INTERDISCIPLINARY INSTRUCTION AND CULTURAL RECEPTIVENESS OF TEACHERS IN PUBLIC ELEMENTARY SCHOOL

Claribel Loguinsa-Quillo[1]

[1]Researcher, The Rizal Memorial Colleges, Inc.

ABSTRACT

This study examines the relationship between interdisciplinary instruction strategies and cultural receptivity among public elementary school teachers in the Caraga District, Division of Davao Oriental. Interdisciplinary instruction integrates knowledge and skills across disciplines to address real-world problems, fostering connections, adaptability, and international-mindedness. Cultural receptivity involves recognizing, respecting, and integrating cultural diversity within educational practices to create inclusive learning environments. Together, these approaches enhance teaching effectiveness, encourage critical thinking, and promote an appreciation for diversity. Using a non-experimental quantitative research design with a correlational method, the study involved 133 teachers selected through universal sampling. Data collection utilized a validated questionnaire with a Cronbach's Alpha of 0.748, assessing interdisciplinary strategies (integrative approaches, understanding, and connections) and cultural receptivity (sensitivity to ethnic backgrounds, teacher roles, language, and inclusive curricula). Statistical analyses, including Pearson Product-Moment Correlation and regression analysis, were employed to identify relationships and influences between the two constructs. The findings reveal that interdisciplinary strategies and cultural receptivity were both rated as high, with significant positive correlations ($r = 0.860$, $p < 0.05$). Teachers demonstrated strong implementation of integrative approaches and understanding but moderate efforts in fostering connections. In terms of cultural receptivity, sensitivity to language and inclusive curricula were highly manifested, with an emphasis on celebrating diversity and tailoring instruction to students' cultural and linguistic needs. Regression analysis indicated that interdisciplinary domains significantly influence cultural receptivity, highlighting the importance of innovative, connected, and inclusive teaching practices. These results underscore the symbiotic relationship between interdisciplinary instruction and cultural receptivity, emphasizing their role in creating inclusive, dynamic, and effective learning environments. Recommendations include professional development programs, whole-school approaches to interdisciplinary and cultural practices, and policies fostering equity and inclusivity in education. The study contributes valuable insights for educators, administrators, and policymakers aiming to enhance teaching strategies in culturally diverse and interdisciplinary contexts.

Keywords: Interdisciplinary instruction, cultural receptivity, inclusive education, integrative teaching strategies, cultural diversity in education.

1. INTRODUCTION

Education today demands more than the mastery of isolated disciplines; it requires a holistic approach that fosters connections between various fields of knowledge. Interdisciplinary instruction has emerged as a response to these challenges, emphasizing the integration of knowledge, skills, and attitudes across subject boundaries. This approach aims to construct a cohesive curriculum that is engaging, relevant, and significant to students' lives. Scholars like Bezemer and Kress (2018) and Nicolescu (2012) argue that traditional subject-specific education is insufficient in equipping students with the tools to navigate the complexities of modern society. Interdisciplinary instruction addresses this gap by providing students with the ability to explore content that transcends subject boundaries, promoting international-mindedness, adaptability, and cultural competence.

The role of interdisciplinary instruction in promoting cultural receptivity is particularly relevant in today's increasingly diverse societies. In contexts such as Australia, the integration of cultural competency into interdisciplinary learning is seen as vital for fostering an understanding of diverse norms and practices among students and their families. Similarly, in the Philippines, the integration of interdisciplinary methods in graduate-level research courses has demonstrated their potential in unifying knowledge and fostering cultural and academic competence (Bellocchi et al., 2013). However, while the benefits of this instructional approach are widely acknowledged, its implementation faces challenges, particularly in designing objectives that effectively integrate multiple disciplines and cultural perspectives.

Background of the Study

The concept of interdisciplinary instruction is rooted in the belief that real-world problems demand knowledge from multiple disciplines. It seeks to unify diverse perspectives and enable students to synthesize knowledge into actionable solutions. This instructional approach is especially significant in a globalized world where cultural competency is a key requirement for personal and professional success. In Australia, for instance, interdisciplinary learning promotes

international-mindedness by encouraging students to make connections across disciplines and apply their learning to real-life situations (Abrams et al., 2019). Similarly, in the Philippines, educators have leveraged interdisciplinary approaches to enhance students' understanding of research practices, illustrating the adaptability and relevance of this method in diverse contexts (Eden & Maisog, 2016).

