

**Beyond the classroom door: Strengthening instructional supervision through
classroom-observable teaching strands**

Ruth C. Colon*

Gabi Elementary School, Cordova, Cebu, Philippines

ABSTRACT

This study examined the extent of implementation and the perceived effectiveness of instructional supervision in relation to classroom-observable teaching strands among elementary school teachers at Gabi Elementary School, Day-as Elementary School and, Gilutungan Integrated School, Cordova District during the School Year 2025-2026. The classroom-observable teaching strands, which were anchored on the Philippine Professional Standards for Teachers (PPST), included Content Knowledge and Pedagogy, Learning Environment, Diversity of Learners, Curriculum and Planning, and Assessment and Reporting. Instructional supervision was examined through four key supervisory practices: Classroom Observation, Feedback and Post-Observation Conferencing, Mentoring and Coaching, and Professional Development and Instructional Support. The study employed a sequential explanatory design involving 31 elementary school teachers. Quantitative data were gathered through survey questionnaires and PPST-based teacher performance evaluation records, while qualitative data were collected through interviews and reflective writing. Quantitative data were analyzed using the weighted mean and the Pearson product-moment correlation at the 0.05 level of significance. The qualitative findings were used to explain and enrich the quantitative results by identifying teachers' experiences, perceptions, and challenges related to instructional supervision. Results revealed that instructional supervision practices were implemented to a high extent and were generally perceived by teachers as supportive of instructional improvement, classroom management, and professional growth. However, teachers perceived supervisory practices positively, although statistical relationships with performance indicators were weak and indirect. The results of qualitative research indicated the importance of constructive feedback, mentoring, collaboration, and reflection in building teacher confidence and decision-making in instruction. The research suggests that instructional supervision is a development process in terms of teacher development and competence building. An Instructional Supervision Training Program was developed based on the research results.

Keywords: Instructional supervision, teaching performance, classroom observation, teacher development, feedback and mentoring, professional growth, DepEd standards, Gabi Elementary School, PPST, educational quality.

Date Submitted: July 3, 2026

Date Accepted: July 15, 2026

Date Published: July 22, 2026

*Corresponding author / Email: ruthcolon04.14@gmail.com

DOI: <http://doi.org/10.69651/PIJHSS05031399>

Recommended citation:

Colon, R. C. (2026). Beyond the classroom door: Strengthening instructional supervision through classroom-observable teaching strands. *Pantao (International Journal of the Humanities and Social Sciences)* 5 (3), 2344-2354. <http://doi.org/10.69651/PIJHSS05031399>

INTRODUCTION

Instructional supervision is a professional, ongoing, and collaborative process aimed at improving teaching and learning through guidance, support, the exchange of ideas, and professional development. It involves a collegial partnership between teachers and instructional leaders aimed at creating a supportive school environment and improving professional learning communities (Zepeda, 2013). Teachers' instructional effectiveness is central to achieving the best possible teaching-learning outcomes, as instructional efficiency over time translates into student success and professional development (Comighud et al., 2020). It is an essential tool for educational development as it directly improves the quality of teaching, consistency in instruction, and learning outcomes. It is the central mechanism through which instructional leadership is delivered in the classroom via feedback, mentoring, and instructional support (Hallinger, 2005). It supports curriculum changes and ensures that the educational standards set by the policy are met in the classroom. However, Bloom (2011) emphasized that despite its robust policy and research foundation, instructional supervision has been ineffective in practice, resulting in a lack of impact on visible teaching practices in the classroom.

