Front, Middle, or Back: A Study on Students' Classroom Seating Preferences

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ABSTRACT

This study examined students' classroom seating preferences, the factors associated with their choices, and whether their reported perceptions and experiences differed across preferred seating locations. A descriptive quantitative design was used. The seating-preference records covered 157 students from a private educational institution in Zamboanga del Sur, Philippines, selected through purposive sampling. The item-response sheet included usable responses from 156 students; one respondent had no corresponding item-level record, and another had two unanswered items. The researcher developed a ten-item questionnaire covering personal, emotional, and social considerations. The back of the classroom was the most frequently preferred location (43.31%), followed by the front (31.85%) and middle (24.84%). The overall item mean was 2.92, interpreted as Uncertain. The item concerning the perceived effect of seating position on concentration had the highest mean (3.30), while the statement about preferring not to be noticed by the teacher had the lowest mean (2.33). A post hoc internal-consistency check based on 155 complete item records yielded Cronbach's alpha of .350, indicating low internal consistency for the ten items as a single scale. The Kaiser–Meyer–Olkin value was .522; therefore, no factor solution was interpreted. Welch's ANOVA did not indicate a statistically significant difference in respondent-level average scores across seating groups, $F(2, 97.29) = 2.39$, $p = .097$. An exploratory regression adjusting for gender and grade level also found no statistically significant overall seating-location term ($p = .095$). The findings should be interpreted cautiously because the instrument's dimensional structure and reliability were not established. The study recommends equitable participation opportunities and further research using validated measures and mixed methods.

Keywords: classroom seating, learning experiences, seating preferences, active learning, flexible seating

INTRODUCTION

Classroom seating is an important feature of the physical learning environment because it positions students in relation to the teacher, classmates, instructional materials, and other classroom resources. Although choosing a seat may appear to be an ordinary classroom routine, students' decisions may reflect considerations such as comfort, visibility, concentration, social interaction, personal preference, and the degree of interaction they wish to have with the teacher. Seating location may therefore be relevant to classroom organization and to students' perceptions of participation and learning.

Recent studies have examined the relationship between classroom seating arrangements and student engagement. Yang et al. (2022), for example, investigated students' preferences for seating arrangements in college English blended-learning classrooms. Their findings suggested that a semicircular arrangement could support communication and concentration during cooperative learning activities more effectively than traditional rows and columns. This evidence concerns the arrangement of the classroom as a whole, rather than the simple distinction between front, middle, and back seating.

The influence of seating location on engagement may also depend on classroom design and learner characteristics. Seet et al. (2022) examined seating arrangement in a team-based learning context and reported that the relationship between seating and engagement was not uniform across learners. Their findings suggest that seating effects should be considered alongside students' experience and the instructional setting.

Other studies have reported associations between preferred seating positions and academic outcomes. Wasendorf et al. (2023) found that students who selected seats at the back of a large introductory biology classroom had lower attendance and academic performance than students who sat in the middle or front. León et al. (2024) reported differences in performance calibration and confidence judgments according to students' preferred seating positions. These studies indicate that seating preferences may be associated with aspects of classroom experience, but they do not establish that seating location alone causes differences in learning.

Yu et al. (2025) analyzed data from classes across several colleges and reported differences in undergraduate performance across classroom seating quadrants. Their study also emphasized classroom size and student density as relevant contextual factors. Taken together, the literature presents varied findings: some studies identify associations between seating position and engagement or performance, while others suggest that any relationship may depend on learner experience, classroom conditions, and instructional practices.

Contemporary approaches to classroom design also move beyond fixed rows and static front–middle–back distinctions. Research on active learning classrooms emphasizes the contribution of spatial factors to students' learning experiences and engagement (Peng et al., 2022). Flexible seating approaches in higher education similarly invite consideration of physical, kinesthetic, and collaborative dimensions of learning spaces (Pennington et al., 2022). These perspectives suggest that classroom participation may depend not only on where students sit but also on how the room is arranged and how teaching and learning activities are organized. Odum et al. (2021) similarly found that engagement patterns differed between active-learning classrooms with mobile tables and mobile desks, although student perceptions were similar across the two spaces. Jin and Peng (2022) also reported that spatial factors associated with lecture and active-learning classrooms shaped students' classroom perceptions. Odum et al. (2021) found that engagement patterns observed by instructors and researchers differed between active-learning classrooms with mobile tables and mobile desks, even though students' own perceptions were similar. Jin and Peng (2022) likewise identified spatial factors that shaped students' perceptions of lecture and active-learning classrooms.

