

Original Research Article

Instructional practices and learning metaphors of language teachers in public secondary schools

ABSTRACT

This study was conducted to determine the instructional practices and learning metaphors of teachers in Caraga District, Division of Davao Oriental. This study employed the non-experimental quantitative research design utilizing correlational method. The respondents of the study were the 131 teachers utilizing the universal sampling in selecting the actual respondents. The following were the statistical tools used in the computation of data these are the Mean, Product Moment Coefficient Correlation or Pearson r and Regression Analysis. Based on the findings obtained in this study, the following conclusions were drawn, the level of instructional practices of teachers were extensive in the areas of mastery of the subject matter, appropriate use of methods, communication skills, evaluation and feedback. On the other hand, the learning metaphors of teachers likewise were very extensive in the areas of teachers of reflection of effective teaching, clarity of expectations, guided performance, experimentation and discovery. There was a significant relationship between instructional practices and learning metaphors of teachers in public elementary schools. It is recommended that the DepEd officials should support the development in instructional practices of teachers. This is to increase the level of their holistic knowledge in the areas of mastery of the subject matter, appropriate use of methods, communication skills, evaluation and feedback in augmenting school academic and non-academic operations.

Keywords: Instructional practices, learning metaphors, public elementary school heads, correlation

1. INTRODUCTION

Instructional practices influence how information is delivered, received, and experienced by students. These practices typically fall under major categories such as teacher-directed and student-centered approaches [1]. Learning metaphor, on the other hand, is a highly complex process, about which much remains unknown. However, it is widely acknowledged that people learn in diverse ways, and one practical approach to understanding this diversity is by observing the metaphors used in language [2].

Instructional practices refer to the techniques that instructors use to deliver their lessons. Effective instructional practices engage students actively in the learning process. When applied correctly, they also support students in achieving their learning objectives [3].

Learning metaphor is a dynamic process central to the understanding of teaching, not only for teachers but also for students and school leaders. It encompasses any symbolic expression or representation that helps individuals conceptualize the learning process. For teachers, learning metaphors can extend beyond verbal expressions and include nonverbal behaviors, self-produced art, items in the environment, or imaginative representations. Essentially, what a person says, sees, hears, feels, does, or imagines can serve as a tool for producing, comprehending, and reasoning through a learning metaphor. Learning metaphor

is not simply an occasional foray into figurative language but rather a fundamental basis for everyday cognition [4].

In their foundational study, in all aspects of life, people define their reality through learning metaphors and act based on these metaphors. They draw inferences, set goals, make commitments, and execute plans, all rooted in their metaphorical understanding of experiences—consciously and unconsciously. However, this reliance on individual learning metaphors may sometimes lead to misunderstandings in the classroom due to differing perspectives [5].

The characteristics of learning metaphors, such as vividness, compactness, and memorability, were identified as essential to their effectiveness. Learning metaphors encapsulate abstract and intangible information in a concise, memorable way, profoundly impacting how students learn. Since metaphors describe one experience in terms of another, they shape and limit how the original experience is understood [6].

In the Philippines, this research introduces a novel approach by applying "clean language" questions to uncover students' metaphors for learning. Originally developed by psychotherapist Grove [7], clean language questions are designed to explore individuals' personal metaphors without altering or influencing their original expressions. Grove found that by using clients' exact words to ask about their metaphors, he could facilitate deeper self-awareness and perceptual shifts. This study adapts this therapeutic technique to the educational context, offering a unique way to understand students' perceptions of learning through their own metaphorical language.

This research aims to provide new insights into instructional practices by examining how teachers' awareness of learning metaphors can enhance teacher-student interactions, ultimately fostering students' academic and social development. The study highlights the benefit of clean language as a non-directive, respectful approach to understanding students' perspectives, which may lead to improved communication, better alignment of teaching strategies with students' learning processes, and heightened student engagement. By examining teachers' instructional practices alongside their own and their students' learning metaphors, this research offers educators a reflective tool that supports more responsive and effective teaching, contributing to the broader goal of educational success.

