EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2026): 8.752 ISSN: 2348 – 814X
Volume: 13 | Issue:5 | May 2026 -Peer Reviewed Journal

# INSTRUCTIONAL STRATEGIES AS PREDICTORS OF TEACHING STANDARDS IN THE DIVISION OF DAVAO DEL NORTE

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**Article DOI: https://doi.org/10.36713/epra27881**
**DOI No: 10.36713/epra27881**

## ABSTRACT

*This study determined the relationship between instructional strategies and teaching standards among 118 elementary teachers in the Division of Davao del Norte. Employing a quantitative, descriptive-correlational research design, the study utilized adapted and validated survey instruments to measure the extent of instructional strategies and teaching standards. Data were analyzed using weighted mean, Pearson Product Moment Correlation, and Multiple Regression Analysis at a 0.05 level of significance. Findings revealed that both instructional strategies and teaching standards were at an extensive level, indicating that these practices were oftentimes evident among teachers. All domains of instructional strategies, including problem solving-sample event, discussion–brainstorming, modeling/simulation/role playing, thinking/interrogating/interpretation, presentation, question-answer, writing/take notes/summarize, and research/project strategies, were rated extensive. Similarly, all dimensions of teaching standards, namely training, content, assessment, instructional methods, syllabus, and learners' evaluations of teaching, were also extensive. A significant and very strong positive relationship was found between instructional strategies and teaching standards. Regression analysis further indicated that instructional strategies significantly predicted teaching standards, explaining a substantial proportion of variance. The results underscore the critical role of varied, interactive, and structured instructional approaches in enhancing overall teaching quality and professional standards.*

**KEYWORDS:** *Instructional Strategies; Teaching Standards; Elementary Teachers; Descriptive-Correlational Design; Regression Analysis; Division of Davao Del Norte*

## INTRODUCTION

Teaching effectiveness is greatly influenced by instructional strategies that educators employ, influencing various aspects of teaching standards, including training, content delivery, assessment, and student evaluations (Richmond et al., 2022). For educators to provide an engaging and effective learning environment, instructional strategies including problem-solving, discussion-based learning, modeling, and research-driven approaches are crucial (Eristi & Akdeniz, 2022). Meanwhile, teaching standards determine the overall quality of instruction by assessing how well educators deliver content, use assessment methods, and respond to learners' needs (Richmond et al., 2022). However, despite the increasing emphasis on innovative teaching techniques, the connection between teaching efficacy and instructional strategies remains an area requiring further exploration, particularly in localized contexts (Baker & Dwyer, 2020). This study is conducted to examine how instructional strategies serve as predictors of teaching standards within the Division of Davao del Norte, addressing existing gaps in both research and practice.

Globally, education systems are continuously evolving to incorporate student-centered learning approaches that emphasize problem-solving, critical thinking, and interactive discussions (Darling-Hammond et al., 2020). However, many learning environments continue to rely on teacher-directed instruction, which may limit students' engagement in critical thinking and their development of independent learning skills (Bhardwaj et al., 2025). Studies indicate that instructional strategies have a significant impact on learners' engagement and academic performance, yet many schools struggle with effectively implementing them due to curriculum rigidity and controlled entry to continue training and development prospects for educators (OECD, 2023). The gap between instructional innovation and its actual classroom application poses a significant challenge to global education reform efforts.

Another pressing international issue is the misalignment between instructional strategies and assessment methods. Many countries emphasize inquiry-based learning and student engagement but continue to rely on standardized tests that primarily assess rote memorization rather than higher-order thinking skills (Biggs & Tang, 2019). This disparity hinders the effectiveness of teaching strategies, as educators are often compelled to prioritize exam-oriented teaching rather than cultivate deep understanding among students. Addressing this gap requires reforms in both curriculum design and teacher training to ensure that assessment methods align with instructional goals.

In the Philippine educational landscape, the Department of Education (DepEd) advocates for learner-centered instruction through the K-12 curriculum. However, studies suggest so many teaching professionals still struggle implementing these approaches effectively because of constraints such as overcrowded classrooms, selective availability to instructional tools, and inadequate skill development (Bernardo & Mendoza, 2021). Discussion-based and research-oriented strategies, which are crucial for fostering critical thinking, remain underutilized as teachers continue to rely heavily on lectures and traditional textbook-based instruction (Navarro, 2020). This limitation affects student engagement and learning outcomes, raising concerns about the effectiveness of current teaching practices.

Another challenge at the national level is the misalignment between curriculum content and instructional methods. Research indicates that while the curriculum emphasizes active learning, many teachers lack the support needed to integrate these strategies into their daily instruction (Navarro, 2020). Without adequate professional development, educators are often left to navigate complex teaching requirements with minimal guidance, leading to inconsistencies in instructional delivery. This issue underscores the demand for specific measures, including continuous teacher instructional courses as well as instructional support systems, strengthening the implementation of effective teaching strategies in Philippine classrooms.

