
Enhancing Teacher Excellence: The Impact of Competency and Work Facilities Mediated by Work Achievement

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Abstract:

This study aims to examine the influence of competence and work facilities on teacher performance through job achievement as an intervening variable among teachers at SMP Negeri 8 Singaraja. The data analysis technique used is Structural Equation Modeling (SEM) based on variance, known as Partial Least Square (PLS) version 3.0. The results indicate that competence has a positive and significant effect on teacher performance, suggesting that higher competence leads to better performance. Work facilities also show a positive and significant impact on performance, implying that adequate facilities help teachers optimize their work. Additionally, competence positively affects job achievement, indicating that competent teachers are more likely to improve their achievements. Work facilities likewise significantly enhance job achievement by supporting teaching activities. Finally, job achievement has a positive and significant effect on teacher performance, confirming that higher achievement leads to better overall performance.

Keywords: Competencies, Work Facilities, Work Achievements, Teacher Performance

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1. Introduction

The advancement of a nation hinges on the quality of its human resources, a critical factor in the era of globalization (Li et al., 2025). Education plays a pivotal role in improving human resource quality, with teachers serving as central agents in shaping student achievement and the effectiveness of the learning process (Hanaysha, 2023; Jerrim & Sims, 2023). Teacher performance reflects their ability to carry out educational responsibilities and achieve learning outcomes aligned with institutional goals (Chen & Zhang, 2025; Meng & Lee, 2024). Research indicates that teacher performance is influenced by several key factors, including competency, work facilities, and work achievement (Pujilestari, Rubini, & Sunaryo, 2023; Silitonga et al., 2024; Taufan, 2022). Competent teachers demonstrate higher pedagogical skills, effective classroom management, and the ability to motivate students, directly contributing to learning outcomes (Aytaç, 2024; Zhang & Wang, 2024). Meanwhile, the availability of adequate work facilities, such as computers, projectors, and

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teaching materials, has been shown to enhance teacher productivity and instructional quality (Wulandari et al., 2021; Baharu, 2021).

SMP Negeri 8 Singaraja, established in 2017 in Buleleng, Bali, exemplifies the challenges in optimizing teacher performance. With 45 teachers (37 certified, 8 uncertified), the school experiences disparities in teacher competencies and limited facilities, which hinder instructional effectiveness (Silitonga et al., 2024; Taufan, 2022). According to the Merdeka Mengajar Platform (PMM) between 2022 and 2024, teacher performance ratings consistently fall at “Sesuai Ekspektasi” (76–77), indicating that performance meets expectations but does not exceed leadership targets for achieving the school’s vision and mission (Sari, Ahmad, & Destiniar, 2021). Discrepancies in certification, uneven workload distribution, and inadequate infrastructure further impede work achievement and overall teacher performance (Hanaysha, 2023; Kuncoro, 2017). Prior studies suggest that deficiencies in school facilities and teaching resources correlate with lower productivity and learning outcomes (Caffey, 2020; Glassow & Zhang, 2024).

Although prior research has examined individual factors affecting teacher performance, such as competency (Chen & Zhang, 2025; Li et al., 2025) or facilities (Wulandari et al., 2021; Silitonga et al., 2024), few studies explore the interplay between teacher competency, work facilities, and work achievement as a mediating factor in junior high school settings. Particularly, there is limited empirical evidence regarding how these variables interact in Indonesian schools, including SMP Negeri 8 Singaraja, leaving a clear research gap that this study seeks to address. This study is urgent and novel because it integrates multiple determinants of teacher performance—competency, work facilities, and work achievement—into a comprehensive model. By considering work achievement as an intervening variable, the research provides a deeper understanding of the mechanisms underlying teacher performance (Pujilestari et al., 2023; Meng & Lee, 2024).

Accordingly, this study investigates the influence of teacher competency and work facilities on teacher performance, mediated by work achievement, at SMP Negeri 8 Singaraja. The research addresses the following questions: (1) Does competency influence teacher performance? (2) Do work facilities affect teacher performance? (3) Does competency impact work achievement? (4) Do work facilities influence work achievement? (5) Does work achievement affect teacher performance? (Silitonga et al., 2024; Taufan, 2022; Zhang & Wang, 2024). The expected contributions of this study are twofold. Theoretically, it enriches human resource management literature in education by elucidating the relationships among competency, facilities, work achievement, and teacher performance (Aytaç, 2024; Chen & Zhang, 2025; Hanaysha, 2023). Practically, it offers evidence-based recommendations for school administrators and policymakers aiming to improve teacher performance, optimize the use of facilities, and enhance student learning outcomes at SMP Negeri 8 Singaraja (Pujilestari et al., 2023; Wulandari et al., 2021).

