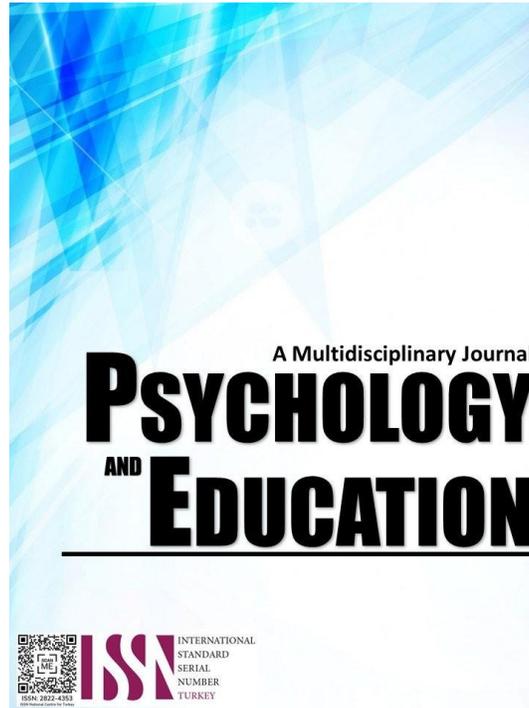


CLASSROOM DESIGN AND ACADEMIC PERFORMANCE OF KEY STAGE 1 LEARNERS IN PUBLIC ELEMENTARY SCHOOLS



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 52

Issue 6

Pages: 732-741

Document ID: 2026PEMJ5093

DOI: 10.70838/pemj.520607

Manuscript Accepted: 01-22-2026

Classroom Design and Academic Performance of Key Stage 1 Learners in Public Elementary Schools

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Abstract

The study was conducted in response to growing recognition of the role that classroom design plays in shaping learners' academic experiences. Modern educational research emphasizes that the physical learning environment can influence students' engagement, motivation, concentration, comfort, and overall well-being, particularly among young learners in Key Stage 1. In the context of the Tanay District School Division Office in Rizal Province, it is crucial to examine how classroom design affects early learners' academic performance, given the increasing demand for evidence-based strategies that optimize learning spaces. The study aimed to determine the influence of classroom design on the academic performance of Key Stage 1 learners in selected public elementary schools in Tanay District School Division Office of Rizal Province during the School Year 2024-2025. A descriptive correlational research design was applied, utilizing a researcher-made questionnaire checklist. Also, the study considered the total population of Key Stage 1 teachers in the said schools as respondents of the study. The study revealed that classroom design with respect to engagement and motivation, concentration and focus, comfort and well-being, and learning style and differentiation influences Key Stage 1 learners to a great extent. Also, there is no significant relationship between the extent of influence of classroom design and the academic performance of Key Stage 1 learners. The study concluded that teachers' level of education and their position title influence their perceptions of how classroom design affects Key Stage 1 learners' concentration and focus. The study recommended that school administrators should give full support to teachers in providing them with seminars and training to upgrade them with the latest differentiated activities for learners. School administration may improve the condition of the classroom by providing adequate facilities necessary for a comfortable and conducive place for learners.

Keywords: *classroom design, academic performance, key stage 1 learners, physical learning, learning style*

Introduction

Education is the acquisition of knowledge and skills among individuals. It is a way of sharing knowledge, enhancing individuals' interests and curiosity, and instilling positive attitudes and values. It involves developing the necessary skills and competencies, which are important weapons in the life journey of an individual. Furthermore, education enables an individual to adapt to the changing needs of society. It is a lifelong process that develops the full potential of an individual. Moreover, education is considered a guiding light to success.

The schools are the temple of knowledge and are considered the venue for social change and the development of knowledge, skills, and values. Hence, the structure and features of educational institutions are important in creating a conducive learning environment for students.

In addition, the school is a social entity or social system composed of different human relationships. The quality of school climate and relationships in it often determines the quality of work life and learning life for teachers and students. Therefore, one of the important school functions is to provide a quality environment. Thus, quality education can be achieved if there is a healthy educational environment.

One of the important factors that motivates learners in the teaching-learning process is the classroom environment. If schools have proper and adequate facilities, learning will be enjoyable for pupils. In the Philippines, the Department of Education (DepEd) has emphasized the importance of quality educational facilities through various policies that advocate for a learning environment that fosters quality education and holistic development.