In Davao del Norte, local schools face significant challenges in implementing research-based and problem-solving instructional strategies. Teachers often struggle to incorporate problem-solving and project-based learning due to a lack of training and teaching materials, impeding learners' capacity to build higher-level reasoning skills (Dela Cruz, 2022). The survey instrument highlights the importance of encouraging students to investigate problems and develop solutions, yet many educators in the province still rely on teacher-directed methods that prioritize information delivery over inquiry-based learning. This reliance on traditional teaching approaches creates a disconnect between instructional strategies and student engagement, emphasizing the need for support and training that is specific to the area.

Furthermore, many teachers in Davao del Norte experience deficiencies in professional development, which directly impacts their ability to implement diverse instructional strategies. Limited access to training programs on active learning methods and assessment strategies hinders teachers' ability to modify their teaching to accommodate the demands of their students (Department of Education Regional Office XI, 2023). Without structured professional development opportunities, educators may lack the skills needed to apply discussion, research, and simulation-based teaching methods effectively. This gap in teacher training underscores the urgent need for interventions that equip educators with the knowledge and resources necessary for instructional innovation.

Another critical issue in the local context is the inadequate integration of formative assessments and feedback mechanisms into teaching practices. The study's research instrument emphasizes the role of assessment in evaluating teaching effectiveness, yet many teachers in Davao del Norte continue to rely on summative assessments rather than continuous feedback (Bautista, 2021). This reliance on traditional assessment methods limits chances for learners to evaluate their own academic progress and hinders teachers from adjusting their instructional strategies based on student needs. Addressing this gap requires greater concentration on formative evaluation training and the development of feedback driven instructional models.

This study is particularly significant as it provides empirical evidence on how instructional strategies influence teaching standards in the local education sector. By identifying which instructional strategies have the greatest impact on teaching effectiveness, the findings can help inform teacher training programs and curriculum development in Davao del Norte (Williams, 2021). Additionally, the research seeks to address the gap between instructional practices and assessment methods, ensuring that educators have the access needed to deliver student-centered learning effectively.

Understanding the connection between instructional strategies and teaching standards is essential for enhancing educational outcomes within the Davao del Norte Division. This investigation not only addresses a local issue but also contributes to broader national and global discussions on effective teaching practices (Hattie, 2019). By emphasizing

localized solutions, this study provides insightful information that can guide educational policies and improve instructional quality at multiple levels. Ultimately, the findings of this research can drive meaningful progress in teacher effectiveness along with student academic growth, aligning local education with global best practices.

## THE STUDY'S OBJECTIVES

The study seeks to look into the connection among instructional strategies into teaching standards. In particular, it aimed to:

1. Examine the level of instructional strategies among teachers;
2. Examine the measure of teaching standards among educators;
3. Find out if a significant connection can be drawn between instructional strategies and teaching standards; and
4. Identify the various dimensions of instructional strategies influence teaching standards significantly.

## METHODOLOGY

This chapter presents the methodological feature of the study. This includes research design, research respondents, research instruments, data gathering procedure, and data analysis applied in this investigation.

### Research Design

In this study, a quantitative research approach was employed, specifically utilizing a descriptive correlational design. Quantitative research involves the collection and statistical analysis of numerical data to explain patterns and relationships between variables (Apuke, 2017). The descriptive correlational design is appropriate for this study as it aims to examine the extent and nature of the relationship between instructional strategies and teaching standards without manipulating the study environment (Creswell & Creswell, 2017). By employing this design, the study provides an empirical basis for understanding how various instructional strategies impact teaching effectiveness.

A descriptive research approach allows for an objective observation of the characteristics of instructional strategies and teaching standards as they occur naturally, without external intervention (Korrapati, 2019). The study focuses on describing the extent to which different instructional strategies such as problem-solving, discussion-based learning, and research-oriented teaching are implemented in educational settings. Additionally, it evaluates the effectiveness of teaching standards, including assessment methods, content delivery, and instructional methodologies. This systematic approach helps in obtaining a comprehensive picture of the current teaching practices and their alignment with effective pedagogy.

On the other hand, a correlational investigation seeks to determine whether a relationship exists between instructional strategies and teaching standards. Correlational research examines how variations in one variable correspond to changes in another, allowing for the identification of potential predictive relationships (Kabir, 2019). This study applies statistical tools such as Pearson correlation coefficient to measure the strength and direction of the relationship, while multiple regression analysis is utilized to identify which instructional strategies significantly influence teaching standards. By doing so, the study provides valuable insights for educators, school administrators, and policymakers in refining instructional methodologies to enhance teaching effectiveness.

### Research Respondent

This study involved a total population of 167 elementary teachers from Davao del Norte. To determine the appropriate sample size, Slovin's formula was employed. Slovin's formula is a widely used statistical method for sample size determination when the total population is known, and a specified margin of error is considered.

Thus, the computed sample size for this study is 118 elementary teachers. This sample ensures statistical reliability while maintaining feasibility in data collection, as supported by the principles of representative sampling (Taherdoost, 2019).

