

Special Education Teachers' Preparedness in Instructional Strategies in Relation to Academic Engagement of Learners' with Special Needs

Cecile C. Aca-ac., Elsa B. Buenavidez., Grace G. Tizon., Cynthia S. Superable., Rochelan A. Lumasag

Misamis University, Ozamiz City, Philippines

DOI: <https://doi.org/10.47772/IJRISS.2026.100500523>

Received: 10 May 2026; Accepted: 15 May 2026; Published: 06 June 2026

ABSTRACT

This study examined the relationships among teachers' preparedness, instructional strategy implementation, and the academic engagement of learners with special needs in the Misamis Occidental Division during SY 2025–2026 using a descriptive-correlational design. A total of 120 purposively selected SPED teachers participated, and data were gathered using validated, researcher-made questionnaires and analyzed using descriptive statistics, Pearson correlation, and Multiple Regression Analysis. Findings showed that teachers' preparedness and instructional strategy implementation were both very high, while learners' academic engagement was generally high. Results revealed no significant relationships between teachers' preparedness and learners' engagement, except for a weakly significant link between competence and emotional engagement. Likewise, instructional strategies showed no significant relationships with engagement, except for a weak significant link between inclusive teaching methods and task completion. The study concludes that although SPED teachers are highly prepared and consistently implement instructional strategies, these do not strongly translate into learners' academic engagement. It is recommended that SPED teachers and curriculum implementers sustain current strengths while strengthening the alignment of teacher competence and inclusive teaching methods with learner engagement outcomes. Future studies are encouraged to include broader variables and contexts to further explain learner engagement in special education settings.

Keywords: special education teachers, instructional strategies, teacher preparedness, academic engagement, learners with special needs

INTRODUCTION

Special education refers to a specialized system of instructional services, programs, and supports designed to meet the unique learning needs of students with disabilities or learning difficulties, enabling them to achieve their full academic and social potential. It involves individualized instruction, specialized teaching strategies, and supportive learning environments tailored to diverse learner needs, often through Individualized Education Programs (IEPs), assistive technologies, and adapted curricula. Contemporary research highlights that special education increasingly emphasizes inclusive practices, where learners with special educational needs are supported within mainstream classrooms while receiving appropriate interventions and accommodations (Madhesh, 2023; Liu & Potmesil, 2025). These approaches recognize that every learner possesses unique strengths and challenges and therefore require flexible educational systems that promote participation, equity, and accessibility in learning (Dayao et al., 2024). As education systems evolve, special education continues to play a crucial role in ensuring that learners with disabilities receive equitable educational opportunities and meaningful participation in school and society.

Inclusive education complements special education by promoting access, participation, and achievement for all learners, regardless of disability, learning difficulty, or social background (Nurullayevna, 2024; González-Afonso et al., 2026). It emphasizes removing barriers to learning while fostering social justice, equity, and respect for diversity (Volker et al., 2023; Alasiri, 2023). Learners with special educational needs benefit from inclusive practices as these provide opportunities to develop academically, socially, and emotionally alongside their peers (Nurullayevna, 2024; Hernández Saca et al., 2023). By creating supportive and responsive learning environments, inclusive education contributes to holistic development and prepares learners to become active

and productive members of society (Nurullayevna, 2024; González-Afonso et al., 2026). Globally, inclusive education is recognized as a key component of high-quality education systems, and international frameworks such as the Salamanca Statement and the United Nations Sustainable Development Goal 4 underscore the importance of equitable education for all (UNESCO, 2025; Hernández Saca et al., 2023).

In the Philippine context, inclusive education is strongly anchored in national policies and legal mandates (Jazmines & Caballes, 2025; Felipe, 2025). The Department of Education (DepEd) has issued guidelines to institutionalize inclusive practices, including DepEd Order No. 72, s. 2009, which promotes inclusive education to increase participation among learners with special needs (Felipe, 2025; Jazmines & Caballes, 2025), and DepEd Order No. 21, s. 2019, which provides a policy framework for inclusive education for learners with disabilities (Jazmines & Caballes, 2025). These initiatives reflect the country's commitment to accessible, learner-centered education. Despite these policy efforts, the actual implementation of inclusive education across public schools remains uneven due to contextual and systemic challenges such as limited resources, overcrowded classrooms, and insufficient administrative support (Factor & Saenz, 2025; Felipe, 2025).