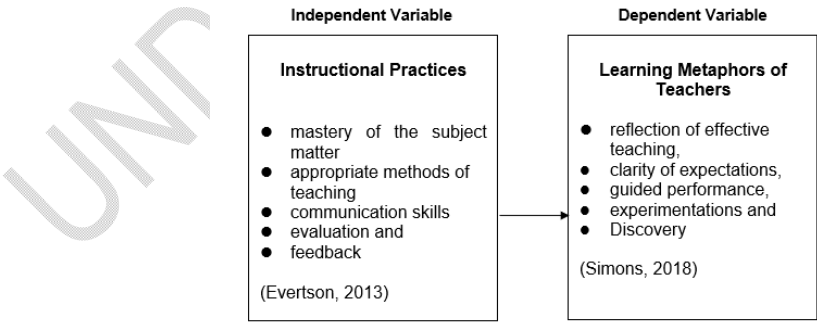


Figure 1. Conceptual Framework of the Study

2. METHODOLOGY

2.1 Research Design

This study employed a descriptive correlation method, chosen for its ability to describe the current status of a situation and explore potential causes behind specific phenomena. Correlational research involves collecting data to determine the existence and degree of a relationship between two or more quantifiable variables [8].

The quantitative research design used here aims to uncover how many individuals think, act, or feel in a particular way. Quantitative research typically involves large sample sizes, focusing on the quantity of responses rather than the focused or emotional insights commonly pursued in qualitative research. It generally favors closed-ended questions, providing respondents with a set list of answers, which enhances efficiency by minimizing the need for coding extensive open-ended responses. However, where appropriate, quantitative research designs may include another category, allowing respondents whose answers don't fit the main categories to record precise responses for analysis [9].

This descriptive survey gathered quantitative data on the phenomenon under investigation. The quantitative approach provided an appropriate framework for collecting data from the target respondents, designed in a structured questionnaire format. This study focused on determining the relationship between the extent of instructional practices and the learning metaphors of teachers in the Caraga District, Division of Davao Oriental.

2.2 Research Respondents

The respondents of this study were 135 teachers in the Caraga District, Division of Davao Oriental. These teachers evaluated the extent of their instructional practices and classroom behavior through a questionnaire administered by the researcher. All participating teachers had served for at least three years in public **secondary** schools. The study was conducted during the 2020-2021 school year.

The researcher employed a universal sampling method, selecting all eligible teachers as the actual respondents. To account for potential non-responses, the sample size exceeded the initial target of 131 respondents. However, the majority of the additional provision was successfully utilized, as most respondents completed the questionnaire.

2.3 Research Instrument

The research instruments used for data collection were adapted from various sources and contextualized to fit the local setting. The survey questionnaire was specifically adapted from Everson's (2013) study on instructional practices and Simons' (2018) study on learning metaphors. The questionnaire was refined with the assistance of the thesis adviser and three additional validators who assessed its content. The instrument's reliability and validity were confirmed, yielding an over-all Cronbach's alpha of 0.792. The questionnaire comprised 50 items, organized into 10 indicators, with each indicator containing 5 questions. A Likert scale was utilized to measure the extent of instructional practices and learning metaphors of teachers in the Caraga District, Division of Davao Oriental.

2.4 Data Gathering Procedure

A letter of permission was obtained to conduct the study on the instructional practices and learning metaphors of teachers in the Caraga District, Division of Davao Oriental. This letter was approved and signed by the Dean of Graduate Studies at Rizal Memorial Colleges, the thesis adviser, and the respective school principals, moderators, or teachers in charge within the Caraga District.

To ensure smooth administration, clear and sufficient copies of the questionnaire were printed. The researcher personally administered the questionnaires to the respondents, requesting them to answer honestly to ensure the validity and reliability of the data collected. All questionnaires (100%) were successfully retrieved. The responses were then compiled, tabulated, and subjected to statistical analysis to fulfill the study's objectives and provide meaningful interpretations.

2.5 Data Analysis

The collected data were classified, analyzed, and interpreted using specific statistical tools to meet the study's objectives. The mean was calculated to determine the extent of instructional practices and classroom behavior among public elementary school teachers in the Caraga District, Division of Davao Oriental. Additionally, Pearson's Product-Moment Correlation (Pearson r) was utilized to examine the relationship between the extent of instructional practices and learning metaphors within this district. Together, these analyses provided insights into the correlations and patterns relevant to instructional practices and teachers' learning metaphors in the region.

3. RESULTS AND DISCUSSION

3.1 Extent of Instructional Practices of Teachers

Table 1. *Extent of Instructional Practices of Teachers*

Item	Mean	Descriptive Equivalent
mastery of the subject matter	3.72	Extensive
appropriate use of methods	3.56	Extensive
communication skills	4.54	Very Extensive
evaluation	4.54	Very Extensive
feedback	3.95	Extensive
Overall Mean	4.06	Extensive

As demonstrated in Table 1 is the extent of instructional practices of teachers in terms of mastery of the subject matter, appropriate use of methods, communication skills, evaluation and Feedback. The mean ratings result of these indicators are as follows mastery of the subject matter yielded a mean rating of 3.72, appropriate use of methods got a mean rating of 3.56, communication skills earned a mean rating of 4.54, evaluation obtained a mean rating of 4.54 and feedback acquired a mean rating of 3.95. The overall results in the extent of instructional practices of teachers in terms of mastery of the subject matter, appropriate use of methods, communication skills, evaluation and feedback had overall mean rating of 4.06. This implies that the extent of instructional practices of teachers in terms of mastery of the subject matter, appropriate use of methods, communication skills, evaluation and feedback are extensive.