The study included elementary teachers currently employed in public and private schools in Davao del Norte. Respondents were selected based on their active engagement in instructional strategies within their respective schools. Teachers with at least one year of teaching experience were prioritized to ensure that they had adequate exposure to various instructional methods and teaching standards. Those who were willing to participate voluntarily and provide informed consent were included.

By utilizing Slovin's formula, this study ensured that the selected respondents adequately represented the broader teacher population, allowing for generalizable and valid findings regarding instructional strategies and teaching standards (Creswell & Creswell, 2018). The study maintained ethical considerations by ensuring confidentiality, voluntary participation, and anonymity in the data collection process, aligning with best practices in educational research (Babbie, 2020).

**Sampling Design**

The study employed a stratified random sampling technique, wherein respondents were selected proportionally from the different elementary schools in the Division of Davao del Norte. The total number of respondents consisted of one hundred eighteen (118) elementary teachers. Stratified random sampling is appropriate when the population is composed of distinct subgroups, as it ensures that each subgroup is adequately represented in the sample, thereby improving the accuracy and generalizability of the findings (Etikan & Bala, 2017).

This approach was particularly suitable for the present study because it allowed the researcher to capture diverse perspectives from teachers across various schools while maintaining representativeness of the entire population. By dividing the population into strata based on school assignment and selecting respondents randomly within each group, the study minimized sampling bias and ensured that differences in instructional practices and teaching standards across schools were properly reflected.

The use of stratified random sampling was further supported by the application of clear inclusion and exclusion criteria. Participants were required to be currently employed as elementary teachers in public schools within the Division of Davao del Norte, actively engaged in classroom instruction, have at least one year of teaching experience, and be willing to participate in the study. Teachers who were on leave, assigned to non-teaching positions, or did not provide consent were excluded to maintain the validity and relevance of the data collected.

To highlight, the sampling technique ensured that the study obtained reliable and representative data, strengthening the credibility of the findings regarding the influence of instructional strategies on teaching standards among elementary teachers.

**Research Instrument**

The primary instrument for data collection was a structured questionnaire designed to measure both instructional strategies and teaching standards. The questionnaire consisted of closed ended items using a Likert scale to quantify the respondents' perceptions and experiences. This format allowed for a systematic and objective assessment of the extent to which instructional strategies are implemented and how teaching standards are demonstrated in classroom practice. The instrument was adapted from established sources to ensure alignment with the variables of the study and was subjected to content validation by a panel of experts in the field of education to establish its appropriateness, clarity, and relevance.

For data collection, the study utilized an adapted survey questionnaire divided into two sets. The first set focused on the extent of instructional strategies, while the second set measured the extent of teaching standards. Each set contained statements reflecting actual classroom practices and professional competencies, enabling respondents to rate the degree to which these are evident in their teaching.

Prior to the actual data collection, the instrument underwent pilot testing to establish their reliability and suitability for the target population. The pilot test was conducted among selected elementary teachers from two schools within the Division of Davao del Norte, specifically in the east district of Sto. Tomas. A group of thirty respondents participated in this process. The pilot testing aimed to determine the clarity of the items, identify ambiguous or confusing statements, and assess the consistency of responses across the instrument. Feedback from the respondents was carefully reviewed, and necessary revisions were made to improve the wording, structure, and overall coherence of the questionnaire. This procedure ensured that the final instrument was reliable, understandable, and suitable for measuring the constructs of instructional strategies and teaching standards in the main study.

*Instructional Strategies.* The instructional strategies questionnaire was adapted from Eristi, B., & Akdeniz, C. (2022). The instrument consisted of 38 items. It had eight indicators namely; problem solving-sample event strategies (1-6), discussion-brain storming strategies (1-5), modeling/simulation/role playing strategies (1-4),

thinking/interrogating/interpretation strategies (1-4), presentation strategies (1-5), question-answer strategies (1-5), strategies of having write/take notes/summarize (1-4), and research/project strategies (1-5).

The instructional strategies questionnaire underwent pilot testing to verify its reliability and validity prior to full implementation. A Cronbach's alpha coefficient of 0.90 was obtained from the data, implying that the objects exhibit high internal consistency. This indicates that the instrument effectively measures the various instructional strategies employed by teachers, ensuring that responses are reliable and consistent across different respondents. When a questionnaire has a high reliability score it is suitable for assessing the extent of instructional strategies and can provide credible and reproducible data for the study. Below was the grading scale of the extent of instructional strategies.

| Mean Interval | Descriptive Level | Descriptive Interpretation |
|---|---|---|
| 4.20 - 5.00 | Very Extensive | The instructional strategies are always evident. |
| 3.40 - 4.19 | Extensive | The instructional strategies are oftentimes evident. |
| 2.60 - 3.39 | Moderately Extensive | The instructional strategies are occasionally evident. |
| 1.80 - 2.59 | Less Extensive | The instructional strategies are seldom evident. |
| 1.00 - 1.79 | Not Extensive | The instructional strategies are never evident. |

*Teaching Standards.* The teaching standards questionnaire was modified from Richmond, et al. (2022). The instrument consisted of 27 items. It had six indicators namely; training (1-5), content (1-4), assessment (1-4), instructional methods (1-4), syllabus (1-5), and learners' evaluations of teaching (1-5).

