

Improving Learning Environment: An All-Inclusive Evaluation of School Facilities

Gina C. Casiano

Head Teacher III, Paite-Balincaguing Elementary School,
Department of Education, Division of Zambales, Philippines

Publication Date: 2026/06/06

Abstract: This study evaluated the school facilities of Paite-Balincaguing Elementary School as a basis for crafting an action plan to improve the learning environment of learners during the School Year 2023–2024. Specifically, the study assessed the current condition of school facilities in terms of infrastructure, safety, and accessibility; determined the learners' perceptions of their learning environment; identified the strengths and weaknesses of the facilities; examined the relationship between the condition of school facilities and learners' perceptions; and proposed an action plan for improvement. The study employed a descriptive research design utilizing a researcher-made survey questionnaire composed of yes-or-no and Likert-scale items. The respondents consisted of 160 learners from Kindergarten to Grade 6. Data were analyzed using frequency count, mean, percentage, and Pearson Product-Moment Correlation Coefficient (Pearson r). Findings revealed that classrooms were generally well-ventilated and spacious, and schools demonstrated preparedness for emergencies through disaster kits and available learning resources. However, issues such as termite infestation, deteriorating roofs and walls, inadequate laboratory facilities, limited accessibility for learners with disabilities, and insufficient security measures were identified. Learners generally perceived the school environment positively, particularly in terms of cleanliness, lighting, and classroom materials. Nevertheless, areas concerning laboratory access, safety, and overall ambiance received lower ratings. Furthermore, the correlation between the condition of school facilities and learners' perceptions was found to be weak and statistically insignificant. The study concluded that improving school facilities remains essential in creating a safer, more inclusive, and conducive learning environment for learners.

Keywords: School Facilities, Learning Environment, Infrastructure, Safety, Accessibility, Inclusivity, Improvement Plan.

How to Cite: Gina C. Casiano (2026) Improving Learning Environment: An All-Inclusive Evaluation of School Facilities. *International Journal of Innovative Science and Research Technology*, 11(5), 3477-3481. <https://doi.org/10.38124/ijisrt/26may2025>

I. INTRODUCTION

A well-ventilated, secure, and child-friendly school environment serves as a critical determinant of learners' academic trajectories. Students optimize their cognitive processing and knowledge acquisition when they operate within comfortable, safe, and fully supportive physical spaces. Sociological and educational frameworks confirm that the absence of sufficient, functional school facilities severely constrains an institution's capacity to cater to diverse student learning profiles and evolving academic requirements. In contemporary literature, research demonstrated that student learning micro-environments and aggregate academic achievement maintain a substantial correlation with the physical quality and educational sufficiency of academic facilities [3]. Structural assets such as spacious, sturdily constructed classrooms, modern science laboratories, up-to-date computer facilities, and well-stocked resource libraries function synergistically to support holistic learner capability development.

Beyond academic performance, the physical security of learners remains an absolute mandate for basic educational institutions. When students are insulated from exterior hazards and internal structural risks, they experience diminished psychological distraction, allowing heightened focus and concentration during classroom delivery. Synthesizing international evidence, A research verified that robust natural environments—characterized by explicit connections to nature, adequate illumination, air quality control, optimized temperature regulation, and high acoustics—significantly enhance cumulative student learning velocity [2]. Furthermore, agile learning configurations that offer age-appropriate flexibility enable custom modifications to satisfy unique pedagogical tasks, while integrated inside-out architectural planning guarantees that every square meter effectively mirrors user-centric requirements.

Developing human capital and fulfilling localized macroeconomic growth goals depend on structural improvements in public education. However, equitable resource allocation faces significant friction within rural or isolated regions. In marginalized contexts, such as the far-flung communities of the Philippines, geographic distance from urban administration centers frequently exacerbates institutional deficits. A research noted that rural schools equipped with baseline basic amenities often surpass resource-constrained urban counterparts, which underlines the extreme, localized value of ensuring basic structural adequacy in peripheral jurisdictions [1]. Consequently, facility interventions must be customized to the discrete economic and structural realities of the immediate community.

Paite-Balincaguang Elementary School (PBES), situated in the municipality of San Felipe, DepEd Division of Zambales, operates as an isolated baseline educational center. It services a total enrollment of 160 learners spanning kindergarten through Grade 6. Currently, the school's structural inventory consists of nine primary classrooms; however, three of these structures suffer from severe, deep-seated termite infestations, causing immediate deterioration and safety hazards for the occupants. To preserve operational capacity, the school borrows four specialized rooms—specifically the Science Laboratory, Computer Laboratory, Library, and the Kindergarten Classroom—from the adjacent Paite-Balincaguang National High School. This spatial arrangement demonstrates that PBES possesses inadequate proprietary infrastructure. Deteriorating structural conditions and obsolete spatial designs restrict instructional efficiency, while introducing threats to student and personnel health, safety, and psychological well-being. Recognizing these structural challenges, this study systematically evaluates the existing physical facilities of Paite-Balincaguang Elementary School to build an empirical basis for an administrative action plan aimed at rectifying facility gaps and optimizing learning conditions.