However, challenges such as limited resources, high student-to-teacher ratios, and suboptimal classroom environments persist, particularly in rural areas. The conditions in many public schools highlight issues such as poor ventilation, inadequate lighting, and crowded spaces, which can hinder students' ability to focus and engage fully with their lessons. Classroom design has an important role in making the educational experiences of learners interesting and enjoyable. This may significantly influence learners' behavior and academic achievement. It may foster a sense of belonging and responsibility, making learners feel comfortable during the learning process.

Public elementary schools in Tanay, Rizal, have difficulties in making the most of their learning settings because of a lack of resources and infrastructure. Many classrooms lack the fundamental elements that science has shown to be beneficial to learning, such as adequate natural lighting, ergonomic seating, and flexible layouts, which has alarmed local educators and administrators.

Classroom design should also consider flexibility for different teaching styles and activities. This includes providing writable surfaces, spaces for collaboration, and areas to display student work. This study will give a better knowledge of how classroom layout, lighting,

ventilation, and other physical space elements affect students' performance. Stakeholders, such as educators, legislators, and school administrators, may find the data useful in promoting classroom layouts that improve students' learning and well-being. It may also serve as the foundation for policy proposals meant to establish more encouraging and productive learning environments.

The present study addresses a critical gap by exploring the influence of classroom design on Key Stage 1 learners in relation to their academic performance. This study is important because the classroom environment greatly affects how well students learn and perform in school. Since early education is the foundation for future success, creating a good learning space is essential. In places like Tanay, Rizal, where resources are limited, understanding how classroom design—like lighting, ventilation, and layout—impacts students can help teachers and officials improve schools. This research can provide useful ideas to make classrooms better, assisting students to learn more effectively and reach their full potential.

Research Questions

The study aimed to determine the influence of classroom design on the academic performance of Key Stage 1 learners in selected public elementary schools in Tanay District during the School Year 2024-2025. Specifically, the study sought answers to the following questions:

1. What is the profile of the respondents in terms of:
 - 1.1 age;
 - 1.2 gender;
 - 1.3 civil status;
 - 1.4 educational attainment;
 - 1.5 length of service;
 - 1.6 position title; and
 - 1.7 in-service trainings attended?
2. What is the extent of influence of classroom design on Key Stage 1 learners as perceived by the respondents with respect to:
 - 2.1 engagement and motivation;
 - 2.2 concentration and focus;
 - 2.3 comfort and well-being; and
 - 2.4 learning style and differentiation?
3. Is there a significant difference in the extent of influence of classroom design on Key Stage 1 learners as perceived by the respondents with respect to the cited aspects in terms of their profile?
4. What is the level of academic performance of the Key Stage 1 learners as revealed by their average grades during the school year 2024-2025?
5. Is there a significant relationship between the extent of influence of classroom design on Key Stage 1 learners and their level of academic performance?

Literature Review

Loose (2023) cited that student learning, attention, engagement, and comprehension are influenced by classroom design. A well-designed classroom can stimulate curiosity, foster creativity, and promote effective learning. Comfortable seating, organized layouts, and engaging educational materials are important to have a conducive learning and working environment.

According to Barret et al. (2015), classroom design may have a significant impact on the learning experiences of students. It fosters engagement, collaboration, and active participation among learners and provides motivation and curiosity. It enhances students' learning interest, improves behavior, and promotes active class participation and engagement in the teaching-learning process. Classroom design is very important in creating a conducive learning environment.

Additionally, Rashid (2023) stated that classroom design includes physical space, layout, furniture, color, lighting, and technology, which creates a conducive school climate. A classroom that is well-designed facilitates engagement, promotes creativity, fosters collaborative learning, and improves students' academic achievement. A good classroom needs to be spacious, flexible, and adaptable to different learning activities.

In a similar vein, Marquez (2020) claimed that student learning engagement and motivation may be influenced by classroom design and structure. Likewise, student learning performance may be affected by the design of the classroom. A well-designed classroom enhances students' concentration and participation and promotes better teacher-student interaction. Lighting, color, and temperature in the school are essential in creating a conducive environment for learning. Well-designed classroom furniture is helpful in keeping students healthy, with good thinking skills, and feeling comfortable to focus on their studies and improve learning achievement.

More so, Espinosa (2024) cited that the learning environment influences effective student learning, engagement, and academic achievement. Particularly, the design of the classroom has a significant influence on how well students learn and is therefore crucial to the educational process. Flexible classroom layouts allow for various teaching and learning techniques, accommodating a range of learning needs and learning preferences.

