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Institutional Support on Teachers' Use of Pisa-Like Assessments

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Abstract **Review Article**

This descriptive-correlational study examined the influence of school leadership support on teachers' use of PISA-like assessments in public secondary schools in Diffun District during the 2025-2026 academic year. It includes 70 Grade 9 and Grade 10 teachers in English, Mathematics, and Science selected through stratified sampling. It aimed to measure teachers' profiles, perceptions of leadership support, and frequency of use of PISA-like assessments. The data were analyzed using frequency, percentage, median, Mann-Whitney U test, Kruskal-Wallis test, and Spearman's rank correlation. Findings revealed that teachers perceived a high level of leadership support, particularly in vision, monitoring, and feedback. Teachers also reported a very high frequency of integrating PISA-like assessments, including higher-order thinking skills and real-world tasks. No significant differences were found across sex and the subject taught, although Grade 10 teachers reported better access to resources. A significant positive relationship was established between leadership support and teachers' frequency of use of PISA-like assessments. This study concludes that strong institutional support enhances the consistent implementation of PISA-aligned assessment practices in public secondary schools.

Keywords: school leadership, teacher practices, PISA-aligned assessment, institutional support, classroom assessment strategies.

Introduction

The Program for International Student Assessment (PISA), conducted by the Organization for Economic Co-operation and Development (OECD), is a global large-scale assessment that evaluates how effectively 15-year-old students apply their knowledge and skills in reading, mathematics, and science to solve problems encountered in real-life contexts, making it an important benchmark for comparing the performance of education systems worldwide (OECD, 2023; Schleicher, 2021). PISA differs from traditional examinations because it evaluates how well 15-year-old students can apply knowledge and skills in reading, mathematics, and science to real-world situations and complex problem-solving tasks, and uses its findings to assess education systems and guide reforms (OECD, 2023; Lewis, 2020). These results frequently catalyze national policy overhauls (Belfali, 2020; OECD, 2019). For the Philippines, the 2018 assessment revealed significant performance gaps, prompting the Department of Education to launch the Sulong EduKalidad initiative in 2019 to modernize curricula

and assessment literacy (DepEd, 2021; World Bank, 2021).

However, the transition from national policy to classroom reality often remains inconsistent, as policy implementation at the school level is shaped by local contexts and institutional capacities (Fullan, 2007; Honig, 2006; Spillane et al., 2002). Research suggests that top-down mandates require robust school-level support to succeed. Institutional leadership acts as the vital bridge in this process; as noted by Ertem (2024) and Amatullah et al. (2025), administrators influence instructional shifts by providing vision, resources, and professional guidance. Teachers are notably more receptive to innovative, PISA-oriented assessments when supported by consistent feedback and institutional reinforcement (AlAli & Wardat, 2024; Emilia et al., 2022).

Despite this, a research vacuum exists regarding how leadership support specifically impacts the use of PISA-like tasks in Philippine public secondary schools (Hallinger, 2011; Leithwood, Harris, & Hopkins, 2008). This study addresses this gap by examining schools in the Diffun District to determine how administrative vision and resource allocation correlate with the frequency of inquiry-based and interdisciplinary assessments. The findings aim to provide empirical evidence for educational leaders to better align local teaching practices with international standards.

Methods

This study used a descriptive correlational research design to assess the impact of leadership support on teachers' use of PISA-like assessments in public secondary schools in Diffun District. The descriptive component examined teachers' profiles and perceptions of school leadership support, and the correlational component examined the relationship between teachers' perceived leadership support and the frequency of use and PISA-like assessments. The respondents were 70 Grade 9 and Grade 10 English, Mathematics, and Science teachers working in 10 public secondary schools in the Philippines, in the Diffun District, Schools Division of Quirino. Stratified sampling was applied to a total population of 71 teachers eligible to participate in the program to ensure representation across PISA-related subject areas.

Data were collected from a validated researcher-developed questionnaire with 3 parts: teachers' profiles, perceptions of leadership support, and the frequency of use of PISA-like assessments. The instrument was content validated and pilot tested with Cronbach's Alpha values ranging between 0.70 and 0.87 (good to acceptable reliability). Data were tested for normality using the Shapiro-Wilk test and were found to be non-normal. The statistical tools used were frequency counts, percentages, the median, the Mann-Whitney test, the Kruskal-Wallis test, and Spearman's rank correlation. Ethical considerations, including informed consent, confidentiality, voluntary participation, and non-maleficence, were strictly adhered to.