Special education teachers' instructional strategies are critical to promoting learners' engagement and academic achievement. Effective strategies include differentiated instruction, scaffolding, multisensory approaches, cooperative learning, and the integration of assistive technologies (Madhesh, 2023; Dayao et al., 2024). These strategies allow teachers to tailor lessons to individual learner needs, maximize participation, and accommodate diverse learning styles. Research indicates that when teachers employ appropriate instructional strategies, learners with special needs demonstrate higher levels of motivation, engagement, and academic performance (Salas García & Rentería, 2024; Liu & Potmesil, 2025).

However, the effective implementation of these strategies requires adequate teacher preparedness, which involves training, knowledge of inclusive pedagogy, familiarity with IEPs, and the ability to manage heterogeneous classrooms (Villarente et al., 2024; Singh, 2024). Studies in the Philippines show that although teachers generally hold positive attitudes toward inclusion, many feel underprepared to handle learners with diverse needs due to limited professional development and insufficient institutional support (Vasquez et al., 2025; Factor & Saenz, 2025). This gap between pedagogical knowledge and practical classroom application underscores the need for continuous capacity-building programs tailored to the challenges of special education.

Teacher preparedness encompasses both formal training and ongoing professional development that equips educators to respond effectively to the academic and socio-emotional needs of learners with disabilities. Adequately prepared teachers can design individualized learning experiences, implement inclusive instructional strategies, and assess learners' progress effectively (Madhesh, 2023; Dayao et al., 2024). Conversely, insufficient preparation can limit the quality of instruction, reduce learner engagement, and hinder academic outcomes (Vasquez et al., 2025; Felipe, 2025). In the Philippine setting, research highlights that teacher preparedness is constrained by limited resources, time, and support services, affecting the consistent application of inclusive practices (Jazmines & Caballes, 2025; Galutera, 2025). Therefore, enhancing teacher preparedness is essential to bridging the gap between policy mandates and classroom realities.

Academic engagement refers to learners' active participation in classroom activities, investment in learning tasks, and commitment to academic success. For learners with special needs, engagement is influenced by the appropriateness of instructional strategies, the classroom environment, and the teacher's ability to provide individualized support (Nurullayevna, 2024; Hernández Saca et al., 2023). Research in Philippine schools demonstrates that learners with disabilities exhibit higher engagement when instructional approaches are tailored to their abilities and when teachers are adequately trained in inclusive pedagogy (Vasquez et al., 2025; Factor & Saenz, 2025). Engagement is also strengthened through supportive peer interactions and accessible learning materials, highlighting the interplay between teaching strategies, preparedness, and learner outcomes (Galutera, 2025; Jazmines & Caballes, 2025).

The interrelationship among special education teachers' instructional strategies, their preparedness, and learners' academic engagement is central to the success of inclusive education. Teachers who are well-prepared and employ evidence-based instructional strategies create learning environments that actively engage learners with special needs, fostering both academic achievement and socio-emotional development (Madhesh, 2023; Dayao

et al., 2024). Conversely, limitations in teacher preparedness or ineffective strategies can impede learner engagement, highlighting the need for integrated support systems that combine professional development, resource allocation, and institutional backing (Vasquez et al., 2025; Felipe, 2025). Understanding these dynamics in the Philippine context is crucial for developing interventions that enhance inclusive practices and improve learner outcomes.

Despite extensive qualitative studies on inclusive education in the Philippines, there remains a scarcity of large-scale, quantitative research examining the relationship between teachers' instructional strategies, preparedness, and learners' academic engagement (Jazmines & Caballes, 2025; Vasquez et al., 2025). Most existing studies rely on descriptive or phenomenological approaches, providing limited empirical evidence to establish clear patterns, correlations, or causal relationships (Hernández Saca et al., 2023; Vasquez et al., 2025). Furthermore, there is a lack of systematic reviews that synthesize findings on teacher practices and learner engagement within the Philippine context. Addressing this gap is essential for formulating data-driven policies, designing targeted teacher training programs, and implementing strategies that effectively support learners with special needs.

