



# CLASSROOM DESIGN: EVALUATING LEARNING ACHIEVEMENT THROUGH BAREWALL POLICY IMPLEMENTATION AMONG GRADE 2 PUPILS OF SAN ISIDRO ELEMENTARY SCHOOL

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## ABSTRACT

This scholarly article investigated the student learning achievement through 'bare-wall policy' as an educational trend implemented by the Department of Education. Primarily, the purpose of this study is to evaluate the impact of Bare-Wall Policy to the learning outcomes of elementary pupils in San Isidro Elementary School. With a total of 51 respondents, the researchers employed quasi-experimental design randomly assigning each member of the samples into two subgroups. This design seeks to demonstrate a cause-and-effect link between an independent and dependent variable, much like a real experiment does. However, a quasi-experiment does not depend on random assignment, in contrast to an actual experiment. As observed, the t-coefficient result of 0.8109, which is less than the threshold of 1.9845 at 98 degrees of freedom, indicates that there is no significant difference between the mean scores of the experimental (12.07, Sd=3.56) and control (11.76, Sd=4.06) groups. The t-ratio of 3.423 is higher than the tabular value of 1.9845 at the 0.05 level of significance using 98 degrees of freedom, indicating a significant difference between the experimental (13.82, Sd=3.53) and control (16.45, Sd=2.34) mean scores, supporting the application of bare-wall policy in classrooms. Most students are average on the pretest (control group, 35, or 71.43%, and 37, or 72.55%). However, the majority of students in the control group improved from below average (34 or 69.39%) to above average (35 or 68.63%) after the treatment. Given that the experimental group outperformed the control group in terms of scores, the application of bare-wall policy in classroom is effective.

**KEYWORDS:** Learning Achievement and Bare-Wall Policy, Classroom Design, Educational Trend

## INTRODUCTION

### Background of the Study

The relationship between the classroom environment and students' academic achievement has received a lot of attention in educational research in recent years, and it is becoming increasingly clear that the physical aspects of the learning environment can have a significant impact on student learning outcomes (William, 2006; Arroyo, Y., Peñabaena N. (2023). Several studies have examined different aspects of the learning environment, including learning tasks, materials, teacher instructional behaviors, and student-teacher relationships (Lawaid & Aly, 2014). In fact, on August 3, the Department of Education (DepEd) posted Department Order 21 on its website, which directs schools to remove all visual teaching aids and traditional educational posters from classroom walls in order to make the spaces neat, functional, and distraction-free.

However, there remains a need for more focused and systematic research into the influence of the physical aspects of the

learning environment on the learners' academic performance (Abel, 2013; Arshadet, 2018). In their academic paper, Rands and Gansemer-Topf (2017) said that classrooms are structures that embody the core of education. The architecture of a classroom is a tangible representation of educational ideas, beliefs, and ideals. This is known as "built pedagogy." Educational structures embody curricula and values by design, given the premise that built environments both enable and constrain certain modes of social action and interaction (Rands and Gansemer-Topf, 2017; Mohanan, 2002).

The fundamental question this research addresses is whether classroom decoration, or its absence, as per Department Order number 21- acts as stimulant or factor that influences academic achievement. As educators and stakeholders consider the effects of changing the learning environment, this issue assumes center stage. Arguments arose concerning whether the department's order is beneficial or not. Upon investigations of both



local and international literature, researchers have collected the magnitude of this concern.

