

Linking Classroom Environment and Management Strategy to Learning Instructions of General High School Students in an Inclusive Classroom (Special Needs)

Jerwin M. Luisen, Estela I. Vasquez, Roselyn Ricaforte

Holy Cross of Davao College, Davao City, 8000, Philippines

DOI: <https://doi.org/10.51244/IJRSI.2025.120600127>

Received: 06 June 2025; Accepted: 10 June 2025; Published: 15 July 2025

ABSTRACT

Learning instruction identified as one of many issues in special education as insufficient resources, lack of purposeful training and professional development, contrasting inclusive education laws and policies, weak government support, inappropriate curriculum and classroom organization, assessment practices, awareness of inclusive education, and the need for constant collaboration among different stakeholders. Using a quantitative descriptive-correlational design, data were gathered from 250 students in Region XI through structured survey instruments assessing classroom environment, management strategies, and learning instruction. Descriptive results showed that both classroom environment and management strategies were rated highly, particularly indicators like classroom positivity and verbal instruction. However, correlation and regression analyses revealed that only management strategies had a statistically significant effect on learning instruction, while the classroom environment showed no significant direct impact. The study concluded that empowering teachers with consistent management techniques—such as clear verbal guidance and structured supervision—is vital to improving learning instruction in inclusive classrooms. As a recommendation, the study calls for enhanced teacher training in classroom management, integration of metacognitive learning strategies, promotion of emotionally supportive environments, and adoption of differentiated instruction (Tomlinson, 2001) to meet the diverse needs of learners. Replication of this research in other contexts is encouraged to further validate its findings.

Keywords: Special Needs and Disabilities (SNED), classroom environment, management strategy, learning instruction, inclusive education, Vygotsky, Social Constructivism, metacognition, Philippines.

INTRODUCTION

In recent years, the global push for inclusive education has underscored the need for differentiated learning instructions that address the diverse needs of students, particularly those with Special Needs Education (SNED) in general high schools. Students with SNED often face systemic barriers in mainstream classrooms due to instructional methods that do not adequately accommodate their cognitive, emotional, and behavioral needs (Reis, Gelbar, & Madaus, 2023, USA). Effective learning instruction for students with SNED includes multiple pedagogical elements, such as micro strategies, metacognitive training, emotional-social support, and guided study habits. According to Khan and Lal (2023, India), metacognitive functioning plays a crucial role in helping students with learning difficulties manage information, plan effectively, and reflect on their learning processes. The differentiate instruction for students with disabilities often leads to ineffective teaching practices, which fails to support academic growth for these students that leads to poor or insufficient learning instruction for special needs education (SNED).

This study aims to achieve the following objectives: To determine the level of classroom environment in terms of classroom positive, diversity values, personal negative, persistent in subject; management strategy in terms of verbal instructions, corporal management, use of instructional supervision, and delegation of authority; and learning instruction in terms of micro strategies, metacognition, emotional-social support and study habits; To analyze the significant relationships between the classroom environment, management strategies, and learning instruction for both general high school students and students with SNED and; To

determine the extent to which classroom environment and management strategies significantly influence the learning instruction of general high school students with SNED.

The study hypothesized that there is no significant relationship between the classroom environment, management strategies, and effective learning instruction for general high school students with Special Needs and Disabilities (SNED) and there is no significant influence of classroom environment and management strategies on the learning instruction of general high school students with Special Needs and Disabilities (SNED).

This study anchored to social constructivist theory that emphasizes the role of social interaction and cultural context in learning. It posits that learning is a social process where students construct knowledge through interactions with others and through participation in culturally relevant activities. Social Constructivist Theory, primarily developed by Lev Vygotsky, is deeply connected to inclusive classrooms through its focus on social interaction, cultural context, and collaborative learning. By embracing Social Constructivism in inclusive classrooms, educators can create environments that support all students' learning and development through social interaction, tailored support, and cultural relevance. This approach not only addresses individual needs but also promotes a collaborative and inclusive learning culture.