The pervasive neglect of Instructional Supervision directly contributes to stagnant pedagogical practices and a significant hindrance to teachers' continuous professional growth. For example, a teacher can be formally observed in a scheduled demonstration lesson as part of the instructional supervision process. During the observation, the supervisor identifies general strengths such as classroom management and lesson delivery, as well as areas for improvement in learner engagement and assessment strategies, both of which are classroom-observable teaching strands. Nevertheless, there is no post-observation conference or mentoring that follows the demonstration lesson. Atkinson et al, (2022) stated that without structured feedback and mentoring, the teacher is not provided with any specific information on how to improve the identified instructional shortcomings. As a result, the teacher is likely to continue with existing instructional practices rather than trying to improve them. This is because the thematic finding indicates that supervision, when it is only observation, is a compliance-focused activity and not a tool for professional development (Muthanna & Alduais, 2021). The management and supervisors have many responsibilities as managers that limit their time and energy to engage in instructional supervision activities (Naidoo, 2019). Aftermath, supervision may become erratic, compliance-oriented, or evaluative in nature, as opposed to being instructional and developmental. Such constraints undermine the ability of supervision to provide focused and instructionally meaningful feedback that results in improved teaching practice. According to Cicekci & Sadik (2019) the most significant weakness of the current practice of supervision is the absence of attention to the instructional core of teaching. School administrators and supervisors are faced with a myriad of complex organizational realities that require them to juggle administrative, managerial, and instructional responsibilities. Consequently, the supervision process can be described as occasional, non-specific, and evaluation-oriented rather than consistent and instructional in nature. Without instructional referents, supervision cannot possibly provide feedback that can lead to improvements in teaching practice. This study sharpens its conceptual lens by focusing on instructional supervision which supports the Sustainable Development Goal #4 as a process for influencing observable instructional behavior by improving teacher quality through evidence-based, classroom-focused feedback and professional development, ensuring that gains in educational access are matched by sustained improvements in instructional quality and learning outcomes (Adipat & Chotikapanich, 2022).

The classroom-observable teaching strands are very essential in improving the instructional supervision process by ensuring that the supervision process is based on the observable and measurable aspects of the teaching process. These strands have been used as an

indicator of the teaching process (Decano, 2023). In line with the stipulation of the analytical requirement that the supervision process is not a general leadership function but a specific process for improving the teaching process where supervision was made as evidence-based, objective, and professional in its application and implementation, the study integrated the use of classroom-observable teaching strands of the teaching process in its main framework of analysis (Wijaya et al., 2023). These classroom-observable teaching strands included the "empirically visible and pedagogically highly relevant strands of the teaching process" that include lesson preparation, teaching delivery, classroom management, learner engagement, and assessment and feedback. These strands are the operational link between the supervisory intention and the teaching practice, hence making it possible to evaluate the supervision process based on its ability to influence actual classroom practices rather than general professional traits (Friedman, 2020).

Despite the evidence in previous studies indicating the relationship between instructional supervision and teacher effectiveness, there remain certain aspects concerning instructional supervision that deserve more research attention (Decano, 2023). Consequently, the instructional processes through which the supervision process affects teaching practices have not been extensively investigated. Furthermore, the lack of district-level research on the supervision process, which investigates the process using classroom-observable teaching strands under different contextual constraints, has contributed to the problem of under-theorization and under-measurement of instructional supervision at the level of classroom-observable practice. Filling-in the gap of the study through the help of classroom-observable teaching strands.

The District of Cordova provides a relevant and appropriate context for this study due to the increasing instructional demands placed on teachers and school leaders amid ongoing educational reforms. Analyzing instructional supervision in this district enables a localized examination of the manner in which supervision is practiced in the school setting and the manner in which classroom-visible teaching strands are utilized to enhance teaching practice. The manner in which the district is studied addresses the call for localized evidence that captures the challenges and realities of the school setting. It is being contextualized and specific that the linkage between classroom-observable teaching strands and the effectiveness of supervision is being supported by the theories of developmental supervision and instructional leadership, which highlights the importance of professional growth of the teachers. In this manner, the effectiveness of supervision is dependent not on the manner in which it is conducted, but rather on the manner in which it impacts the instructional choices of teachers. The classroom-visible teaching strands are the mechanism that ensures supervisory efforts are focused.

Statement of the problem

This study aims to examine how instructional supervision can be strengthened through classroom-observable teaching strands among elementary school teachers in Gabi Elementary School, Day-as Elementary School and Gilutungan Integrated School during School Year 2025-2026 as a basis for developing an instructional supervision training program.

Specifically, this study seeks to answer the following questions:

1. What is the level of implementation of instructional supervision in terms of classroom-observable teaching strands, as perceived by the teachers, in the areas of content knowledge and pedagogy, learning environment, diversity of learners, curriculum and planning, and assessment and reporting?

2. What is the extent of instructional supervision practices in public elementary schools in terms of classroom observation, feedback and post-observation conferencing, mentoring and coaching, and professional development and instructional support?
3. Is there a significant relationship between the extent of instructional supervision practices and the level of implementation of classroom-observable teaching strands?
4. What challenges, barriers, and opportunities do teachers encounter in the implementation of instructional supervision based on classroom-observable teaching strands?
5. Based on the findings of the study, what instructional supervision training program can be developed to strengthen instructional supervision practices in the school?