The initial supposition supporting the removal of classroom decorations is anchored in the Bare Wall Theory. This holds that having too many visual aids in a classroom might be distracting and possibly impair students' ability to learn. The idea originated with a small-scale study of kindergarten students, which found that excessively decorated classrooms are too distracting and impair student performance on tests (Tuazon, 2023). Anna V. Fisher, Karrie E. Godwin and Howard Seltman (2014) from Carnegie Mellon University saw a group of twenty-four kindergarten students being taught in two mock classrooms: one with plain walls and the other furnished with commercial items like maps, science posters, and pictures of presidents, along with the kids' artwork. In this study, the kindergartners got distracted by other students or even themselves in the sparse classroom. But in the classroom with decorations, children were more likely to be distracted by the visual environment and spent far more time 'off task.' The findings showed that the classroom environment can be distracting and negatively impact learning (Fisher, et.al., 2014)

On the other hand, there are studies supporting that decorated learning rooms can also contribute to learning. A study by the School of the Built Environment at the University of Salford, published on April 1, 2015, classroom layout can have a 25% impact on student academic performance. In 153 classrooms across 27 schools in the UK, the study found that natural light, pleasant temperatures, and decent acoustics all improved student performance. The study also discovered that a classroom's physical features produce affordances that encourage students' involvement. The study found that the learning rates of 3,766 students were impacted by school design by 16%. An environment-behavior factors model that was thoroughly validated was used in the study.

Another study conducted in the Philippines examined the effects of the learning environment on the academic performance of Grade 12 students. This study used the descriptive method of research and focused on sampled thirty (30) students at Bestlink College of the Philippines, Quezon City for the school year 2018-2019. The study found that the learning environment can help students have more interest in their learning. The study suggests that students are more likely to learn in a safe learning environment, one in which they feel valued and protected.

The findings of prior studies emphasize the significance of the learning environment in fostering students' interest in learning, particularly in a safe and supportive setting where they feel valued and protected. This underscores the relevance of examining how the implementation of the Bare Wall Policy, involving the removal of classroom decorations, may influence the academic achievement of Grade 6 pupils within the specific school context of Rizal Elementary School.

The magnitude of the problem is evident in the discourse surrounding the relationship between classroom aesthetics and student achievement. Educational institutions far and wide are

grappling with the potential implications of such shifts in classroom decoration practices.

This investigation delves into the heart of the classroom environment's dynamics and its potential repercussions on the learning of Grade 2 pupils at San Isidro Elementary School. The focal point is the transformative shift from conventionally adorned classroom walls to the adoption of bare walls, instigated by the issuance of Department Order number 21 from the Department of Education (DepEd) in 2023, set for implementation in the subsequent school year. This deliberate change aims to provide students with an environment that fosters concentration and minimizes distractions during the learning process.

The salience of this problem lies in its pertinence to educational practices, particularly in the context of San Isidro Elementary School and the similar institutions. The abrupt transition from decorated to bare classroom walls challenges established norms and perceptions of the learning environment. It raises critical questions about the role of classroom decoration as a potential stimulant for academic achievement. The influence of the learning environment in educational institutions on pupils' academic outcomes and experiences is becoming more widely acknowledged. The importance of classroom aesthetics, design, and décor in affecting students' learning engagement and achievement has been underlined in numerous studies.

Anderson and Boyce's (2013) research highlighted the significant influence that school building conditions have on students' cognitive function and overall achievement. They discovered a favorable correlation between improved student learning and elements like natural light, pleasant temperatures, and the absence of visual distractions. These results lay a framework for investigating the possible impact of classroom decoration, which is an essential component of the actual learning environment. Additionally, many studies, such as those by Lippman, et al. (2013) and Moss and Case-Smith (1998) have explored. This research addresses a crucial problem with useful implications for educational design and policy by looking into the effects of classroom decoration on academic achievement. The results of student learning could be improved with the help of this research, which has the potential to inform policy choices and practices. It might also offer advice on how to design the ideal learning environment for various learner types. Lastly, it might shed light on how classroom décor affects students' motivation, engagement, and wellbeing.

This study aims to investigate the effects of classroom decorations on the academic achievements of Grade 2 pupils at San Isidro Elementary School. The school building conditions have been shown to have a significant impact on students' achievement.

#### **Objectives of the Study**

This study aims to evaluate the impact of Bare Wall Policy to the learning outcomes of Grade 2 pupils of San Isidro Elementary School as an educational trend implemented by the Department of Education.