The teaching standards questionnaire underwent pilot testing, yielding a Cronbach's alpha coefficient of 0.91, which also indicates excellent internal consistency. This result suggests that the instrument is well-structured in measuring the aspects of teaching standards, such as training, content, assessment, instructional methods, syllabus, and learners' evaluations of teaching. The high reliability score implies that the questionnaire effectively captures the perceptions of teachers regarding teaching standards, ensuring accuracy and dependability in the collected data. These pilot test findings affirm that the instruments are robust and suitable for use in the main study. Below was the grading scale of the extent of teaching standards.

| Mean Interval | Descriptive Level | Descriptive Interpretation |
|---|---|---|
| 4.20 - 5.00 | Very Extensive | Teaching standards is always evident. |
| 3.40 - 4.19 | Extensive | Teaching standards is oftentimes evident. |
| 2.60 - 3.39 | Moderately Extensive | Teaching standards is occasionally evident. |
| 1.80 - 2.59 | Less Extensive | Teaching standards is seldom evident. |
| 1.00 - 1.79 | Not Extensive | Teaching standards is never evident. |

The instruments used in this study were contextualized in order to accomplish its goal. The researcher included all the comments and suggestions of the adviser, panel members and expert validators in order to improve the tools and to attain construct validity.

**Data Gathering Procedure**

The process used to collect data for this study adhered to a systematic and ethically guided process to assure the accuracy, reliability, and integrity of the research results. The procedure included securing the ethics compliance certificate, obtaining the endorsement letter from the dean, requesting the permit to conduct the study from the Schools Division Superintendent (SDS), sending letters to the school principals, and validating the research instruments prior to the administration of the questionnaires. The data collection was conducted among respondents in the Division of Davao del Norte.

*Ethics Review.* Prior to the conduct of the study, the researcher secured an Ethics Compliance Certificate on August 19, 2025, located in Appendix D. This process ensured that the study adhered to the ethical standards required for research involving human participants. The ethics review confirmed that the rights, dignity, and welfare of the respondents were protected throughout the research process. Ethical principles such as voluntary participation, informed consent, confidentiality of responses, and proper handling of collected data were strictly observed in accordance with the provisions of the Data Privacy Act of 2012. The issuance of the certificate signified that the study met the required ethical guidelines and was permitted to proceed with the subsequent stages of the research.

*Validation of the Instrument.* Prior to the actual administration of the research instruments, the questionnaire underwent expert validation on October 07, 13, and 15, 2025 which can be found in Appendix H. The researcher provided validation sheets to selected experts who evaluate the research instruments in terms of clarity, relevance, appropriateness of content, and alignment with the research variables. The experts recorded their comments and suggestions in the validation sheets, which are carefully reviewed by the researcher. Necessary revisions were incorporated to improve the quality of the questionnaire before the final administration to the respondents. This process ensured that the instrument was valid, reliable, and capable of accurately measuring the variables included in the study.
*Endorsement from the Dean.* After securing the ethics compliance certificate, the researcher requested an endorsement letter from the Dean of the Graduate School of Rizal Memorial Colleges, Inc. on August 23, 2025, viewed in Appendix C. The endorsement confirmed that the research had undergone proper academic review and was aligned with the requirements of the graduate program. It also verifies that the study is legitimate, academically sound, and appropriate for implementation in the identified research setting. This endorsement serves as an official institutional support that allows the researcher to formally request permission from the Schools Division Office to conduct the study.

*Permit to Conduct the Study.* With the endorsement letter from the dean, the researcher submitted a formal request for a Permit to Conduct the Study addressed to the Schools Division Superintendent (SDS) of Davao del Norte on October 9, 2025 found in Appendix E. The request included the research title, objectives of the study, the target respondents, and the procedures for data collection. Supporting documents such as the endorsement letter, research instruments, and other required attachments were also submitted for review. Upon approval, the permit grants the researcher official authorization to conduct the study within the schools under the jurisdiction of the said division.

*Letter to the Principals.* After receiving the permit from the Schools Division Superintendent, the researcher prepared and sent letters to the school principals of the identified schools in the Division of Davao del Norte on December 15, 2025, January 5, and January 12, 2026 which can be viewed in Appendix F. The letter informed the school heads about the purpose of the research, the respondents involved, and the procedures for administering the research instruments. Coordination with the principals was conducted to schedule the appropriate time for the distribution and retrieval of the questionnaires while ensuring that the regular school activities would not be disrupted. Their cooperation was essential in facilitating smooth communication with the respondents and ensuring an organized data collection process.

**Data Analysis**
To address the four research questions of this study, the following statistical procedures were applied to the data gathered from the 118 respondents:
*Weighted Mean* used to measure the extent to which instructional strategies (Problem Solving-Sample Event Strategies, Discussion-Brainstorming Strategies, etc.) and teaching standards (Training, Content, Assessment, etc.) are implemented.

