

Teachers' Pedagogical Practices and Their Influence on Academic Performance Among Basic Education Learners: Implications for Academic Progress Teachers

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ABSTRACT

This study investigated students' perceptions of basic education teachers' pedagogical practices at Aldersgate College and examined how these practices relate to academic performance across elementary and secondary levels. The research identified effective strategies that promote creativity, problem-solving, and interdisciplinary learning. Findings indicated that elementary teachers more often used structured, proactive methods, which corresponded with higher academic performance ($M = 93.89$) than among high school students ($M = 90.00$). The study also explored the correlation between time spent with a learning partner and academic outcomes, emphasizing the importance of time management and peer support. The study also found significant differences in pedagogical areas such as motivational strategies, contextual learning, resource management, and formative evaluation. Moreover, practices such as addressing contextual problems and implementing performance-based assessments showed strong positive correlations with academic success, while others, such as collaborative work and values education, showed limited or negative relationships. These insights highlight the need for continued professional development, interdisciplinary teaching, and adapting effective elementary strategies in secondary education to improve overall learning outcomes.

Keywords: Pedagogical practices, academic performance, creativity, problem solving, interdisciplinary learning

INTRODUCTION

With the advent of the Philippine K-12 curriculum, reassessing teachers' pedagogical practices is crucial for delivering quality 21st-century education. Evolving teaching modalities demand dynamic strategies that align with the United Nations' Sustainable Development Goal 4 (Quality Education), which advocates inclusive, equitable, and lifelong learning opportunities. Republic Act No. 10533, the "Enhanced Basic Education Act of 2013" (Official Gazette, 2013), shapes this educational landscape by mandating the Department of Education (DepEd) to collaborate with CHED, TESDA, and other stakeholders to craft a globally competitive curriculum. To effectively execute this, DepEd Order No. 43, s. 2013, establishes strict standards, requiring the curriculum to be learner-centered, culture-sensitive, constructivist, and inquiry-based, while utilizing mother-tongue instruction and spiral progression to ensure mastery of skills.

Implementing these robust standards relies heavily on a teacher's ability to utilize evidence-based teaching strategies (Kapur, 2018). Furthermore, instruction is a reciprocal, dynamic interplay between educators and learners that goes beyond mere knowledge transfer to actively foster critical thinking (Tomlinson, 2014). Effective pedagogy requires teachers to perform an introspective self-evaluation to tailor differentiated, collaborative instruction that addresses diverse learning paces and nurtures individual student growth. When educators empower students to think and work independently, they cultivate shared learning and deepen understanding.

Significantly, students' consistent underperformance is largely attributed to the use of ineffective teaching methods (Adunola, 2011). Despite the progressive national frameworks mandated by law, local observations in Solano reveal a stark contrast: many instructional deliveries still rely heavily on traditional, teacher-centered methods. This failure to fully integrate differentiated and constructivist approaches often results in passive learning and visible student disengagement, creating a critical gap between policy and classroom practice. To address this, this study aims to examine the relationship between teachers' pedagogical practices and learners' academic performance at Aldersgate College School in Solano, Nueva Vizcaya. By exploring this interplay, the research aspires to pave the way for informed, localized teaching strategies that enrich the educational experience for all learners.

Theoretical Framework

In education, teachers serve as influential guides who significantly shape learners' academic journeys. The study, "Teachers' Pedagogical Practices and Their Influence on Academic Performance among the Basic Education Learners: Intermediate Learners and Junior High School," seeks to uncover the intricate connection between instructional approaches and resulting student achievements. To provide a clear and structured lens for examining this problem and to guide the formulation of research questions and hypotheses, this study is anchored in a multi-dimensional framework comprising Albert Bandura's Social Learning Theory (Bandura, 1977), John Sweller's Cognitive Load Theory (Sweller, 1988; Cherry, 2022; Main, 2022), Jean Piaget's Constructivist Learning Theory (Piaget, 1936), and Benjamin Bloom's Taxonomy of Educational Objectives (Bloom, 1956).

According to Social Learning Theory, learning results from observation and social interaction; thus, teachers serve as influential models whose pedagogical practices directly shape observational learning outcomes. Complementing this, Cognitive Load Theory highlights the mental effort required for learning, asserting that effective teaching methods must minimize extraneous cognitive load to optimize the learners' cognitive processing capacity. Furthermore, Piaget's Constructivist Learning Theory posits that students actively construct knowledge through experience, which directly supports the study's examination of how active, inquiry-based pedagogical practices, rather than passive instruction, affect student engagement. Finally, Bloom's Taxonomy provides a hierarchical framework for cognitive skills, guiding the assessment of

how varying instructional strategies successfully elevate students from basic knowledge recall to higher-order critical thinking and real-world application.