Specifically, this research aims to find answers to the following questions:



1. What is the performance of the two groups of respondents in the pretest?
  - 1.1. Control group
  - 1.2. Experimental group
2. What is the performance of the two groups of respondents in the posttest?
  - 1.1. Control group
  - 1.2. Experimental group
3. Is there a significant difference between the pretest scores of the control and experimental group?
4. Is there a significant difference between the posttest scores of the control and experimental group?
5. Is there a significant difference between the pretest and posttest scores of the control and experimental group?

## METHODOLOGY

### Research Design

This study applied experimental research design. Specifically, the method employed is quasi-experimental. This design seeks to demonstrate a cause-and-effect link between an independent and dependent variable, much like a real experiment does. However, a quasi-experiment does not depend on random assignment, in contrast to an actual experiment. Subjects are grouped according to non-random criteria instead (Thomas, 2020).

In quasi-experimental research, groups under various conditions or treatments are compared to identify causal relationships. Quasi-experimental research design enables the collection of data at a single point in time, offering varying results from two groups which are not randomly assigned to gain statistical comparisons between a class with bare walls and a class with academic decorations.

Incorporating this design entails a pretest that serves as a baseline assessment given to participants before a treatment or

intervention is given; and a post-test that serves as an assessment given to participants after they have undergone a treatment and is used to measure changes over time. The pretest and posttest are essential in a pretest-posttest study in quasi-experimental design, in which subjects get the identical evaluation both before and after therapy. To ascertain the impact of the therapy, the pre-test and post-test scores are compared.

### Locale of the Study

This study was conducted at San Isidro Elementary School, one of the upstream elementary schools belonging to District I of the Municipality of Dolores. Established 41 years ago, the school has played a key role in providing quality education to the children of the area. Despite its remote location, San Isidro elementary School pledges still to continue its mission to serve the local community but with geographical setting, some educational mandate and trends are coming in late at their doorstep. It is in this reason that the researchers have chosen this school as a locale of the study. Due to its relevance to the study's focus on evaluating the impact of the Bare Wall Policy on Grade 2 pupils of the aforesaid locale. The choice of this locale allows the researchers to directly assess the effects of minimal classroom decorations within the specific educational context of San Isidro Elementary School if Bare Wall Policy matters to a small-scale community in relations to the learners' attention, engagement, interest, and academic achievement, contributing to the study's contextual validity and meaningful insights.

### Respondents of the Study

The respondents of the study include all the population from two classes. This stratification of samples ensures that the same learners from the experimental group receive the same intervention and the same learners from the control group are used to compare results.

CONTROL GROUP (Grade 2 – Daisy)	Frequency	EXPERIMENTAL GROUP (Grade 2 – Rose)	Frequency
Male	23	Male	22
Female	26	Female	29
TOTAL	49	TOTAL	51

### Research Instruments

Collecting data is identifying and selecting individuals for a study, obtaining their permission to study them, and gathering information by asking people questions or observing their behaviors (Cresswell, 2008). There are some kinds of instruments to collect data of correlational research design such as test and questionnaire.

In this research, the researchers used researcher-made pretest and posttest. The research instrument designed for this study is a structured questionnaire crafted to gather quantitative data on the impact of *Bare Wall Policy* on the academic achievement of

Grade 2 pupils at San Isidro Elementary School. The questionnaire comprises two sections tailored for Grade 2 pupils.

The 20-item tests underwent careful development and validation to ensure clarity, relevance, and reliability of the collected data. It aligns with the study's cross-sectional research design, facilitating systematic data analysis to address the items or questions effectively.

### Data Gathering

The data gathering procedure for this study involved the implementation of surveys as the primary methodology. The



teacher researchers adopted carefully crafted a tests based on the study's objectives and strata, ensuring clarity and relevance of questions. The test was distributed to the selected students, with the understanding that participation will be used for academic purposes and will be kept confidential.

