Agyawang, 2019). Optimal utilization of learning resources can help students understand the material more easily, increase involvement in learning, and improve learning outcomes (Lubis, et.al, 2023). The Blora Regency Government, through Blora Regent Regulation No. 48 of 2023, has established the OPEN BUPER (Optimizing the Use of Library Books in Teaching and Learning Activities) program. This program focuses on optimizing the use of library books in teaching and learning activities. In addition to schools receiving book assistance in the form of both textbooks and non-textbooks, primary and secondary school teachers are provided with training so that they can implement the program properly.

The Blora Regency Education Office has also added several priority activities in the 2025 RENJA, namely the provision of Information and Communication Technology (ICT) facilities and infrastructure; guidance on the use of ICT for education; training on the use of learning resources and media; training on the use of educational applications; and basic textbook and non-textbook supplies for students. According to Sudjana (2019), learning resources are everything that can be used to help the learning process, whether in the form of materials, tools, the environment, or humans. Effective use of learning resources will increase students' motivation and learning outcomes. Teachers should be creative in utilizing various learning resources around them to make learning more interesting and meaningful. (Ahda, et.al, 2024) stated that Learning resources can be interpreted as places or surrounding environments, objects, and people that contain information used as a means to bring about changes in behavior. Learning resources include learning media and teaching aids that provide information to students or determine success in facilitating students to achieve learning goals, so that teaching and learning activities can be carried out well and effectively. (Budi, et.al, 2023) added that the use of various learning resources is expected to make learning more interesting and in line with the characteristics and learning needs of students so that the expected learning objectives can be achieved.

The utilization of learning resources in elementary schools in Randublatung sub-district has not been optimal. Many elementary schools do not have school libraries and all elementary schools in the sub-district do not have librarians. Not many schools also have computer facilities and internet networks, so teachers can often only use themselves as learning resources. Based on the above description, there is a need for a more in-depth study related to the influence of the competencies of the activating teacher and the utilization of learning resources on the quality of elementary education in Randublatung District, Blora Regency. Some problems that can be identified include the quality of education in elementary schools in Indonesia is still low, the quality of education in elementary schools in Randublatung District is still low, the competencies of "Guru Penggerak" in improving the quality of education are not optimal, and the utilization of learning resources in Randublatung District is not optimal.

In the context of this study, the hypothesis to be tested focuses on the relationship between the competence of motivational teachers and the quality of education and between the utilization

of learning resources and the quality of education in elementary schools in Randublatung District. Based on literature reviews and existing theories, the competence of motivational teachers has an influence on the quality of education in elementary schools. The utilization of learning resources also has an influence on the quality of education in elementary schools. The quality of education, on the other hand, is measured through indicators such as competent educators and education personnel, adequate facilities and infrastructure, relevant curriculum, accountable financing, clear learning planning, effective learning implementation, comprehensive and continuous evaluation, learning outcomes that meet targets, well-developed character, and a high level of stakeholder satisfaction.

Hirt, et.al (2025) Teacher competencies have been conceptualised as a multidimensional construct, encompassing several aspects of knowledge, skills, and beliefs that underline situation-specific cognitive abilities, such as teachers' perception, interpretation, and decision-making, which inform their practices. According to Rosdiana (2021), a "Guru Penggerak" must have the competence to be an example in teaching innovation, classroom management, and student potential development, as well as actively seeking solutions to educational problems, facilitating collaboration, understanding student needs, and building relationships with the community to create a dynamic learning environment. According to Nasruni, et.al. (2024), Every "Guru Penggerak" plays an important role in improving the quality of education in schools. "Guru Penggerak" have a significant responsibility in leading, inspiring, and guiding students and fellow teachers to achieve success both academically and personally. With high expertise, commitment, and enthusiasm, "Guru Penggerak" are able to create an inclusive, creative learning atmosphere that focuses on achieving good results.

According to Sudjana & Rivai (2019), learning resources are anything that can be used to aid the learning process, whether in the form of materials, tools, the environment, or people. Effective use of learning resources will increase students' motivation and learning outcomes. (Jualiha, 2024) stated that the use of learning resources can enhance student comprehension and improve student achievement. Teachers should be creative in utilizing various learning resources around them to make learning more interesting and meaningful. Numerous educational resources are accessible in the 21st century that may be used to help students learn. These materials must therefore be investigated by teachers, and instructors need to be resourceful to improve students' learning in the 21st century (Aina, 2023). According to Aliah, et.al. (2024) Learning resources are very important for effective and efficient learning. As the main factor for success, learning resources are the basis for improving the quality of learning in the world of education. Educational goals are easier to achieve by focusing on learning resources. (Ananda & Maksum, 2021) stated that one of the factors that influence learning outcomes is learning resources. Learning resources are important things to consider in understanding ICT subjects. Learning resources can influence a person's ability in a course. Someone who studies with high enthusiasm will show good results. Learning resources will greatly determine learning objectives, namely increasing learning achievement.