Meanwhile, according to Dela Rosa (2019), student comfort and well-being are necessary for academic success and overall development. This includes physical comfort, emotional safety, a sense of belonging, and opportunities for social and emotional learning. This also includes creating a positive school climate, fostering strong teacher-student connections, and providing access to mental health resources. Physical comfort includes appropriate classroom temperature, lighting, noise levels, and comfortable furniture. A safe and supportive environment is important for every learner. Positive relationships can create a positive and supportive learning environment that allows students to thrive academically, socially, and emotionally.

Moreover, Siega et al. (2021) examined the effect of a classroom environment on students' academic achievement in a male boarding secondary high school in Cavite. Results showed that the classroom environment and students' academic achievement are correlated. Students revealed that the classroom environment affects their academic achievement because it makes them feel comfortable while learning, the facilities enable them to grasp the lesson easily, and it motivates them in understanding the concepts, increasing their interest in the different learning areas. The findings revealed that complete educational facilities have a positive effect on students' academic achievement.

Methodology

Research Design

This study used the descriptive-correlational research design. Descriptive research aims to obtain information describing a studied situation. According to Bautista (2022), descriptive correlational research is a research design that describes the relationship between variables without manipulating them. It aims to explain how variables are linked, without making causal claims.

This design was the most appropriate as it described the significant relationship and difference between the learners' perceptions of the classroom design elements and their academic performance, which was the study's primary objective. The study design attempted to explain the link between two or more variables without making any causal assertions. It was used to study correlations between variables without the researcher influencing or manipulating them to quantify and identify historical trends between two variables. Documentary analysis was also applied since the average grades of Key Stage 1 learners were obtained as basis of their academic performance.

Respondents

The study considered the total population of Key Stage 1 teachers in selected public elementary schools in Tanay District. This consists of 90 teachers. They were described in terms of age, gender, civil status, educational attainment, length of service, position title, and in-service training attended.

Instrument

This study utilized a researcher-made questionnaire checklist in gathering the needed data. The questionnaire checklist consisted of two parts. The first part of the questionnaire gathers basic demographic information about the respondents, including age, gender, and educational attainment, length of service, position title, and in-service training attended. Part II focused on the extent of influence of classroom design on Key Stage 1 learners with respect to engagement and motivation, concentration and focus, comfort and well-being, and learning style and differentiation. Each aspect contained 10 items with a total of 40 items.

The developed researcher made a questionnaire checklist and underwent a content validation procedure to ensure accuracy and consistency. The validation process ensures that the questionnaire can be trusted to produce consistent, representative data supporting the study's conclusions. The validators were the thesis adviser, principal, master teacher, professorial lecturers, statistician, and dean. Their comments and suggestions were considered in the finalization of the questionnaire before administering it to the respondents.

Procedure

The conduct of the study was guided by a Gantt Chart of Activities. This includes the formulation of the research problem up to the revision of the manuscript and submission of the final copy. After the validation of the instrument, permission to conduct the study was obtained from the Office of the Schools Division Superintendent. Then, the questionnaire checklist was administered to the respondents. Guidelines in the Data Privacy Act of 2012 were considered in gathering the needed data.

After the retrieval, the data were encoded and processed through the Statistical Package for Social Sciences (SPSS). Based on the interpreted data, a summary of findings, conclusions, and recommendations was formulated. The manuscript was also subjected to an anti-plagiarism test.

Data Analysis

For the analysis and interpretation of data, the study employed appropriate statistical tools aligned with each research objective. Frequency, percentage, and rank distribution were used to describe the profile of the respondents. The extent of influence of classroom design on primary grade pupils, as perceived by teachers, was analyzed using a weighted mean, while one-way analysis of variance (ANOVA) tested for significant differences in perceptions across teacher profile variables. Pupils' academic performance was



evaluated using frequency, mean, and standard deviation, and the relationship between perceived classroom influence and academic performance was examined through correlation analysis.

Ethical Considerations

The researcher adhered strictly to the ethical considerations in conducting this study. First, a permit from the proper authority before administering her instruments was secured. In addition, the researcher ensured that all the participants were informed about the study and its purpose. Moreover, all the data gathered was treated with utmost confidentiality. Lastly, the perused ideas from other related work were properly cited.