*Pearson Correlation Coefficient* used to determine whether a significant relationship exists between instructional strategies and teaching standards. This statistical method measures the strength and direction of the relationship between the independent variable (instructional strategies) and the dependent variable (teaching standards).

*Multiple Regression Analysis* determine the extent to which each instructional strategy contributes to variations in teaching standards, allowing the identification of the most impactful strategies.

**Ethical Consideration**
n the conduct of this investigation, the researcher observed the following ethical protocols to safeguard the participation rights, personal privacy, and professional dignity of all 118 elementary teachers who served as respondents within the Division of Davao del Norte. This included the assurance of confidentiality, informed consent, voluntary participation, fairness, and adherence to standards of responsible conduct in research. Each of the following ethical factors was contextualized to the study on instructional strategies and teaching standards among elementary teachers.

*Social Value.* This study held significant social value, as it aimed to identify the correlation between instructional strategies and teaching standards in public elementary schools in the Division of Davao del Norte. Understanding this relationship helped improve teaching practices and instructional design, which directly contributed to better learning outcomes among pupils. By providing empirical data, the study supported evidence-based policymaking, informed

teacher development programs, and assisted school administrators and DepEd officials in improving instructional quality across the division. The results benefited not only the teachers but also learners, administrators, and educational policymakers. Ultimately, the social value lay in its potential to elevate education delivery by promoting strategies that aligned with effective teaching standards.

*Informed Consent.* Before participating in the study, all respondents were provided with an informed consent form that clearly outlined the objectives, procedures, risks, and benefits of the research. The language used in the form was simple and understandable to ensure clarity. Participants were informed that their involvement was entirely voluntary and that they could withdraw at any point without any penalties or consequences. Since the study focused on teachers, assent from minors was not applicable. However, emphasis was placed on respecting each participant's autonomy and ensuring their understanding of their rights as research participants. The researcher was available to answer questions and address concerns before and during the study.

*Vulnerability of Respondents.* Although the study involved professional adult teachers, the researcher remained mindful of potential vulnerabilities, particularly those arising from power dynamics or job security concerns. Some teachers might have felt compelled to respond positively due to their employment status within DepEd. To minimize this, the researcher emphasized the anonymity of responses and ensured that participation did not affect job evaluations or performance reviews. Participation was purely voluntary, with no incentives or coercion involved. The researcher was sensitive to respondents' comfort levels and ensured that all interactions were respectful and professional.

*Privacy and Confidentiality.* All data collected from respondents were treated with strict confidentiality, in compliance with the Data Privacy Act of 2012. Personal identifiers were removed or coded, and responses were used only for research purposes. The questionnaire did not ask for names or any identifiable information. Completed forms were securely stored in locked cabinets or password-protected digital storage. Access to the data was limited to the researcher and authorized personnel. Data were destroyed after a specific retention period as outlined in the ethical clearance protocol, ensuring that privacy was maintained even after the study concluded.

*Risk, Benefits, and Safety.* The risks involved in participating in this study were minimal. The primary risk was psychological discomfort in answering some questions related to teaching practices or evaluations. To address this, the questionnaire was designed to be non-invasive and respectful. Respondents were allowed to skip any question they were uncomfortable answering. The potential benefits included self-reflection on current instructional practices, contribution to academic research, and possible future training programs derived from the findings. The safety of respondents was ensured by maintaining a non-threatening environment during data collection, whether conducted in person or online.

*Justice.* Justice was upheld by ensuring that all qualified teachers in the Division of Davao del Norte had an equal opportunity to participate in the study. The selection of participants was based on inclusion criteria, such as current employment in public elementary schools, without regard to gender, ethnicity, or school classification. This ensured that the benefits and burdens of research were fairly distributed and that no group was unduly excluded or overburdened. The study results were also shared equitably with stakeholders who could use the findings for educational improvement.

*Transparency.* Transparency was maintained throughout the study. Respondents were fully informed about the purpose, scope, procedures, and expected outcomes of the research. A research briefing was conducted before the distribution of questionnaires. Findings were disseminated to DepEd Davao del Norte and participating schools through official reports or presentations. This ensured that respondents and stakeholders were aware of how the data were used and the value it brought to the education sector.

*Qualification of Researcher.* The researcher was a graduate student with a background in education and had undergone training in research ethics and quantitative research methods. In conducting this study, the researcher sought guidance from the RMC Research Ethics Committee to ensure all ethical standards were met. The researcher's academic preparation, coupled with familiarity with the local educational context in Davao del Norte, ensured that the study was designed and executed professionally, with a high regard for ethical and scientific rigor.

*Conflict of Interest.* To avoid any conflict of interest, the researcher declared no affiliation with school administrators or DepEd officials that could influence the study outcomes. If the researcher was employed in the same division, their school was not included in the sample. Additionally, no financial or professional gain was expected from the outcome of the research. Transparency was observed by disclosing any potential conflicts to the RMC Research Ethics Committee.