This study seeks to fill the identified research gap by examining the relationship between special education teachers' instructional strategies, their preparedness, and the academic engagement of learners with special needs. By providing quantitative and integrative insights, the study will inform educational stakeholders about effective practices, capacity-building needs, and policy interventions necessary to improve inclusive education in Philippine schools. Ultimately, this research helps ensure that learners with special needs receive equitable opportunities for meaningful participation, learning, and holistic development, consistent with national and international standards for inclusive education (Nurullayevna, 2024; González-Afonso et al., 2026).

METHODS

This study employed a descriptive-correlational research design to examine the relationships among instructional strategies, teacher preparedness, and the academic engagement of learners with special needs in selected schools in the Province of Misamis Occidental, Philippines. The study involved 120 SPED teachers selected through purposive sampling based on established inclusion criteria, including experience in handling learners with special needs. Data were collected using three researcher-developed questionnaires that measured instructional strategies, teacher preparedness, and learners' academic engagement across behavioral, emotional, and cognitive dimensions. The instruments underwent expert validation and pilot testing to ensure reliability and validity. Ethical procedures were strictly observed through obtaining informed consent, maintaining confidentiality, and obtaining approval from the Misamis University Research Ethics Committee. Data analysis utilized statistical tools such as mean, standard deviation, Pearson Product-Moment Correlation, and Multiple Regression Analysis to determine the relationships and predictive influence of instructional strategies and teacher preparedness on learners' academic engagement.

RESULTS AND DISCUSSIONS

Preparedness of the Teachers' Handling of Learners with Special Needs

The findings revealed that teachers handling learners with special needs demonstrated a very high level of preparedness across the dimensions of training, attitude, competence, and support, with attitude obtaining the highest mean score, followed by support, training, and competence. The overall results indicate that teachers are well prepared to implement inclusive education, with positive attitudes toward diversity, adequate professional knowledge and skills, and strong institutional and peer support systems. These findings suggest that teachers can address the academic and socio-emotional needs of learners with special needs through effective instructional strategies, differentiated instruction, and supportive classroom practices. The results are supported by related studies emphasizing that teacher preparedness is essential in promoting inclusive education, learner engagement, and academic success. Furthermore, the findings imply that existing training programs and support mechanisms are effective, although continuous professional development and sustained institutional support remain necessary to maintain and strengthen teachers' preparedness in inclusive classroom settings.

Implementation of Instructional Strategies of Teachers Handling Learners with Special Needs

The findings revealed that teachers handling learners with special needs demonstrated a very high level of implementation of instructional strategies across differentiated instruction, inclusive teaching methods, classroom management strategies, and assessment-based instruction. Differentiated instruction obtained the highest mean score, indicating that teachers effectively adapt content, activities, and teaching approaches to accommodate diverse learner needs and ensure meaningful participation. Classroom management strategies also received very high ratings, suggesting that teachers maintain organized, supportive, and engaging learning environments that minimize barriers to learning. Similarly, the strong implementation of inclusive teaching methods and assessment-based instruction reflects teachers' commitment to equitable learning opportunities and to using ongoing assessments to guide instruction and monitor learner progress. These findings are supported by related studies emphasizing that effective instructional strategies enhance participation, understanding, and academic engagement among learners with special needs. The results imply that teachers are highly capable of translating their preparedness into responsive classroom practices, although continuous enhancement in assessment practices and innovative, inclusive teaching approaches remains important to further strengthen learner engagement and educational outcomes.

Academic Engagement of Learners with Special Needs

The findings revealed that learners with special needs demonstrated generally high levels of academic engagement, with very high levels of behavioral and emotional engagement, and high levels of cognitive engagement and task completion. This indicates that learners are actively participating in classroom activities, showing interest, positive attitudes, and a strong emotional connection to learning, which reflects supportive and engaging classroom environments. However, the comparatively lower ratings for cognitive engagement and task completion suggest that learners still face challenges sustaining deeper thinking, problem-solving, and consistent completion of academic tasks. The results imply that while learners are highly motivated and engaged at the behavioral and emotional levels, there remains a need to strengthen instructional strategies to promote higher-order thinking and sustained academic output. These findings highlight the importance of enhancing teaching approaches to further develop learners' cognitive engagement and improve their academic performance and independence.