Results and Discussion

Table 1. *Frequency and Percentage Distribution of the Respondents in Terms of the Selected Variables*

<i>Age</i>	<i>frequency</i>	<i>Percent</i>
21-30 years old	8	8.9
31-40 years old	46	51.1
41-50 years old	25	27.8
51-60years old	11	12.2
Total	90	100.0
Gender		
Male	20	22.2
Female	70	77.8
Total	90	100.0
Civil Status		
Single	31	34.4
Married	55	61.1
Separated/Annulled	1	1.1
Widow/Widower	3	3.3
Total	90	100.0
Educational Attainment		
Bachelor's Degree	33	36.7
Bachelor's with MA units	18	20.0
Master's Degree	32	35.6
MA with Doctoral Units	7	7.8
Total	90	100.0
Length of Service		
25 years and above	2	2.2
20-24Years	9	10.0
15-19 Years	15	16.7
10-14 Years	19	21.1
5-10 Years	38	42.2
4 years and below	7	7.8
Total	90	100.0
Position Title		
Master Teacher I	6	6.7
Teacher III	26	28.9
Teacher II	12	13.3
Teacher I	46	51.1
Total	90	100.0
In-Service Trainings Attended		
National Level	16	17.8
Regional Level	16	17.8
Division Level	27	30.0
District Level	15	16.7
School Level	16	17.8
Total	90	100.0

The profile of the 90 respondents reveals a predominantly mid-career teaching workforce, with the majority aged 31–40 years old (51.1%), followed by those in the 41–50 age bracket (27.8%). A smaller proportion falls within the 51–60 (12.2%) and 21–30 (8.9%) age groups, suggesting that most respondents have accumulated significant professional experience. In terms of gender, the group is largely female-dominated, with 77.8% identifying as female and only 22.2% as male. The civil status data shows that a majority of the respondents are married (61.1%), followed by single individuals (34.4%), with only a small number being widowed (3.3%) or separated/annulled (1.1%), indicating a largely stable social background.

Regarding educational attainment, a substantial number hold a bachelor's degree (36.7%), while an almost equal proportion have

attained a master's degree (35.6%), and 20.0% have earned bachelor's degrees with master's units. A smaller group (7.8%) has pursued master's degrees with doctoral units, reflecting a high level of academic and professional advancement among the respondents. When it comes to length of service, the majority have been in the profession for 5–10 years (42.2%), followed by 10–14 years (21.1%) and 15–19 years (16.7%), indicating that many are in the prime of their careers.

Fewer respondents have served for 20–24 years (10.0%), 4 years and below (7.8%), or 25 years and above (2.2%), suggesting a smaller proportion of either new or veteran educators. Position-wise, over half of the respondents are Teacher I (51.1%), with others serving as Teacher III (28.9%), Teacher II (13.3%), and a small group as Master Teacher I (6.7%), which implies that a large portion are still in entry-level or mid-level teaching positions. In terms of in-service training, most respondents have attended sessions at the division level (30.0%), while equal participation was noted at the national, regional, and school levels (17.8% each). The least attended were district-level trainings (16.7%), highlighting the respondents' active involvement in professional development across multiple administrative levels.

Recent studies suggest that teacher demographic and professional characteristics influence instructional practices and professional development engagement. A predominantly female and mid-career teaching workforce, as observed in this study, reflects global trends in elementary education where female teachers and those with several years of experience tend to demonstrate greater instructional confidence and classroom effectiveness (Skaalvik & Skaalvik, 2017).

Higher educational attainment among teachers has been linked to improved pedagogical skills and student support strategies, as teachers with graduate studies are more likely to integrate reflective and evidence-based practices (Akiba & Reichardt, 2019). Research also highlights that sustained participation in varied in-service trainings enhances teachers' instructional quality and adaptability to curriculum reforms (Desimone & Pak, 2017). Collectively, these studies underscore the importance of ongoing professional development and academic preparation in strengthening teacher capacity, which aligns with the profile patterns found in this research.