This finding supports the study of Day et al. [10], who concluded that effective instructional practices are a critical factor in student achievement. When teachers apply extensive and varied instructional strategies, it leads to improved student outcomes, as diverse approaches address the individual learning needs of students. The study highlighted that when teachers use a range of methods, from direct instruction to more student-centered practices, students are more engaged, and their learning experiences are enhanced.

Moreover, the finding aligns with the study of Moore [11], who identified that the breadth and quality of instructional practices directly impact classroom learning environments. When teachers are skilled in applying a wide array of instructional strategies, they create more dynamic and effective learning experiences, which in turn foster greater student engagement and academic success.

3.2 Extent of Learning Metaphors of Teachers

Table 2. *Extent of Learning Metaphors of Teachers*

Item	Mean	Descriptive Equivalent
reflection of effective teaching	3.55	Extensive
clarity of expectations	4.32	Very Extensive
guided performance	4.55	Very Extensive
experimentation	4.56	Very Extensive
Discovery	4.56	Very Extensive
Overall Mean	4.31	Very Extensive

As shown in Table 2 is the summary of the extent of learning metaphors of teachers in terms of reflection of effective teaching, clarity of expectations, guided performance, experimentations and discovery. The mean ratings result of these indicators are as follows reflection of effective teaching yielded a mean rating of 3.55, clarity of expectations got a mean rating of 4.32, guided performance earned a mean rating of 4.55, experimentation obtained a mean rating of 4.56 and discovery acquired a mean rating of 4.56. The overall results in the summary of the extent of learning metaphors of teachers in terms of reflection of effective teaching, clarity of expectations, guided performance, experimentation and discovery had overall mean rating of 4.31. This implies that the extent of learning metaphors of teachers in terms of reflection of effective teaching, clarity of expectations, guided performance, experimentation and discovery are very extensive.

This finding corroborates with the study of Lakoff & Johnson [5], who explored the significant role of metaphors in shaping human understanding and communication. Their research highlighted that metaphors are not only linguistic tools but also integral to how individuals structure and conceptualize knowledge. The extensive use of learning metaphors by teachers, as indicated by the high mean rating, supports the idea that metaphors are powerful teaching tools that help make abstract concepts more tangible and facilitate deeper understanding.

Furthermore, this finding coincides with the study of Landau et al. [11], which examined the impact of teaching strategies, including metaphor use, on student engagement and comprehension. When teachers effectively use metaphors in their instruction, it enhances students' ability to relate to and retain complex concepts. Their study suggests that learning

metaphors serve as bridges between known and unknown ideas, making them particularly effective in supporting student learning and fostering a more engaging educational experience.

3.3 Significant Relationship Between the Extent of Instructional Practices and Learning Metaphors of Teachers

Table 3. *Significant Relationship Between the Extent of Instructional Practices and Learning Metaphors of Teachers*

Independent Variable (Instructional Practices)	Dependent Variable (Learning Metaphors)	p-value	Descriptive Level	Computed r-value	Decision
mastery of the subject matter	reflection of effective teaching clarity of expectations guided performance experimentation discovery	0.02	High	0.76	Reject Ho
appropriate use of methods	reflection of effective teaching clarity of expectations guided performance experimentation discovery	0.00	High	0.74	Reject Ho
communication skills	reflection of effective teaching clarity of expectations guided performance experimentation discovery	0.04	High	0.78	Reject Ho

evaluation	reflection of effective teaching clarity of expectations guided performance experimentation discovery	0.04	High	0.75	Reject Ho
feedback	reflection of effective teaching clarity of expectations guided performance experimentation discovery	0.04	High	0.76	Reject Ho
Overall		0.03	High	0.76	Reject Ho

As shown in the Table 3, it demonstrates a statistically significant and positive relationship between various instructional practices and learning metaphors, suggesting that effective teaching strategies are closely tied to positive learning experiences. Each instructional practice—mastery of the subject matter, appropriate use of methods, communication skills, evaluation, and feedback—correlates strongly with learning metaphors such as reflection of effective teaching, clarity of expectations, guided performance, experimentation, and discovery.