Conceptual Framework

Educating youth is immensely significant, as teachers become integral figures in their learners' lives. As educators, it is imperative to use diverse teaching styles that resonate with each learner's unique needs. Recognizing learner diversity is crucial, as teachers must navigate various pedagogical practices in their classrooms. Each teacher develops distinct pedagogical practices to enhance learners' academic performance and be more effective in their educational roles.

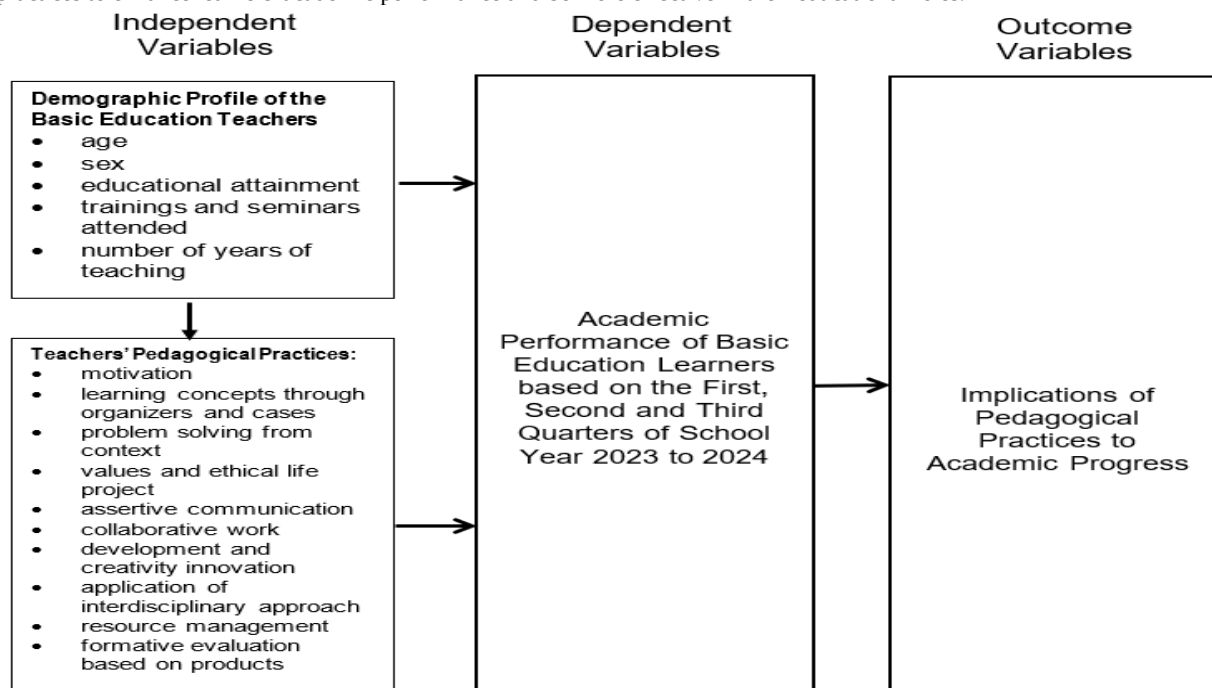


Figure 1. Paradigm of the Study

The research paradigm encapsulates the teachers' demographic profile in terms of age, sex, educational attainment, number of years of teaching, and trainings and seminars attended, and also the learners' demographic profiles in terms of age, sex, and grade level, the extent of the use of pedagogical practices of teachers in motivating learning concepts through organizers and cases, and the academic performance of learners based on their grade weighted average from the first quarter to the third quarter of the School Year 2023-2024.

The investigation aims to establish connections among the demographic profile, pedagogical practices, and academic performance. The study also seeks to discern

the relationships between demographic profile and pedagogical practices, between demographic profile and academic performance, and between pedagogical practices of the basic education teachers and the Implications of Pedagogical Practices to Academic Progress.