Table 2. *Extent of Influence of Classroom Design on Key Stage 1 learners as Perceived by the Respondents with Respect to Engagement and Motivation*

<i>Engagement and Motivation The classroom design...</i>	<i>$W\bar{X}$</i>	<i>Verbal Interpretation</i>
1. Incorporates vibrant colors and decor, which enhances pupils' motivation and engagement in lessons.	4.38	Very High Extent
2. Features flexible seating arrangements that improve collaboration and increase pupil motivation.	3.40	High Extent
3. Includes technology such as interactive whiteboards, significantly boosting pupil engagement and participation.	3.79	High Extent
4. Showcases pupils' work and collaborative displays, which increases emotional investment in learning.	3.43	High Extent
5. Incorporates designated "learning zones," positively influencing pupils' interest and engagement in various activities.	3.43	High Extent
6. Provides frequent opportunities for movement and active learning, leading educators to report higher pupil motivation.	3.22	Moderate Extent
7. Emphasizes organization and layout, fostering a sense of belonging that enhances motivation and peer connections.	3.79	High Extent
8. Integrates real-world materials and projects, which is associated with increased pupils' enthusiasm and motivation.	3.79	High Extent
9. Ensures accessible resources, empowering pupils to engage more actively in their learning experience.	3.22	Moderate Extent
10. Allows for pupils' choice in learning activities, leading to higher engagement and motivation among them.	3.64	Agree
Overall $W\bar{X}$	3.61	High Extent

The overall weighted mean of 3.61 shows that respondents generally agree that classroom design positively affects pupil engagement and motivation to a great extent. This suggests that while visual elements like vibrant colors and decor are recognized as crucial in enhancing pupil motivation, there is room for improvement in incorporating movement-based learning opportunities and ensuring resources are readily accessible.

Findings imply the importance of classroom aesthetics, showing that vibrant, well-designed spaces enhance pupil engagement and motivation. Incorporating movement and active learning strategies in the classroom positively impacts students' motivation and cognitive function.

This is aligned with the statements of Loose (2023) that classroom design profoundly influences student engagement and motivation. A well-designed classroom can stimulate curiosity, foster creativity, and promote effective learning. Classroom elements like comfortable seating, organized layouts, and engaging educational materials work in harmony to create a conducive learning environment.

As presented in the table below, with respect to concentration and focus, the overall weighted mean obtained is 3.64, with all items interpreted as High Extent. This reveals that, as perceived by teachers, classroom design influences the concentration and focus of Key Stage 1 learners to a great extent. This means that pupils' concentration and focus are affected by their learning environment, specifically the classroom design.



Table 3. *Extent of Influence of Classroom Design on Key Stage 1 learners as Perceived by the Respondents with Respect to Concentration and Focus*

<i>Concentration and Focus The classroom design...</i>	<i>W\bar{X}</i>	<i>Verbal Interpretation</i>
1. Reduces visual clutter, which enhances pupils' ability to concentrate on tasks.	3.58	High Extent
2. Employs soundproofing techniques that yield significant improvements in pupil focus.	3.58	High Extent
3. Features clearly defined work areas that reduce distractions, allowing pupils to maintain better focus during lessons.	3.57	High Extent
4. Utilizes adjustable lighting options linked to improved pupils' attention spans.	3.67	High Extent
5. Prioritizes personal space, contributing to improved concentration among pupils.	3.69	High Extent
6. Minimizes noise levels during independent work sessions, which is essential for enhancing pupils' focus.	3.67	High Extent
7. Incorporates calming colors, which are associated with improvements in pupils' focus and cognitive performance.	3.69	High Extent
8. Emphasizes an organized layout that allows for sustained attention.	3.69	High Extent
9. Includes sensory breaks to help pupils regain focus during the lesson.	3.73	High Extent
10. Integrates movement opportunities, positively affecting attention spans.	3.69	High Extent
Overall W \bar{X}	3.64	High Extent

Findings imply that classroom design significantly impacts student concentration and focus. Features like lighting, seating arrangements, and even the presence of natural elements can influence how well students can concentrate and learn.

This relates to the ideas of Espinosa (2024), who states that concentration and focus are crucial for students to effectively learn and succeed academically. Maintaining focus allows students to absorb information better, improve retention, and perform well on assessments. Strategies to enhance concentration include minimizing distractions, utilizing effective study techniques, and ensuring a conducive learning environment.