Results and Discussions

Table 1. *Frequency and Percent Distribution of Respondents*

Profile	Specifics	Frequency	Percent
Sex	Male	23	32.86
	Female	47	67.14
Subject Taught	English	22	31.43
	Mathematics	24	34.29
	Science	24	34.29

	Grade 9	23	32.86
Grade Level Taught	Grade 10	32	45.71
	Grade 9 & 10	15	21.43

n = 70

Statistically, these demographic factors, gender, subject, and grade level, exerted no significant influence on the frequency or type of assessments used. This indicates a "systemic uniformity" in which pedagogical strengths and implementation hurdles are shared across the district rather than isolated to specific departments. This finding reinforces Fullan's (2015) assertion that the prevailing institutional culture and collective mandates are more powerful determinants of teacher behavior than individual subject expertise. Furthermore, this consistency aligns with the findings of Awuah et al. (2024), who noted that teacher profiles show no statistical correlation with the adoption of innovative formats. Instead, as Hernandez-Ramos and Martinez-Abad (2023) highlight, the school's leadership climate and the quality of professional development serve as the true engines of assessment reform.

Table 2. Test of Difference on the Frequency of Teachers' Use of PISA-Like Assessments When They are Grouped by Profile

	Median	**Sex**	**Subject Taught**	**Grade Level Taught**
A. Leadership Support on PISA-Like Assessments				
A1. Vision and Direction	4.00	NS	NS	NS
A2. Provision of Professional Development and Training	4.00	NS	NS	Significant
A3. Instructional Support and Resource Allocation	3.50	NS	Significant	Significant
A4. Monitoring, Feedback and Encouragement	4.00	Significant	NS	Significant
B. Teachers' use of PISA-Like Assessments				
B1. Real-World and Authentic Problem-Solving Tasks	4.00	NS	Significant	Significant
B2. Higher-Order Thinking and Reasoning Tasks	4.00	NS	NS	NS
B3. Inquiry-Based and Student-Centered Assessment Tasks	4.00	Significant	NS	NS
B4. Interdisciplinary or Cross-Curricular Assessment Tasks	4.00	NS	NS	NS
B5. Feedback and Use of Results from PISA-like Tasks	4.00	NS	NS	Significant

Table 2 shows the test of difference in the frequency of use of PISA-like assessments among the sample of teachers, by sex, subject taught, and grade taught. Based on the medians, the majority of indicators had a median of 4.00, indicating a high level, while A3 Instructional Support and Resource Allocation had the lowest median of 3.50. This indicates that although leadership support is quite high, resource allocation is comparatively lower than in other areas, suggesting that access to materials may also vary. This suggests that while leadership vision is established, the physical distribution of teaching materials remains a systemic hurdle. This outcome aligns with Hattie (2023), who argues that the "Transfer of Training", the actual classroom application of new skills, is only realized when professional development is paired with sustained instructional resources.

For leadership support, A4 Monitoring, Feedback and Encouragement (Median = 4.00) showed significant differences by sex and grade level, suggesting that support practices are not experienced equally by all teachers. This indicates that administrative oversight is not experienced uniformly by all staff. Such a "Culture of Recognition" is essential; This mirrors Fullan's (2023) assertion that effective leadership must transcend administrative checklists to foster deep "pedagogical collaboration." A2 Provision of Professional Development and Training (Median = 4.00) showed significant differences in grade level, and A3 (Median = 3.50) showed significant differences in subject taught and grade level, indicating that training and resources are not distributed equally. The differences in Professional Development (A2) in grades replicate the research findings of He et al. (2024), who found that a principal's active involvement in training is a non-negotiable predictor of teacher growth.

For teachers' use of PISA-Like Assessment, (B1) Real-World Tasks (Median = 4.00) showed significant differences by subject and grade level. In terms of classroom application, the subject and grade level had significant differences for Real-World Problem-Solving Tasks (B1). This validates the fact that, although reforms are national, their incorporation varies from one pedagogical context to another. As stated by AlAli and Wardat (2024), teachers' inclination to adopt these complex tasks increases when they are in a supportive, guided organizational climate. Also, (B5) Feedback Use (Median = 4.00) showed a significant difference across grade levels. The significant variation across grade levels in the Feedback and Use of Results (B5) testifies to a developing commitment to "data-driven instruction." By closing the "assessment loop," teachers go beyond random testing to meaningful remediation processes that Ertem (2024) categorizes as the critical relationship between school leadership and student performance, as described by Amatullah et al. (2025). However, B2 and B4 (both Median = 4.00) did not show significant differences, so these practices are being applied consistently. The lack of significant differences in Higher-Order Thinking (B2) and Interdisciplinary Tasks (B4) may indicate that these have achieved the "uniform professional standard" across the district, consistent with the objectives of the OECD (2023), which has globalized curricular alignment goals.