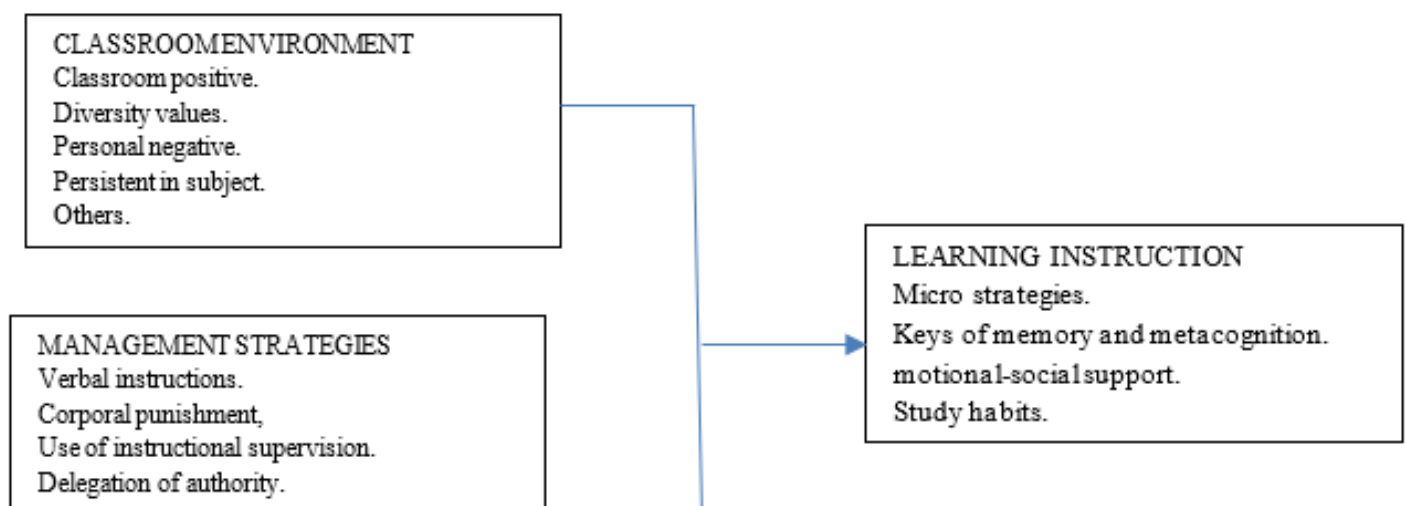


Figure 1 Conceptual Framework of the linking classroom environment and management strategy to learning instructions of general high school student with SNED.

METHOD

This section presents the research design, research locale, respondents of the study, research instrument, data gathering procedure, and data analysis. A detailed discussion is provided.

The study utilized predictive study quantitative approach, the quantitative aimed to quantify the relationships between variables and test specific hypotheses derived from the literature. A descriptive correlational design was employed. This study was conducted among senior high school students in Region XI under general classroom with a SNED student in mainstream. The researcher selected the senior high school within Region XI who has SNED program in their schools under mainstream and mixed in the general classrooms. In this study, the quantitative phase entailed the involvement of the selection of 250 respondents the selection criteria will specifically target high school students under general classrooms with SNED.

The researcher adopted a survey questioner to collect data for the first independent variable, classroom environment with indicators classroom positive, diversity values, personal negative, persistent in subject and others, (McGhee, D. E., Lowell, N., Lemire, S., 2007). The following was used by the respondents in the questionnaire to assess the learning instruction of regular high school students with SNED as part of mainstream class: 5 as strongly agree, 4 as agree, 3 as neutral, 2 as disagree, and 1 as strongly disagree. The Likert scale below was used to analyze the result.

To gather results for the second independent variable, management strategies, the researcher also adopted a survey questionnaire, (George, I., Sakirudeen, O., & Sunday, H. 2017). It is a 25-item instrument with the following indicators: verbal instructions, corporal punishment, use of instructional supervision and delegation of authority. In evaluating the students' management strategies, the respondents used the following rating: 5 as strongly agree, 4 as agree, 3 as neutral, 2 as disagree, and 1 as strongly disagree. For the analysis of the result, the Likert Scale below will be used.

For the dependent variable, learning instruction, the researcher adopted another survey tool. It has a total of 22 items with the following indicator micro strategies, keys of memory and metacognition, emotional-social support and study habits (Jimenez, L., Garcia, A.-J., Lopez-Cepero, J., & Saavedr, F.-J. 2017). The respondents answered the questionnaire using this scale: 5 as strongly agree, 4 as agree, 3 as neutral, 2 as disagree, and 1 as strongly disagree. The Likert Scale below was used to analyze the result.

RESULTS

This chapter's findings and analysis of the data were thoroughly discussed. The problem statement sequence structures the discussions. To explain and substantiate the findings, pertinent literature directly connected to the research was referenced and incorporated.

This study was focused on a primary variable in the learning instruction of general high school students with SNED under mainstream program. This includes three variables namely classroom environment, management strategies and learning instruction. The use of mean and descriptive levels is presented in the following table.