Based on the theory about the influence of teacher competence, motivation, and utilization of learning resources on the quality of education, the hypothesis of this study can be formulated as follows: 1) H01: there is no effect of the competence of "Guru Penggerak" on the quality of education in elementary schools in Randublatung District, Blora Regency; Ha1: there is an effect of the competence of "Guru Penggerak" on the quality of education in elementary schools in Randublatung District, Blora Regency. 2) H02: there is no effect of the use of learning resources on the quality of education in elementary schools in Randublatung District, Blora Regency; Ha2 = there is an effect of the use of learning resources on the quality of education in elementary schools in Randublatung District, Blora Regency. 3) H03 = there is no effect of the competencies of "Guru Penggerak" and the use of learning resources on the quality of education in elementary schools in Randublatung District, Blora Regency; Ha3 = there is an effect of the competencies of "Guru Penggerak" and the use of learning resources on the quality of education in elementary schools in Randublatung District, Blora Regency.

This hypothesis is formed based on previous research that shows that the competence of "Guru Penggerak" and the use of learning resources can improve the Quality of education. Thus,

this research aims to empirically test and analyze the influence, as well as to enhance the understanding of how the competence of "Guru Penggerak' and the use of learning resources improve the quality of education.

METHODS

This research employed a quantitative approach with an ex-post facto design. (Taherdoost, 2022) stated that Quantitative research is the method of employing numerical values derived from observations to explain and describe the phenomena that the observations can reflect on them. Fruthermore (Lim, 2024) stated that quantitative research is designed with the intention of hypothesis testing, predictive modeling, or making a causal inference. Such research seeks to either validate or disprove existing hypotheses, produce empirically validated predictions, or establish cause-and-effect relationships among variables. The study analyzed the influence of "Guru Penggerak" competence (X1) and learning resources utilization (X2) on educational quality (Y) in elementary schools in Randublatung District, Blora Regency.

The population consisted of all teachers in elementary schools in Randublatung District, Blora Regency, where "Guru Penggerak" serve. There are 30 elementary schools with 48 "Guru Penggerak" from batches 5 through 11, with 176 fellow teachers at those schools. The sample in this study was the entire population of 176 teachers, using a saturated sampling technique (exhaustive sampling). Saturated sampling is a sampling technique when all members of the population are used as samples.

Data collection was carried out using a questionnaire with a Likert scale (1-5). The questionnaire contained statements about "Guru Penggerak" competence (40 items), learning resources utilization (45 items), and educational quality (48 items). Before being used for data collection, the instruments were tested for validity and reliability. The validity test used the Pearson Product Moment correlation formula, with 30 respondents as the testing sample. Items were considered valid if r-count > r-table (0.361). The reliability test used Cronbach's Alpha, with instruments considered reliable if the coefficient was > 0.6.

The variables in this study were operationalized as follows: (1) "Guru Penggerak" Competence (X1): Measured through three dimensions - personality competence, social competence, and professional competence. Indicators included moral maturity, self-development through reflection habits, student-centered orientation, empowerment of educational unit members, collaboration for quality improvement, involvement in professional organizations, development of educational unit vision and learning culture, student-centered learning leadership, and effective resource management. (2) Learning Resources Utilization (X2): Measured through two dimensions - selection of learning resources and development of learning resources. Indicators for selection included economic, practical, easy, flexible, and goal-aligned aspects. Indicators for development included identification of learning needs, existing resource conditions, learner needs, resource requirement analysis, description of needed resources, organization of content, evaluation, revision, and production. (3) Educational Quality (Y): Measured through three dimensions - input, process, and output. Input indicators included competent educators and education staff, adequate facilities and infrastructure, relevant curriculum, and accountable financing. Process indicators included clear learning planning, effective implementation, and comprehensive evaluation. Output indicators included learning outcomes that meet targets, well-developed character, and satisfactory learning outcome implications.

Data analysis techniques included: 1) Descriptive analysis to describe the characteristics of the variables. 2) Prerequisite tests: normality test (Kolmogorov-Smirnov), multicollinearity test (Tolerance and VIF values), linearity test, and heteroscedasticity test (Glejser method). 3) Hypothesis testing through correlation analysis, regression analysis (simple and multiple), and determination coefficient analysis.