Relationship between the Level of Preparedness of the Teachers' handling of Learners with Special Needs and the Level of Academic Engagement of Learners

The findings revealed that there is generally no significant relationship between teachers' preparedness, specifically in terms of training, attitude, competence, and support, and learners' academic engagement in terms of behavioral engagement, cognitive engagement, and task completion, as all correlation coefficients were very low and statistically insignificant. The only exception was a weak but significant positive relationship between teacher competence and learners' emotional engagement, suggesting that teachers' instructional skills may slightly influence learners' interest, motivation, and emotional responses in the classroom. Overall, the results indicate that teacher preparedness alone does not strongly predict or determine learners' academic engagement in special education settings. This implies that learner engagement is likely influenced by a combination of contextual and environmental factors beyond teacher-related variables, such as peer interactions, family support, and the classroom environment, highlighting the need for a more holistic approach to understanding and improving engagement among learners with special needs.

Relationship between the Level of Implementation of Instructional Strategies of Teachers handling Learners with Special Needs and the Level of Academic Engagement of Learners

The findings revealed that there is generally no significant relationship between teachers' implementation of instructional strategies and learners' academic engagement across most dimensions, as the correlation coefficients were weak and statistically insignificant. Differentiated instruction, classroom management strategies, and assessment-based instruction showed no meaningful associations with behavioral, emotional, cognitive engagement, or task completion. However, a significant but weak positive relationship was found between the use of inclusive teaching methods and task completion, suggesting that learners are more likely to

complete academic tasks when inclusive practices are consistently applied in the classroom. Overall, the results indicate that instructional strategies, while highly implemented by teachers, have limited direct statistical influence on learners' academic engagement. This implies that learner engagement may be shaped more strongly by other contextual and environmental factors, highlighting the need for a more holistic, system-wide approach to improving engagement among learners with special needs.

CONCLUSION

The study concludes that teachers who handle learners with special needs are highly prepared in terms of training, attitudes, competence, and support, and they consistently demonstrate a very high level of implementation of instructional strategies, indicating strong readiness and effective inclusive teaching practices. Likewise, learners with special needs exhibit generally high academic engagement, particularly in behavioral and emotional dimensions, while cognitive engagement and task completion are comparatively lower but still positive. However, statistical analysis revealed that teacher preparedness and instructional strategies have no significant relationship with learners' academic engagement, except for weak but significant links between teacher competence and emotional engagement, and between inclusive teaching methods and task completion. These findings suggest that while teachers are highly capable and actively applying inclusive strategies, learners' engagement is likely influenced by a broader set of contextual and environmental factors beyond teacher-related variables alone.

RECOMMENDATIONS

It is recommended that SPED teachers and curriculum implementers sustain and further strengthen the already very high levels of teacher preparedness and instructional strategy implementation through continuous professional development, mentoring, coaching, and sharing of best practices, ensuring that effective inclusive education practices are consistently maintained. Greater attention should be given to enhancing learners' cognitive engagement and task completion by designing more structured, learner-centered, higher-order-thinking activities that are supported by guided instruction and consistent feedback. Since teacher preparedness showed no significant relationship with learner engagement, efforts should focus on improving how training and competence translate into classroom practice, particularly by strengthening emotional engagement through reflective teaching and targeted coaching. Additionally, because only inclusive teaching methods showed a significant link with task completion, teachers should further refine and consistently apply these strategies to maximize their impact. Future researchers are encouraged to expand the scope of the study by including broader contextual factors, such as classroom environment, parental involvement, and learner characteristics, to gain a more comprehensive understanding of the influences on academic engagement among learners with special needs.

