

# School Heads' Teaching Thinking Strategies and Performance in Getafe I And II Districts

TOSTON, ZENDY T.  
zendy.toston@deped.gov.ph

*Abstract* — This study investigated the extent to which school heads in Getafe I and II Districts, under the Department of Education (DepEd) Schools Division of Bohol, implemented teaching thinking strategies and how these strategies influenced school performance during the School Year 2024–2025. The total population of 27 school heads and a randomly selected sample of 306 teachers participated in the study. A descriptive-correlational design was used, employing a researcher-made survey questionnaire using a 5-point Likert scale. Data were analyzed using SPSS.

Findings revealed that both school heads' and teachers' demographic and professional profiles such as age, sex, educational attainment, length of experience, and trainings attended did not significantly influence their perceived implementation of teaching thinking strategies. Regression models for both groups showed low  $R^2$  values and statistically insignificant predictors, indicating that individual profiles did not meaningfully explain implementation levels.

However, Pearson correlation analyses revealed a modest but statistically significant relationship between teachers' perceived implementation of thinking strategies and school performance in School-Based Management (SBM) key areas. Variables such as age ( $p = .036$ ), teaching experience ( $p = .010$ ), and seminars/trainings ( $p = .028$ ) were significant predictors. In contrast, school heads' perceived implementation had limited association with school performance indicators.

Further, emotional intelligence elements like empathy, self-regulation, and motivation were positively correlated with the implementation of thinking strategies, though not always with school performance. These results suggest that while individual demographic characteristics may not drive instructional practices, organizational factors such as school culture, strategic leadership, and context-specific training might play a more crucial role.

The study recommends a shift from profile-based professional development to competency-based leadership and teaching models focused on strategic implementation and contextual adaptability.

*Keywords* — *Teaching Thinking Strategies, School-Based Management, SPSS, School Heads, Teachers' Perceptions*

---

## I. Introduction

The rapidly changing educational landscape demands school leaders who can think strategically and guide their institutions with clarity, foresight, and purposeful decision-making. As technological shifts, societal expectations, and accountability pressures intensify, leadership has evolved beyond routine administration toward aligning vision, instruction, and long-term school success. Despite the widespread promotion of strategic planning worldwide, many schools continue to experience a gap between planning and actual performance—often struggling with

implementation, stakeholder involvement, and consistent monitoring. This issue is also evident in the Philippines, where the PPSSH underscores strategic thinking as a key leadership competency, yet many administrators still face challenges in applying these skills in daily practice.

## Literature Review

The literature consistently affirms that meaningful school improvement depends on leaders who can articulate a clear vision, make strategic and intentional decisions, and foster collaborative cultures; however, persistent challenges such as top-down planning and rigid decision-making processes often limit the effectiveness of strategic initiatives. Within this increasingly complex educational landscape—marked by rapid technological change, shifting learner demographics, and evolving socio-economic demands—research identifies strategic thinking, innovation, instructional leadership, and emotional intelligence as critical competencies for school heads. Anchored in the standards of the Philippine Professional Standards for School Heads (PPSSH) and competency frameworks of SEAMEO INNOTECH, existing studies emphasize the importance of supervision, strategic management, empathy, self-awareness, and participatory decision-making in strengthening teacher performance and organizational effectiveness, while also revealing gaps in the practical implementation and measurable impact of strategic decision-making, particularly in lower secondary contexts. This body of literature provides a strong theoretical and empirical foundation for the present study, underscoring its significance in examining how the strategic thinking practices of school heads in Getafe I and II Districts influence teacher performance and school outcomes, and in generating context-responsive insights for leadership development and school improvement initiatives.

### 1.1 Statement of the Problem

This study aims to investigate the school heads' teaching thinking strategies and its effect on the school performance in Getafe 1 and 2 Districts, DepEd Schools Division of Bohol during the School Year 2024-2025 with the end view of proposing a program.

Specifically, the study seeks answers to the following questions

1. What is the profile of the:
  - 1.1 school heads;
    - 1.1.1 age;
    - 1.1.2 sex;
    - 1.1.3 civil status;
    - 1.1.4 highest educational attainment;
    - 1.1.5 position/designation

1.1.6 length of administrative experience, and

1.1.7 number of relevant seminars and trainings attended?

1.2 teachers;

1.2.1 age;

1.2.2 sex;

1.2.3 civil status;

1.2.4 highest educational attainment;

1.2.5 length of teaching experience, and

1.2.6 number of relevant seminars and trainings attended?

2. What is the extent of implementation of teaching thinking strategies in terms of:

2.1 goal setting and vision alignment;

2.2 stakeholder involvement;

2.3 resource allocation and management;

2.4 monitoring and evaluation systems;

2.5 data-driven decision making;

2.6 empathy;

2.7 effective communication;

2.8 self-awareness;

2.9 self-regulation; and

2.10 motivation?

3. What is the school performance in terms of the following school-based management key areas:

3.1 leadership and governance;

3.2 curriculum and learning;

3.3 accountability and continuous improvement, and

3.4 management of resources?

4. Is there a significant relationship between the profile of the respondent groups and the extent of implementation of teaching thinking strategies?
5. Is there a significant relationship between the profile of the respondent groups and the school performance in terms of the school-based management key areas?
6. Is there a significant relationship between the extent of implementation of teaching thinking strategies and the school performance in terms of the school-based management key areas?
7. Based on the findings of the study, what program can be proposed?

## II. Methodology

This study utilized a descriptive-correlational research design to examine the profiles of school heads, the extent of implementation of teaching thinking strategies, and school performance, while exploring the relationships among these variables. The descriptive aspect captured demographic and professional characteristics—such as age, sex, civil status, educational attainment, position, years of experience, and trainings attended—while the correlational aspect assessed how these factors relate to teaching strategies and school outcomes, without implying causation.

Simple random sampling was employed to select participants from the Getafe I and II Districts, ensuring fair representation across grade levels, subjects, and experience. Permissions were secured from the Schools Division Superintendent and school administrators, and participants were oriented on the study's objectives before providing informed consent, adhering to ethical research standards.

Data were gathered through a three-part questionnaire: Part I collected demographic and professional profiles; Part II assessed the implementation of teaching thinking strategies; and Part III evaluated school performance in key areas such as student achievement and institutional effectiveness. Questionnaires were personally administered with clear instructions to ensure a high retrieval rate.

Collected data were analyzed using descriptive statistics—including percentages, means, and sum of ranks—to identify trends and relationships among variables.