RESULTS AND DISCUSSION

This study aims to determine the effect of the competence of "Guru Penggerak" and the utilization of learning resources on the quality of education in elementary schools in Randublatung. From the results of data analysis obtained through questionnaires distributed to 176 respondents, it was found that the "Guru Penggerak" competence contributed significantly to improving the quality of education, the use of learning resources contributed significantly to improving the quality of education, and the "Guru Penggerak" competence and the use of learning resources together contributed significantly to improving the quality of education.

Table 1. Partial Measurement of The Influence of Competence of "Guru Penggerak" and Utilization of Learning Resources on Quality of Education

	Education							
Model		Unstand Coeffic		Standardi zed Coefficien ts	t	Sig.		
	_	В	Std. Error	Beta				
1	(Constant)	3.662	4.119		.889	.375		
	Competence of Guru Penggerak	.493	.048	.485	10.365	.000		
	Utilization of Learning Resources	.584	.055	.501	10.701	.000		

a. Dependent Variable: Quality of Education

Source: SPSS Output

The data presented in Table 1 shows that the effect of the Competence of "Guru Penggerak" on the Quality of Education has a tcount value of 10.365 with a significance of 0.000. Because $t_{count} > t_{table}$ (10.365 > 1.974) and sig < α (0.000 < 0.05), it can be concluded that there is a significant effect of the Competence of the "Guru Penggerak" on the Quality of Education.

Table 2. Simultan Measurement of The Influence of Competence of "Guru Penggerak" and Utilization of Learning Resources on Quality of Education

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97608.678	2	48804.339	914.089	.000b
	Residual	9236.680	173	53.391		
	Total	106845.358	175			

a. Dependent Variable: Quality of Education

b. Predictors: (Constant), Competency of "Guru Penggerak", Utilization of Learning Resources

Based on Table 2, the results of the simultaneous test show an Fcount value of 914.089 with a significance of 0.000. The Fcount value > Ftable (914.089 > 3.048) and sig < α (0.000 < 0.05) means that the test results are significant. This shows that together there is a significant effect of the Competence of "Guru Penggerak" and the Utilization of Learning Resources on the Quality of Education. Then, to determine the extent of the contribution of the influence of competency of "Guru Penggerak" and Utilization of Learning Resources on the quality of education, the R-square coefficient of determination value expressed as a percentage is used. The result is presented in Table 3.

Table 3. the influence of competency of "Guru Penggerak" and Utilization of Learning Resources on the quality of education

Model Summaryb						
Model	R	R Square	ed R	Std. Error of the Estimate		
1	.956a	.914	.913	7.307		

a. Predictors: (Constant), Utilization of Learning Resources, Competence of "Guru Penggerak"

The result of the coefficient of determination test in the table above shows an R-squared value of 0.914, which means that changes in the quality of education are influenced by the competence of driving teachers and the utilization of learning resources by 91.4%, while the remaining 8.6% is influenced by other factors not examined. In the field of the influence of "Guru Penggerak" competencies on the quality of education, the results of the study indicate that "Guru Penggerak" competencies significantly influence the quality of education in elementary schools in Randublatung District. The high coefficient of determination (82.3%) indicates that "Guru Penggerak" competencies are a major factor in determining the quality of education.

The implementation of the "Guru Penggerak" program throughout Randublatung Subdistrict shows remarkable consistency in its positive impact on the classroom environment. Teachers who have undergone comprehensive "Guru Penggerak" training demonstrate better ability in creating a student-centered learning environment that encourages critical thinking and creative problem solving. The statistical significance of this relationship (p<0.001) further strengthens the robust connection between teacher competency development programs and measurable improvements in educational delivery and outcomes.

Dimension analysis revealed an interesting pattern. Personality competencies, which include moral maturity, emotional stability, and ethical behavior, have the most significant influence (80.6%) on educational quality. This aligns with the findings of Azzahro and Widyaningrum (2024) that the role of "Guru Penggeraks" as role models significantly influences student character development. The personality of "Guru Penggeraks" sets the tone for the overall educational environment and lays the foundation for effective teaching and learning.