Table 1. Descriptive Table

Variables	Std. Deviation	Mean	Description
Classroom Environment	.268	3.79	High
Classroom Positive	.323	4.07	High
Diversity Values	.572	3.87	High
Personal Negative	.578	3.93	High
Persistent in subject	.675	3.51	High
Others	.843	3.60	High
Management Strategy	.324	3.91	High
Verbal Instructions	.585	4.06	High
Corporal Punishment	.561	3.97	High
Instructional Supervision	.444	3.84	High
Delegation of Authority	.589	3.78	High
Learning Instruction	.476	3.59	High
Microstrategies	.657	3.78	High
Keys of Memory and Metacognition	.542	3.05	Moderate
Emotional-social Support	.554	3.80	High
Study Habits	.730	3.74	High

On the first variable, the classroom environment in general high school students with SNED has five indicators. The classroom positive showed the highest average mean score of 4.07 it is interpreted as high. It emphasized that student perceive a strong positive atmosphere in the classroom,

The second variable, the management strategy in general high school students with SNED has four indicators: verbal instructions, corporal punishment, instructional supervision and the delegation authority. On these four indicators, the verbal instructions show highest mean score of 4.06 and it is interpreted as high. It highlights that the clear and consistent verbal instructions have highly significant.

The third variable which was the dependent variable, learning instruction and it has four indicators namely, micro strategies, keys of memory and metacognition, emotional-social support, and study habits. On these variables the highest indicator that has the highest mean score of 3.80 is emotional-social support and it falls on high category. It showed that the student feels well-supported emotionally in the learning environment.

Table 2. Table of Correlation

	Learning Instruction			
	R - Value	P - Value	Decision on Ho	Interpretation
Classroom Environment	0.061	0.334	Accept	Not Significant
Management Strategy	0.638	0.000	Reject	Significant

Table 2 presented the results of correlation analysis that showing the relationship between classroom environment and management strategy on learning instruction. The table included the correlation coefficient R-value, P-Value, the decision on the hypothesis and the interpretation of each result.

It was found that the correlation between classroom environment and learning instruction has an R-value of 0.061 with a P-value of .334, it showed the decision on hypothesis is accepted with interpreted as not significant. In all, there is no statistically significant relationship between the classroom environment and learning instruction therefore accept the null hypothesis

In contrast, the correlation between management strategy and learning instruction showed an R-value of 0.638 with a p-value of 0.000. Because this p-value is well below 0.05, therefore rejects the null hypothesis, indicating a statistically significant positive relationship. This suggests that better management strategies are strongly linked to more effective learning instruction—when classroom management improves, instructional quality tends to improve as well.

Table 3. Test of Influence

	Learning Instruction				
	R - Square Value	F-Value	P-Value	Decision	Interpretation
Classroom Environment	0.004	0.937	0.334	Accept	Not Significant
Management Strategy	0.407	170.485	0.000	Reject	Significant
Combined Influence	0.413	86.781	0.000	Reject	Significant

Table 3 presented the results of a statistical analysis that examined how classroom environment and management strategy influence learning instruction. When looking at the classroom environment alone, the results showed an R-square value of 0.004 and a p-value of 0.334, which was above the commonly used significance threshold of 0.05. Because of this, the null hypothesis was accepted, indicating that the classroom environment does not have a statistically significant effect on learning instruction.

In contrast, the management strategy showed a much stronger influence. With an R-square value of 0.407 and a p-value of 0.000, the results are statistically significant. This means that management strategies have a significant and positive impact on learning instruction, explaining approximately 40.7% of the variation in how instruction is delivered or perceived.

When both variables—classroom environment and management strategy—are considered together, the combined R-square value is 0.413, and the p-value remains at 0.000, showing a significant joint influence on learning instruction. This suggests that while the classroom environment alone may not be a strong predictor, its contribution alongside effective management strategies helps explain over 41% of the variation in learning instruction outcomes.

DISCUSSIONS

The findings of the study revealed that while both classroom environment and management strategies were perceived positively by students, it was the management strategy that has a significantly greater impact on

learning instruction. High mean scores for verbal instruction and classroom positivity indicate a generally supportive learning atmosphere; however, only management strategies showed a strong, statistically significant correlation with improved instruction, aligning with Marzano and Marzano (2003), who highlighted the critical role of structured, consistent teacher practices. On the other hand, the classroom environment, though beneficial for emotional support (Salanova et al., 2009), showed no significant direct impact, reinforcing Hattie's (2009) assertion that teacher-driven strategies, such as classroom management and feedback, are more influential than environment alone. Additionally, the combination of both variables accounted for of the variance in learning instruction, suggesting that while the environment provides a necessary foundation, effective learning in inclusive settings is best supported through strong instructional leadership and management practices.