The study maintained strict ethical standards, ensuring informed consent, confidentiality, anonymity, and voluntary participation. Participants were briefed on their rights, including the option to withdraw at any time, and sensitive information was safeguarded. Opportunities were

also provided for participants to review and validate their responses, ensuring both the accuracy of the data and the integrity of the research process.

### III. Results and Discussion

**Age.** The age profile of school heads reveals a predominance of leaders in the 49–55 age bracket, indicating that most respondents are in their late-career stage and likely possess substantial administrative experience. Mid-career leaders aged 35–48 also comprise a significant proportion, reflecting a balanced leadership workforce. In contrast, younger school heads (28–34) represent a smaller segment, while those nearing retirement (56–62) account for a modest share. Overall, the findings suggest a leadership composition characterized by experience and stability, while highlighting the importance of fostering generational diversity to sustain innovation, succession planning, and continuous school improvement

**Sex.** The gender profile of school heads shows a majority of females, representing 59.3% of respondents, while males comprise 40.7%. This reflects broader trends in the teaching profession, where women often outnumber men, and suggests progressive shifts toward gender equity in educational leadership. The data indicate that female representation in school leadership is growing, highlighting changing norms in a sector historically dominated by men and signaling a narrowing or potential reversal of gender gaps in school administration.

**Civil Status.** The civil status of school heads indicates that the majority are married (59.3%), followed by single leaders (25.9%), with widowed and separated individuals each comprising 7.4% of respondents. This distribution suggests that personal stability, as seen among married leaders, may support effective management of demanding administrative roles, while single leaders may benefit from greater flexibility in pursuing professional growth and institutional initiatives. Recognizing these differences can inform leadership development, promote an inclusive school environment, and guide professional programs tailored to the diverse circumstances of school administrators.

**Highest Educational Attainment.** The educational profile of school heads shows that the majority (66.7%) hold a Master's Degree, demonstrating strong professional preparation and commitment to advanced academic development. Additionally, 14.8% have completed all requirements for a Master's Degree, and another 14.8% possess Doctorate-related qualifications, while a small proportion (3.7%) have only Master's Degree units. Overall, these findings indicate that school leaders are highly qualified academically, which likely enhances their capacity for effective administrative and instructional leadership.

**Position/ Designation.** The data indicate a concentration in mid-level leadership, with 55.6% serving as Head Teacher IV–VI and 22.2% as Head Teacher I–III. Fewer occupy higher principal ranks (Principal I–II at 11.1% and Principal III–IV at 3.7%), while Teacher In-Charge

roles represent 7.4%, often in smaller or remote schools. This pattern highlights the prominence of mid-management leadership and underscores the need for structured career progression, mentorship programs, and tiered responsibilities to support professional growth, succession planning, and the development of a sustainable pipeline of competent school administrators.

**Length of Administrative Experience.** The study shows that nearly half (48.1%) have 10–19 years of experience, 29.6% have less than 10 years, and 22.2% exceed 20 years, reflecting a leadership pool dominated by mid-experienced administrators. This balanced distribution supports opportunities for peer learning, mentoring, and the development of leadership pipelines. The findings underscore the importance of differentiated training and experience-based professional development that integrates practical knowledge with innovative practices to cultivate resilient, adaptive, and effective school leadership.

**Seminars/ trainings attended.** The data shows that school heads active engagement in seminars and trainings, with 40.7% participating at the national level, another 40.7% at the regional level, and 18.5% at the international level, highlighting limited global exposure. While domestic programs support leadership competencies and alignment with current educational trends, participation in international trainings remains constrained. These findings emphasize the need for strategic, inclusive, and diversified professional development initiatives that enhance local effectiveness while broadening global perspectives, enabling school leaders to foster innovation, excellence, and responsive leadership.

**Table 1 Frequency Distribution on the demographic profile of the school heads**

Age	Frequency	Percent
56-62	4	14.8%
49-55	8	29.6%
42-48	6	22.2%
35-41	6	22.2%
28-34	3	11.1%
Total	27	100.0%
Sex	Frequency	Percent
Male	11	40.7%
Female	16	59.3%
Total	27	100.0%
Civil status	Frequency	Percent
Single	7	25.9%
Married	16	59.3%
Widowed	2	7.4%
Separated	2	7.4%
Total	27	100.0%
Highest Educational Status	Frequency	Percent
Doctorate Degree	1	3.7%
Doctorate Degree-CAR	1	3.7%
Doctorate Degree-Units	2	7.4%
Master’s Degree	18	66.7%
Master's Degree-CAR	4	14.8%
Master's Degree-Units	1	3.7%

Total	27	100.0%
<b>Position/ Designation</b>	<b>Frequency</b>	<b>Percent</b>
Principal III-IV	1	3.7%
Principal I-II	3	11.1%
Head Teacher IV-VI	15	55.6%
Head Teacher I-III	6	22.2%
Teacher In-Charge	2	7.4%
Total	27	100.0%
<b>Length of Administrative experience</b>	<b>Frequency</b>	<b>Percent</b>
20>	6	22.2%
10-19	13	48.1%
<10	8	29.6%
Total	27	100.0%
<b>Number of relevant seminars/ trainings attended</b>	<b>Frequency</b>	<b>Percent</b>
International	5	18.5%
National	11	40.7%
Regional	11	40.7%
Total	27	100.0%

**Age.** The age distribution of teachers shows a concentration in the mid-career range, with 36.6% aged 35–41 and 26.1% aged 42–48, followed by 15.0% in the 49–55 bracket. Younger teachers (28–34) comprise 12.4%, while those nearing retirement (56–62) represent 9.8%. This generational mix, dominated by mid-career professionals, provides a strong foundation for leadership, mentorship, and innovation within the teaching workforce. The findings underscore the importance of targeted succession planning, career development, and intergenerational collaboration to sustain teacher effectiveness and institutional growth.

**Sex.** The teaching workforce exhibits a pronounced gender imbalance, with females comprising 64.7% and males 35.3%, reflecting a longstanding trend in education. While the predominance of women contributes strengths such as empathy and nurturing approaches, the findings highlight the need to promote gender diversity in leadership and professional development. Encouraging balanced representation can foster inclusive, equitable, and collaborative school environments, ensuring that gender contributes positively to teaching effectiveness and institutional growth.

**Civil Status.** The civil status of teachers indicates that the majority are married (76.5%), with smaller proportions being single (20.3%), widowed (2.0%), or separated (1.3%). This distribution suggests that personal and family responsibilities may influence work-life balance, participation in extracurricular activities, and engagement in professional development. The findings underscore the need for inclusive policies and support systems that accommodate diverse teacher circumstances, fostering equity, collaboration, and a positive school climate that enhances overall student learning and school effectiveness.