METHODOLOGY

Research design

In this research, a Sequential Explanatory Mixed-Methods Research Design was applied whereby data were gathered in two phases: in the first phase, quantitative data collection and analysis were done before proceeding to collect qualitative data to explain and elaborate on the results of the former.

Locale of the study and respondents

The study was carried out in Gabi Elementary School, Day-as Elementary School, and Gilutungan Integrated School in the District of Cordova, Cebu Province, for the School Year 2025–2026. The respondents of the study comprised of 31 elementary school teachers who were actively involved in the teaching process and had been exposed to the different instructional supervision practices in their respective schools.

Research instruments

The study made use of a researcher-modified survey questionnaire, PPST-based teacher performance evaluation records, a semi-structured interview guide, and reflective writing guide in order to obtain both quantitative and qualitative data regarding the implementation of classroom-observable teaching strands and the effectiveness of instructional supervision practices.

Data analysis procedure

Quantitative data were analyzed using weighted mean to measure the extent of implementation and perceived effectiveness of instructional supervision practices and the Pearson Product-Moment Correlation Coefficient to measure the relationship between the study variables.

RESULTS AND DISCUSSION

Perceived level of implementation of instructional supervision of classroom-observable teaching strands

Content knowledge and Pedagogy

The content knowledge and pedagogy of the study. In the statements reviewed, using different types of teaching methods to improve learners' literacy and numeracy outcomes had the highest mean rating (4.7419, SD 0.4448). This indicates that teaching supervision is carried out to a high standard. Conversely, the item emphasizing the use of effective verbal and nonverbal classroom communication strategies to support learners' understanding, participation, engagement, and achievement recorded the lowest mean (4.2258, SD = 0.762). Although low, it implies that supervisory practices in instruction have been excellent and have achieved great gains in learning. The aggregated results yield an overall average mean of 4.4774 with a standard deviation of 0.5388, which respondents categorize as highly effective. Collectively, these observations show that instructional supervision efforts grounded in practical classroom measures are currently helping to improve the quality of literacy and numeracy instruction, as well as teacher effectiveness, in these elementary schools. To maximize the effect, attention to maintaining and enhancing high-impact teaching strands, as well as developing communication-based strategies, must continue during the years 2025 to 2026.

Learning environment

The learning environment as perceived in this study. The data reveal a learning climate that prioritizes fairness, respect, and care, which participants consistently associate with conducive learning conditions. This dimension attained the highest mean score (4.6452) with a small spread (SD = 0.4864), indicating that instructional supervision practices are carried out with a high level of consistency and excellence and that these practices are linked to appreciable improvements in teaching performance. In contrast, the item describing the application of a range of successful strategies to sustain motivating learning environments and to encourage students to assume responsibility for their own learning recorded the lowest mean (4.3871) with a comparable standard deviation (0.4951). While this item remains within the realm of consistently excellent instructional supervision and its positive impact on teaching performance, its slightly lower mean suggests there is still room for further refinement in translating a variety of strategies into heightened learner motivation and agency. Results for all these statements taken together yield an average score of 4.5565 and a standard deviation of 0.4946, indicating that survey participants consider these statements indicative of highly effective instructional supervision strategies.

Diversity of learners

The data presented indicate the range of learner profiles involved in the investigation and the potential instructional implications they can have for supervision and professional learning. It should be noted that differentiated and developmentally appropriate learning activities tailored to meet the specific needs, interests, strengths, gender, and experience of each learner have been rated the highest on the scale with an average score of 4.4194 (SD =

0.50161). The result implies that supervisory practice is always implemented effectively and positively impacts the performance of teachers. Establishing a culture that meets learners' linguistic, social, economic, and religious backgrounds has received a somewhat lower average rating of 3.9355 (SD = 0.8538). The finding shows that supervisory practices are often seen and positively contribute to professional growth and classroom instruction although there is room for improvement to incorporate linguistic and cultural diversity in teaching techniques.

Overall, all strands receive average scores of 4.1828 (SD = 0.70154) which demonstrates their effectiveness as criteria for assessing instructional supervision at target elementary schools. In summary, all the findings point to the importance of adopting the concept of visible strands of teaching as a basis for improving instructional supervision, reflection, and professional development in the academic year 2025-2026 at Gabi Elementary School, Day-as Elementary School, and Gilutungan Integrated School.