Despite its advantages, the implementation of interdisciplinary instruction is not without its challenges. Teachers often face difficulties in creating objectives that are both interdisciplinary and contextually relevant. Furthermore, the integration of cultural receptivity—understanding and valuing diverse cultural backgrounds—into interdisciplinary instruction requires a nuanced approach. Researchers like Khalifa et al. (2016) emphasize the need for educational leaders to support minoritized students by examining assumptions about race and culture and adopting practices that are inclusive and responsive to demographic shifts.

Statement of the Problem

This study aims to explore the relationship between interdisciplinary instruction strategies and the cultural receptivity of teachers in public elementary schools in Caraga District, Division of Davao Oriental. Specifically, it seeks to answer the following questions:

1. What is the degree of interdisciplinary instruction strategies among teachers in terms of integrative approaches, understanding, and connections?

2. What is the level of cultural receptivity among teachers concerning students' ethnic backgrounds, teachers' roles, sensitivity to language, and inclusive curricula?

3. Is there a significant relationship between interdisciplinary instruction strategies and the cultural receptivity of teachers?

4. Which domains of interdisciplinary instruction strategies significantly influence cultural receptivity among teachers?

Hypotheses

The study tests the following null hypotheses:

- There is no significant relationship between the level of interdisciplinary instruction strategies and the cultural receptivity of teachers in public elementary schools.

- None of the domains of interdisciplinary instruction strategies significantly influence the cultural receptivity of teachers.

2. SIGNIFICANCE OF THE STUDY

The findings of this study hold significant implications for multiple stakeholders. For CHED officials, the study provides insights into improving interdisciplinary instruction strategies and cultural awareness, enabling them to design policies that align with global education standards. School administrators can utilize the findings to foster an inclusive and cohesive educational environment, enhancing both interdisciplinary learning and cultural receptivity. Teachers stand to benefit from strategies that enable them to integrate cultural diversity into their pedagogy, empowering them to create inclusive and engaging classrooms. Lastly, future researchers can build on this study to further explore the intersection of interdisciplinary instruction and cultural competence in diverse educational contexts.

Scope and Delimitations- The study focuses on public elementary schools in Caraga District, Division of Davao Oriental, examining interdisciplinary instruction strategies and cultural receptivity within this specific context. While the findings provide valuable insights, they are limited to this particular educational setting and may require adaptation for broader application.

Definition of Terms- Interdisciplinary instruction strategies refer to the integration of knowledge and skills across disciplines to address real-world problems. This approach emphasizes integration, understanding, and connections as key components of learning (Pigdon & Woolley, 1992; Fogarty & Stoehr, 2015). Cultural receptivity, on the other hand, involves recognizing and respecting diverse cultural values and promoting inclusive relationships (Albers & Harste, 2017; Chandler-Olcott & Mahar, 2013).

Conclusion

In a rapidly evolving world, interdisciplinary instruction and cultural receptivity are essential components of modern education.

By fostering connections across disciplines and promoting an appreciation for cultural diversity, these approaches prepare students to navigate and thrive in complex, globalized societies. This study aims to contribute to the understanding and implementation of these educational strategies, ultimately enhancing the learning experience for students and teachers alike.

3. METHOD

This chapter presents the research design, respondents, research instrument, data gathering procedure, and data analysis methods used to examine the interdisciplinary instruction strategies and cultural receptivity of teachers in public elementary schools in Caraga District, Division of Davao Oriental.

Research Design

This study utilized a non-experimental quantitative research design employing a correlational method. Quantitative research emphasizes objective measurements and statistical analysis of data collected through structured instruments, such as questionnaires and surveys, to explore relationships between variables (Dörnyei, 2017). The purpose of this design is to determine the relationship between the independent variable, interdisciplinary instruction strategies, and the dependent variable, cultural receptivity of teachers.