Statement of the Problem

This study aimed to determine the relationship between teachers' pedagogical practices and the academic performance of basic education learners at Aldersgate College School, Solano, Nueva Vizcaya, and to understand their implications for academic progress. Specifically, the study sought to answer the following questions:

1. What is the demographic profile of the basic education teachers of Aldersgate College teaching elementary and junior high school for the School Year 2023-2024?
2. To what extent are the following pedagogical practices used by the basic education teachers in their teaching - learning tasks as perceived by the learners?
3. What is the academic performance of the basic education learners based on their Grade Point Average (GPA) from the first to the third quarter of School Year 2023-2024?
4. Is there any significant difference in the perception of the basic education teachers and learners relative to the extent of use of the pedagogical practices of the basic education teachers in the teaching- learning tasks?
5. Is there any significant relationship between the basic education teachers' pedagogical practices to the academic performance of the basic education learners?
6. What implications for academic progress can be derived from the results of the study?

METHODOLOGY

Research Design

This study used a descriptive-comparative research design. Descriptive-comparative research is a quantitative approach that describes and compares the characteristics, behaviors, or conditions of different groups or variables without manipulating them. It aims to provide a comprehensive understanding of the similarities and differences among groups by identifying patterns, trends, or relationships based on existing conditions (Asuero & González, 2007).

Respondents and Setting

The study was conducted during the third quarter period of the School Year 2023–2024 at Aldersgate College in Solano, Nueva Vizcaya, Philippines. Aldersgate College is a learning institution affiliated with the United Methodist Church, which envisions itself as a 21st-century university transforming a global network of learners for enlightenment, leadership, and human service.

Instrumentation

This study utilized a two-part survey questionnaire to gather demographic data and assess the extent of pedagogical practices employed by basic education teachers. Adapted from a validated tool by Tobón et al. (2020), the instrument is grounded in the socio-formative approach, which emphasizes solving real-life problems, developing complex thinking, and fostering collaborative work. Reliability testing confirmed the questionnaire's strong internal consistency, with Cronbach's alpha scores across its ten dimensions ranging from 0.719 to 0.917, well within the acceptable-to-excellent range for research scales. Additionally, to measure student academic performance, a documentary analysis of the learners' Grade Point Averages (GPA) for the first three quarters of School Year 2023–2024 was conducted using the official Classroom E-Record based on DepEd guidelines.

Data Analysis

The gathered data were analyzed using appropriate statistical treatments to address the research questions. Descriptive statistics, specifically frequency, percentage, and mean, were utilized to summarize the teachers' demographic profiles and to evaluate the perceived extent and effectiveness of their pedagogical practices. To compare teachers' and learners' perceptions of these practices, an independent t-test was applied. Furthermore, the learners' academic performance was measured using their Grade Point Averages (GPA) for the first three quarters of the school year. Finally, correlation analysis was conducted at a specified 0.05 (5%) level of significance to examine the relationships between the teachers' pedagogical practices, their demographic variables, and the learners' academic performance, ensuring that all interpretations of inferential data are clearly based on this significance threshold.

RESULTS

Demographic Profile of Basic Education Teachers

The demographic profile of the 45 basic education teachers at Aldersgate College. Most teachers (64%) were between 20 and 30 years old, with the largest single group aged 25–30 (51%), indicating a predominantly young teaching workforce. Female teachers outnumbered male teachers at a 2:1 ratio (67% female, 33% male), consistent with national trends in Philippine basic education. In terms of educational attainment, 76% held bachelor's degrees with graduate units (MA/MAEd), while 11% had completed their master's degrees; no teacher had attained a doctorate. Regarding professional development, 91% had attended at least one training or seminar, predominantly at the local level (56%), with no reported international training participation. Teaching experience was likewise concentrated at the early career stage, with 80% having ten years or fewer in service.

Learners' Perception of Teachers' Pedagogical Practices

Table 2 presents the overall mean scores for all ten pedagogical practice domains as perceived by elementary (Level A) and secondary (Level B) learners. All domains were rated within the "Very Good Extent" range (4.20–5.00), indicating that learners across both levels positively perceived the quality and frequency of their teachers' pedagogical strategies.