Table 4. *Extent of Influence of Classroom Design on Key Stage 1 learners as Perceived by the Respondents with Respect to Comfort and Well-being*

<i>Comfort and Well-being The classroom design...</i>	<i>W\bar{X}</i>	<i>Verbal Interpretation</i>
1. Features comfortably designed furniture that significantly reduces pupil discomfort and improves learning engagement.	3.90	High Extent
2. Ensures adequate ventilation, leading to improved cognitive abilities and overall pupil well-being.	4.00	High Extent
3. Incorporates natural elements, such as plants, which enhance pupils' emotional well-being and learning comfort.	3.90	High Extent
4. Includes soft seating areas that positively impact pupils' relaxation and comfort during learning periods.	3.80	High Extent
5. Regulates temperature effectively, which is essential for maintaining pupil comfort and supporting better learning outcomes.	3.90	High Extent
6. Promotes an organized space that fosters a sense of safety and well-being, enhancing pupils' learning attitudes.	3.87	High Extent
7. Provides access to quiet areas for pupils to retreat to for emotional regulation and stress relief.	3.97	High Extent
8. Incorporates comfortable and adaptable seating, which positively influences pupils' mindfulness and stress levels.	3.97	High Extent
9. Creates an emotional climate that fosters engagement and aids in overall comfort.	3.80	High Extent
10. Includes sensory materials like textured walls, supporting pupils' emotional well-being.	3.80	High Extent
Overall W \bar{X}	3.89	High Extent

The overall weighted mean of 3.89 indicates that respondents agree that classroom design positively contributes to pupil comfort and well-being to a great extent. Findings suggest that proper ventilation is viewed as the most important factor in promoting student comfort and enhancing learning outcomes. Furthermore, incorporating natural and sensory elements in classrooms has been linked to improving emotional well-being and reducing anxiety among pupils.

The findings imply that adequate ventilation is crucial in classroom design for enhancing pupils' cognitive function and overall well-being, highlighting the need for schools to prioritize air quality and circulation. Although other factors, such as temperature regulation, emotional climate, and sensory materials, are also important, their lower rankings suggest these elements might require further attention to maximize their impact on student comfort and learning.

This conforms to the statements of Dela Rosa (2019), that student comfort and well-being are crucial for academic success and overall development. This encompasses physical comfort, emotional safety, a sense of belonging, and opportunities for social and emotional learning. Creating a positive school climate, fostering strong teacher-student connections, and providing access to mental health resources are all important components.

Findings imply that classroom design that incorporates diverse learning materials and flexible setups can significantly enhance teachers' ability to address different learning styles, thereby supporting differentiated instruction. However, the lower rating for targeted instructional strategies suggests a need to better align physical classroom environments with pedagogical approaches that personalize



learning. Schools should therefore focus not only on the availability of materials and flexible spaces but also on designing environments that actively facilitate differentiated teaching practices to improve pupil outcomes.

Table 5. *Extent of Influence of Classroom Design on Key Stage 1 learners as Perceived by the Respondents with Respect to Learning Style and Differentiation*

<i>Learning Style and Differentiation The classroom design...</i>	<i>W\bar{X}</i>	<i>Verbal Interpretation</i>
1. Provides diverse learning materials within a flexible setup, enhancing teachers' ability to meet different learning styles.	3.72	High Extent
2. Accommodates varied instructional strategies, leading to improved pupil outcomes.	3.31	Moderate Extent
3. Features organized areas that allow for targeted differentiated instruction, supporting diverse learning needs.	3.61	High Extent
4. Fosters collaborative learning through varied seating arrangements, which are essential for diverse learning styles.	3.34	Moderate Extent
5. Utilizes technology-enhanced environments that enable differentiated instruction.	3.48	High Extent
6. Provides choices in how pupils engage with content, addressing individual preferences and promoting better outcomes.	3.21	Moderate Extent
7. Emphasizes a structured yet flexible environment that facilitates peer-supported learning and accommodates different styles.	3.71	High Extent
8. Integrates visual, auditory, and kinesthetic elements into activities, enhancing engagement across learning styles.	3.62	High Extent
9. Supports targeted instruction strategies that yield improved outcomes according to teachers embracing differentiated practices.	3.20	Moderate Extent
10. Entails learning stations that allow for various instructional approaches to meet diverse student needs.	3.52	High Extent
Overall <i>W\bar{X}</i>	3.47	High Extent

This is supported by the ideas of Dela Cruz et al. (2024), who state that understanding learning styles can help educators personalize instruction and create more engaging learning experiences. Differentiated instruction is an approach where teachers adjust their teaching methods, materials, and assessments to accommodate the diverse learning needs of students.