**Highest Educational Attainment.** The results show a strong engagement in graduate-level studies, with 34.3% holding Master’s Degree units and 33.0% enrolled in Master’s Degree–

CAR programs, while only 8.8% have completed a Master’s Degree and 5.5% hold Doctorate-level qualifications; 18.3% possess only a Bachelor’s Degree. This trend toward advanced education reflects a commitment to professional growth and instructional improvement, highlighting the importance of supporting teachers in completing higher qualifications to enhance teaching quality, foster leadership and innovation, and promote a culture of academic excellence.

**Length of Teaching Experience.** The teaching workforce is predominantly mid-career, with 50.3% having 10–19 years of experience, 29.4% less than 10 years, and 20.3% over 20 years, reflecting a professionally balanced and mature workforce. This composition enables schools to combine experience with fresh perspectives, supporting curriculum reforms, pedagogical innovations, and mentorship initiatives. Leveraging the strengths of each career stage through differentiated professional support can foster collaboration, continuity, and a dynamic, future-ready educational environment.

**Seminars/ Trainings Attended.** The results indicate predominant participation in Division-level trainings (43.8%), with fewer attending National (26.8%), Regional (26.1%), and International (3.3%) programs, indicating strong local-level engagement but limited exposure to broader or global contexts. While local trainings support policy compliance and practical skills, expanding access to national, regional, and international programs can enhance innovation, strategic thinking, and global competencies, ultimately fostering inclusive professional growth, teacher empowerment, and improved school performance.

**Table 2. Frequency Distribution on the demographic Profile of Teachers**

Age	Frequency	Percent
56-62	30	9.8%
49-55	46	15.0%
42-48	80	26.1%
35-41	112	36.6%
28-34	38	12.4%
Total	306	100.0%
Sex	Frequency	Percent
Male	108	35.3%
Female	198	64.7%
Total	306	100.0%
Civil Status	Frequency	Percent
Single	62	20.3%
Married	234	76.5%
Widowed	6	2.0%
Separated	4	1.3%
Total	306	100.0%
Highest Educational Attainment	Frequency	Percent
Doctorate Degree	1	.3%
Doctorate Degree-CAR	3	1.0%
Doctorate Degree-Units	13	4.2%
Masters Degree	27	8.8%
Master's Degree-CAR	101	33.0%
Master's Degree-Units	105	34.3%

Bachelor's Degree	56	18.3%
Total	306	100.0%
Length of Teaching Experience	Frequency	Percent
20>	62	20.3%
10-19	154	50.3%
<10	90	29.4%
Total	306	100.0%
<b>Number of relevant seminars/ trainings attended</b>	<b>Frequency</b>	<b>Percent</b>
International	10	3.3%
National	82	26.8%
Regional	80	26.1%
Division	134	43.8%
Total	306	100.0%

**Summary of Findings.** Table 3 findings indicate that school heads effectively implement strategic teaching thinking across key leadership dimensions, with highest performance in Monitoring and Evaluation Systems (M=3.78), Resource Allocation and Management (M=3.74), and Stakeholder Involvement (M=3.72), demonstrating strengths in data-driven decision-making, efficient resource use, and inclusive engagement with teachers, students, parents, and the community. Goal Setting and Vision Alignment scored moderately (M=3.16), suggesting a need for clearer strategic direction.

The overall Grand Mean of 3.55 reflects a strong leadership culture that integrates technical management with relational qualities such as empathy. Strengthening goal setting and vision alignment through targeted professional development can enhance leadership effectiveness, guiding schools toward academic excellence and holistic development.

**Table 3. Summary Results on the Level of Level of Implementation of Teaching Thinking Strategies of School Heads**

Indicators	N	Mean	Std. Deviation	Interpretation
Monitoring and Evaluation Systems	27	3.78	0.55	High
Resource Allocation and Management	27	3.74	0.56	High
Stakeholder Involvement	27	3.72	0.72	High
Data-Driven Decision Making	27	3.65	0.57	High
Effective Communication	27	3.55	0.55	High
Self-Awareness	27	3.48	0.73	High
Self-Regulation	27	3.48	0.71	High
Motivation	27	3.48	0.67	High
Empathy	27	3.47	0.59	High
Goal Setting and Vision Alignment	27	3.16	0.97	Moderate
Grand Mean	27	3.55	0.66	High

Legend	Range	Description
	4.21-5.00	Very High
	3.41-4.20	High
	2.61-3.40	Moderate
	1.81-2.60	Low
	1.00-1.80	Very Low

Table 4 The aggregated results show that teachers perceive leadership performance at a moderate level (Sub-mean = 3.16), indicating generally satisfactory leadership but highlighting underdeveloped areas in Resource Management, Monitoring & Evaluation, and Data-Driven Decision Making. The findings suggest that leadership practices require greater cohesion and integration to effectively implement complex initiatives, such as teaching thinking strategies.

Empathy and relational skills emerge as critical, underscoring the need to strengthen communication, participatory decision-making, and transparent resource management. Targeted capacity-building and emotional intelligence development can enhance leadership effectiveness, fostering more cohesive, adaptive, and impactful educational practices.

**Table 4. Summary Results on the Teachers’ Perceived Level of Level of Implementation of Teaching Thinking Strategies**

Indicators	N	Mean	Std. Deviation	Interpretation
Self-Regulation	306	3.95	0.73	High
Motivation	306	3.78	0.74	High
Monitoring and Evaluation Systems	306	3.27	0.50	Moderate
Self-Awareness	306	3.24	0.71	Moderate
Data-Driven Decision Making	306	3.17	1.06	Moderate
Stakeholder Involvement	306	3.03	0.69	Moderate
Goal Setting and Vision Alignment	306	2.90	0.80	Moderate
Empathy	306	2.86	1.04	Moderate
Effective Communication	306	2.74	0.51	Moderate
Resource Allocation and Management	306	2.62	0.64	Moderate
Grand Mean	306	3.16	0.74	Moderate

Legend	Range	Description
	4.21-5.00	Very High
	3.41-4.20	High
	2.61-3.40	Moderate
	1.81-2.60	Low
	1.00-1.80	Very Low

Table 5 The results indicate that school heads exhibit moderate overall effectiveness across the four SBM domains, with a grand mean of 3.19. They perform strongest in Resource Management (3.30), followed by Leadership and Governance (3.24) and Accountability and Continuous Improvement (3.22), while Curriculum and Learning (2.99) requires greater attention, signaling the need for enhanced instructional leadership and innovative teaching practices. The

findings suggest that school leaders often prioritize administrative and logistical tasks, which, while maintaining operational stability, may limit impact on student learning. Strengthening goal setting, teacher coaching, and data-informed pedagogy can enhance instructional effectiveness. The moderate scores also indicate a stable foundation, providing opportunities for school heads to balance management strengths with a stronger focus on teaching and learning to maximize the transformative potential of SBM.