➤ *Statement of the Problem*

This research study aimed to evaluate the institutional school facilities to improve the localized learning environment of the learners in Paite-Balincaguang Elementary School. It specifically aimed to provide answers to the following questions:

- What are the current conditions of school facilities in terms of: (a) Infrastructure, (b) Safety, and (c) Accessibility?
- How do the learner-respondents perceive their internal learning environment within the existing school facilities?
- What are the definitive strengths and weaknesses of the school facilities based on their verified conditions?
- Is there a statistically significant correlation between the current objective conditions of school facilities and the subjective perceptions of learners regarding their learning environment?
- What data-driven action plan can be crafted to systematically improve the structural conditions of the school facilities?

II. REVIEW OF RELATED LITERATURE

A. *School Facilities and Learning Environment*

School facilities and infrastructure play a significant role in improving learners' academic performance and overall school experience (Barrett, Ambasz, & Treves, 2019; World Bank). Functional classrooms, Science and Computer laboratories, libraries, internet connectivity, and accessible learning spaces contribute to a conducive learning environment that supports effective teaching and learning processes. International organizations such as the UNESCO and the World Bank emphasize the importance of safe, inclusive, and child-friendly school facilities as essential components of quality education and holistic child development.

Studies further highlight that adequate educational infrastructure is associated with improved learning outcomes, healthier school environments, and stronger learner engagement. Well-designed school spaces not only enhance cognitive performance but also promote motivation and attendance among learners [1]. However, despite these recognized benefits, many schools still face challenges such as deteriorating classrooms, insufficient Science and Computer laboratories, and limited learning resources. These issues are more pronounced in remote and underserved areas, where infrastructure gaps continue to hinder the delivery of quality education.

B. *School Safety, Accessibility, and Inclusivity*

A safe, secure, and inclusive school environment is essential in supporting effective teaching and learning. Literature emphasizes that safety measures such as security personnel, surveillance systems, sanitation facilities, disaster preparedness mechanisms, and adequate playgrounds are critical in ensuring the physical, emotional, and social well-being of learners (Department of Education Philippines).

In addition, accessibility and inclusivity are vital components of a responsive educational environment. Schools are encouraged to provide infrastructure such as ramps, accessible comfort rooms, adaptive learning materials, and inclusive instructional support for learners with disabilities in order to ensure equal participation in education. The UNESCO and United Nations both stress that inclusive education systems must remove barriers and ensure that no learner is excluded due to physical, social, or economic limitations.

Furthermore, the Department of Education Philippines has implemented policies and programs focused on school safety, disaster risk reduction, health services, and child protection to strengthen the overall school environment. Despite these initiatives, challenges remain in fully ensuring safe and inclusive learning spaces, particularly in resource-limited and geographically isolated schools.

III. METHODOLOGY

A. Research Design

This study employed the descriptive research method design to evaluate the school facilities and the perception of learner-respondents about the condition of their learning environment. This research used a survey questionnaire to collect data. Based on this research, a descriptive research design is appropriate given that it will collect, examine, categorize, and tabulate current conditions, procedures, trends, and cause-and-effect relationships, as well as provide sufficient and accurate interpretations regarding the data, with the use of statistical methods.

B. Respondents and Locale

The respondents of this study were the learners of Paite-Balincaguang Elementary School (PBES), District of San Felipe, Division of Zambales from kindergarten to Grade 6 during the SY 2023-2024, with 160 learners in total. The research study involved the learners in PBES; it will not involve any other learners from other schools.

C. Research Instrument

The research study employed descriptive research design with a survey questionnaire as a primary method of collecting data. The survey questionnaire was researcher-made with two parts. The first part was solicited learners' ideas about the school facilities present in their schools in terms of Infrastructure, Safety, and Accessibility. Each of these has five statements to be answered by Yes or No. On the other hand, the second part of the questionnaire gathered the perception of the learners about their learning environment in the school. It has ten statements, and they used a Likert scale from 1 to 4 on how much they agree or disagree with them.

D. Data Gathering Method

The researcher secured a letter of request to conduct research from the Coordinating Principal of San Felipe District. After securing the approval of the Coordinating Principal, the researcher asked for assistance from the teachers of Paite-Balincaguang Elementary School in distributing the parental consent to the learner-respondents, stating that the learner's perspective will be solicited for research study.

After securing the parental consent of the learners, the researcher distributed the survey questionnaire, and the teachers of each class helped the learners to answer the given questionnaire. Additionally, the purpose of the study was discussed with the learner-respondents and made sure that the confidentiality of their responses will be secured.