*Adequacy of Facilities.* Data collection was facilitated using printed and digital survey questionnaires, and data analysis was conducted using statistical software such as SPSS. The researcher had access to university-provided software, computing facilities, and secure data storage options. Facilities for data gathering included school offices or classrooms where teachers completed the questionnaires in private. These arrangements ensured convenience and confidentiality for respondents.

*Community Involvement.* The research involved community stakeholders, such as school principals and division officials, by informing them of the study's purpose and outcomes. This involvement encouraged cooperation and promoted a shared sense of ownership of the results. Consultations and feedback sessions were held after data collection to share findings and discuss potential applications of the research. This ensured that the local educational community in Davao del Norte was not only informed but also empowered to utilize the research outcomes for continuous improvement.

**Results**

This chapter presents the findings of the study on teachers' instructional strategies and teaching standards. Results are presented in tabular and textual formats.

**Extent of Instructional Strategies**

Tables 1–8 show the extent of teachers' instructional strategies across eight domains. Overall, the strategies are frequently applied, with all indicators rated **Extensive**.

**Problem-solving sample event strategies** (M = 4.00, SD = 0.89) indicate frequent use of activities such as proposing solutions, developing hypotheses, and gathering information from multiple sources. These findings align with Eristi and Akdeniz (2022), Jonassen and Hung (2020), and Savery (2019), who emphasized problem-centered and inquiry-based instruction for critical thinking and knowledge transfer.

**Discussion-brainstorming strategies** (M = 4.02, SD = 0.93) are commonly practiced, engaging students in group discussions, evidence-based exchanges, and idea-sharing. This aligns with Mercer and Littleton (2019), Hmelo-Silver and Barrows (2020), and Runco and Acar (2019) on collaborative and creative thinking.

**Modeling/simulation/role-playing strategies** (M = 4.03, SD = 0.94) involve dramatization, process modeling, and role enactment, supporting experiential learning. Findings reflect the work of Lantada et al. (2020) and Rittle-Johnson and Loehr (2021), emphasizing active, context-based engagement.

**Thinking/interrogating/interpretation strategies** (M = 4.05, SD = 0.93) promote higher-order thinking through critical questioning, predictions, and argumentation, consistent with King and Kitchener (2021) and Nussbaum (2021). **Presentation strategies** (M = 4.04, SD = 0.93) engage students in storytelling, elaboration, and sharing outputs, aligning with Eristi and Akdeniz (2022), Mayer (2021), and Fiorella and Mayer (2019).

**Question-answer strategies** (M = 4.01, SD = 0.93) encourage open-ended questions, student-generated queries, and wait time, supporting active participation, critical thinking, and dialogue (Chin, 2020; Walsh & Sattes, 2022).

**Strategies of writing/taking notes/summarizing** (M = 4.07, SD = 0.94) involve essays, process maps, and graphical organizers, enhancing organization, analysis, and metacognition (Bangert-Drowns et al., 2020; Fiorella & Mayer, 2019).

**Research/project strategies** (M = 4.02, SD = 0.96) promote inquiry-based learning, project drafts, data collection, and peer presentations, supporting independent thinking and critical inquiry (Hmelo-Silver et al., 2020; Kokotsaki et al., 2022).

**Summary (Table 9):** The overall mean of instructional strategies is **4.03 (SD = 0.93, Extensive)**, with the highest-rated domain being writing/taking notes/summarizing (4.07), followed by thinking/interrogating/interpretation (4.05) and presentation strategies (4.04). This demonstrates consistent application of diverse, student-centered strategies across classrooms.

**Extent of Teaching Standards**

Tables 10–16 present teaching standards across six domains, all rated **Extensive**.

**Training** (M = 4.09, SD = 0.82) shows strong adherence to professional preparation, graduate coursework, and scholarly engagement (Richmond et al., 2022; Darling-Hammond et al., 2019).

**Content** (M = 4.02, SD = 0.90) supports students' information literacy, critical thinking, and written communication (Richmond et al., 2022; Bean, 2021).

**Assessment** (M = 4.05, SD = 0.97) is aligned with learning objectives, includes constructive feedback, and guides instructional adjustments (Brookhart, 2021; Wiliam, 2020).

**Instructional methods** (M = 4.06, SD = 0.92) reflect varied teaching approaches, promoting discussions, engagement, and enthusiasm (Richmond et al., 2022; Salas-Pilco et al., 2022).

**Curriculum guide** (M = 4.03, SD = 0.94) shows alignment of goals with activities, assignments, evaluations, and readability (Richmond et al., 2022; Nilson, 2021).

**Learners' evaluations** (M = 4.03, SD = 0.97) are actively sought and incorporated into instructional improvement (Spooren et al., 2021; Dawson et al., 2020).

**Summary (Table 16):** Overall teaching standards are **4.05 (SD = 0.92, Extensive)**, with training as the highest-rated domain, reflecting the importance of professional development in ensuring instructional quality.