Despite growing attention to classroom seating, students' reasons for choosing the front, middle, or back of the classroom and their perceptions of how these locations relate to learning remain relevant areas for investigation. A student's preferred location may be shaped by personal comfort, concentration, perceived visibility, social preferences, or the desire to interact with or remain at a distance from the teacher. Understanding these considerations may help teachers and school administrators provide equitable opportunities for participation and access to instruction.

The present study, entitled "Front, Middle, or Back: A Study on Students' Classroom Seating Preferences," examines the seating locations preferred by students, the personal, emotional, and social considerations associated with their choices, and whether their reported perceptions and experiences differ according to preferred seating location. By focusing on students from a private educational institution in Zamboanga del Sur, Philippines, the study seeks to contribute context-specific evidence and practical information for creating inclusive and supportive learning environments.

OBJECTIVES

The study was conducted to achieve the following objectives:

1. To identify the seating locations most commonly preferred by students in the classroom.

2. To examine students' level of agreement with personal, emotional, and social factors that influence their seating preferences.

3. To determine whether there is a significant difference in students' perceptions and learning experiences based on their seating locations (front, middle, or back).

The third objective is interpreted as a comparison of the variable questionnaire-based average scores; it does not constitute a direct measure of objective academic achievement.

METHODOLOGY

This study employed a descriptive quantitative research design to examine students' classroom seating preferences and their reported learning experiences in relation to their seating locations. The descriptive approach was used to determine the distribution of students according to their preferred seating locations and describe their perceptions and experiences concerning classroom seating. Quantitative data were gathered through a structured questionnaire and analyzed using appropriate statistical procedures.

Purposive sampling was used to include students who could provide information relevant to classroom seating preferences. The demographic and seating-preference sheets contained records for 157 students. However, the item-response sheet contained records for 156 identifiable participants; Participant 23 had no corresponding item-level responses. Accordingly, all 157 records were used for the frequency and percentage analysis of seating preferences, whereas item-based analyses used the 156 available records. Of these, 155 had complete responses to all ten items. Participant 4 had two missing item responses (Items 2 and 5); the respondent-level average for this participant was calculated from the eight available responses, consistent with the original scoring approach.

The study used a researcher-developed questionnaire consisting of two parts. Part I asked respondents to identify their preferred classroom seating location as front, middle, or back. Part II contained ten statements addressing concentration, participation, peer influence, comfort, teacher attention, personal preference, perceived learning, and choice of seating. The statements were answered using a five-point Likert scale.

The English descriptions of the questionnaire items in the results section were aligned with the actual Filipino statements in the administered instrument. In particular, Item 1 concerns whether sitting at the back is more helpful than sitting at the front; Item 5 concerns comfort in answering recitation questions while seated at the front; and Item 6 concerns preferring not to be noticed by the teacher. These meanings differ from some descriptions in the earlier manuscript and have been corrected.

The questionnaire was reviewed by five validators composed of teachers and research experts. They assessed the relevance, clarity, appropriateness, and alignment of the items with the study objectives. Their comments and recommendations were considered in refining the instrument. A pilot test was also conducted with 30 students who were not included in the final sample to assess item clarity and comprehensibility.

The original numerical output from the pilot-stage reliability analysis was unavailable. Therefore, the pilot-test Cronbach's alpha could not be verified. As a separate post hoc check, internal consistency was estimated from the final dataset using the 155 respondents with complete responses to all ten items. The resulting Cronbach's alpha was .350. This value indicates low internal consistency when the ten heterogeneous statements are treated as a single scale. The estimate should not be described as the pilot-test reliability coefficient.

The Kaiser–Meyer–Olkin measure was .522, indicating marginal sampling adequacy for factor analysis. Bartlett's test of sphericity was statistically significant, $\chi^2(45) = 145.71$, $p < .001$; however, a significant Bartlett's test alone does not establish that a stable factor structure can be recovered. Given the marginal KMO value, no exploratory factor solution was interpreted. Consequently, the ten items are treated as separate descriptive indicators, and the respondent-level average used in the group comparison is regarded as a provisional descriptive index rather than a validated multidimensional scale.