Table 2

Summary of Learners' Perceived Pedagogical Practices by Domain and Level

Pedagogical Practice Domain	Elem. Mean	Sec. Mean	Interpretation
Motivation	4.66	4.68	Very Good Extent
Learning Concepts via Organizers & Cases	4.51	4.50	Very Good Extent
Contextual Problem-Solving	4.56	4.32	Very Good Extent
Values & Ethical Life Project	4.78	4.79	Very Good Extent
Assertive Communication	4.40	4.40	Very Good Extent
Collaborative Work	4.80	4.74	Very Good Extent
Development of Creativity & Innovation	4.60	4.35	Very Good Extent
Interdisciplinary Approach	4.60	4.61	Very Good Extent
Resource Management	4.64	4.51	Very Good Extent
Formative Evaluation Based on Products	4.76	4.60	Very Good Extent

Academic Performance of Basic Education Learners

Table 3 presents the academic performance of 298 basic education learners. At the elementary level, 94.4% of 90 learners achieved an "Outstanding" rating, with a mean grade of 93.89 (SD = 2.97). At the secondary level, 64.9% of 208 learners were rated "Outstanding," with a mean grade of 90.00 (SD = 2.85). Both levels recorded negligible proportions below "Very Satisfactory," indicating an overall high level of academic performance within the institution.

Table 3
Academic Performance of Basic Education Learners by Level

Descriptor	Elementary f (%)	Secondary f (%)
Satisfactory (80–84)	2 (2.2%)	11 (5.3%)
Very Satisfactory (85–89)	3 (3.3%)	62 (29.8%)
Outstanding (90–100)	85 (94.4%)	135 (64.9%)
Mean	93.89 (2.97)	90.00 (2.85)

Differences in Pedagogical Practices Between Elementary and Secondary Teachers

Independent samples t-tests revealed significant differences ($p < .05$) between elementary and secondary teachers in four of the ten pedagogical domains: Contextual Problem-Solving Strategies (mean diff. = 0.25, $t = 3.971$, $p < .001$), Development of Creativity and Innovation (mean diff. = 0.26, $t = 3.996$, $p < .001$), Resource Management (mean diff. = 0.13, $t = 2.094$, $p = .038$), and Formative Evaluation Based on Products (mean diff. = 0.16, $t = 3.293$, $p = .001$). In all four areas, elementary teachers were perceived to employ these practices more effectively than their secondary counterparts. No significant differences were found in Motivation, Learning Concepts through Organizers and Cases, Values and Ethical Life Project, Assertive Communication, Collaborative Work, and the Interdisciplinary Approach.

Within specific items, elementary teachers were significantly more likely than secondary teachers to conduct explanatory classes ($p = .014$), address contextual problems regularly ($p < .001$), encourage students to analyze and debate contextual issues ($p = .010$), use evaluation instruments systematically ($p < .001$), and instruct students in creative problem-solving strategies such as brainstorming and graphic organizers ($p < .001$). Secondary teachers, by contrast, were significantly more likely to begin classes by reading curriculum-stated objectives ($p = .047$) and to use advanced teaching strategies such as case analysis and debates in certain domains ($p = .036$).

Relationship Between Pedagogical Practices and Academic Performance

Table 4 presents the Pearson r correlation coefficients between each pedagogical practice domain and learners' academic performance. Three domains yielded statistically significant positive correlations: Contextual Problem-Solving Strategies ($r = .199$, $p = .001$), Development of Creativity and Innovation ($r = .181$, $p = .002$), and Formative Evaluation Based on Products ($r = .155$, $p = .008$). The remaining seven domains: Motivation, Learning Concepts through Organizers and Cases, Values and Ethical Life Project, Assertive Communication, Collaborative Work, Interdisciplinary Approach, and Resource Management did not yield statistically significant correlations with academic performance.

Table 4
Correlation Between Pedagogical Practices and Learners' Academic Performance

Pedagogical Practice Domain	R	p-value	Decision
Motivation	-0.044	0.453	Retain Ho
Learning Concepts via Organizers & Cases	0.007	0.902	Retain Ho
Contextual Problem-Solving	.199**	0.001	Reject Ho
Values & Ethical Life Project	-0.048	0.409	Retain Ho
Assertive Communication	0.048	0.411	Retain Ho
Collaborative Work	0.032	0.582	Retain Ho
Development of Creativity & Innovation	.181**	0.002	Reject Ho
Interdisciplinary Approach	0.025	0.666	Retain Ho
Resource Management	0.027	0.644	Retain Ho
Formative Evaluation Based on Products	.155**	0.008	Reject Ho

DISCUSSION

Demographic Profile and Institutional Implications

The demographic data reveal a predominantly young, female, and early-career teaching workforce at Aldersgate College. These characteristics align with national patterns reported by the Philippine Statistics Authority (PSA, 2022) and the Department of Education (DepEd, 2022), where women and early-career teachers comprise the majority of the basic education sector. While young teachers may signal institutional growth and fresh pedagogical energy, the dominance of teachers with ten or fewer years of experience raises concerns about retention and sustainability. The Philippine Institute for Development Studies (PIDS, 2022) identified workload, salary, and limited career advancement as primary drivers of early attrition among

Filipino teachers, all of which are particularly salient for younger educators. Institutional investments in mentorship frameworks, career incentive structures, and structured professional development would be strategically important for Aldersgate College to sustain and strengthen its faculty base.