A correlational study allows for the examination of associations between variables without manipulating the research environment. Descriptive aspects of this study focus on the characteristics of the population, while correlational analysis explores the strength and direction of relationships (Black, 2017). Thus, this study provides insights into how interdisciplinary instruction strategies relate to cultural receptivity among public elementary school teachers.

Research Respondents

The respondents for this study were the 133 public elementary school teachers in Caraga District, Division of Davao Oriental, identified through universal sampling. This method ensured that the entire population of interest was included as respondents, minimizing sampling bias. Eligibility criteria required teachers to have served at least three years in public schools. Data collection was conducted during the 2021-2022 school year. Respondents evaluated their colleagues through a survey questionnaire, ensuring comprehensive and reliable feedback.

Research Instrument

The research instrument was divided into two sections: interdisciplinary instruction strategies and cultural receptivity of teachers. The questionnaire was developed based on a review of relevant literature and validated by experts in the field of Educational Management. Following expert feedback, the instrument underwent revisions and was pilot-tested on 30 teachers from a separate public elementary school in the same district.

The reliability of the instrument was confirmed with a Cronbach's Alpha value of 0.748, indicating acceptable internal consistency. The final instrument consisted of 40 items distributed across five subscales. The scoring was based on a 5-point Likert scale with the following interpretations:

Scale for Interdisciplinary Instruction Strategies

Range of Means	Descriptive Level	Interpretation
4.20–5.00	Very High	Strategies always evident.
3.40–4.19	High	Strategies oftentimes evident.
2.60–3.39	Moderate	Strategies occasionally evident.
1.80–2.59	Low	Strategies seldom evident.
1.00–1.79	Very Low	Strategies never evident.

Scale for Cultural Receptivity

Range of Means	Descriptive Level	Interpretation
4.20–5.00	Very High	Cultural receptivity always manifested.
3.40–4.19	High	Cultural receptivity oftentimes manifested.
2.60–3.39	Moderate	Cultural receptivity occasionally manifested.
1.80–2.59	Low	Cultural receptivity seldom manifested.
1.00–1.79	Very Low	Cultural receptivity never manifested.

Data Gathering Procedure

The data collection process followed these steps:

Approval Process: The researcher secured permission and endorsements from the Dean of Graduate School, the Schools Division Superintendent, and School Heads.

Pilot Testing: Pilot testing questionnaires were distributed to a separate group of teachers to validate the instrument's reliability and clarity.

Survey Administration: Once the final instrument was ready, the researcher scheduled visits to schools for the distribution of questionnaires. Clear instructions and explanations about the study were provided to participants.

Data Collection: Completed questionnaires were collected, ensuring all responses were accounted for.

Data Processing: The collected data were tallied, tabulated, and prepared for statistical analysis.

Data Analysis

The data were analyzed using the following statistical tools:

Mean: Used to measure the level of interdisciplinary instruction strategies and cultural receptivity of teachers.

Pearson Product-Moment Correlation (Pearson r): Employed to determine the strength and significance of relationships between interdisciplinary instruction strategies and cultural receptivity.

Regression Analysis Applied to identify which domains of interdisciplinary instruction strategies significantly influence cultural receptivity.

This approach provided a robust framework for examining the interaction between interdisciplinary instruction strategies and cultural receptivity, offering valuable insights for educational practices in public elementary schools.

4. RESULTS AND DISCUSSION

This chapter presents the analysis, interpretation, and findings of the data gathered, addressing the research questions concerning interdisciplinary instruction strategies and cultural receptivity of teachers in public elementary schools in Caraga District, Division of Davao Oriental.

Interdisciplinary Instruction Strategies

Integrative Strategies. The results indicate that teachers in public elementary schools often implement integrative interdisciplinary instruction strategies, with an overall mean rating of 3.57 (high). Key practices include finding out what students already know, helping them generate questions to explore, and providing resources and opportunities for fieldwork. Teachers also share and display the results of students' explorations through culminating activities, though these are less consistently applied.

This finding underscores the collaborative nature of integrative strategies, where topics of study are selected based on student interests, curriculum standards, and local resources. According to Fogarty (2011), such integrative approaches encourage students to make meaningful connections among subject areas, fostering engagement and practical application of knowledge.