Based on the results of this study, it can be concluded that while both classroom environment and management strategy are perceived positively by high school students with special needs in inclusive settings, it is management strategy that plays a more critical and statistically significant role in influencing learning instruction. The descriptive data showed high mean scores across indicators like verbal instruction and classroom positivity, affirming the presence of a constructive and emotionally supportive educational setting. However, the correlation and regression analyses revealed that classroom environment, though important for student comfort and inclusion (Salanova et al., 2009), does not significantly predict instructional quality. This finding aligns with Hattie (2009), who emphasized that while classroom climate contributes to learning conditions, it is less impactful than teacher-controlled factors such as instruction and feedback.

In contrast, effective management strategy—including clear verbal instructions, appropriate delegation, and structured supervision—showed a strong and statistically significant impact on learning instruction. Moreover, the combined effect of classroom environment and management strategy explained over 41% of the variance in learning instruction, supporting Hattie's (2009) view that student achievement is maximized when the environment is paired with strong instructional leadership. These findings suggest that to improve learning outcomes, schools must prioritize equipping teachers with effective management skills while continuing to support a positive and inclusive classroom climate.

Based on the study's findings, it is recommended that future research ensure the instructional quality, it is recommended that teachers receive continuous professional development focused on effective classroom management strategies, as these have a significant impact on student learning outcomes. Training should prioritize clear verbal communication, structured routines, and positive discipline approaches to better equip teachers in managing diverse classrooms. Although classroom environment did not show a statistically significant effect on learning instruction, creating emotionally supportive and inclusive spaces remains essential, as emphasized by Salanova et al. (2009) and Pianta et al. (2008), who highlight the role of positive climates in fostering student engagement and well-being. Given that metacognition scored the lowest among learning instruction indicators, schools should also integrate metacognitive skill-building activities, supporting Zimmerman's (2002) assertion that self-regulated learning enhances academic independence. Finally, it is recommended that this study be replicated in different contexts or with alternative variables to further validate or refine its findings.

REFERENCES

1. Sally Reis, University of Connecticut, tasker building, storrs, CT 06269, USA. Email: reis@uconn.edu
2. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
3. McGhee, D. E., Lowell, N., Lemire, S., & University of Washington Office of Educational Assessment. (2007). *The Classroom Learning Environment (CLE) questionnaire: Preliminary development*.
4. George, I., Sakirudeen, O., & Sunday, H. (2017). Effective classroom management and students' academic performance in secondary schools in Uyo local government area of Akwa Ibom state. *Research in Pedagogy*, 7(2), 43–56. <https://doi.org/10.17810/2015.47>

5. Jimenez, L., Garcia, A.-J., Lopez-Cepero, J., & Saavedr, F.-J. (2017). The brief-ACRA scale on learning strategies for university students. *Revista de Psicodidactica*, 23(1), 63–69. doi: 10.1016/j.psicod. 2017.03.001.
6. Salanova, M., Schaufeli, W. B., & Bakker, A. B. (2010). The gain spiral of resources and work engagement: Sustaining active learning. *European Journal of Work and Organizational Psychology*, 19(2), 1-15.
7. Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). Classroom assessments and teacher-student interactions. *Handbook of classroom assessment: Learning, achievement, and equity*.
8. Eccles, J. S., & Roeser, R. W. (2011). *Schools as developmental contexts during adolescence*. *Journal of Research on Adolescence*, 21(1), 225–241. <https://doi.org/10.1111/j.1532-7795.2010.00725.x>
9. Wentzel, K. R. (2012). *Teacher-student relationships and adolescent competence at school*. In A. Masten (Ed.), *Multilevel dynamics in developmental psychopathology: Pathways to the future* (pp. 179–202). Taylor & Francis.
10. Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). *Evidence-based practices in classroom management: Considerations for research to practice*. *Education and Treatment of Children*, 31(3), 351–380. <https://doi.org/10.1353/etc.0.0007>
11. Yukl, G. (2013). *Leadership in Organizations* (8th ed.). Pearson Education.
12. Ahmad, I., Donia, M. B. L., & Shah, S. H. (2021). Empowering leadership and its impact on employee performance: A study of the mediating role of psychological empowerment. *Frontiers in Psychology*, 12, 660394. <https://doi.org/10.3389/fpsyg.2021.660394>
13. Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525. <https://doi.org/10.3102/0034654308325693>
14. Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, 34(10), 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>