The overall findings indicate a strong, positive connection between effective instructional practices and learning metaphors. The significant p-value of 0.03 and r-value of 0.76 for the overall relationship suggest that when instructors implement practices like mastering their subject, using appropriate teaching methods, maintaining clear communication, offering thorough evaluations, and providing constructive feedback, students experience more effective and engaging learning metaphors.

This finding affirms the view of Gagné [12], who argued that instructional practices play a crucial role in facilitating learning by making abstract concepts more accessible. The use of varied instructional strategies, including the integration of metaphors, directly enhances students' understanding and engagement. The positive relationship between effective instructional practices and learning metaphors in this study supports his assertion that teachers' strategies are pivotal in shaping positive learning outcomes.

Moreover, the finding validates the theory of Constructivism by Piaget [13], which suggests that learning occurs most effectively when students actively construct knowledge through interaction with the environment, including through teachers' instructional methods. The importance of prior knowledge and cognitive structures in learning, with metaphors serving as tools to bridge gaps in understanding. The significant relationship identified between

instructional practices and learning metaphors aligns with this view, highlighting that effective teaching methods help students make connections between new and existing knowledge.

Furthermore, the findings confirm Sweller's Cognitive Load Theory [14], which suggests that instructional practices should aim to reduce unnecessary cognitive load and enhance learning efficiency. The positive relationship found in this study between instructional practices and learning metaphors not only supports this theory but also highlights the unique role of metaphors as a practical tool for simplifying complex information and reducing cognitive overload. Compared to previous research, which has often focused on cognitive load in terms of content complexity alone, this study introduces the novelty of integrating metaphorical learning as a strategy to manage cognitive demands. This alignment with and extension of prior findings suggests that metaphors can facilitate deeper learning, especially when students are dealing with abstract or challenging concepts. The implications for education are significant, as integrating metaphor-based instruction may help educators design more effective learning experiences that support comprehension and retention across various subjects and cognitive levels.

4. CONCLUSION

Based on the findings of the study, the following conclusions are drawn: Teachers in the Caraga District, Division of Davao Oriental, demonstrate a high degree of instructional practices, indicating that their teaching methods, strategies, and overall approaches are well-developed and extensively applied. Furthermore, their use of learning metaphors—a teaching approach where complex ideas are explained through relatable, simplified concepts—is found to be highly prevalent and sophisticated. This extensive use of metaphors in instruction suggests that teachers not only prioritize making content accessible but also actively employ strategies to enhance students' understanding and retention of material.

The significant relationship observed between instructional practices and learning metaphors highlights a connection between the depth of teachers' methods and their ability to convey complex ideas effectively. Specifically, the study reveals that as teachers' instructional practices increase in complexity and thoroughness, their reliance on and development of learning metaphors also expand. This finding led to the rejection of the null hypothesis, reinforcing the idea that robust instructional practices directly influence and enhance the use of metaphorical teaching techniques.

5. RECOMMENDATIONS

Based on the findings and conclusions of the study, several recommendations are put forward for consideration. DepEd officials are encouraged to provide greater support for the development of teachers' instructional practices, enhancing their knowledge in areas such as subject mastery, method selection, communication skills, and effective evaluation and feedback. This support is crucial for improving both academic and non-academic operations in schools. District supervisors should also offer opportunities for school leaders and teachers to deepen their understanding of instructional practices and learning metaphors, fostering positive behavioral changes and strengthening relationships within the school community. School heads should prioritize the development of instructional practices and learning metaphors, aligning them with the school's improvement plan to achieve better outcomes. Teachers, in turn, should continue developing their teaching potential, ensuring that their practices are aligned with their teaching philosophy, which is essential for fostering student growth and development. Lastly, future researchers should examine the challenges faced by schools in identifying and developing instructional practices and learning metaphors.

among teachers, particularly in other districts within the Caraga Region, Division of Davao Oriental, to gain a broader perspective on how these factors influence educational success.

CONSENT

In this study, ethical considerations were carefully upheld to ensure integrity and respect for all participants, with a strong emphasis on protecting respondents' confidentiality. Before gathering data, participants were thoroughly informed about the study's purpose and the privacy safeguards in place, and informed consent was obtained. Identifiable information was removed from datasets, and participants were assigned unique codes to maintain anonymity throughout data analysis and reporting. Digital data were securely stored on password-protected servers, while physical documents were kept in locked cabinets accessible only to authorized staff. Findings were reported in aggregate form, ensuring no individual respondent could be identified.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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