2. Theoretical Background

Teacher Competency

Competency refers to an individual's ability to perform tasks based on the knowledge, skills, and work attitudes required to achieve optimal results (Aytaç, 2024; Chen & Zhang, 2025). Teacher competency reflects the capacity developed through education, experience, or training and is a key determinant of learning process quality and student achievement (Meng & Lee, 2024; Li et al., 2025). Teacher competency can be classified into four main indicators. First, pedagogical competency, which includes understanding students' cognitive development, designing learning experiences, and evaluating learning outcomes (Hanaysha, 2023; Jerrim & Sims, 2023). Second, personality competency, which involves professionalism, wisdom, and moral character supporting ethical behavior in education (Aytaç, 2024). Third, professional competency, which relates to mastery of the curriculum, teaching methodologies, and technical skills in the subject area (Chen & Zhang, 2025; Zhang & Wang, 2024). Fourth, social competency, which includes the ability to communicate effectively with students, colleagues, parents, and other stakeholders (Pujilestari, Rubini, & Sunaryo, 2023). Previous studies indicate that teachers with high competency levels tend to perform better and significantly improve student achievement (Hanaysha, 2023; Silitonga et al., 2024).

Work Facilities

Work facilities refer to physical resources that support task efficiency and the quality of educational services (Wulandari et al., 2021; Baharu, 2021). They facilitate the transformation of inputs into outputs and provide long-term benefits to educational institutions (Caffey, 2020; Glassow & Zhang, 2024). Five common indicators of work facilities are: (1) suitability, the extent to which facilities meet task requirements; (2) optimization, their capacity to improve work outcomes; (3) ease of use, or user-friendly design; (4) efficiency, the ability to accelerate work processes; and (5) proper placement, meaning appropriate arrangement to support operational needs (Silitonga et al., 2024; Taufan, 2022). Prior research demonstrates that adequate facilities enhance teacher productivity and improve the quality of instruction (Wulandari et al., 2021; Sari, Ahmad, & Destiniar, 2021).

Work Achievement

Work achievement refers to the qualitative and quantitative results of a teacher's efforts in fulfilling responsibilities (Aytaç, 2024; Meng & Lee, 2024). It serves as the basis for decisions regarding rewards, promotions, or performance evaluations (Chen & Zhang, 2025). The main indicators of work achievement include: (1) discipline, adherence to rules and schedules; (2) creativity, innovation in task completion; (3) collaboration, ability to work effectively in teams; (4) experience, application of skills to perform tasks; and (5) responsibility, accountability for outcomes (Pujilestari et al., 2023; Silitonga et al., 2024). Studies show that work achievement acts as a mediator between teacher competency and performance, meaning that teachers with high competency and adequate facilities tend to achieve higher work performance (Taufan, 2022; Zhang & Wang, 2024).

Teacher Performance

Teacher performance encompasses observable behaviors and the results achieved in fulfilling educational duties, directly contributing to institutional goals (Hanaysha, 2023; Chen & Zhang, 2025). It can be measured using five key indicators: (1) work quality, accuracy and precision in completing tasks; (2) timeliness, meeting deadlines; (3) initiative, proactive problem-solving; (4) capability, mastery of relevant skills; and (5) communication, effective collaboration and interaction with stakeholders (Meng & Lee, 2024; Pujilestari et al., 2023). Previous research confirms that high teacher performance positively affects student learning outcomes and overall educational effectiveness (Aytaç, 2024; Wulandari et al., 2021).

3. Methodology

This study was conducted at SMP Negeri 8 Singaraja, Bali, selected due to the issue of some teachers lacking educator certification, leading to mismatches in teaching assignments and raising questions about the optimality of their performance. The research employs both quantitative and qualitative approaches, with quantitative data including the number of teachers and questionnaire responses, and qualitative data encompassing the school's vision, mission, and organizational structure (Sugiyono, 2019). Primary data were collected through observations and questionnaires from a saturated sample of 45 teachers, while secondary data include documents such as the school's history and organizational structure.