Prior to the gathering of data, the researchers adapted pretest and posttest instruments from the teachers to be used as bases in the quasi-experimental procedure. Upon the completion of the instruments, a letter to the principal was written stating the study's intention and indicating the participants and all the concerned individuals.

After obtaining permission from the School Principal, the survey methodology was employed for the learners. Learners were provided with a one-hour time frame to accomplish the pretest. And the intervention, classroom decoration, was installed. The intervention lasted based on the timeframe of the lessons allocated for a week of instruction. After a week, the researchers conducted a posttest, using the same material from the pretest.

Once the data collection phase is concluded, the researchers compiled and analyzed the information using appropriate statistical methods, such as frequency distribution and percentage analysis.

This comprehensive data gathering process ensures the study's validity and relevance in determining the impact of the Bare Wall Theory to the subjects of the study.

The temporal aspect of the research setting is crucial, with the transition occurring in the 2024-2025 school year following the

issuance of Department of Education Order 21. This temporal boundary delineates the research's scope and allows for the investigation of the immediate effects of the policy shift.

### Analysis of Data

To analyze the test scores from the pretest and posttest, scores from each group were weighted by calculating its mean and determining its gain score. Factors that may contribute to the test result were considered such as effect size, regression to the mean, and the availability of a control group.

In order to measure the significant difference of pretest and posttest scores, paired t-test was used. This test assesses whether the means of the two paired samples, such as the pretest and posttest, are significantly different. The p-value from this test indicates the probability of observing such a difference or if there were no actual difference between the pretest and the posttest scores. The interpretation of the result is based on its p-value. If the p-value is less than the significance level (0.05 typically), the null hypothesis will be rejected and therefore conclusion is reached that significant differences between the pretest and posttest existed.

### Ethical Considerations

This study adheres to the rules of the institution in conducting research. The respondents will be well informed of what they will have to do, how the information will be used, and what the implications are. The researcher will assist the respondents in the process of data collection in order to provide explanations like knowing their rights to access to their data and the right of withdrawal at any time.

## RESULTS

Table 1: Pretest Results of the Control and the Experimental Groups

Groups	N	Mean	Standard Deviation
Control Group	49	11.76	4.06
Experimental Group	51	12.07	3.56

Table 1 displays the pretest results for the two class groups. Based on the diagnostic scores, the experimental group reported a slightly higher mean score of 12.07 (sd=3.56) than the control group, which had a mean of 11.76 (sd=4.06). The fact that the variance results of 4.06 and 3.56 are not very large indicates

that the students in both classes are diverse, meaning their IQs varied. This serves as a suitable baseline because the results indicate that the two study parts are nearly identical in terms of how the scores are distributed. This indicates that the students' ability groups are diverse.

Table 2: Pretest Results of the Control and the Experimental Groups

Gender of the Respondents				
Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	18	45.0	45.0	45.0
Female	22	55.0	55.0	100.0
Total	40	100.0	100.0	

In Table 2 displays the two groups' performance levels on the posttest. The control group, which was taught in a traditional instructional set-up where decorative instructions are posted on

the walls, received a mean score of 13.82 (Sd=3.53); whereas the experimental group of students, who were exposed to an





environmental set-up based on the *Bare Wall Policy*, received a mean score of 16.45 (Sd=2.34).

The outcome demonstrated that the experimental groups who were exposed to an environmental set-up based on the *Bare Wall Policy* had noticeably higher scores than those who were

taught in a traditional instructional set-up. According to the standard deviation scores, the experimental group's variance was lower than the control group's, indicating that the students' intellectual capacities were not dispersed as they were in the pretest results.

**Table 3: Difference of the Pretest Scores of the Control and Experimental Groups**

Groups	Mean	Standard Deviation	Computed t	Tabular Value at 0.05 Level of Significance	Decision
Control	11.76	3.36	3.429	1.9845	Accept Ho
Experimental	12.07	2.34			

The significant difference between the two groups' pretest results is shown in Table 3. At 98 degrees of freedom, the calculated t-ratio of 0.8109 is smaller than the tabular value of 1.9845. Therefore, it is agreed that there is no major difference. The class groups' pretest results do not differ significantly.