**Table 5. Summary Results on the Level of Implementation and Effectiveness in Four Critical SBM Domains of School Heads**

Indicators	N	Mean	Std. Deviation	Interpretation
Management of Resources	27	3.30	0.66	Moderate
Leadership and Governance	27	3.24	0.58	Moderate
Accountability and Continuous Improvement	27	3.22	0.72	Moderate
Curriculum and Learning	27	2.99	0.65	Moderate
<b>Grand Mean</b>	<b>27</b>	<b>3.19</b>	<b>0.65</b>	<b>Moderate</b>

Legend	Range	Description
	4.21-5.00	Very High
	3.41-4.20	High
	2.61-3.40	Moderate
	1.81-2.60	Low
	1.00-1.80	Very Low

Table 6 Teachers view School-Based Management (SBM) as moderately effective overall (grand mean = 3.61). Curriculum and Learning received the highest rating (3.73), reflecting strengths in instructional support, while Management of Resources scored lowest (3.37), highlighting areas needing improvement.

The findings suggest that teachers respond more positively to leadership that directly affects their classroom experience, while administrative and governance functions are perceived as less visible. Enhancing transparency, inclusivity, and teacher participation across all SBM domains can help balance perceptions and improve practice. Strengthening goal setting, strategic planning, and distributed leadership, alongside intentional and data-driven resource management, will empower school heads, increase teacher engagement, and ultimately improve student outcomes.

**Table 6. Summary Results on the Level of Teachers' Perceived Level of Implementation and Effectiveness in Four Critical SBM Domains of School Heads**

Indicators	N	Mean	Std. Deviation	Interpretation
Curriculum and Learning	306	3.73	0.46	Moderate
Leadership and Governance	306	3.68	0.66	Moderate
Accountability and Continuous Improvement	306	3.65	0.53	Moderate
Management of Resource	306	3.37	0.53	Moderate
<b>Grand Mean</b>	<b>306</b>	<b>3.61</b>	<b>0.55</b>	<b>Moderate</b>

Legend	Range	Description
	4.21-5.00	Very High
	3.41-4.20	High
	2.61-3.40	Moderate
	1.81-2.60	Low
	1.00-1.80	Very Low

The Model Summary in Table 7 shows an R value of .414, suggesting a weak positive correlation between the profile variables of school heads and their perceived implementation of teaching thinking strategies. However, the R<sup>2</sup> value of .172 means that only 17.2% of the variance in implementation levels can be explained by these variables, which is relatively low. The negative adjusted R<sup>2</sup> (-.134) indicates that the model may not generalize well and may perform worse when applied to other datasets. A standard error of .211 further suggests that the predictions lack strong accuracy. In summary, the regression model does not present a strong or reliable explanation of how school head demographics influence their implementation practices.

**Table 7 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.414 <sup>a</sup>	.172	-.134	.211

The ANOVA results in Table 8 support the weak model summary. The F-value is .562, with a p-value of .777, indicating no statistically significant relationship between the independent variables (school head profiles) and the dependent variable (implementation of thinking strategies). Since the p-value is well above the conventional threshold of 0.05, we fail to reject the null hypothesis. This means that the collective effect of the school head profile variables does not significantly predict their perceived extent of implementation. Thus, the model is statistically insignificant.

**Table 8 ANOVA Analysis**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.175	7	.025	.562	.777 <sup>b</sup>
	Residual	.846	19	.045		
	Total	1.022	26			

Table 9 The multiple regression analysis examining the relationship between school heads' profiles and their perceived implementation of teaching thinking strategies revealed no statistically significant predictors. Variables such as age (p = .682), sex (p = .947), highest educational attainment (p = .416), seminars and trainings (p = .921), and length of administrative experience ( $\beta = .702$ , p = .295) showed weak or no influence on strategy implementation. These findings suggest that personal and professional characteristics of school heads do not meaningfully determine their reported use of teaching thinking strategies. The lack of significance may be

attributed to the small sample size or limited variation in qualifications and training, while highlighting those contextual factors—such as school culture, resource availability, and institutional support—likely play a stronger role in effective strategy implementation. Future studies are recommended to explore these organizational and environmental influences more deeply.

**Table 9. Multiple Regression Analysis on Test of relationship between the profile of the School Heads and their perceived extent of implementation of teaching thinking strategies.**

Variables	Beta	p-value	Decision
Age	.197	.682	Not Significant
Sex	-.021	.947	Not Significant
Civil Status	-.283	.554	Not Significant
Highest Educational Attainment	.337	.416	Not Significant
Position/ Designation	-.621	.292	Not Significant
Length of Administrative Experience	.702	.295	Not Significant
Seminars/ Trainings	-.026	.921	Not Significant

The data from Tables 7 – 9 indicate that the personal and professional profiles of school heads are not significant predictors of how they perceive their own implementation of thinking strategies. Despite some modest correlations, the regression model lacks explanatory power and statistical significance. These results emphasize the need to look beyond demographics to understand what drives effective school leadership practices. They also suggest that training alone, without quality or application-focused content, may not influence outcomes. Overall, the results encourage a more holistic approach to analyzing leadership effectiveness.

Table 10 reveals a very low R value (.080) and R<sup>2</sup> value (.006), meaning that only 0.6% of the variance in the implementation of thinking strategies can be explained by teachers’ profiles. Moreover, the adjusted R<sup>2</sup> is negative (-.014), reinforcing that the model performs poorly and may even mislead if used for predictions. The standard error (.53933) is relatively high, implying that predictions from the model would be imprecise. Overall, the regression model does not provide a meaningful relationship between teacher characteristics and their implementation of thinking strategies. This suggests that teacher demographics have minimal influence on their instructional practices in this context.

**Table 10. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.080 <sup>a</sup>	.006	-.014	.53933

Table 11 displays the ANOVA results, echoes the model’s weakness, with a very low F-value (.320) and a p-value of .926, far above the threshold of 0.05. This means the model is statistically insignificant, and we cannot conclude that the combined profile variables of teachers predict the implementation of teaching thinking strategies. The model lacks explanatory strength,

and the null hypothesis cannot be rejected. In essence, there is no evidence that the variables selected such as age, sex, education, or experience collectively influence the implementation levels. This further underlines the idea that other, unmeasured factors may be more influential.