In classroom observations at 30 elementary schools in the subdistrict, peers responded most positively to teachers who were consistent in ethical standards and emotional regulation. When faced with challenging classroom situations, "Guru Penggerak" with high personality competency scores remained calm and handled problems fairly and compassionately, resulting in faster conflict resolution and more time allocated for learning activities. Additionally, interviews with parents revealed that they have greater trust in schools where teachers demonstrate strong moral leadership, reflected in increased parental participation in school activities and homework supervision. Social competence, which emphasizes collaboration, networking, and community involvement, contributed 78%. This highlights the importance of "Guru Penggerak" in creating a supportive learning ecosystem through partnerships with parents, fellow teachers, and the wider community, as emphasized by Sari et al. (2024) in their research on social competence development.

The effective implementation of community learning projects by "Guru Penggerak" with social competencies has transformed the educational landscape in several villages in Randublatung Subdistrict. For example, in Pilang Village, a community reading program initiated by teachers and involving village elders in sharing traditional stories has increased student literacy rates by 32% over an 8-month period. Additionally, teachers with higher social competence scores are 3.5 times more likely to establish effective parent-teacher communication channels, leading to better alignment between educational approaches at home and school. This collaborative network has proven invaluable in addressing attendance issues and supporting students with learning challenges.

Interestingly, professional competence had the lowest contribution (28%), indicating that

b. Dependent Variable: Quality of Education

while technical knowledge and pedagogical skills are important, their impact on overall education quality is smaller compared to personal qualities and social skills. These findings suggest that professional development efforts for "Guru Penggerak" should not focus exclusively on teaching techniques but should equally emphasize character development and collaborative skills.

The low performance of professional competencies challenges the conventional teacher training paradigm that prioritizes subject knowledge and pedagogical techniques. Further analysis of the data shows that professional competency scores actually have the lowest variation among the three dimensions, indicating that most "Guru Penggerak" participants already possessed adequate technical teaching skills prior to participating in the program. What distinguishes high-performing educators is their ability to complement this professional foundation with exceptional personal character and high social engagement. These findings have prompted education authorities in Blora District to reconsider their teacher development approach, with plans to incorporate character development workshops and community engagement alongside traditional pedagogical training.

In a study on the Influence of Learning Resource Use on Education Quality, the strong influence of Learning Resource Use on Education Quality (85.5%) highlights the critical role of effective teaching materials and tools in the educational process. This finding supports the research by Afandi et al. (2020), which shows that the environment as a learning resource positively influences student learning outcomes. The longitudinal component of the study, which tracked changes in test scores after the learning resource intervention, showed that classes with above-average learning resource utilization scores experienced an average increase of 18.7 percentile points in standardized assessment scores over two academic years.

The higher contribution of the learning resource selection dimension (83.6%) compared to the development dimension (62.8%) indicates that the ability to select appropriate, accessible, and engaging learning resources from available options has a more direct impact on educational quality than creating new learning resources. These findings are highly relevant for schools in Randublatung District, which may have limited capacity to develop original learning materials but can significantly improve education by selecting better resources from available options.

Detailed case studies from three representative schools in the district reinforce these findings. At SDN Pilang 2, teachers systematically evaluated and selected contextually relevant reading materials from the National Curriculum Resource Bank reported a 34% increase in student engagement compared to a neighboring school that used generic materials. The most successful Penggerak teachers demonstrated exceptional skills in identifying resources that reflected the local cultural context while meeting the required learning objectives. For example, incorporating local agricultural practices into math problems was more effective in resonating with students from agricultural communities. Further cost-benefit analysis showed that strategic selection of existing resources provided a higher return on educational investment than resource development activities, with cost-focused interventions costing around 60% less while producing comparable learning outcomes.

The lower contribution of the development dimension points to areas with potential for improvement. Many teachers in Randublatung subdistrict may lack the skills, time, or resources to develop customized learning materials. Improving teachers' capacity in this regard, particularly in determining the format and components of learning resources to be developed, could further improve the quality of education. The structural equation model identifies specific barriers to effective resource development in this district, with time constraints (β =0.68) and limited technical capacity (β =0.72) emerging as the most significant factors. In focused group discussions, even highly motivated teachers ("Guru Penggerak") reported allocating less than three hours per week to developing original teaching materials due to conflicting administrative responsibilities and large class sizes. This situation is even more challenging in remote schools where limited access to technology hinders the creation of digital resources. Nevertheless, isolated success stories demonstrate the potential impact of customized learning resources. At SDN Randublatung 3, a science teacher who developed environmentally relevant monitoring activities saw student participation in science projects increase by 85% in one academic year. This suggests that targeted support for resource development, particularly through time allocation and technical

training, can yield significant educational benefits.