E. Data Analysis

Data were analyzed using frequency, percentage, mean, and Pearson Product – Moment Correlation Coefficient.

IV. RESULTS AND DISCUSSION

A. Summary of the Results

The evaluation of school facilities covers infrastructure, safety, and accessibility, highlighting mixed outcomes. Classrooms are generally well-ventilated and spacious, yet termite infestation and poor condition of roofs, walls, and windows present issues. Limited access to functional science and computer labs and the absence of security cameras further challenges the safety and learning quality. Although schools are prepared for emergencies with disaster kits and nutritious school canteens, gaps remain in physical security and inclusivity. Accessibility for students with disabilities and access to modern technology also need improvement.

Learners generally have positive perceptions of the school environment, rating lighting, classroom materials, and cleanliness highly. However, lower ratings in lab accessibility, security, and ambiance suggest areas for enhancement. The correlation between facility conditions and learners' perceptions is weak and statistically insignificant.

B. Conclusion

The findings indicate that while schools are meeting essential educational needs, significant areas need improvement to provide a secure, inclusive, and conducive learning environment. Strengths include well-ventilated classrooms, disaster preparedness, internet connectivity, and access to learning resources. However, weaknesses such as inadequate security, outdated facilities, limited laboratory access, and lack of disability accommodations limit the effectiveness of the facilities.

C. Recommendation

The school should address termite infestations, repair damaged building structures, and improve Science and Computer laboratories with modern equipment to enhance hands-on learning experiences among students. It is also recommended that security measures be strengthened by installing security cameras, ensuring that school entrances are properly secured during school hours, and increasing the presence of security personnel to maintain a safe learning environment. Furthermore, updating technology resources and ensuring full accessibility for learners with disabilities should be prioritized through the provision of adequate ramps, inclusive facilities, and adaptive learning tools that support equitable education.

In addition, schools should strengthen student feedback mechanisms by implementing regular assessments and feedback sessions to continuously improve school facilities in response to learners' evolving needs. Finally, the proposed action plan should be implemented to further enhance school facilities and ensure learners' academic success and overall development.

Table 1 Current Conditions of School Facilities in Terms of Infrastructure

Statement	Yes (Functional)	No (Non-functional)
Well-ventilated and spacious classrooms (standard size)	143	17
Classrooms free from termites	6	154
Roof, walls, doors, and windows in good condition	70	90
Functional science and computer laboratory	26	134
Functional library	115	45

The current condition of school facilities shows mixed results. Classrooms are generally well-ventilated and spacious, with 143 learners affirming adequate space and ventilation. However, termite control is a pressing issue, with only 6 learners affirmed that their classroom is reported as termite-free, suggesting a risk to structural integrity. The condition of

roofs, walls, doors, and windows is also a concern, with nearly half needing repair. Functional science and computer labs are notably lacking, limiting hands-on learning opportunities. Libraries are a positive area, with 115 learners affirming that there is a functional facilities that support literacy skills.

Table 2 Current Conditions of School Facilities in terms of Safety

Statement	Yes (Functional)	No (Non-functional)
Presence of a Security Guard.	23	137
Presence of Security Cameras in the school vicinity.	0	160
Entrances and other gates were locked during class hours.	42	118
Basic Disaster Supply Kits are present in the school.	135	25
School Canteen adequately provide nutritious and hygienic meals.	116	44

The data reveals strengths in emergency preparedness and nutrition within schools, yet significant gaps in physical security measures. Only a small number of learners (23) affirmed that they have security guards, leaving the majority without on-site security personnel. Even more concerning, no learners affirmed that they have security cameras, and 118

learners say that the school keep entrances and gates unlocked during class hours, increasing the risk of unauthorized access. In contrast, emergency readiness appears strong, with 135 learners affirmed that their school is equipped with disaster supply kits, ensuring basic crisis preparedness.

Table 3 Current Conditions of School Facilities in terms of Accessibility

Statement	Yes (Functional)	No (Non-functional)
Inclusive and accessible for learners with disabilities.	52	108
Technology and IT Facilities of the school is up to date.	56	104
Adequately equipped with necessary educational resources (K-to-12 Books).	147	13
Internet Connection is present.	157	3
Ramp for handicapped learners.	107	53

The data highlights both strengths and weaknesses in school regarding accessibility, technology, and educational resources. While 147 learners affirm that they have adequate K-to-12 textbooks and 157 learners affirm that they have internet connectivity, inclusivity for learners with disabilities remains a significant concern. Only 52 learners say that they

are fully inclusive, with 108 learners tell they are lacking necessary accommodation. Additionally, only 56 learners affirm that they have up-to-date technology facilities, indicating a need for modernization in this area to enhance educational quality and prepare students for the digital workforce.