The near absence of doctoral degree holders and teachers with international training exposure further points to systemic limitations in upward professional mobility. Although DepEd (2022) encourages graduate study as a pathway for career and salary advancement, institutional support through study grants and flexible scheduling remains essential to sustain qualification upgrading, particularly in private institutions where resource constraints are more pronounced.

Pedagogical Practices: Strengths Across Domains

Across all ten pedagogical domains assessed, learners perceived both elementary and secondary teachers at Aldersgate College as employing instructional practices to a "Very Good Extent." This consistently high perception signals an institutional culture of instructional engagement and professional commitment. The highest-rated domain was Values and Ethical Life Project, with secondary teachers achieving near-perfect mean scores ($M = 4.79$ – 5.00). This aligns with the mission of Catholic-affiliated and faith-based educational institutions in the Philippines, where values formation is embedded as a central pedagogical responsibility (Saadia, Asaduzzaman, & Fatima, 2024). Teachers consistently instilled values through integration across subject areas, reflective activities, and using peer conflicts as teachable moments—a holistic approach supported by character education literature (Balong et al., 2024).

Collaborative Work and Motivation were the next highest-rated domains. Teachers' strong performance in facilitating teamwork—including guiding role distribution, promoting shared goals, and resolving conflicts—aligns with research by Gillies (2016) and López Vera et al. (2020), who showed that structured collaborative learning enhances both academic outcomes and social skill development. In motivation, teachers' emphasis on linking course objectives to real-life applications echoes motivational theory that emphasizes perceived relevance and autonomy in sustaining intrinsic student engagement (Ahmar et al., 2023).

Assertive Communication recorded the lowest domain-level means, with the item specifically addressing active listening, dialogue, and conflict resolution falling at the "Great Extent" level (elementary $M = 3.98$, secondary $M = 3.86$)—the only item in the entire study to fall below the "Very Good Extent" threshold. This finding suggests that while teachers provide timely communicative feedback, deliberately and systematically cultivating assertive communication competencies remains an area for intentional pedagogical investment. Anghel and Jitaru's (2019) framework on assertive teacher communication underscores the importance of explicit modeling of respectful dialogue, active listening, and conflict resolution as prerequisite conditions for effective classroom discourse.

Differences Between Elementary and Secondary Pedagogical Practices

The significant differences found in four domains—Contextual Problem-Solving, Creativity and Innovation, Resource Management, and Formative Evaluation consistently favored elementary teachers. These findings align with existing literature indicating that elementary educators tend to adopt more student-centered, exploratory, and hands-on pedagogical approaches than their secondary counterparts, whose instruction is more content-driven and disciplinary (Fukuda, Fukaya, & Kusumi, 2024; Dong et al., 2024).

In problem-solving specifically, elementary teachers were significantly more likely to address contextual problems regularly, encourage student debate, and integrate real-world issues into daily lessons. This developmental pattern is theoretically grounded: foundational cognitive schema formation in younger learners benefits from concrete, contextualized, and experiential instruction, while secondary curricula often prioritize abstract conceptual mastery aligned with national learning competency frameworks (Li & Schoenfeld, 2020). The institutional implication is clear—secondary teachers would benefit from structured professional development that translates contextual problem-solving, creativity facilitation, and formative assessment strategies into secondary-level instructional designs without sacrificing disciplinary rigor.

The finding that elementary teachers employed creativity-fostering strategies significantly more frequently—particularly in instructing students to modify problem-solving procedures through brainstorming, graphic organizers, and free writing (mean diff. = 0.42, $p < .001$) contrasts with secondary teachers, who appeared constrained by curriculum demands and standardized assessment pressures (Roy, 2013). Mastul (2024) similarly emphasized that teacher-student relational warmth and explicit creativity scaffolding are critical at all levels, suggesting that secondary educators can leverage relational capital to more deliberately promote divergent thinking within existing curricular boundaries.