**Relationship Between Instructional Strategies and Teaching Standards**

The Pearson correlation (Table 17) shows a strong, significant relationship between overall instructional strategies and teaching standards (**$r = 0.7930$, $p < 0.05$**), confirming that teachers' use of varied strategies is closely linked to higher teaching standards. Pairwise correlations for individual strategies range from 0.7370 to 0.8703, all significant ($p < 0.05$).

**Domains of Instructional Strategies that Influence Teaching Standards**

Regression analysis (Table 18) indicates that instructional strategies significantly predict teaching standards (**$R^2 = 0.893$, $F = 113.163$, $p < 0.001$**). Significant predictors include:

- **Question-answer strategies** ($\beta = 0.255$, $p = 0.002$)
- **Problem-solving sample event strategies** ($\beta = 0.239$, $p = 0.000$)
- **Thinking/interrogating/interpretation strategies** ($\beta = 0.202$, $p = 0.000$)
- **Modeling/simulation/role-playing strategies** ($\beta = 0.200$, $p = 0.000$)
- **Writing/taking notes/summarizing** ($\beta = 0.154$, $p = 0.003$)
- **Research/project strategies** ($\beta = 0.099$, $p = 0.008$)
- **Presentation strategies** ($\beta = 0.067$, $p = 0.028$)

Discussion/brainstorming strategies were not significant ($\beta = 0.012$, $p = 0.086$). This confirms that structured, inquiry-driven, and interactive strategies are key determinants of teaching standards.

**Theoretical Alignment**

Findings support **constructivist learning theory** (Piaget, 1952; Vygotsky, 1978), **cognitive load theory** (Sweller, 1988; Paas & Sweller, 2022), and **social learning theory** (Bandura, 1977), which collectively highlight that teaching standards improve when instruction is:

1. Student-centered and inquiry-driven (problem-solving, research projects).
2. Cognitively structured and scaffolded (writing, modeling, presentation).
3. Socially interactive (question-answer, peer discussion, role-playing).

**Summary**

The primary objective of this study was to determine the extent to which instructional strategies and teaching standards are significantly related among elementary teachers within the Division of Davao del Norte. In total, 118 elementary teachers from the said division served as respondents. This research was conducted under a quantitative framework, employing a descriptive-correlational approach as its primary method to assess the extent of instructional strategies and teaching standards, as well as the relationship between these variables. The research instruments were adapted from established sources and were validated by a panel of experts prior to their administration. These instruments also underwent an initial pilot study to validate their internal consistency and measurement reliability. Analysis of the data was carried out using the Weighted Mean to determine the extent of the variables, Pearson Product-Moment Correlation to examine the significance of their relationship, and Multiple Regression Analysis to determine the influence of the different domains of instructional strategies on teaching standards. The hypotheses examined and tested using a 0.05 level of significance.

(1) The key outcomes of the study bring to light that elementary teachers in the Division of Davao del Norte are making extensive use of instructional strategies in their day-to-day teaching. Across all eight domains, problem-solving and sample event strategies, discussion and brainstorming strategies, modeling, simulation, and role-playing strategies, thinking, questioning, and interpretation strategies, presentation strategies, question-and-answer strategies, strategies that engage students in writing, note-taking, and summarizing, and research and project-based strategies — teachers consistently earned extensive ratings. This speaks to how genuinely committed these teachers are to bringing a wide variety of learner-centered approaches into their classrooms every single day. What stood out the most were the domains involving writing, note-taking, and summarizing, along with thinking and questioning strategies, both of which received the highest marks, a clear reflection of how strongly these teachers value the development of higher-order thinking skills and the creation of meaningful and well-structured learning experiences for their students.

(2) Similarly, the findings showed that the level of teaching standards demonstrated by teachers is also extensive. The domains pertaining to training, content, assessment, instructional methods, curriculum guide, and learners' evaluations of teaching were all rated at an extensive level. Training obtained the highest level among the indicators, implying that teachers demonstrate strong professional preparation and continuous development. Instructional methods and assessment practices also showed high ratings, reflecting teachers' commitment to diverse teaching techniques and aligned evaluation practices. Such findings indicate that teachers within the Division of Davao del Norte consistently demonstrate competencies aligned with established teaching standards.

(3) Also, the study established that a significant relationship exists between instructional strategies and teaching standards. The computed correlation revealed a strong positive relationship, indicating that improvements in instructional strategies are associated with improvements in teaching standards. The hypotheses that instructional strategies and teaching standards bear no significant relationship with one another was consequently rejected. This finding underscores that the quality and variety of instructional approaches employed by teachers are closely linked to the level of teaching standards they demonstrate.

(4) The regression analysis also revealed that several domains of instructional strategies significantly influence teaching standards. Question-answer strategies emerged as the strongest predictor, followed by problem solving-sample event strategies, thinking/interrogating/ interpretation strategies, and modeling/ simulation/role-playing strategies. Strategies involving writing, research/project-based activities, and presentation methods also showed significant influence. However, discussion-brainstorming strategies did not exhibit a statistically significant independent effect when other strategies were considered simultaneously. The null hypotheses asserting that the domains of instructional strategies do not significantly influence teaching standards in any way was accordingly rejected based on the evidence gathered. Overall, the findings emphasize that interactive, inquiry-driven, and structured instructional practices are critical determinants of high teaching standards among elementary teachers within the Division of Davao del Norte.