Permission was obtained from the appropriate school authorities before data collection. The purpose of the study and the voluntary nature of participation were explained to respondents. Participants were instructed to answer honestly based on their classroom seating preferences and experiences. Completed questionnaires were retrieved, checked, encoded, and analyzed. Confidentiality was maintained, and the information was used for academic and research purposes.

Frequency and percentage were used to describe the distribution of students according to preferred seating location. Means and standard deviations were calculated for each questionnaire item. The overall mean was computed as the mean of the available item responses and was interpreted using the five-point response

categories employed in the original instrument.

Welch's analysis of variance was used to compare respondent-level average scores across the front, middle, and back seating groups because it does not require equal population variances. The analysis included the 156 respondents with at least one available item response. Participant 23 was excluded from this analysis because no item-level responses were present. Participant 4's score was calculated from the eight completed items.

An exploratory ordinary least squares regression was also conducted using heteroscedasticity-consistent HC3 standard errors. The model included seating location, gender, and grade level. Because only two respondents were coded as Other for gender, these two cases were excluded from the gender-adjusted regression, leaving 154 cases (81 male and 73 female). Age was not entered because its distribution was highly unbalanced (146 respondents aged 15 or below, nine aged 16–17, and one aged 18 or above among the 156 item-response records). GPA, visual or auditory impairments, and teacher interaction style were not available in the dataset and therefore could not be controlled statistically. The regression was treated as exploratory, particularly in view of the low internal consistency of the ten-item index.

RESULTS AND DISCUSSION

This section presents the findings of the study concerning students' classroom seating preferences and how these may relate to their learning experiences and perceptions. The presentation of the data is organized according to the research objectives: (1) the seating locations most commonly preferred by students in the classroom; (2) their level of agreement with the personal, emotional, and social factors that influence their seating preferences; and (3) the significant differences, if any, in students' perceptions and experiences based on their seating locations.

Preferred Classroom Seating Locations

Table 1. Distribution of Students According to Preferred Seats

Seating Location	Frequency	Percentage
Front	50	31.85%
Middle	39	24.84%
Back	68	43.31%
Total	**157**	**100%**

Table 1 shows that the back of the classroom was the most frequently preferred seating location, selected by 68 students (43.31%). This was followed by the front, selected by 50 students (31.85%), and the middle, selected by 39 students (24.84%). The distribution indicates that the back was the most commonly reported preference in this sample; it does not, by itself, establish why students selected that location.

The finding is consistent with the broader view that students select seats for different reasons and that preferred seating may be associated with classroom experiences (Wasendorf et al., 2023). León et al. (2024) also reported differences in students' performance calibration and confidence judgments across preferred seating positions. However, such findings should not be interpreted as evidence that one seating location is universally more beneficial. Classroom layout, class size, instructional activity, and opportunities for interaction may also shape students' choices. Gao et al. (2022), using survey and wearable-sensor data, also reported associations between individual and group-wise seating experiences and student engagement, illustrating that seating-related experiences can extend beyond a simple front–middle–back classification. Gao et al. (2022), using survey and wearable-sensor data, also reported associations between individual and group-wise seating

experiences and student engagement, illustrating that seating-related experiences extend beyond a simple front–middle–back classification.

Students' Agreement with Statements Related to Seating Preferences

Table 2. Students Level of Agreement on the Factors Influencing Their Setting Preferences

Statement	Mean	SD	Interpretation
I find it more difficult to participate when sitting at the back that at the front.	2.85	1.26	Uncertain
I am more active in participating when sitting near the front	3.14	1.31	Uncertain
My seating position affects my concentration during lessons	3.3	1.29	Uncertain
My friends influence my choice of seat	2.61	1.17	Disagree
I feel comfortable answering during recitation even when seated at the back.	3.05	1.35	Uncertain
I prefer sitting near the teacher while teaching is taking place	2.33	1.21	Disagree
My seating preference reflects my personality.	3.22	1.22	Uncertain
Sitting in front is only for hardworking students.	2.49	1.22	Disagree
My seating position affects my learning	3.04	1.21	Uncertain
Students should be allowed to choose their own seats.	3.2	1.51	Uncertain
Overall Mean	**2.92**	**_____**	**Uncertain**

Table 2 presents the respondents' ratings of the ten statements. The overall mean was 2.92, interpreted as Uncertain. This indicates that the responses, considered descriptively, did not show a clear overall tendency toward agreement or disagreement across the varied statements. Because the items address different aspects of seating preference and do not demonstrate adequate internal consistency as a single scale, the overall mean should be interpreted as a provisional summary rather than as a score from a validated construct.