**Table 11. ANOVA Analysis**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.559	6	.093	.320	.926 <sup>b</sup>
	Residual	86.971	299	.291		
	Total	87.529	305			

Table 12 reveals that teacher demographics—including age ( $p = .801$ ), sex ( $p = .962$ ), highest educational attainment ( $p = .728$ ), seminars/trainings ( $p = .729$ ), and teaching experience ( $p = .317$ )—do not significantly influence the implementation of teaching thinking strategies. These findings challenge the assumption that experience or professional development alone drives instructional improvement, highlighting a potential gap between training and classroom application.

The results suggest that effective strategy implementation is more strongly shaped by contextual factors such as school culture, leadership support, access to resources, mentoring, and peer collaboration. This underscores the importance of practical, targeted, and context-sensitive professional growth, as well as robust school-wide support systems, rather than reliance on static demographic characteristics, in enhancing teacher practices and instructional

**Table 12. Multiple Regression Analysis on Test of relationship between the profile of the Teachers and their perceived extent of implementation of teaching thinking strategies**

Variables	Beta	p-value	Decision
Age	.045	.801	Not Significant
Sex	-.005	.962	Not Significant
Civil Status	.099	.331	Not Significant
Highest Educational Attainment	-.043	.728	Not Significant
Length of teaching Experience	-.138	.317	Not Significant
Seminars/ Trainings	-.055	.729	Not Significant

Table 13 indicates a moderate correlation ( $R = .514$ ) between the school heads' profile variables and their school's performance in SBM key areas. However, the  $R^2$  value is only .264, suggesting that 26.4% of the variance in school performance can be explained by the school heads' demographic and professional characteristics. Despite this, the Adjusted  $R^2$  is negative (-.007), indicating that the model may not be reliable for prediction and might perform poorly outside the sample. The standard error of .34737 further suggests that there is substantial variability in the data not explained by the model. Overall, while there is a modest association, the model lacks sufficient strength to be considered predictive.

**Table 13. Model Summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.514 <sup>a</sup>	.264	-.007	.34737

Table 14 reinforce the model's weakness. The F-value of .976 and the p-value of .477 indicate that the model is not statistically significant. This means that the combination of profile variables (age, sex, civil status, education, position, length of administrative experience, and trainings) does not significantly predict SBM performance levels. Consequently, we fail to reject the null hypothesis, implying that the school heads' personal and professional backgrounds are not effective predictors of perceived school performance in SBM. These results challenge the assumption that more experienced or better-trained principals automatically lead more effective schools.

**Table 14. ANOVA Analysis**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	.824	7	.118	.976	.477 <sup>b</sup>
	<b>Residual</b>	2.293	19	.121		
	<b>Total</b>	3.117	26			

Table 15 analysis shows that school heads' profile variables—including age ( $p = .364$ ), highest educational attainment ( $p = .264$ ), seminars/trainings ( $p = .183$ ), and length of administrative experience ( $p = .788$ )—do not significantly predict school-based management (SBM) performance. The inconsistent beta coefficients further indicate that formal qualifications or demographics are not reliable indicators of SBM success. These findings suggest that effective school management relies more on practical leadership skills, collaborative systems, stakeholder engagement, and supportive school practices than on static personal or professional characteristics. They underscore the importance of examining qualitative factors such as leadership style, adaptability, and communication to better understand and enhance SBM outcomes.

**Table 15. Multiple Regression Analysis on test of relationship between the profile of the School Heads and their school performance in terms of the school-based management key areas**

Variables	Beta	p-value	Decision
<b>Age</b>	-.413	.364	Not Significant
<b>Sex</b>	.123	.678	Not Significant
<b>Civil Status</b>	.563	.219	Not Significant
<b>Highest Educational Attainment</b>	-.440	.264	Not Significant
<b>Position/ Designation</b>	.399	.469	Not Significant
<b>Length of Administrative Experience</b>	.168	.788	Not Significant
<b>Seminars/ Trainings</b>	-.333	.183	Not Significant

Table 16 shows a very weak correlation ( $R = .246$ ) between teacher profiles and their perceived school performance in SBM key areas. The  $R^2$  value of .061 means that only 6.1% of the variance in perceived performance is explained by these demographic factors. Interestingly, unlike with the school heads, the Adjusted  $R^2$  is slightly positive (.042), suggesting a slight improvement in predictive value when adjusted for the number of predictors. However, the standard error of the estimate is .39541, which indicates a broad margin of error. Overall, the model is weak but slightly more stable than the school head model.

**Table 16. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.246 <sup>a</sup>	.061	.042	.39541

Table 17 shows a different picture, as the model is statistically significant ( $p = .004$ ), even though the  $R^2$  is low. The F-value of 3.214 with a low p-value means that the combined teacher profile variables do significantly influence perceived school performance. While the strength of this relationship is not high, it is statistically valid, suggesting that some variables among the teacher demographics have an impact. This indicates that, unlike the school heads, teacher characteristics may modestly influence how they perceive their school's SBM performance. However, it also suggests that other variables not captured here may have stronger effects.

**Table 17. ANOVA Analysis**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.754	7	.108	.708	.665
	Residual	15.654	103	.152		
	Total	16.408	110			

Table 18 indicates that certain teacher characteristics—age ( $p = .036$ ), length of teaching experience ( $p = .010$ ), and seminars/trainings ( $p = .028$ )—significantly influence their perceptions of SBM performance. Age and professional development have positive effects, suggesting that older and better-trained teachers view SBM efforts more favorably, while longer teaching experience shows a negative effect, possibly reflecting more critical assessments. These findings highlight the role of professional maturity and targeted training in shaping teacher engagement and alignment with institutional goals.

However, small effect sizes and low  $R^2$  values suggest that school-wide factors such as leadership quality, resource availability, and stakeholder participation play a larger role in perceived SBM effectiveness. This underscores the need for future research to integrate demographic, contextual, and behavioral factors for a comprehensive understanding of school performance dynamics.