Table 4 Learners Perception about the Learning Environment within the School Facilities

Statements	Weighted Mean	Qualitative Interpretation	Rank
The overall cleanliness of the school facilities is excellent. (Ang kabuuang kalinisan ng mga pasilidad ng paaralan ay maganda at kaaya-aya.)	3.49	Agree	5
I feel safe and secure within the school premises. (Nakakaramdam ng seguridad at kaligtasan sa loob ng mga pasilidad ng paaralan.)	3.35	Agree	9
There is an adequate lighting in classrooms and common areas. (May sapat na ilaw sa mga silid aralan at ibang pasilidad ng paaralan.)	3.74	Strongly Agree	1
I can use all the educational materials inside my classroom. (Malayang nagagamit ang mga kagamitan pang edukasyon sa loob ng silid aralan.)	3.66	Strongly Agree	2
I can use the computers in our computer laboratory and science instruments in our science laboratory. (Malayang nagagamit ang mga kompyuter at mga instrumentong pang agham sa mga laboratoryo.)	3.25	Agree	10
There are enough books in our library. (May sapat na mga aklat at babasahin sa silid aklatan.)	3.55	Strongly Agree	3

Statements	Weighted Mean	Qualitative Interpretation	Rank
The overall cleanliness of the school facilities is excellent. (Ang kabuuang kalinisan ng mga pasilidad ng paaralan ay maganda at kaaya-aya.)	3.49	Agree	5
I am very comfortable in my classroom. (Napakakumportable ko sa aking silid aralan.)	3.41	Agree	6
The restroom are clean and well-maintained. (Ang mga palikuran ay malinis at maayos na naaalagaan.)	3.51	Strongly Agree	4
The overall ambiance and aesthetic appeal of the school facilities is excellent. (Ang kabuuang kapaligiran at estetic na itsura ng mga pasilidad ng paaralan ay napakaganda.)	3.36	Agree	7.5
The school facilities adequately support my learning needs. (Ang mga pasilidad ng paaralan ay sapat na sumusuporta sa aking mga pangangailangan sa pag aaral.)	3.36	Agree	7.5

The data reflects students' satisfaction with school facilities, highlighting strengths and areas for improvement. Lighting (3.74) and access to classroom materials (3.66) are highly rated, indicating these aspects effectively support learning. Library resources (3.55) and clean restrooms (3.51) are also viewed favorably, contributing positively to the school environment.

Lower scores in access to lab resources (3.25) and safety and security (3.35) suggest these areas need attention. Additionally, students feel the ambiance and aesthetic appeal (3.36) and overall facility support for learning (3.36) could be enhanced. While facilities are largely satisfactory, improvements in security, lab access, and aesthetics would further support students' comfort and learning.

ACKNOWLEDGMENT

First and foremost, I give all glory and praise to Almighty God for His unending guidance, strength, and wisdom throughout the journey of this research. Without His grace, this accomplishment would not have been possible. I would like to express my deepest gratitude to the people who, in one way or another, have given their time, effort, encouragement, and support in the completion of this study. To my research adviser, colleagues, mentors, friends, and all individuals who contributed to this research, thank you for sharing your knowledge, insights, constructive feedback, and unwavering support. Your guidance has been invaluable in shaping this study and helping me accomplish this endeavor. To the school heads, teachers, staff, parents, and learners who participated in this study, thank you for your cooperation and contributions. This research would not have been possible without your willingness to be part of it. To my family and loved ones, thank you for your patience, understanding, love, and encouragement throughout this journey. Your support has been my source of strength during the most challenging times. Above all, I dedicate this work to my two greatest inspirations and blessings, my beloved sons, Gian Gil C. Casiano and Gilbert Gene C. Casiano. You are my source of motivation and my reason for striving for excellence. Your smiles, dreams, and love inspire me to become a better person each day. Everything I do is for both of you. To everyone who became part of this journey and contributed in one way or another to the success of this research, my heartfelt gratitude and appreciation. This achievement belongs to all of us.

REFERENCES

- [1]. Barrett, P., Treves, A., Shmis, T., Ambasz, D., & Ustinova, M. (2019). The Impact of School Infrastructure on Learning: A Synthesis of the Evidenc. ERIC. <https://files.eric.ed.gov/fulltext/ED604388.pdf>
- [2]. Figueroa, L. L., Lim, S., & Lee, J. (2016). Investigating the relationship between school facilities and academic achievements through geographically weighted regression. *Annals of GIS*, 22(4), 273–285. <https://doi.org/10.1080/19475683.2016.1231717>
- [3]. Otchere, S. N., Afari, J. B., & Kudawe, C. (2019). Examining the Relationship Between School Facilities and the Learning Environment: A Case Study of Oda Senior High School . *Journal of Education and Practice*, 10(26). <https://doi.org/10.7176/jep>