Data collection techniques include observation to assess teacher activities and school facilities, documentation of organizational structure and teaching activities, and questionnaires using a 1-10 scale to measure teacher competence, work facilities, work achievement, and performance. Data analysis utilizes Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 3.0, comprising measurement models (outer model) to test validity and reliability, and structural models (inner model) to predict causal relationships between variables (Ghozali, 2018). Hypothesis testing compares T-statistics with a T-table value of 1.96 at a 0.05 significance level, and path analysis examines direct and indirect variable relationships.

Established on July 7, 2017, SMP Negeri 8 Singaraja in Buleleng, Bali, aims to produce graduates with noble character, faith, and high achievement. The school is equipped with facilities such as classrooms, administrative offices, a principal's room, a canteen, toilets, and waste disposal areas, along with internet access to support modern learning. School activities include workshops for curriculum development, sports programs, student participation in competitions, and management of Teacher Working Groups (KKG) and Principal Working Groups (KKKS). The school's organizational structure delineates roles and coordination, facilitating the delivery of quality education.

4. Empirical Findings/Result

Structural Model and Variable Indicators

This model serves as the basis for analyzing causal relationships using Smart PLS. The PLS Algorithm results, shown in Table 2: PLS Algorithm Path Coefficient Results, indicate positive influences: competence on teacher performance (0.302), work facilities on teacher performance (0.240), competence on work achievement (0.473), work facilities on work achievement (0.389), and work achievement on teacher performance (0.491).

Table 2. PLS Algorithm Path Coefficient Results

Variable	Competence	Work Facilities	Work Performance	Teacher Performance
Competence			0,473	0,302
Work Facilities			0,389	0,240
Work Performance				0,491
Teacher Performance				

Source : Smart PLS 3.0 Output Results

The outer model assessment ensures the validity and reliability of the research instruments. The following are the detailed evaluations:

Convergent Validity: Reflective indicators are valid if their loading factors exceed 0.70. Table 3: Outer Loading Values shows that all indicators for competence (0.743-0.856), work facilities (0.719-0.934), work achievement (0.742-0.933), and teacher performance (0.802-0.870) have loading factors above 0.70, confirming their validity. The FK5 indicator (proper placement of work facilities) has the highest value (0.934), indicating that well-organized facilities enhance teacher efficiency (Figure 2: Loading Factor Values).

Table 3. Outer Loading Values

Variable	Variable Indicators	Indicator Value	Rule Of Thumb	Description
Competence	KT1	0,834	0,700	Valid
	KT2	0,761	0,700	Valid
	KT3	0,856	0,700	Valid
	KT4	0,743	0,700	Valid
Work Facilities	FK1	0,719	0,700	Valid
	FK2	0,894	0,700	Valid
	FK3	0,845	0,700	Valid
	FK4	0,895	0,700	Valid
	FK5	0,934	0,700	Valid
Work Performance	PK1	0,847	0,700	Valid
	PK2	0,933	0,700	Valid
	PK3	0,760	0,700	Valid
	PK4	0,742	0,700	Valid
	PK5	0,915	0,700	Valid
Teacher Performance	KG1	0,802	0,700	Valid
	KG2	0,863	0,700	Valid

KG3	0,806	0,700	Valid
KG4	0,853	0,700	Valid
KG5	0,870	0,700	Valid

Source : Smart PLS 3.0 Output Results

Discriminant Validity: This test ensures that indicators measure their associated constructs more strongly than others. Table 4: Discriminant Validity Values shows loading factors for competence (0.800), work facilities (0.861), work achievement (0.843), and teacher performance (0.839), with lower cross-loading values for other constructs (e.g., competence to teacher performance at 0.767, work facilities to work achievement at 0.644), satisfying discriminant validity requirements.

Table 4. Discriminant Validity Values

Variable	Work Facilities	Teacher Performance	Competence	Work Performance
Work Facilities	0,861			
Teacher Performance	0,719	0,839		
Competence	0,538	0,767	0,800	
Work Performance	0,644	0,852	0,683	0,843

Source : Smart PLS 3.0 Output Results

Average Variance Extracted (AVE): Table 5: Average Variance Extracted (AVE) Values indicates AVE values for competence (0.640), work facilities (0.741), work achievement (0.711), and teacher performance (0.704), all above 0.50, confirming construct validity.