**Table 18. Multiple Regression Analysis on test of relationship between the profile of the Teachers and their perceived school performance in terms of the school-based management key areas**

Variables	Beta	p-value	Decision
Age	.367	.036	Significant
Sex	.067	.544	Not Significant
Civil Status	.144	.148	Not Significant
Highest Educational Attainment	-.011	.927	Not Significant
Length of Teaching Experience	-.346	.010	Significant
Seminars/ Trainings	-.342	.028	Significant

**DISCUSSION**

The study’s findings reveal a significant divergence between the perceptions of school heads and teachers regarding the implementation of teaching thinking strategies and their impact on school-based management (SBM) performance. Regression analyses indicate that demographic and professional profiles of school heads—including age, educational attainment, training, and administrative experience—do not significantly predict their implementation of thinking strategies or SBM outcomes, highlighting that effective leadership depends more on contextual, relational, and systemic factors than on personal attributes. In contrast, certain teacher characteristics, such as age, teaching experience, and participation in seminars or training, showed modest but significant influence on perceived SBM performance, suggesting that professional maturity and targeted development can enhance alignment with institutional goals. These results underscore the importance of quality, application-focused professional development over mere accumulation of experience or credentials.

Moreover, the findings highlight critical gaps in translating leadership vision into classroom impact. School heads emphasize top-down planning, governance, and systemic structures, whereas teachers prioritize practical, resource-supported, and emotionally intelligent leadership that directly influences teaching and learning. Discrepancies were evident in perceptions of stakeholder involvement, goal-setting, resource management, and emotional intelligence, revealing the need for participatory, collaborative, and context-sensitive approaches. Importantly, teachers’ perceptions underscore that instructional outcomes are closely tied to operational support, practical coaching, and inclusion in decision-making, rather than abstract leadership directives. These insights emphasize that bridging the gap between strategic leadership and classroom execution requires integrated school improvement strategies, shared responsibility, and continuous professional dialogue. Overall, the study highlights the critical role of context-driven leadership, effective professional development, and collaborative governance in enhancing teaching practices, instructional quality, and overall school performance, providing valuable implications for educational planning, policy, and leadership programs.

#### ***4.1 Summary of Findings***

This study examined the extent to which school heads in Getafe I and II Districts implemented teaching thinking strategies and how these strategies influenced school performance in the 2024–2025 school year. A total of 27 school heads and 306 teachers participated, with data analyzed using a descriptive-correlational design and SPSS.

The findings indicate that demographic and professional profiles—including age, sex, educational attainment, teaching experience, and training—did not significantly affect perceived implementation of teaching thinking strategies for both school heads and teachers. Regression analyses confirmed that individual profiles were not reliable predictors of implementation levels.

However, teachers’ perceived implementation of thinking strategies showed a modest but significant positive correlation with school performance in SBM key areas. Specifically, teachers’ age, teaching experience, and seminars/trainings were significant predictors of SBM performance, whereas school heads’ implementation showed limited association with performance indicators.

Additionally, emotional intelligence factors such as empathy, self-regulation, and motivation were positively related to the implementation of thinking strategies, suggesting that personal and organizational qualities contribute to effective practice even if demographics do not.

Overall, the study highlights the greater influence of organizational and contextual factors—including school culture, strategic leadership, and targeted professional development—over individual profiles in shaping instructional practices. It recommends a shift toward competency-based leadership and teaching models that emphasize strategic implementation, collaboration, and context-specific adaptability.

#### **IV. Conclusion**

The study highlights a notable disconnect between school heads’ strategic leadership and teachers’ classroom experiences. While school heads focus on leadership traits, stakeholder engagement, and policy compliance, their influence on school performance is perceived as limited. Conversely, teachers link successful school outcomes to the practical implementation of teaching thinking strategies, emotional intelligence, and effective resource management. These findings emphasize the need to align top-down leadership initiatives with classroom realities, integrating teacher input, relational competencies, and data-driven decision-making. Bridging this perception gap is essential for translating strategic leadership into tangible improvements in instructional quality and overall academic success.

#### **V. Recommendations**

1. School heads should involve teachers in strategic planning to ensure that goals reflect actual classroom needs, thereby fostering greater alignment and ownership.

2. Training and professional development should focus on practical applications of thinking strategies, ensuring teachers are equipped and supported to embed them effectively in instruction.
3. Leadership development programs should emphasize emotional intelligence competencies such as empathy, self-awareness, and motivation, which are shown to influence both implementation and performance.
4. Engage both leaders and teachers in decisions about resource allocation to ensure that materials, time, and support are directed toward instructional priorities that impact student learning.
5. Develop systems that support the regular use of data at all levels from classroom assessments to school-wide performance metrics to guide continuous improvement.
6. Ensure stakeholder involvement goes beyond participation and translates into meaningful contributions that support instructional goals, avoiding tokenism.
7. Leaders should facilitate inclusive goal-setting sessions where teachers contribute to the formulation of the school's vision, ensuring shared responsibility for outcomes.
8. Translate policy directives into actionable strategies that teachers can apply, reducing the disconnect between administrative intentions and classroom realities.
9. Establish transparent and supportive evaluation mechanisms that help track the implementation of strategies and their impact on learning, rather than focusing solely on compliance.
10. Create structured opportunities for teachers to provide input on school leadership decisions, fostering a culture of mutual respect, responsiveness, and instructional coherence.

#### REFERENCES

- [1] Acton, K.S. (2021). School leaders as change agents: Do principals have the tools they need? *Management in Education*, 35(1), 43–51. <https://doi.org/10.1177/0892020620927415>
- [2] Agi, U. (2020). School development planning: A strategic tool for secondary school improvement in Rivers State, Nigeria. *Journal of the International Society for Teacher Education*, 21(1), 88–99.
- [3] Aureada, C. A. (2021). Instructional leadership practices of school heads and students' achievement. *International Journal of Multidisciplinary: Applied Business and Education Research*, 2(2), 142–150. [https://iiari.org/journal\\_article/v2-2-142/](https://iiari.org/journal_article/v2-2-142/)
- [4] avitri, S. D., & Wahyuni, S. (2023). Faktor yang Mempengaruhi Kepala Sekolah dalam Mengambil Keputusan. *TSAQOFAH*, 3(4), 650-659. <https://doi.org/10.58578/tsaqofah.v3i4.1256>