Table 3. Relationship between Teachers' Perceptions and Their Frequency of Use of PISA-Like Assessments

	A1.	**A2.**	**A3.**	**A4.**
B1. Real-World and Authentic Problem-Solving Tasks	Significant	NS	Significant	Significant
B2. Higher-Order Thinking and Reasoning Tasks	Significant	Significant	Significant	Significant

B3. Inquiry-Based and Student-Centered Assessment Tasks	Significant	Significant	Significant	Significant
B4. Interdisciplinary or Cross-Curricular Assessment Tasks	Significant	Significant	Significant	Significant
B5. Feedback and Use of Results from PISA-like Tasks	Significant	Significant	Significant	Significant

The link between institutional leadership support and the implementation of PISA-aligned assessments is presented in Table 3. In all cases, key leadership dimensions are positively and significantly related to the frequent use of complex tasks (B2-B5), including Vision (A1), Instructional Support (A3), and Monitoring (A4). This implies a holistic approach to leadership that enables educators to go beyond conventional testing and work toward student-centered, reflective pedagogies.

These findings align with Instructional Leadership Theory, which has highlighted the critical role of leaders who provide clear pedagogical direction and active supervision in enhancing teacher efficacy. Specifically, the researchers Amatullah et al. (2025) state that school administrators serve as key intermediaries within their institutions; their research validates the finding that academic achievement increases when school leaders create a culture of accountability and provide targeted training. Furthermore, according to AlAli and Wardat (2024), teacher readiness to perform complex tasks increases significantly in a conducive organizational climate.

Conversely, the non-significant relationship between Professional Development (A2) and Real-World Authentic Tasks (B1) suggests that "one-shot" workshops may fail to correct bad instructional habits. To achieve meaningful "Transfer of Training" for genuine problem-solving, as suggested by Hattie (2023), a sustained regimen of coaching and data-driven feedback loops is important versus passive attendance. Ultimately, whilst resources (A3) are the basis, visionary leadership (A1) and an active role in monitoring (A4) are the main catalysts behind the institutionalization of the high-level competencies required by global PISA standards.

Based on the results of this research, the following conclusions have been arrived at. School leadership assistance in the Diffun District is always clearly evident. Teachers feel they have a clear vision, adequate support, and frequent monitoring from school leaders. This strong leadership support is linked with the high frequency of using PISA-like assessments in classrooms. Monitoring, feedback, and encouragement from school leaders have a greater impact on teachers' use of PISA-like assessments than professional development activities alone. This indicates that direct leadership and follow-up with school leaders are more effective than training that does not include classroom application. There is unequal instructional support within grade levels. Grade 10 teachers have greater access to materials, technology, and supportive classrooms than Grade 9 teachers do. This suggests that leading is more supported by the grade 10 timing. The sex of teachers and the subject taught do not influence their perceptions of leadership support or their use of PISA-like assessments. This means that practices aligned with PISA are implemented as a school-wide approach and applied equally across subjects and genders.

From the study's findings, the Department of Education may develop a centralized repository of PISA-aligned assessment items to support teachers in integrating higher-order thinking skills into classroom assessment. Schools may also conduct structured Learning Action Cell (LAC) sessions that focus on designing and implementing PISA-oriented assessment practices through collaborative planning and reflection. School heads may strengthen

instructional supervision by conducting regular classroom observations that emphasize authentic, higher-level assessment strategies and are supported by constructive feedback. In addition, schools may ensure equitable access to instructional materials, technological tools, and learning resources that promote inquiry-based and problem-solving activities across grade levels. Subject-area departments may periodically review teacher-developed assessment tasks to ensure alignment with PISA-oriented standards, particularly those that require analytical thinking, open-ended responses, and multi-step reasoning. Finally, future research may explore the implementation of PISA-like assessments using qualitative methods to better understand classroom practices and institutional support mechanisms.

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