Table 5. Average Variance Extracted (AVE)

Variable	Average Variance Extracted (AVE)	Rule Of Thumb	Description
Work Facilities	0,741	0,500	Valid
Teacher Performance	0,704	0,500	Valid
Competence	0,640	0,500	Valid
Work Performance	0,711	0,500	Valid

Source : Smart PLS 3.0 Output Results

Composite Reliability and Cronbach Alpha: Table 6: Composite Reliability Values shows reliability values for competence (0.876), work facilities (0.934), work achievement (0.924), and teacher performance (0.922), all above 0.70, indicating high reliability. Table 7: Cronbach Alpha Values also shows values above 0.60 for competence (0.813), work facilities (0.910), work achievement (0.896), and teacher performance (0.896), confirming that all variables are reliable.

Table 6. Composite Reliability Values

Variable	Composite Reliability	Rule Of Thumb	Description
Work Facilities	0,934	0,700	Reliable
Teacher Performance	0,922	0,700	Reliable
Competence	0,876	0,700	Reliable
Work Performance	0,924	0,700	Reliable

Source : Smart PLS 3.0 Output Results

Table 7. Cronbach Alpha Values

Variable	Cronbach Alpha	Rule Of Thumb	Description
Work Facilities	0,910	0,600	Reliable
Teacher Performance	0,896	0,600	Reliable
Competence	0,813	0,600	Reliable
Work Performance	0,896	0,600	Reliable

Source : Smart PLS 3.0 Output Results

4. Inner Model Assessment

The inner model evaluation examines relationships between variables through R-square values and the significance of structural paths (Figure 3: Inner Model). Table 8: R-Square Values indicates that work achievement has an R-square of 0.574 (57.4% of variability explained by competence and work facilities), while teacher performance has an R-square of 0.823 (82.3% explained by competence, work facilities, and work achievement). The remaining 42.6% for work achievement and 17.7% for teacher performance are influenced by external variables such as supervision, compensation, or incentives.

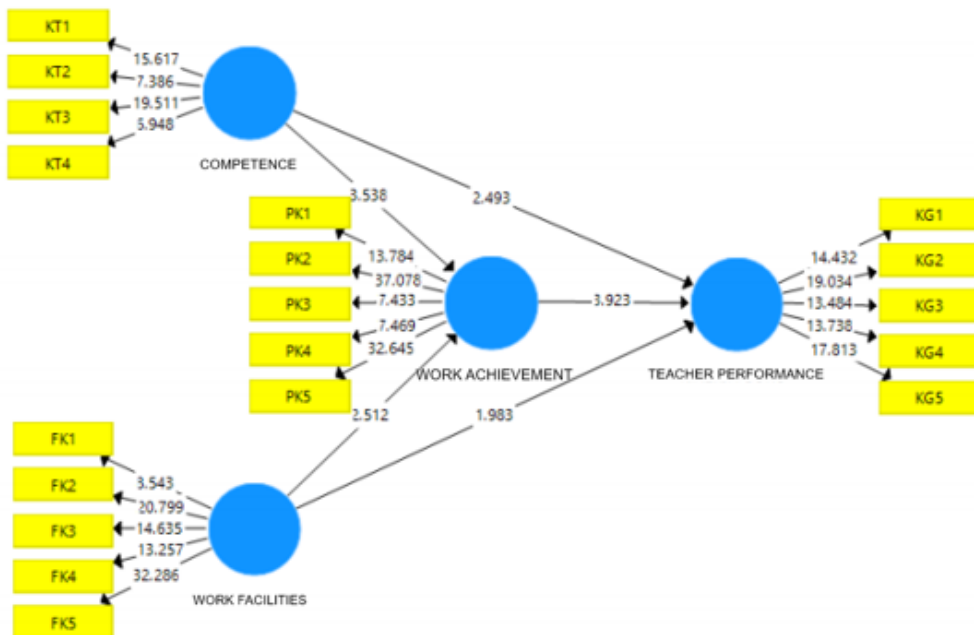


Figure 3. Inner Model

Source : Smart PLS 3.0 Output Results

Table 8. R-Square Values

Variable	R Square	R Square Adjusted
Work Performance	0,574	0,553
Teacher Performance	0,823	0,811