Understanding. Teachers demonstrated a strong commitment to understanding as part of their interdisciplinary instruction strategies, with an overall mean rating of 3.80 (high). This reflects practices such as transdisciplinary learning, allowing students to construct their own meaning, and providing opportunities for significant and relevant learning experiences.

These results align with Banks (2011), who emphasizes that understanding within interdisciplinary instruction promotes diversity, human commonality, and the development of multiple perspectives. Teachers play a pivotal role in bridging theoretical concepts with real-world applications, helping students transfer their learning into broader contexts.

Connections. In terms of connections, the results reveal a moderate implementation of interdisciplinary strategies, with an overall mean rating of 2.98. Teachers provided ideas that encouraged their colleagues to take risks, designed innovative approaches to curriculum development, and discussed challenges during group meetings. However, the adaptation of designs and materials for diverse group projects was less evident.

As highlighted by Chang (2008), the ability to connect instructional practices across disciplines is crucial for fostering creativity and collaboration. Despite moderate performance in this area, the findings suggest that teachers are making efforts to enhance the relevance and coherence of their teaching approaches.

Summary of Interdisciplinary Instruction Strategies

Overall, the interdisciplinary instruction strategies employed by teachers were rated high, with an overall mean of 3.45. Teachers demonstrated consistent efforts in integrative strategies and understanding, with moderate performance in

fostering connections. This highlights the need for continued professional development to enhance connection-building practices, which are critical for holistic interdisciplinary instruction.

Cultural Receptivity

Students' Ethnic Background. Cultural receptivity related to students' ethnic backgrounds was rated high, with an overall mean rating of 3.54. Teachers actively expressed interest in students' ethnic backgrounds, encouraged students to share their cultural traditions, and recognized the importance of proper name pronunciation. These practices foster trust and inclusivity in the classroom.

This finding supports Brown's (2017) assertion that recognizing students' cultural identities and celebrating their traditions is vital for creating a culturally responsive classroom environment. Such efforts help students feel valued and included, promoting better engagement and mutual respect.

Teachers' Role. Teachers' roles in fostering cultural receptivity were also rated high, with a mean of 3.32. Teachers acted as facilitators rather than instructors, creating a nurturing environment and reducing power dynamics in the classroom. They provided students with opportunities to share their interests and take ownership of their learning.

Charmaz (2010) highlights the importance of shifting from authoritative teaching to facilitative approaches, which empower students to connect more deeply with the material. This aligns with the findings, emphasizing the need for teacher-student collaboration in culturally diverse classrooms.

Sensitivity to Language. Sensitivity to language was rated high, with an overall mean of 3.55. Teachers celebrated linguistic diversity, provided instructional materials tailored to students' proficiency levels, and encouraged mastery of both their native language and English. These practices reflect a strong commitment to inclusivity and support for non-native speakers.

Lawrence et al. (2012) stress the importance of sensitivity to language in culturally diverse classrooms. By tailoring instruction to students' linguistic needs, teachers can reduce feelings of marginalization and foster confidence among learners.

Inclusive Curriculum. The level of cultural receptivity regarding inclusive curricula was rated high, with an overall mean of 3.56. Teachers ensured that all students were included, acknowledged unique differences, and synthesized cultural differences into the curriculum. This approach not only promoted inclusion but also helped students from minority backgrounds develop a sense of identity. Cervetti, Damico, and Pearson (2016) assert that an inclusive curriculum enhances students' ability to navigate diverse cultural landscapes. By integrating students' cultural experiences into the learning process, teachers create a more inclusive and equitable educational environment.

Relationship Between Interdisciplinary Instruction and Cultural Receptivity.

The study found a significant positive relationship between interdisciplinary instruction strategies and cultural receptivity among teachers, with an r-value of 0.860 (p < 0.05). This indicates that teachers who effectively implement interdisciplinary strategies are more likely to exhibit higher levels of cultural receptivity.

This finding is consistent with Beach and Bruce (2012), who argue that interdisciplinary instruction fosters a deeper understanding of cultural diversity by integrating multiple perspectives into the learning process. The alignment between these two variables underscores the interconnected nature of teaching strategies and cultural awareness.