The statement "My seating position affects my concentration during lessons" obtained the highest mean (M = 3.30, SD = 1.29), interpreted as Uncertain. This suggests that respondents did not express a clear overall position on whether seating location affects their concentration. This result can be considered alongside research on active learning classrooms, which emphasizes that spatial factors may contribute to students' learning experiences and engagement (Peng et al., 2022). Yang et al. (2022) likewise highlighted the importance of seating arrangements that support communication and cooperative learning.

The lowest mean was obtained by the statement "I prefer not to be noticed by the teacher during class" (M = 2.33, SD = 1.21), interpreted as Disagree. This means that respondents generally tended to disagree with the statement that they preferred not to be noticed by the teacher. It should not be interpreted as evidence that students prefer sitting near the teacher, because that was not the statement administered in the questionnaire.

The findings suggest that students' seating preferences involve several considerations rather than one clearly dominant factor. Since the statements cover different content areas, future instrument development should define the intended constructs more precisely and establish evidence of reliability and dimensional validity before combining items into a single scale.

Differences in Respondent-Level Average Scores by Seating Location

Table 3. Significant Differences in Students Learning Experiences Based on Their Seating Locations

Source of Variation	F	df1	df2	p-value	Interpretation
Seating Location	2..392	2	97.2888	0.097	Not Significant

Welch's ANOVA did not indicate a statistically significant difference in respondent-level average scores

across the three seating groups, F(2, 97.29) = 2.39, p = .097. Because the p-value was greater than the .05 significance level, the null hypothesis was not rejected. The group means were 3.04 for the front group (n = 50, SD = 0.48), 2.85 for the middle group (n = 39, SD = 0.39), and 2.87 for the back group (n = 67, SD = 0.53). Although the observed means differed numerically, the analysis did not provide sufficient evidence of a statistically significant difference.

This nonsignificant result should not be interpreted as proof that seating location has no influence on students' experiences. Rather, the present analysis did not detect a statistically significant difference among the three groups in this sample, using the provisional average derived from the ten questionnaire items. The low internal consistency of the item set further limits the strength of conclusions that can be drawn from this comparison.

The result may also be considered in light of contemporary classroom approaches. Active learning environments emphasize the role of spatial design in supporting interaction, collaboration, and engagement rather than relying exclusively on fixed front, middle, and back positions (Peng et al., 2022). Yang et al. (2022) found that seating arrangements designed to facilitate cooperative learning can support communication and concentration. Pennington et al. (2022) discussed flexible seating in higher education from physical and kinesthetic perspectives. These frameworks suggest that student engagement may depend on the interaction between classroom design, teaching strategies, and learning activities, not merely on a student's usual seating location. Lee et al. (2023) found that flexible furniture configurations and classroom technologies could support pedagogical flexibility and interaction among students and instructors. Nehyba et al. (2023) reported that seating arrangements were associated with interaction patterns during group reflective practice, with effects varying by field of study and facilitator involvement. Parsons (2024) found that circular roundtable arrangements in an active-learning classroom supported immediate feedback, learner agency, and accountability. Casanova et al. (2023) emphasized the value of involving students and teachers in co-designing higher-education learning spaces.

The present study did not collect detailed information about classroom configuration, seat distance, visibility, acoustics, teacher movement, or the instructional activity taking place. Consequently, it cannot determine whether flexible or active-learning arrangements explain the observed result. The findings instead support further investigation that measures these contextual features directly.