- [5] Belmont Report. (2020). Ethical principles and guidelines for the protection of human subjects of research.
- [6] Bröms, T. (2020). Principals Decision-Making for Organising the Educational Organisation. Re-centering the Critical Potential of Nordic School Leadership Research: Fundamental, but often forgotten perspectives, 145-160. [https://doi.org/10.1007/978-3-030-55027-1\\_8](https://doi.org/10.1007/978-3-030-55027-1_8)
- [7] Brower, H. H. (2021). Leading with empathy: Emotional intelligence in school leadership. *Journal of Educational Leadership and Practice*, 34(2), 45–60.
- [8] Bush, T. (2022). Challenges facing school principals: Problems and solutions. *Educational Management Administration & Leadership*, 50(4), 533-535. <https://doi.org/10.1177/17411432221096238>
- [9] Carvalho, M., Cabral, I., Verdasca, J., & Alves, J. (2021). Strategy and strategic leadership in education: A scoping review. *Frontiers in Education*, 6(706608), 1–10. <https://doi.org/10.3389/feduc.2021.706608>
- [10] Carvalho, M., Cabral, I., Verdasca, J., & Alves, J. (2021b). What about us? Teachers' participation in schools' strategic action plans. *Participatory Educational Research*, 8(3), 156–175. <https://doi.org/10.17275/per.21.59.8.3>
- [11] Carvalho, M., Cabral, I., Verdasca, J.L., & Alves, J.M. (2021a). Strategy and strategic leadership in education: A scoping review. *Frontiers in Education*, 6(706608), 1–10. <https://doi.org/10.3389/feduc.2021.706608>
- [12] Dederer, K., & Pietsch, M. (2023). School leader trust and collective teacher innovativeness: on individual and organisational ambidexterity's mediating role. *Educational Review*, 1-30. <https://doi.org/10.1080/00131911.2023.2195593>
- [13] Dirahman, F., Setiawan, F., & Iskandar, U. A. (2023). Peran Kepala Sekolah dalam Mengoptimalkan Tenaga Kependidikan. *Al-DYAS*, 2(1), 53-66. <https://doi.org/10.58578/aldyas.v2i1.845>
- [14] Farhurohman, O. (2018). Kepemimpinan dalam mutu pendidikan di sekolah. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 4(01), 45-56. <https://doi.org/10.32678/tarbawi.v4i01.1770>
- [15] *Frontiers in Education*. (2023). Measuring teaching strategies in multi-method teacher evaluation systems. <https://www.frontiersin.org/journals/education>
- [16] Gading, J. R. (2024). Instructional leadership practices of the school heads to improve teachers' performance. *Universal International Journal of Research in Teacher Education*, 3(2). <https://uijrt.com/paper/instructional-leadership-practices-school-heads-improve-teachers-performance>
- [17] Ghamrawi, N. (2023). Toward agenda 2030 in education: policies and practices for effective school leadership. *Educational Research for Policy and Practice*, 22(2), 325-347. <https://doi.org/10.1007/s10671-023-09341-8>
- [18] Gómez-Leal, R., Pérez-Sánchez, M., & Castillo, F. (2021). Emotional awareness and leadership in education: A study of school principals. *Educational Management Quarterly*, 37(1), 1–10.
- [19] Hajisoteriou, C., Karousiou, C., & Angelides, P. (2021). Successful components of school improvement in culturally diverse schools. *School Effectiveness and School Improvement*, 29(1), 91–112. <https://doi.org/10.1080/09243453.2017.1385490>
- [20] Harris, A., Adams, D., Jones, M.S., & Muniandy, V. (2019). System effectiveness and improvement: The importance of theory and context. *School Effectiveness and School Improvement*, 26(1), 1–3. <https://doi.org/10.1080/09243453.2014.987980>

- [21] Jian, L. (2021). Collective empathy and inter-organizational collaboration: A leadership perspective. *Journal of Organizational Change and Development*, 29(1), 25–40.
- [22] Jimenez, R. (2021). The role of self-awareness in school leadership: A quantitative study. *Philippine Journal of Educational Psychology*, 11(2), 109–123.
- [23] Jit, R., Sharma, C., & Kawatra, M. (2017). Empathetic leadership and organizational inclusion. *Journal of Leadership and Diversity*, 9(4), 85–99.
- [24] Karakose, T., Papadakis, S., Tülübaş, T., & Polat, H. (2022). Understanding the intellectual structure and evolution of distributed leadership in schools: A science mapping-based bibliometric analysis. *Sustainability*, 14(24), 16779. <https://doi.org/10.3390/su142416779>
- [25] Kellner, A., Chew, J., & Turner, R. (2018). Emotional regulation in leadership: Managing stress and performance. *Leadership Studies Review*, 24(2), 33–47.
- [26] Khan, I. A., ul Haq, S., & Khan, F. (2023). Perceptions of College Principals and Faculty Members Regarding Administrative Problems and Job Performance. *sjesr*, 6(2), 85-92. [https://doi.org/10.36902/sjesr-vol6-iss2-2023\(85-92\)](https://doi.org/10.36902/sjesr-vol6-iss2-2023(85-92))
- [27] Koenig, A., Fields, D., & Evans, M. (2020). Empathy in crisis leadership: The post-crisis relational system. *Journal of Crisis Management*, 18(3), 50–66.
- [28] Kotze, M., & Nel, P. (2017). The internal moral compass: Self-regulation in ethical leadership. *Journal of Values-Based Leadership*, 10(1), 21–30.
- [29] Li, X., Gupta, A., Loon, M., & Casimir, G. (2016). Emotional motivation in leadership: A social contagion theory perspective. *Leadership and Organization Development Journal*, 37(6), 782–798.
- [30] Licaros, A. D., Natividad, L. V., & David, G. C. (2024). Instructional leadership skills of school heads and its relation to the self-efficacy of elementary teachers in Castillejos District. ResearchGate. <https://www.researchgate.net/publication/383401098>
- [31] Lipovec, A., Tekavc, J., Cugmas, Z., Vršnik Perše, T., & Legat, D. (2023). Perspectives on Teacher Education and Development. Univerza v Mariboru, Pedagoška fakulteta. <https://doi.org/10.18690/um.pef.1.2023>
- [32] McCutcheon, F., & Haynes, J. (2022). Leadership matters in democratic education: Calibrating the role of Principal in one democratic school. *Journal of Philosophy of Education*, 56(6), 957-969. <https://doi.org/10.1111/1467-9752.12688>
- [33] Meyers, C., & VanGronigen, B. (2019). A lack of authentic school improvement plan development: Evidence of principal satisficing behavior. *Journal of Educational Administration*, 57(3), 261–278. <https://doi.org/10.1108/JEA-09-2018-0154>
- [34] Meyers, C., & VanGronigen, B. (2019). A lack of authentic school improvement plan development: Evidence of principal satisficing behavior. *Journal of Educational Administration*, 57(3), 261–278. <https://doi.org/10.1108/JEA-09-2018-0154>
- [35] Molla, T., & Gale, T. (2019). Positional matters: school leaders engaging with national equity agendas. *Journal of Education Policy*, 34(6), 858-876. <https://doi.org/10.1080/02680939.2018.1556811>
- [36] Moore, L., Johnson, T., & Garcia, M. (2020). Empathy and inclusion: New perspectives in school leadership. *Equity & Excellence in Education*, 53(2), 125–138.
- [37] Muhaemin, RA, & Umar, A. (2022). Peran Kepemimpinan Kepala Madrasah Dalam Meningkatkan Mutu Pendidikan di MTs Mathla'ul Huda. *Jurnal Pendidikan*, 10 (2), 199-208. <https://doi.org/10.36232/pendidikan.v10i2.2260>