Curriculum and planning

The curriculum and planning framework for the study, derived from the data gathered. The item describing a planned lesson in which the teacher determines the objectives, selects methods, and arranges teaching materials received the highest mean score of 4.7419 (SD = 0.4448). This pattern indicates that instructional supervision practices are consistently implemented with a high level of excellence and are associated with meaningful gains in teaching performance. However, the item on developmentally sequenced teaching and learning activities in order to address the requirements in terms of curriculum standards as well as to cater to various teaching scenarios emerged as the one with the lowest average mean of 4.0968 (SD = 0.7897). From this, it could be deduced that although the existence of such supervisory activities is generally evident and advantageous in improving teachers' performance as well as the teaching session itself, there might be some differences in their frequency. Overall, the average mean rating of all items is 4.4194 (SD = 0.5787).

Together, these findings depict a coherent picture in which supervision reinforces structured planning and delivery while also supporting adaptive instruction that meets diverse curricular demands. The data collectively point to a sustained level of quality in supervisory practices that are closely linked to constructive improvements in teaching practice and student learning opportunities across the participating elementary settings.

Assessment and reporting

The results and findings on the assessment and reporting part of this study have been outlined using information provided by the elementary schools that participated in the research. It is evident from the findings that using assessment techniques in line with the requirements of the curriculum attained a mean score of 4.5806, with a standard deviation of 0.50161. The above trend implies that instructional supervision procedures have been carried out in an exemplary manner and help improve the performance of teachers. Conversely, the assertion related to the creation of an assessment tool considering the achievement of learning objectives scored an average of 4.1613 with a standard deviation of 0.7788. This shows that although the development of personalized assessment tools continues to be linked with teacher growth and improvement of classroom teaching, it remains secondary to the rest. The aggregate results yield an overall mean of 4.3145 with a standard deviation of 0.7052, indicating that respondents perceive the instructional supervision practices as highly effective across the examined schools and school year.

Instructional supervision practices in public elementary schools

Classroom observation

The practices related to classroom observation within the realm of instructional supervision in public elementary schools. Classroom observation is a highly recognized practice. Consensus is found regarding the transparency in scheduling observations prior to their execution (workflow mean WM = 4.77) and the clarity of criteria on which the observations are based (WM = 4.52), as well as the provision of written notes during the observations (WM = 4.52). The process is viewed positively, evidenced by high self-assessment (SA) rating (SA $\approx$ 4.65). Overall, a positive opinion on classroom observation process emerges (SA mean = 4.48).

From the results above, it can be seen that the means of all the variables are very high, which shows the fact that most people feel that the classroom observation is based on predefined criteria, planned before, documented, and done in a conducive environment. This is confirmed by the mean value of self-assessment of 4.48. Overall, classroom observations are conducted in public elementary schools on a schedule, using criteria, providing notes, and supporting teachers. Value of observations and observer involvement. The observed items are very valuable, as all of them were strongly affirmed (SA) and have mean values between approximately 4.4-4.7. A particular focus was put on the observer involvement (heads/masters), schedules communication, criteria definition, observations notes availability, and the supportive nature of the observation system. All these factors make up for a harmonious and non-threatening atmosphere for supervisory activities that help in promoting professional reflection and development.

Consistency and non-threatening environment structure According to Table 3, classroom observations are usually planned and carried out following clear criteria with the means equal to approximately 4.5-4.8. This narrow distribution range proves a consistent approach to observation planning and implementation. The results from all WM/SA items prove that the respondents find the observation system well-structured and supportive. It should be concluded that the classroom observation component of instructional supervision works as an effective structured and criterion-based system. One instance of this is a case whereby a teacher is conducting his/her lesson on the water cycle and where the teacher is observed by the Master Teacher. It was evident that the lesson was well-planned but there were a few learners who were not participating actively in the discussion. In the post-observation conference, the Master Teacher gave constructive feedback to the teacher and suggested that he/she should adopt strategies that encourage active learning such as a group work, use of visual aids and higher-order thinking questioning techniques. This was implemented in the following class and positive changes were noted.

The distribution of notes along with the participation of school administrators (heads/masters) in the survey suggests that there is a presence of feedback loops, which can positively impact teacher reflections and teaching practices. The relatively small variability among the responses suggests uniformity of experiences, even though there is possibility that a few students may not have experienced such uniformity.