REFERENCES

1. Adam, S. (2023). Who needs the social model of disability? *Frontiers in Sociology*.
2. Albert, J. R. G., Basillote, L. B., Alinsunurin, J. P., Vizmanos, J. F. V., Muñoz, M. S., & Hernandez, A. C. (2023). Sustainable Development Goal 4 on quality education for all: How does the Philippines fare and what needs to be done? *Philippine Institute for Development Studies Discussion Paper No. DP 2023-16*.
3. Almughyiri, S. (2025). Influence of Bronfenbrenner's ecological theory on career choices of preservice teachers. *Scientific Reports*, 15, Article 29023.
4. Benemerito, P., Delos Reyes, N. R. T., Espina, R. C., Peteros, E. D., & Sito, R. E. (2025). The role of professional development in enhancing pedagogical practices of teachers in inclusive classroom. *International Journal of Intelligent Systems and Applications in Engineering*.
5. Brillantes, S. M. R., & Cabasag, R. C. (2025). Inclusive learning teaching strategies: Enhancing engagement and equity in diverse classrooms. *International Journal of Academic Multidisciplinary Research*, 9(10), 432–434.
6. Dayao, C. J. M., Daligdig, J., Zoilo, N., Castro, E., Lanuza, A. L., & Regala, D. D. (2024). Unique needs of diverse learners: Practices of special education. *International IT Journal of Research*, 2(4), 134–143.

7. Devi, D. S. (2023). Differentiated instruction in special education: Meeting diverse needs in the classroom. *Global International Research Thoughts*, 11(1), 53–57.
8. Guy-Evans, O. (2025). Bronfenbrenner's ecological systems theory. *Simply Psychology*.
9. Hernández-Saca, D. I., Voulgarides, C. K., & Etscheidt, S. L. (2023). A critical systematic literature review of global inclusive education using an affective, intersectional, discursive, emotive and material lens. *Education Sciences*, 13(12), 1212.
10. Jazmines, N. K. C., & Caballes, D. G. (2025). Implementation and sustainability of inclusive education programs towards curriculum development framework. *International Journal of Learning, Teaching and Educational Research*, 24(8), 56–90.
11. Juanzo, C. J. (2024). Inclusive education: The strategic catalyst of internationalization at a Philippine State University. *Romblon State University Research Journal*, 6(1), 71–76.
12. Kenny, N., McCoy, S., & O'Higgins Norman, J. (2023). A whole education approach to inclusive education. *Education Sciences*, 13(9), 959.
13. Largo, M. I., Pinili, L., Mangubat, R., Calasang, V., Cabigon, A. F., & Espina, R. (2025). Assessing the role of adaptive materials in inclusive classrooms. *International Journal of Educational Studies*, 8(2), 48–53.
14. Lazaga, R. J. T. (2025). Navigating engagement, representation, and expression in inclusive learning environments. *International Journal of Interdisciplinary Viewpoints*.
15. Madhesh, A. (2023). The concept of inclusive education from the point of view of academics specializing in special education. *Humanities and Social Sciences Communications*, 10, 278.
16. Marchan, C. B., Tenerife-Cañete, J. J., Añora, H., & Pinili, L. (2025). Instructional practices and challenges of teachers in supporting special needs students. *International Journal of Educational Studies*, 8(3), 55–65.
17. Oliver, M. (1990). *The politics of disablement*. Macmillan Education.
18. Ramilo, J. P., & Ting, M. S. (2025). Effectiveness of differentiated instruction, level of engagement and academic performance. *International Journal of Multidisciplinary Research and Growth Evaluation*, 6(2), 1406–1415.
19. Salas García, V. B., & Rentería, J. M. (2024). Students with special educational needs in regular classrooms and their peer effects. *Humanities and Social Sciences Communications*, 11, 521.
20. Singh, S. (2024). Inclusive education: Promoting equity and access for students with disabilities. *Global International Research Thoughts*, 12(1), 30–35.
21. UNESCO. (2024). *Every learner matters and matters equally: Salamanca Statement celebration*. UNESCO.
22. UNESCO. (n.d.). *Q&A: What you need to know about inclusion in education*. UNESCO.
23. Vergara, M., Pinili, L., Delos Reyes, N. R., Sitoy, R., Espina, R., & Saladaga, L. (2025). Teachers' preparedness for inclusive education: Analyzing knowledge, confidence, and classroom management. *International Journal of Educational Studies*, 8(2), 54–64.
24. Villarente, S. V. D., Ancheta, R. A., Manalastas, R. D. C., Capuno, R. G., Delos Reyes, N. R. T., Etcuban, J. O., Manguilimotan, R. P., & Pinili, L. C. (2024). Assessment of the implementation of inclusive education for students with special needs. *International Journal of Research in Special Education*, 4(1), 97–101.