Academic Performance: Institutional Grades vs. International Benchmarks

The academic performance data revealed uniformly high grades, with 94.4% of elementary and 64.9% of secondary learners achieving "Outstanding" ratings. While these figures affirm learner competence within the DepEd criterion-referenced grading framework, which rewards mastery of specific, locally-defined curriculum competencies, they must be interpreted cautiously alongside international benchmarks. The Philippines ranked among the lowest-performing nations in the 2022 Program for International Student Assessment (PISA), particularly in reading, mathematics, and science (OECD, 2023). This ostensible contradiction reflects a fundamental difference in measurement constructs: DepEd grades assess curriculum compliance and content recall, while PISA measures functional literacy the application of knowledge to novel, real-world problems requiring analytical and evaluative reasoning (Bernardo, 2008; Guskey, 2009).

The divergence further reflects structural factors including the transition from mother-tongue-based instruction in the early grades to English-medium assessments at higher levels, grade inflation tendencies within school-based evaluation systems, and the relatively lower emphasis on higher-order thinking items in classroom tests compared to internationally standardized instruments (Almerino et al., 2020; Navarro, 2018; Tupas & Weninger, 2017). These findings collectively suggest that high institutional grades, while indicative of curriculum alignment, do not necessarily translate to internationally competitive applied reasoning skills a critical gap that pedagogical innovation must be designed to address.

Relationship Between Pedagogical Practices and Academic Performance

The three domains with significant positive correlations Contextual Problem-Solving ($r = .199$, $p = .001$), Creativity and Innovation ($r = .181$, $p = .002$), and Formative Evaluation Based on Products ($r = .155$, $p = .008$) constitute the most actionable finding of this study. These correlations indicate that teachers who more frequently engage learners in real-world problem-solving tasks, foster creative and divergent thinking, and employ systematic formative assessment practices produce measurably better academic outcomes, as reflected in official grades.

The significant correlation for contextual problem-solving aligns with Rahman and Ahmadi (2023) and Chen et al. (2022), who reported that problem-based and context-embedded learning environments enhance not only content knowledge acquisition but also critical thinking and long-term knowledge retention. Akpur's (2023) meta-analysis supports the link between creativity and innovation, finding a consistent positive relationship between creative disposition and academic achievement. Formative evaluation's relationship with performance aligns with Lee et al. (2020) and Graham et al. (2020), who showed that structured, criterion-referenced assessment with timely feedback accelerates learning by enabling iterative improvement.

Seven domains—including motivation, values education, assertive communication, collaborative work, interdisciplinary approaches, and resource management—did not show statistically significant correlations with grades. This does not imply that these practices are pedagogically unimportant; rather, it suggests that their contributions to learning may operate through indirect pathways (e.g., socio-emotional development, moral formation, long-term dispositional outcomes) not captured by grade-based academic performance metrics. Specifically, the significant negative correlation found for general values instruction ($r = -.181$, $p = .002$) does not indicate that values education harms academic performance, but likely reflects a confounding in which time allocated to values formation may come at the expense of direct academic instruction a tension inherent in holistic education philosophies (Akan, 2021; Gomez, 2024).

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that while the teaching workforce is young and relatively inexperienced, learners generally achieve "Outstanding" academic ratings. However, a significant performance gap exists: elementary students consistently outperform secondary students because elementary educators use structured, context-driven, and creative instructional strategies more effectively. Academic success at the institution is directly linked to these intentional, real-world practices, highlighting a critical need for cross-departmental collaboration to standardize pedagogical excellence across all grade levels.

Based on these findings, the study recommends the following actionable steps:

- Retain Talent: Implement mentorship programs and career incentives to stabilize the early-career workforce.
- Modernize Instruction: Transition toward 21st-century, inquiry-based, and learner-centered practices.
- Elevate Standards: Align curriculum competencies with higher-order, application-based tasks for global readiness.
- Bridge the Departmental Gap: Facilitate cross-departmental workshops where elementary teachers can share effective strategies with secondary colleagues.
- Prioritize High-Impact Practices: Embed contextual problem-solving and creative tasks heavily into secondary education, as these are proven predictors of success.
- Guide Future Research: Investigate the direct influence of teacher demographic profiles (like experience and education) on pedagogical effectiveness.

AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

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