Exploratory Regression Analysis

Table 4. Exploratory Regression Test for Seating Locations, Gender, and Grade Level

Predictor	Robust Wald Test	df	p-value
Seating Location	$\chi^2 = 4.713$	2	0.095
Gender (male/female)	$\chi^2 = 2.255$	1	0.133
Grade level	$\chi^2 = 0.914$	2	0.822

The exploratory regression model included seating location, gender, and grade level and was estimated using HC3 heteroscedasticity-consistent standard errors. The overall seating-location term was not statistically significant ($\chi^2(2) = 4.713$, p = .095). Gender ($\chi^2(1) = 2.255$, p = .133) and grade level ($\chi^2(3) = 0.914$, p = .822) were also not statistically significant in this model. The model explained approximately 4.9% of the variation in respondent-level average scores ($R^2 = .049$).

These results are exploratory. The two respondents coded as Other were not included in the gender-adjusted model because the subgroup was too small for a stable estimate. Age was not included because its distribution was highly imbalanced. The dataset did not contain academic GPA, visual or auditory impairment information, or teacher interaction style. Therefore, the regression does not address all potential confounding variables identified in the reviewer's recommendation and should not be presented as a comprehensive adjusted analysis.

CONCLUSION

The back of the classroom was the most frequently preferred seating location among the 157 students

represented in the seating-preference records, followed by the front and middle. The ten questionnaire statements produced an overall mean of 2.92, interpreted as Uncertain. The statement concerning the perceived effect of seating position on concentration received the highest mean, while the statement about preferring not to be noticed by the teacher received the lowest mean.

Welch's ANOVA did not identify a statistically significant difference in respondent-level average scores across the front, middle, and back groups, $F(2, 97.29) = 2.39$, $p = .097$. The exploratory regression likewise did not identify a statistically significant overall seating-location term after adjustment for gender and grade level ($p = .095$). These findings do not establish that seating location has no effect; they indicate only that statistically significant group differences were not detected in the available data.

The conclusions must be interpreted cautiously because the ten-item instrument showed low internal consistency ($\alpha = .350$), its factor structure was not established, and one participant had no item-level responses. The results are therefore best understood as context-specific descriptive evidence about seating preferences and questionnaire responses rather than definitive evidence about the effect of seating location on learning.

LIMITATIONS OF THE STUDY

Several limitations should be considered when interpreting the findings. First, the study involved students from a single private educational institution and used purposive sampling; consequently, the results may not represent students in other institutions, educational levels, or geographical settings. Second, the seating-preference and demographic sheets contained 157 records, but the item-response sheet contained only 156 identifiable participant records. One participant had no corresponding item responses, and another had two unanswered items.

Third, the study relied on self-reported questionnaire responses, which may be affected by individual interpretation, recall, and social-desirability biases. Fourth, the ten-item researcher-developed instrument covered several distinct topics. The post hoc Cronbach's alpha was low, and the KMO value was marginal; therefore, the instrument's internal consistency and factor structure were not established. The respondent-level average should be treated as a provisional descriptive index, not a validated scale.

Fifth, seating was classified into only three broad locations and the study did not document classroom size, desk configuration, seat distance, visibility, acoustics, teacher movement, or the type of learning activity. Finally, potentially relevant variables—including GPA, visual or auditory accessibility needs, and teacher interaction style—were not collected. Although gender and grade level were available for exploratory regression, the small number of respondents in the Other gender category and the highly imbalanced age distribution limited the adjusted analysis.

RECOMMENDATION

Based on the findings of the study, the following recommendations are offered:

1. For Teachers. Provide equitable opportunities for students to participate regardless of seating location. Teachers may distribute questions and activities across the classroom, use collaborative and active-learning strategies, and check that students in all areas can see instructional materials and hear discussions.

2. For the School Administration. Review classroom conditions to ensure adequate visibility, acoustics, seating access, and flexibility. Where feasible, consider arrangements that support different instructional activities, including individual work, group collaboration, and whole-class discussion.

3. For Students. Reflect on whether their preferred seating locations support their concentration and participation. Students should recognize that engagement also depends on preparation, attention, self-discipline, and willingness to participate.

4. For Future Researchers. Conduct similar studies with larger and more diverse samples and in different educational settings to determine whether the findings are consistent. Future studies may also use interviews or

focus group discussions to explore why students prefer particular seating locations. Other variables, such as actual academic performance and classroom participation, may be included to further examine factors associated with students' learning experiences.

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