Feedback and post-observation conferencing

The feedback and post-observation conferencing findings of the study, analyzed using the statements on classroom observations. From the analysis, one can conclude that teachers

who receive feedback after being observed in classrooms perform the best in terms of consistency and accuracy, which means that they have mastered teaching and professionalism. In particular, the statement concerning the provision of feedback after observations yielded the highest mean and lowest standard deviation, implying that participants always display exemplary teaching and professionalism in their actions.

On the contrary, the statement on how teachers are provided with the opportunity to reflect and respond during post-observation conference meetings yields lower mean and higher standard deviation despite showing excellent performance. This implies that teachers exhibit mastery and professionalism but their ability to engage in reflective discussion during post-observation conference sessions is slightly variable.

Overall, the summary statistics show that participants strongly agree with the statements. Indeed, from the results, the average is very high and thus implies that there is an immense belief that teaching strands observable in classrooms could be developed through instructional supervision involving timely feedback and structured post-observation dialogue.

Mentoring and coaching

Demonstrate the fact that coaching was the most approved form of assistance because this type of personal instruction addressed individual needs of the teachers, implying a high correlation with their development paths and a high level of their expertise in working with students and mastering certain techniques. Respondents' opinion shows that they perceive coaching as a key approach to professional training, with all the respondents providing highly positive feedback regarding the degree of mastery achieved by using this technique and their ability to use coaching skills efficiently. Such trends suggest that focusing the supervision on personalized coaching sessions coupled with supervisory check-in sessions and collaborative goal setting like the increase of mentoring and coaching sessions from occasional to monthly within on school year will increase the salience of classroom teaching strands for improved instructional supervision in these elementary schools.

Professional development and instructional support

The key aspects of professional development and instruction support obtained from the research data using properly constructed statements. According to the findings, PD support that addressed the authentic classroom needs of the teachers was seen as the most important item with regard to its high average level reflecting the alignment with real needs and successful implementation in practice with a rather small standard deviation indicating relatively uniform respondents' responses. The finding points at the tendency to perceive PD as relevant to the current classroom needs and helpful in the maintenance of effective and satisfactory performing of professional duties in the future.

At the same time, another statement on recommendations of supervisors to conduct certain training following classroom observations received a considerably lower mean but still reflected the agreement that teachers perform effectively in the course of regular classroom practices. Thus, there is an interesting difference between the statements showing that the teachers find PD to be relevant but are still somewhat critical towards the supervisors' recommendations with respect to conducting necessary training according to classroom observation.

When considering all items together, the results indicate a high degree of consensus on the adequacy and utility of the PD and instructional support system in these participating schools. The average score indicates that respondents generally concur that the existing structures of professional development and supervisory guidance are delivering meaningful benefits and supporting the development of teaching competencies. However, the low to

medium standard deviations associated with the averages indicate that there is a general consensus on these opinions by the teachers, principals, and supervisors, implying a uniformity of progress and a stable base for further improvement.

Significant relationship between the extent of instructional supervision practices and the level of implementation of classroom-observable

In this section, an empirical examination of the relationships between five areas of instructional supervision practices including Content Knowledge & Pedagogy, Learning Environment, Diversity of Learners, Curriculum and Planning, and Assessment and Reporting and four instructional supervision activities namely Classroom Observation, Post-Observation, Mentoring, and Instructional Support is presented. By applying a correlation table, which includes Pearson correlation coefficients and two-tailed significance (p-value) tests, we interpret the strength and statistical significance of the relationship between the domains and supervisory activities. Based on the largely insignificant correlation coefficients, we discuss potential theoretical, measurement, and practical implications of the analysis of instructional supervision.

As the current analysis reveals, there are no significant linear relationships between the instructional content/practice domains and supervisory functions analyzed in the context of the study (Classroom Observation, Post-Observation, Mentoring, and Instructional Support). Although some slight positive relationships can be noted in certain pairs (LE and IS; CP and CO), they fail to meet the conventional level of statistical significance. The presented results suggest a more cautious approach toward interpreting this data as well as highlight the need for more thorough research, including the use of qualitative data to identify relationships between instruction supervision practices and teacher knowledge and environment.

Challenges and barriers encounter in implementing of instructional supervision

Challenges during the process of instructional supervision

Hinder the effectiveness of instructional supervision

The critical factors that can help determine the efficacy of instructional supervision in enhancing the quality of teaching include: focusing on the needs of the teachers and offering comprehensive assistance; involving the teachers in seminars and other relevant trainings; giving feedback that is constructive and professional; ensuring that the process of supervision is collaborative rather than evaluative; collecting information for decision-making through various sources; integrating professional development activities with the outcomes of supervision for greater efficiency; creating trainings, workshops, or LAC sessions based on the deficiencies observed during the supervision process; creating a conducive environment for honest communication and trust; ensuring consistent feedback; encouraging professional learning communities; being open to varied suggestions in the name of school unity; and conducting targeted training workshops within the school context to improve teaching practices.