Influence of Interdisciplinary Domains on Cultural Receptivity

Regression analysis revealed that the domains of interdisciplinary instruction significantly influence cultural receptivity, with an r-value of 0.836 (p < 0.05). This suggests that improving integrative strategies, understanding, and connections can enhance teachers' ability to foster cultural inclusivity.

Ahmad (2011) emphasizes the role of structured instructional practices in promoting classroom inclusivity. By refining their interdisciplinary approaches, teachers can create a more supportive and culturally responsive learning environment.

Conclusion

The findings highlight the strong relationship between interdisciplinary instruction strategies and cultural receptivity in public elementary schools. Teachers' efforts to integrate knowledge across disciplines, promote understanding, and foster connections are instrumental in enhancing cultural awareness and inclusivity. These results underscore the need for continuous professional development and collaboration among educators to further strengthen these practices.

5. CONCLUSIONS AND RECOMMENDATIONS

This chapter provides a summary of the findings, conclusions, and recommendations based on the results of the study, which explored the interdisciplinary instruction strategies and cultural receptivity of teachers in public elementary schools in Caraga District, Division of Davao Oriental.

Conclusions

Based on the findings, the following conclusions were drawn:

Interdisciplinary Instruction Strategies:The level of interdisciplinary instruction strategies employed by teachers in public elementary schools, specifically in terms of integrative, understanding, and connections, is often manifested. This indicates that while teachers actively employ strategies to foster interdisciplinary learning, there are areas requiring further enhancement to maximize the effectiveness of their instructional practices.

Cultural Receptivity: The cultural receptivity of teachers in terms of students' ethnic backgrounds, teachers' roles, sensitivity to language, and inclusive curricula is often manifested. This shows that teachers acknowledge and incorporate cultural diversity into their teaching practices, though further efforts can enhance their receptivity and inclusiveness.

Relationship Between Interdisciplinary Instruction and Cultural Receptivity: A significant relationship exists between interdisciplinary instruction strategies and cultural receptivity. This underscores the interconnectedness of teaching approaches and cultural awareness, where the enhancement of one positively influences the other.

Influence of Interdisciplinary Domains on Cultural Receptivity: The domains of interdisciplinary instruction significantly influence cultural receptivity. This highlights the importance of well-rounded instructional strategies in fostering culturally inclusive educational environments.

Recommendations

Based on the findings and conclusions, the following recommendations are made:

Improving Interdisciplinary Instruction Strategies: School heads and educators should focus on enhancing areas with room for improvement, such as:

Displaying the results of students' explorations and providing opportunities for review and evaluation.

Allowing students to authentically make connections and transfer their learning to real-world applications.

Supporting redevelopment efforts to ensure innovative practices are adapted and reused effectively across disciplines.

Ensuring that instructional strategies prioritize student learning outcomes over rote teaching.

Enhancing Cultural Receptivity:

Teachers should enrich their cultural receptivity practices by:

Taking the time to learn and correctly pronounce student names, fostering respect and inclusivity.

Celebrating linguistic diversity by tailoring instructional materials to the language fluency levels of non-native speakers.

Ensuring all students are included in every aspect of school life while acknowledging and celebrating their unique differences.

Strengthening Interdisciplinary and Cultural Practices:

School administrators should adopt a holistic approach to enhance both interdisciplinary instruction and cultural receptivity. Key actions include:

Improving and sustaining engaging activities for students that address their needs and foster lifelong learning.

Designing and implementing school-wide policies that integrate interdisciplinary and cultural learning practices.

Taking a Whole-of-School Approach:

To effectively enhance interdisciplinary instruction and cultural receptivity, school heads should:

Consider the integration of interdisciplinary strategies in all school-related policy decisions.

Prioritize education as a core subject in policy-making and resource allocation.

Provide comprehensive pre-service training and professional development opportunities for teachers.

Ensure equity in access to quality education and opportunities for all students.

These recommendations aim to guide educators, administrators, and policymakers in fostering a more inclusive and interdisciplinary approach to education, ensuring that teachers are well-equipped to meet the diverse needs of students and promote a culturally responsive and integrative learning environment.

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