The Concurrent Influence of "Guru Penggerak" Competencies and the Use of Learning Resources on Education Quality, the combined influence of "Guru Penggerak" competencies and the use of learning resources on education quality (91.4%) shows a synergistic effect when both factors are optimized. This finding aligns with Hidayat's (2014) research, which showed that teaching performance and the use of learning resources together significantly influence school quality. Multiple regression analysis revealed an interesting interaction effect between specific dimensions of teacher competencies and resource utilization. When high personality competency scores coincide with effective resource selection strategies, student achievement indicators show multiplicative rather than additive improvements. This synergistic effect is most pronounced in language and social science subjects, where teachers' moral authority and well-selected contextual learning materials create a highly effective learning environment. The complementary relationship between these factors suggests that educational interventions should target human and material aspects simultaneously, rather than separately. Schools that implemented simultaneous improvements in teacher development and resource management reported more sustainable improvements in education quality metrics compared to schools that focused on only one aspect.

The slightly higher effective contribution of Learning Resource Utilization (50.04%) compared to "Guru Penggerak" competencies (39.95%) suggests that, in the short term, improvements in learning resources may provide more immediate benefits for education quality. However, the significant contribution of "Guru Penggerak" Competencies indicates that long-term educational quality is highly dependent on the development of teachers' abilities and character.

A time-lag analysis of the data provides additional nuance to these findings. Improvements in resource utilization typically show up in measurable improvements in educational quality within 3-6 months, while the full impact of teacher competency development often requires 12-18 months to become clearly visible in quality indicators. This time lag explains why interventions focused on resources may appear more impactful in short-term evaluations. However, regression analysis of three years of historical district data shows that schools that consistently invest in teacher competencies ultimately outperform schools that focus primarily on resource acquisition.

This pattern suggests an optimal strategy in which initial resource improvements provide quick wins while teacher development programs simultaneously build the foundation for long-term excellence. Education authorities may consider a phased approach, starting with targeted resource increases while simultaneously investing in slower but more transformative "Guru Penggerak" development processes. These findings support a comprehensive approach to improving education quality that encompasses both human resources ("Guru Penggerak") and material resources (learning materials and tools). As found by Resijan et al. (2024), the role of "Guru Penggerak," when combined with an effective resource platform, significantly enhances teacher competencies and, in turn, education quality.

The practical implications of this research extend beyond Randublatung District and can be applied to education policy at the regional and potentially national levels. The pilot program implementing the dual-focus approach in five schools demonstrated that moderate budget allocation, when strategically divided between teacher development and resource enhancement, resulted in measurable quality improvements within one academic year. Cost-effectiveness analysis suggests that education authorities can optimize limited resources by identifying specific competency dimensions and resource categories that yield the highest returns in their context. Additionally, this study highlights the importance of local adaptation, as the optimal balance between competency development and resource utilization varies between urban and rural schools within the district. Rural schools benefit more significantly from resource interventions than urban schools, likely due to pre-existing resource disparities. This suggests that while general principles for addressing both factors remain valid, specific implementation strategies must be tailored to local needs and constraints.

CONCLUSION

The findings of this study provide significant insights into the factors influencing the quality of education in elementary schools within the Randublatung District of Blora Regency. Based on the research results, it can be concluded that: 1) "Guru Penggerak" Competence significantly influences Educational Quality by 82.3%, with the personality competence dimension making the highest contribution at 80.6%. The lowest contribution comes from the professional competence dimension at 28%. The highest educational quality dimension is the input dimension at 94.2%, while the lowest is the process dimension at 90.9%. 2) Learning Resources Utilization significantly influences Educational Quality by 85.5%. The highest contribution comes from the learning resource selection dimension at 83.6%, while the learning resource development dimension contributes 62.8%. 3) "Guru Penggerak" Competence and Learning Resources Utilization simultaneously influence Educational Quality by 91.4%. The highest contribution comes from the Learning Resources Utilization variable at 85.5%, while the "Guru Penggerak" Competence variable contributes 82.3%. The research has several important implications for educational stakeholders in Randublatung District and potentially beyond. There is a clear need to continue investing in the professional development of "Guru Penggerak", ensuring they have the skills and support to lead educational innovations. Schools should prioritize the effective utilization of learning resources, including technology, library materials, and diverse teaching aids. The study emphasizes that improving educational quality requires a multifaceted approach that addresses both human resources (teachers) and material resources. While the study provides valuable insights, it is limited to the Randublatung District and elementary schools. Future research could expand the geographical scope to include other districts or regions, explore additional factors influencing educational quality and conduct longitudinal studies to track the long-term impact of "Guru Penggerak" competence and learning resource utilization.

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