The analysis shows that most demographic factors, such as age, gender, civil status, length of service, and the number of in-service trainings attended, do not have a significant effect on engagement and motivation, concentration and focus, comfort and well-being, or learning style and differentiation. This is evidenced by p-values greater than 0.05, leading to the acceptance of the null hypothesis for these variables, meaning there is no significant difference in these aspects based on these demographics. However, educational attainment and position title show statistically significant effects on concentration and focus, with p-values of 0.030 and 0.032, respectively. For these, the null hypothesis is rejected, indicating that teachers' education level and job position do influence pupil concentration.

Table 6. *Result of the F-test on the Extent of the Influence of Classroom Design on Key Stage 1 learners as Perceived by the Respondents with Respect to the Different Aspects in Terms of Their Profile*

<i>Aspect</i>	<i>F-value</i>	<i>p-value</i>	<i>Ho</i>	<i>Verbal Interpretation</i>
<i>Age</i>				
Engagement and Motivation	.726	.539	Failed to Reject	Not Significant
Concentration and Focus	1.176	.324	Failed to Reject	Not Significant
Comfort and Well-being	1.083	.361	Failed to Reject	Not Significant
Learning Style and Differentiation	2.066	.111	Failed to Reject	Not Significant
<i>Gender</i>				
Engagement and Motivation	1.985	.162	Failed to Reject	Not Significant
Concentration and Focus	3.366	.070	Failed to Reject	Not Significant
Comfort and Well-being	.640	.426	Failed to Reject	Not Significant
Learning Style and Differentiation	.377	.541	Failed to Reject	Not Significant
<i>Civil Status</i>				
Engagement and Motivation	1.865	.142	Failed to Reject	Not Significant
Concentration and Focus	.972	.410	Failed to Reject	Not Significant
Comfort and Well-being	1.871	.141	Failed to Reject	Not Significant
Learning Style and Differentiation	.119	.949	Failed to Reject	Not Significant
<i>Educational Attainment</i>				
Engagement and Motivation	.778	.510	Failed to Reject	Not Significant
Concentration and Focus	3.136	.030	Rejected	Significant
Comfort and Well-being	.741	.530	Failed to Reject	Not Significant
Reinforcement	.778	.510	Failed to Reject	Not Significant
<i>Length of Service</i>				
Engagement and Motivation	1.578	.175	Failed to Reject	Not Significant
Concentration and Focus	1.814	.119	Failed to Reject	Not Significant
Comfort and Well-being	.022	1.000	Failed to Reject	Not Significant



Learning Style and Differentiation	1.303	.270	Failed to Reject	Not Significant
Position Title				
Engagement and Motivation	1.687	.176	Failed to Reject	Not Significant
Concentration and Focus	3.077	.032	Rejected	Significant
Comfort and Well-being	.777	.510	Failed to Reject	Not Significant
Learning Style and Differentiation	2.224	.091	Failed to Reject	Not Significant
In-Service Trainings Attended				
Engagement and Motivation	2.243	.071	Failed to Reject	Not Significant
Concentration and Focus	1.764	.144	Failed to Reject	Not Significant
Comfort and Well-being	.730	.574	Failed to Reject	Not Significant
Learning Style and Differentiation	1.258	.293	Failed to Reject	Not Significant

These results suggest that improving pupil concentration might be best achieved by focusing on the educational background and professional roles of teachers. Since other demographic factors do not significantly affect the classroom environment, strategies to boost engagement, well-being, or differentiated learning can likely be applied broadly without needing to customize for specific groups. Therefore, professional development and training should prioritize enhancing skills that support concentration, especially considering teachers' education and job responsibilities.

Findings imply that teachers with higher education levels tend to have better teaching skills and methods that help students focus more effectively. Additionally, a teacher's role and experience often reflect their ability to manage the classroom and keep students engaged. The fact that other factors like age and gender don't have much influence aligns with previous studies that highlight qualifications and position as the key drivers of teaching quality. This supports the idea that focusing on teachers' education and roles is essential for improving student concentration and learning outcomes.

Research indicates that teachers' educational attainment and professional roles are significant predictors of classroom effectiveness and student learning outcomes. Darling-Hammond et al. (2017) found that higher teacher qualifications and advanced degrees positively influence instructional quality and student engagement. Similarly, Klassen et al. (2018) reported that teachers in higher positions or with more professional experience demonstrate greater classroom management skills, which directly impacts student concentration and focus. Conversely, factors such as age and gender were not consistently associated with student learning outcomes, supporting findings that professional preparation and role responsibilities are stronger determinants of teaching effectiveness (Akiba and Reichardt, 2019). These studies collectively suggest that targeted professional development focusing on pedagogical skills and role-specific competencies can enhance student engagement and focus.