Source : Smart PLS 3.0 Output Results

Hypothesis Testing

Hypothesis testing was conducted through path coefficients and bootstrapping to ensure the significance of relationships. Table 9: Path Coefficients Results shows:

Table 9. Path Coefficients Results

Variable	Original Sample	T Statistics (O/STDEV)	P Values
Work Facilities > Teacher Performance	0,240	1,983	0,048
Work Facilities > Work Performance	0,389	2,512	0,012
Competence > Teacher Performance	0,302	2,493	0,013
Teacher Performance > Work Performance	0,473	3,538	0,000
Work Performance > Teacher Performance	0,491	3,923	0,000

Source : Smart PLS 3.0 Output Results

The results show that competence has a positive and significant influence on teacher performance, with an original sample value of 0.302, a t-statistic of 2.493 (>1.96), and a p-value of 0.013 (<0.05), while work facilities also positively and significantly affect teacher performance, with an original sample value of 0.240, a t-statistic of 1.983 (>1.96), and a p-value of 0.048 (<0.05). Competence significantly impacts work achievement, with an original sample value of 0.473, a t-statistic of 3.538 (>1.96), and a p-value of 0.000 (<0.05), and work facilities similarly influence work achievement, with an original sample value of 0.389, a t-statistic of 2.512 (>1.96), and a p-value of 0.012 (<0.05). Work achievement has the strongest positive and significant effect on teacher performance, with an original sample value of 0.491, a t-statistic of 3.923 (>1.96), and a p-value of 0.000 (<0.05). All hypotheses are accepted, confirming that competence, work facilities, and work achievement significantly and positively influence teacher performance, with work achievement having the greatest impact (0.491), highlighting its critical role in supporting teacher performance, including adapting to curriculum changes and new teaching methods.

Indirect Effect Testing

The indirect effects through the intervening variable of work achievement were tested via indirect effect analysis. Table 10 Indirect Effect Testing Results shows:

Table 10. Indirect Effect Testing Results

Variable Work Performance	Original Sample	T Statistics (O/STDEV)	P Values
Competence > Teacher Performance	0,232	2,468	0,014
Work Facilities > Teacher Performance	0,191	2,224	0,027

Source : Smart PLS 3.0 Output Results

The results indicate that competence influences teacher performance via work achievement, with an original sample value of 0.232, a t-statistic of 2.468 (>1.96), and a p-value of 0.014 (<0.05), while work facilities influence teacher performance via work achievement with an original sample value of 0.191, a t-statistic of 2.224 (>1.96), and a p-value of 0.027 (<0.05); these results confirm that work achievement significantly mediates the relationship between competence and work facilities with teacher performance.

5. Discussion

The findings of this study highlight the critical role of competence, work facilities, and work achievement in shaping teacher performance at SMP Negeri 8 Singaraja. Competence emerged as a significant factor influencing teacher performance. Teachers who possess strong pedagogical, professional, personal, and social competencies are better equipped to deliver lessons effectively, manage classrooms efficiently, and engage meaningfully with students and colleagues (Aytaç, 2024; Chen & Zhang, 2025; Meng & Lee, 2024). Such competencies enable teachers to design and implement learning strategies that facilitate student understanding and achievement. Prior research supports this finding, indicating that competent teachers directly improve performance by mastering teaching processes and fostering collaborative interactions within educational settings (Hanaysha, 2023; Pujilestari, Rubini, & Sunaryo, 2023; Zhang & Wang, 2024).

Similarly, work facilities were found to positively influence teacher performance. Adequate and well-organized facilities, including classrooms, teaching aids, and administrative tools, streamline instructional and non-instructional tasks, allowing teachers to focus on delivering quality education (Wulandari et al., 2021; Silitonga et al., 2024). Properly arranged and accessible resources reduce barriers to task completion and improve overall efficiency, enabling teachers to allocate more time and energy to pedagogical responsibilities (Caffey, 2020; Sari, Ahmad, & Destiniar, 2021). These findings are consistent with previous studies that emphasize the importance of a supportive physical environment in enhancing teacher productivity and performance (Glassow & Zhang, 2024; Taufan, 2022).