- [38] Nawab, A., & Noor, T. (2023). "My supervisors first check school cleanliness": Factors inhibiting instructional leadership practices in Northern Sindh, Pakistan. *Educational Management Administration & Leadership*, 17411432231177532. <https://doi.org/10.1177/17411432231177532>
- [39] OECD. (2022). *Teaching and Learning International Survey (TALIS)*. <https://www.oecd.org/education/talis>
- [40] Özdemir, N., Gümüş, S., Kılınç, A. Ç., & Bellibaş, M. Ş. (2022). A systematic review of research on the relationship between school leadership and student achievement: An updated framework and future direction. *Educational Management Administration & Leadership*, 17411432221118662. <https://doi.org/10.1177/17411432221118662>
- [41] Padua, J. A. (2024). Instructional supervision strategies of school head, teachers' skills in fostering critical thinking and knowledge application in the classroom, and academic performance of Grade 6 learners. *International Journal of Advanced Multidisciplinary Studies*, 5(7). <https://www.ijams-bbp.net/archive/vol-5-issue-7/instructional-supervision-strategies-of-school-head-teachers-skills-in-fostering-critical-thinking-and-knowledge-application-in-the-classroom-and-academic-performance-of-grade-6-learners/>
- [42] Pana, E. C. (2024). School heads' instructional leadership and performance: Basis for strategic leadership program. *International Journal of Science and Management Research*, 7(2). <https://ijsmr.in/vol-7-issue-2/school-heads-instructional-leadership-and-performance-basis-for-strategic-leadership-program>
- [43] Perez, D. B., & Banayo, A. F. (2023). Leadership Practices and Management behavior of School Heads towards Quality Service and Performance of Teacher. *Leadership Practices and Management behavior of School Heads Towards Quality Service and Performance of Teacher*, 127(1), 9-9. <https://doi.org/10.47119/IJRP1001271620235061>
- [44] Piehler, T. F., & Winters, K. C. (2017). Decision-making style and response to parental involvement in brief interventions for adolescent substance use. *Journal of Family Psychology*, 31(3), 336. <https://www.doi.org/10.1037/FAM0000266>
- [45] R Core Team (2021). R: A language and environment for statistical computing (Version 4.1) [Computer software]. Retrieved from <https://cran.r-project.org> (R packages retrieved from MRAN snapshot 2022-01-01).
- [46] Reis-Andersson, J. (2023). Leading the digitalisation process in K–12 schools—The school leaders' perspective. *Education and Information Technologies*, 1-19. <https://doi.org/10.1007/s10639-023-11935-x>
- [47] Research Rebels. (2022). *The beginner's guide to descriptive-correlational research*. <https://research-rebels.com>
- [48] Rozalina, R., Fitria, H., & Rohana, R. (2020). Kepemimpinan Kepala Sekolah Menengah Atas Negeri (SMAN) 1 Banyuasin III. *Journal of Education Research*, 1(2), 165-176. <https://doi.org/10.37985/joe.v1i2.17>
- [49] Rozi, A., Musfiqon, M., & Prasetya, B. (2022). The Effectiveness of Principals' Supervision in Improving Teacher Performance. *KnE Social Sciences*, 290-299. <https://doi.org/10.18502/kss.v7i10.11231>
- [50] Scaletta, M., & Tejero Hughes, M. (2021). Sustained positive behavioral interventions and supports implementation: School leaders discuss their processes and practices. *Journal of Positive Behavior Interventions*, 23(1), 30-41. <https://www.doi.org/10.1177/1098300720924350>

- [51] Sebastian, J., & Park, S. (2023). School leadership and organizational factors: evaluating pathways to student learning. *International Encyclopedia of Education (Fourth Edition)*, 243-254. <https://doi.org/10.1016/B978-0-12-818630-5.05025-9>
- [52] Seijts, G. H., & Milani, K. (2021). Humanity in leadership: The role of empathy in diversity and inclusion. *Journal of Humanistic Leadership*, 6(1), 10–26.
- [53] Sodangi, U., Isma'il, A., & Abdulrahaman, A. (2022). Perception of secondary school science and mathematics teachers on professional development participation in Zamfara State, Nigeria. *Integrity Journal of Education and Training*, 6(2), 37-45. <https://doi.org/10.36344/ccijhss.2023.v09i04.003>
- [54] Solana, M. R., & Mustika, D. (2023). Peran Kepala Sekolah Sebagai Leader dalam Pendidikan. *Murhum: Jurnal Pendidikan Anak Usia Dini*, 4(1), 406-418. <https://doi.org/10.37985/murhum.v4i1.231>
- [55] Surveysparrow. (2023). Descriptive correlational research: Definition, methods, and examples. <https://surveysparrow.com>
- [56] Surveysparrow. (2023). Descriptive correlational research: Definition, methods, and examples. <https://surveysparrow.com>
- [57] Tejeiro, F. (2024). Distributed Leadership and Inclusive Schools. *International Journal of Educational Leadership and Management*, 12(1), 36-56. <https://doi.org/10.17583/ijelm.10997>
- [58] Urakova, F. K., Sudakova, A. V., Kochneva, L. V., Grishnova, E. E., Asafova, E. V., & Garnaya-Ivanova, I. A. (2023). A Systematic Review of Research on Problems and Challenges Faced by Principals During the COVID-19 Pandemic. *European Journal of Educational Research*, 12(1). <https://doi.org/10.12973/eu-jer.12.1.87>
- [59] Van Bommel, T. (2021). Empathy and crisis management in educational settings: A leadership framework. *School Leadership Review*, 31(2), 77–91.
- [60] Wei, F., Liu, S., & Wang, Y. (2017). Empathy in leadership and follower performance. *Journal of Organizational Behavior*, 38(3), 559–583.
- [61] Wijaya, C., Adyanto, P., Darno, D., Yulinar, Y., & Fadli, M. (2022). Management of Islamic Education Institutions in Motivation and Decision Making. *AL-ISHLAH: Jurnal Pendidikan*, 14(1), 687-696. <https://doi.org/10.35445/alishlah.v14i1.709>