This outcome is favorable because the baseline data collected before the removal of instructional decorations were used indicated that the students' intellectual capacities were comparable, which will be important when experimenting with the teaching strategy. Given their pre-experiment commonalities, the statistics indicate that the groups are highly suitable for the study.

**Table 4: Outcomes of Post-test of the Control and Experimental Groups**

Groups	Mean	Standard Deviation	Computed t	Tabular Value at 0.05 Level of Significance	Decision
Control	13.82	3.53	3.423	1.9845	Reject Ho
Experimental	16.45	2.34			

It is evident from the statistics that the experimental group, which received instruction in a bare wall classroom setting, benefited from the difference in achievement scores. Therefore, based on the data produced, it is reasonable to conclude that having a bare classroom is effective. Similar studies have demonstrated the same findings, as a matter of fact, Rands

(2017) summed up that one crucial classroom feature that encouraged student-faculty engagement and created an environment where students felt like co-constructors of knowledge was reducing the physical barrier between faculty and student area.

**Table 5: Difference of the Test Scores of the Control and Experimental Group**

Groups	Mean	Standard Deviation	Computed t	Tabular Value at 0.05 Level of Significance	Decision
<b>Pretest and Posttest (df=96)</b>			<b>0.09</b>	<b>1.9845</b>	<b>Accept Ho</b>
Control	11.76	4.06			
Control	13.62	3.53			
<b>Pretest and Posttest (df=100)</b>			<b>1.02</b>	<b>1.9840</b>	<b>Reject Ho</b>
Experimental	12.07	3.56			
Experimental	16.45	2.34			

The comparison of the control and control groups' pretest and posttest results is shown in Table 5. The calculated t coefficient of 0.09, which is less than the tabular value of 1.9850 utilizing 96 degrees of freedom, indicates that there is obviously no significant difference for the control. It is clear, therefore, that the computed t-ratio of 1.02 for the control group is higher than the tabular figure of 1.9840. As a result, the hypothesis that the control group's pretest and posttest scores did not differ significantly is accepted, but the experimental group's hypothesis is denied.

Since the group exposed in a traditional classroom setting did not report a difference in score, and the group taught in a classroom setting applying the *Bare Wall Policy* demonstrated a substantial difference, the results are highly significant. It is safe to say that bare classroom is an effective learning environment of teaching English.

## CONCLUSIONS

The following conclusions are drawn from the data.



1. The pretest scores of the control and the experimental group do not differ significantly.
2. The posttest scores of the groups significantly differ, resulting to higher scores for the experimental group.
3. No significant difference exists in the pretest and post-test scores of the control group, but significant difference is noted for the experimental group.
4. Barewall Policy is effective considering the higher scores of the experimental group compared to the control group.

## RECOMMENDATIONS

The following suggestions are made in light of the facts and conclusions mentioned above.

1. Educational institutions should encourage the use of bare classrooms, particularly when teaching language courses like English to students from diverse backgrounds, as this has been shown to enhance student performance.
2. Teachers should be given in-service training on effective minimal classroom settings to gain more understanding of the approach/policy.
3. With the advantage of spending less time and money on decorating classrooms, teachers should adopt the Barewall Theory as it is statistically proven to significantly impact students' learning.
4. Further research must be conducted

## Conflict of Interest

The authors ensured that they had no conflict of interest in conducting this study. All the data were collected and analyzed in an objective manner, thereby personal relationships, financial reward, or organizational membership did not influence outcomes. Ethical principles were followed to the letter, including the employment of informed consent with the participants and confidentiality. Biases were eschewed by the employment of the systematic research process, peer review, and adherence to proven research methods in educational research.

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