The study also confirms that competence significantly impacts work achievement. Teachers with high levels of pedagogical, professional, and social skills demonstrate greater motivation and productivity, effectively meeting institutional expectations (Aytaç, 2024; Chen & Zhang, 2025). Competent teachers can efficiently organize learning activities, manage classroom challenges, and complete administrative tasks, which collectively improve their work achievement (Meng & Lee, 2024; Hanaysha, 2023). Previous research supports this link, showing that teacher competency is closely associated with the ability to achieve work-related goals and maintain consistent performance (Pujilestari et al., 2023; Zhang & Wang, 2024).

Work facilities also positively affect work achievement by enabling teachers to complete tasks efficiently. The availability of modern teaching aids, supportive infrastructure, and well-maintained resources ensures that teachers can perform their responsibilities without encountering logistical barriers (Wulandari et al., 2021; Silitonga et al., 2024). By providing the necessary tools and organized spaces, schools allow teachers to devote attention to instructional quality and administrative responsibilities simultaneously, reinforcing productivity and fostering higher work achievement (Caffey, 2020; Sari, Ahmad, & Destiniar, 2021).

Work achievement itself was identified as the strongest determinant of teacher performance. Teachers who demonstrate discipline, creativity, collaboration, experience, and accountability are better prepared to adapt to challenges such as curriculum changes or new pedagogical approaches (Aytaç, 2024; Meng & Lee, 2024). High work achievement equips teachers with the skills and motivation to consistently deliver high-quality educational outcomes, contributing directly to institutional success (Hanaysha, 2023; Pujilestari et al., 2023; Zhang & Wang, 2024). This finding aligns with previous studies emphasizing that teachers' accomplishments in their daily tasks are crucial for achieving broader school objectives (Chen & Zhang, 2025; Wulandari et al., 2021).

The mediating role of work achievement is particularly noteworthy, as it enhances the effects of both competence and work facilities on teacher performance. This suggests that investments in improving teacher competencies through professional development and in upgrading school facilities can amplify their impact by fostering higher work achievement (Silitonga et al., 2024; Taufan, 2022). By focusing on strategies that enhance work achievement, schools can optimize teacher performance more effectively, creating an interconnected system in which skills, resources, and outcomes mutually reinforce each other.

Overall, the results underscore the interconnected nature of competence, work facilities, and work achievement in shaping teacher performance. Schools seeking to improve teaching quality should adopt an integrated approach that simultaneously develops teacher competencies, provides adequate facilities, and cultivates work achievement. Such a holistic strategy is likely to maximize teacher effectiveness, improve student outcomes, and support the achievement of institutional goals (Aytaç, 2024; Pujilestari et al., 2023; Wulandari et al., 2021).

6. Conclusions

This study confirms that competence, work facilities, and work achievement positively influence teacher performance at SMP Negeri 8 Singaraja, both directly and indirectly through the mediating role of work achievement. Among these factors, work achievement has the greatest impact, emphasizing its crucial role in enhancing teacher quality and supporting the achievement of educational goals. Teachers with strong pedagogical, professional, personal, and social competencies are more capable

of managing classrooms effectively, engaging with students, and completing administrative tasks efficiently, all of which contribute to higher overall performance.

In addition, well-organized work facilities, including proper placement of teaching aids and accessible infrastructure, significantly enhance teacher efficiency and work achievement, allowing teachers to focus on instructional quality without operational obstacles. These findings highlight the importance of a holistic approach that integrates teacher competency development and adequate facility provision to optimize teacher performance and create an effective learning environment.

Future research could explore additional factors that may influence teacher performance, such as leadership styles, motivation, organizational culture, and the integration of digital learning technologies. Longitudinal studies could provide insights into how improvements in teacher competence and facilities lead to sustained performance over time. Comparative studies across different schools or regions would help examine contextual variations and generalize the findings more broadly.

Moreover, future studies could investigate the relationship between teacher performance and student learning outcomes more directly, exploring how teacher competencies, work facilities, and work achievement contribute to academic success. Examining potential mediating or moderating variables, such as professional development programs or teacher motivation, could provide further understanding of the mechanisms that enhance teacher effectiveness. These studies would offer practical guidance for school administrators and policymakers in designing strategies to maximize teacher performance and overall educational quality.

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