Proper instructional supervision

The opportunities for improvement will be found where teachers will have instructional supervision that is well-designed based on evidence-based practices. It could help enhance the academic performance of the learners, promote innovation in the instructional methods, and ensure continuous growth and development in the profession. In fact, when there is effective instructional supervision, the teachers can deliver lessons in a more consistent, efficient, and effective manner since they can benefit from immediate feedback and constructive professional assistance. This also encourages cooperation among peers, improves the skills of the instructors, and helps create an environment of growth and accountability within the institution. This could ultimately boost their professional self-confidence, thereby improving their students' performance as well.

CONCLUSION

Based on the research findings, teachers perceived instructional supervision as beneficial and supportive of professional growth. Although the quantitative analysis showed that there was not always a significant correlation between certain instructional supervision processes and the teaching strands observable in classrooms, the overall findings suggest that supervision still plays a very important developmental role.

The quantitative findings showed varying degrees of correlation between instructional supervision practices and teacher performance, implying that changes in teachers' effectiveness may lie beyond the scope of supervision practices alone. On the other hand, the qualitative information has shed light on how teachers have experienced the supervision processes and found them to be valuable learning experiences, particularly in observation, the provision of constructive feedback, mentoring, coaching, and instructional assistance. Thus, the combination of both types of information shows that instructional supervision is important for teachers' development.

In addition, the study emphasizes that mentoring and individual coaching proved to be important means of development for teachers, which allowed them to enhance their knowledge of subject matter, instructional strategies, and classroom management skills. However, topics like differentiation and cultural responsiveness need more attention.

Within the framework of developmental education, the study highlights the importance of improving systems for building teachers' capacity through collaborative and developmental approaches to instructional supervision. Organizations can gain more through using supervision approaches that focus on mentoring, coaching, and development, rather than compliance evaluation. Supervision methods could promote reflective teaching, increase the quality of instruction in different learning environments, and contribute to teacher development.

Lastly, the results obtained in this study need to be evaluated in light of its limitations. Data collection was based on a selective sample of schools and subjects in the Cordova district and largely relied on respondents' subjective reports. Despite this, the study is significant because it offers important perspectives on improving the process of instructional supervision for teacher development.

REFERENCES

- Zepeda, S. J. (2013). *Instructional supervision: Applying tools and concepts*. Routledge.
- Comighud, S. M. T., Futralan, M. C. Z., & Cordevilla, R. P. (2020). *Instructional supervision and performance evaluation: A correlation of factors communities*. New York: Teachers College Press.

Cicekci, M. A., & Sadik, F. (2019). Teachers' and Students' Opinions about Students' Attention Problems during the Lesson. *Journal of Education and Learning*, 8(6), 15-30.

Adipat, S., & Chotikapanich, R. (2022). Sustainable development goal 4: An education goal to achieve equitable quality education. *Academic Journal of Interdisciplinary Studies*, 11(6,174-183).

Atkinson, A., Watling, C. J., & Brand, P. L. (2022). Feedback and coaching. *European journal of pediatrics*, 181(2), 441-446.

Bloom, C. M. (2011). Leadership Effectiveness and Instructional Supervision: The Case of the Failing Twin. *Journal of Case Studies in Education*, 1.

Decano, R. B. (2023). Utilization of classroom observation tool for teachers.

Friedman, I. A. (2020). The competent school principal: Personality traits and professional skills. *Psychology*, 11(06), 823.

Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. *Leadership and policy in schools*, 4(3), 221-239.

Muthanna, A., & Alduais, A. (2021). A thematic review on research integrity and research supervision: Relationships, crises and critical messages. *Journal of Academic Ethics*, 19(1), 95-113.

Naidoo, P. (2019). Perceptions of teachers and school management teams of the leadership roles of public school principals. *South African Journal of Education*, 39(2).

Wijaya, N. A. P., Junaidi, J., Simbolon, A. M. Y., Yanti, I., & Sumarni, W. (2023). Leadership concepts in educational supervision. *GIC Proceeding*, 1, 219-227.