Table 7. Level of Academic Performance of Key Stage 1 learners as Revealed by Their Average Grades

Grades	Verbal Interpretation	F	%
90 and above	Outstanding (O)	30	33.3
85 - 89	Very Satisfactory (VS)	33	36.7
80 - 84	Satisfactory (S)	23	25.6
75 - 79	Fairly Satisfactory (FS)	4	4.4
below 75	Did not meet expectations (DE)	-	-
Total		90	100
Highest Grade		95	
Lowest Grade		79	
Mean		87.49 (VS)	
Std. Deviation		4.65	

The academic performance of the Key Stage 1 classes handled by the teacher respondents, as indicated by the average grades, reveals a generally positive outcome. The highest recorded grade was 95, the lowest was 79, and the overall mean grade was 87.49, which falls within the "Very Satisfactory" category. The relatively low standard deviation of 4.65 suggests that most pupils' grades were clustered closely around the mean. These results indicate that the majority of pupils are performing well academically, with a strong foundation in core subjects as reflected in their grades. The absence of failing grades suggests effective teaching strategies and a supportive learning environment.

Findings imply that high academic performance in Key Stage 1 education is closely linked to effective classroom instruction, supportive learning environments, and continuous assessment practices. Findings further suggest that pupils' engagement and motivation, coupled with timely feedback, contribute to maintaining high achievement levels and minimizing underperformance. Furthermore, monitoring student progress using consistent grading criteria, as demonstrated in this data, aligns with best practices that support academic success and early intervention when necessary.

This is connected to the study of Moomaw and Davis (2020), which emphasized that consistent monitoring and assessment practices contribute to sustained high performance and help identify pupils who need additional support, supporting the observed positive outcomes in Key Stage 1 classes.

Table 8. *Computed R-values on Significant Relationship between the Extent of the Influence of Classroom Design and Academic Performance of Key Stage 1 learners*

<i>Aspects</i>	<i>R-values</i>	<i>p-values</i>	<i>HO</i>	<i>Verbal Interpretation</i>
Engagement and Motivation	-.041	.701	Failed to Reject	Not Significant
Concentration and Focus	-.183	.084	Failed to Reject	Not Significant
Comfort and Well-being	.021	.845	Failed to Reject	Not Significant
Learning Style and Differentiation	-.003	.975	Failed to Reject	Not Significant

The computed R-values indicate the strength and direction of the relationship between various aspects of classroom design and pupils' academic performance. The p-values for all aspects, engagement and motivation ($r = -0.041$, $p = 0.701$), concentration and focus ($r = -0.183$, $p = 0.084$), comfort and well-being ($r = 0.021$, $p = 0.845$), and learning style and differentiation ($r = -0.003$, $p = 0.975$), are greater than the typical significance level of 0.05. Findings reveal that the null hypothesis (H_0) of no significant relationship is not rejected for all aspects, indicating that there is no statistically significant relationship between the extent of influence of classroom design by teachers and pupils' academic performance.

This implies that focusing solely on classroom design may not lead to significant improvements in Key Stage 1 learners' academic performance across areas like engagement, motivation, concentration, focus, comfort, well-being, and learning style differentiation. Instead, it highlights the importance of a holistic approach that combines environmental enhancements with effective teaching strategies, support systems, and student-centered interventions to foster better learning outcomes.

This is contrary to the findings of the study of Salar (2024), which revealed significant correlations between pupils' perceptions of classroom environments and academic performance. Specifically, educational aids and a balanced aesthetic environment were associated with increased concentration and comfort, enhancing learning efficiency.

Conclusions

The study concludes that teachers' education level and position title significantly influence their perceptions of how classroom design affects Key Stage 1 learners' concentration and focus, while other demographic factors do not show significant effects on perceptions of engagement, motivation, comfort, well-being, or learning style differentiation. Additionally, the academic performance of the learners is not significantly correlated with the perceived influence of classroom design, indicating that other factors, such as teaching strategies and learner support, likely play a larger role in academic outcomes. It is recommended that schools provide targeted professional development to enhance teachers' skills in creating concentration-friendly classrooms and combine classroom improvements with evidence-based teaching methods, formative assessments, and learner support systems to optimize both student engagement and academic achievement.

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