***Conclusions***

On the basis of the evidence obtained from this study, the following conclusions were drawn:

(1) The extent of instructional strategies among the 118 elementary teachers in the Division of Davao del Norte is extensive, which implies that these practices are oftentimes evident in classroom instruction. This suggests that teachers consistently employ varied, interactive, and learner centered approaches that promote critical thinking, collaboration, and meaningful engagement, thereby reflecting a high level of instructional practice.

(2) Similarly, the level of teaching standards is likewise extensive, which indicates that these competencies are likewise oftentimes evident among teachers. This implies that teachers demonstrate strong professional performance

in terms of instructional delivery, assessment practices, content mastery, and responsiveness to learners, thereby sustaining a high level of teaching quality in the Division.
(3) Also, the study concludes that a significant relationship exists between instructional strategies and teaching standards. The strong positive relationship indicates that as teachers improve and diversify their instructional strategies, corresponding improvements in teaching standards are observed. This finding confirms that the quality of instructional practices is closely associated with the level of teaching effectiveness demonstrated by teachers.
(4) Further, the study concludes that instructional strategies significantly influence teaching standards. The results revealed that several instructional approaches serve as strong predictors of teaching standards, highlighting that interactive, structured, and inquiry driven practices contribute meaningfully to the quality of teaching. This conclusion is grounded in constructivist learning theory, which places great importance on the active building of knowledge, and is further reinforced by the concept of the zone of proximal development, which draws attention to how scaffolding supports learning, by cognitive load theory, which underscores structured and organized instruction, and by social learning theory, which stresses modeling and interaction. Hence, the null hypotheses were rejected, and the findings imply that improvements in instructional strategies lead to corresponding enhancements in teaching standards.

***Recommendations***

Based on what the study has concluded, the following recommendations are offered for consideration:
For Higher Officials. For the Schools Division Superintendent (SDS), the Schools Division Superintendent of Davao del Norte may issue division-wide memoranda and policies that prioritize the enhancement of instructional strategies, particularly those found to significantly predict teaching standards such as question-answer techniques, problem-solving activities, and modeling/simulation approaches. The SDS may also direct the formulation of a Division Instructional Leadership Plan that integrates evidence-based instructional strategies into the Division's Annual Implementation Plan (AIP). Division-wide capability-building programs and learning action cells (LACs) may be institutionalized to ensure continuous improvement of instructional practices among all elementary teachers. For the Assistant Schools Division Superintendent (ASDS) and Education Program Supervisors (EPS), the ASDS and the EPSs may actively monitor and supervise the implementation of instructional strategies through regular classroom observations, instructional audits, and data-driven coaching sessions. EPSs may design contextualized training programs aligned with the instructional strategy dimensions identified in this study, ensuring that teachers receive targeted professional development in areas of relative weakness. They may also facilitate the development and dissemination of instructional materials and strategy guides to support teachers in effectively integrating diverse approaches in their daily instruction. For the Public Schools District Supervisors (PSDS), the PSDS may strengthen district-level instructional supervision by conducting regular learning walks and peer observation programs focused on the implementation of effective instructional strategies. They may organize district-level LAC sessions where teachers can collaborate, share valuable insights and approaches, and work together in addressing obstacles in instructional delivery. The PSDS may also ensure that school-based improvement plans include specific targets related to the enhancement of instructional strategies and teaching standards.

For School Principals. School principals may actively support instructional supervision and mentoring programs that focus on the effective integration of varied instructional strategies in classroom practice. Principals may promote joint planning sessions among teachers, mutual classroom observations, and the establishment of professional learning communities to promote the sharing of best practices. Instructional leadership should also emphasize data-driven decision-making by using classroom observations, learner feedback, and performance results to guide targeted interventions. By nurturing an environment of continuous growth and development and innovation, principals can ensure that high teaching standards are not only maintained but further enhanced.

For Teachers. Teachers may sustain and continuously refine their use of interactive, inquiry-based, and performance-oriented instructional strategies. Teachers may actively engage in professional development opportunities, personal reflection, and collaborative discussions to strengthen their pedagogical competence. Emphasis may be given to strategies that were found to have strong predictive influence on teaching standards, particularly questioning techniques, problem-solving tasks, and activities that promote analytical thinking and authentic learning experiences. Teachers may regularly seek and incorporate learner feedback to improve instructional delivery and classroom engagement.

For Future Researchers. Future researchers may conduct related studies across different divisions or academic levels to validate and extend the findings of this research. Future investigations may explore additional variables that may

influence teaching standards, such as leadership practices, teacher motivation, school climate, or technological integration. Longitudinal studies may also be undertaken to determine the lasting impact of instructional approaches on learner outcomes and professional growth. By expanding the scope of research, future scholars can contribute to a more profound comprehension of how instructional practices mold the standards and effectiveness of educational practice.

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