

HOW DOES CHANGING SEATING ARRANGEMENTS AFFECT STUDENTS' ATTENTION AND PARTICIPATION?

Sohibova Zarnigor Mansurovna

3rd-year student, Namangan State Institute of Foreign Languages

E-mail: zarnigorsohibova8@gmail.com

Scientific adviser: **Erkulova Feruza**, PhD, associate professor

<https://doi.org/10.5281/zenodo.20108791>

Abstract: In recent years, classroom seating arrangements have become an important factor in improving students' learning and engagement. However, students who sit in the back rows often tend to talk to each other and lose attention during lessons, which reduces their participation in classroom activities. This study aims to examine the relationship between seating arrangements and students' attention and participation, as well as to identify the most suitable seating arrangement for primary school learners. To explore this, different seating arrangements, including U-shaped seating and other classroom layouts, were implemented. The research employed a survey-based approach and was conducted with 15 fourth-grade students at School No. 20 in the Fergana region. Data were collected through student questionnaires to identify their opinions about the current seating arrangement, as well as through classroom observations to better understand how different seating styles affect students' attention and participation. The findings indicate that changing seating arrangements can significantly increase students' activity and attentiveness during lessons. These results suggest that flexible seating arrangements may help teachers create a more interactive and effective learning environment, ultimately improving students' attention and participation.

Keywords: seating arrangement, student engagement, classroom interaction, learning environment

SINFDA O'TIRISH TARTIBINI O'ZGARTIRISH O'QUVCHILARNING DIQQATI VA ISHTIROKIGA QANDAY TA'SIR QILADI?

Sohibova Zarnigor Mansurovna

Namangan davlat chet tillari instituti 3-kurs talabasi

E-mail: zarnigorsohibova8@gmail.com

Ilmiy rahbar: **Erkulova Feruza**, PhD, dotsent

Annotatsiya: So'nggi yillarda sinfdagi o'tirish tartibi o'quvchilarning o'rganishi va faolligini oshirishda muhim omilga aylandi. Biroq, orqa qatorlarda o'tiradigan o'quvchilar ko'pincha bir-biri bilan gaplashib, dars davomida diqqatini yo'qotadi, bu esa ularning sinf faoliyatidagi ishtirokini kamaytiradi. Ushbu tadqiqot o'tirish tartibi bilan o'quvchilarning diqqati va ishtiroki o'rtasidagi bog'liqlikni o'rganish, shuningdek, boshlang'ich sinf o'quvchilari uchun eng mos o'tirish tartibini aniqlashni maqsad qiladi. Buni o'rganish uchun U-shaklidagi o'tirish tartibi va boshqa sinf joylashuvlari qo'llanildi. Tadqiqot so'rovnoma asosida olib borildi va Farg'ona viloyatidagi 20-maktabning 4-sinfida tahsil olayotgan 15 nafar o'quvchi ishtirok etdi. Ma'lumotlar o'quvchilarning mavjud o'tirish tartibi haqidagi fikrlarini aniqlash uchun so'rovnomalarda orqali, shuningdek, turli o'tirish shakllarining o'quvchilarning diqqati va ishtirokiga ta'sirini tushunish uchun sinf kuzatuvlari orqali to'plandi. Natijalar shuni ko'rsatdiki, o'tirish tartibini o'zgartirish o'quvchilarning darsdagi faolligi va diqqatini sezilarli darajada oshiradi. Ushbu natijalar moslashuvchan o'tirish tartiblari o'quvchilarga yanada interaktiv va

samarali ta'lim muhitini yaratishga yordam berishini, natijada o'quvchilarning diqqati va ishtirokini yaxshilashini ko'rsatadi.

Kalit so'zlar: o'tirish tartibi, o'quvchi faolligi, sinfdagi o'zaro ta'sir, ta'lim muhiti

КАК ИЗМЕНЕНИЕ РАССАДКИ В КЛАССЕ ВЛИЯЕТ НА ВНИМАНИЕ И УЧАСТИЕ УЧАЩИХСЯ?

Сохибова Зарнигор Мансуровна

Студентка 3-го курса Наманганского государственного института иностранных языков

E-mail: zarnigorsohibova8@gmail.com

Научный руководитель: Эркулова Феруза, PhD, доцент

Аннотация: В последние годы рассадка в классе стала важным фактором повышения успеваемости и вовлечённости учащихся. Однако ученики, сидящие на задних рядах, часто склонны разговаривать друг с другом и терять внимание во время урока, что снижает их участие в учебной деятельности. Цель данного исследования — изучить взаимосвязь между рассадкой, вниманием и активностью учащихся, а также определить наиболее подходящую форму рассадки для учащихся начальных классов. Для этого были применены различные варианты рассадки, включая U-образную и другие формы организации класса. Исследование проводилось на основе опроса с участием 15 учеников 4 класса школы №20 Ферганской области. Данные были собраны с помощью анкетирования учащихся для выявления их мнений о текущей рассадке, а также посредством наблюдений за уроками для более глубокого понимания влияния различных форм рассадки на внимание и активность учащихся. Результаты показали, что изменение рассадки может значительно повысить активность и внимательность учащихся во время урока. Эти выводы свидетельствуют о том, что гибкая организация рассадки помогает учителям создавать более интерактивную и эффективную образовательную среду, что в итоге улучшает внимание и участие учащихся.

Ключевые слова: рассадка, вовлечённость учащихся, взаимодействие в классе, образовательная среда

INTRODUCTION

Classroom seating arrangements have been widely studied as a key factor influencing student behaviour, interaction, and participation. According to Wannarka and Ruhl (2008), seating arrangements are important classroom setting events because they have the potential to help prevent problem behaviours that decrease student attention and diminish available instructional time. This shows that seating arrangement helps manage behaviour and maintain students' focus.

In addition, seating position within the classroom affects communication and interaction. As Robert Sommer (1967) states, seating position in the classroom affects patterns of communication and interaction among students. This suggests that students' location in the classroom influences how actively they communicate and participate. Furthermore, flexible seating arrangements can improve interaction and engagement. Marx, Fuhrer, and Hartig (1999) reported that students in classrooms arranged for interaction asked more questions and engaged in more on-task behaviour. This indicates that interactive seating designs encourage active learning and participation.

Furthermore, Black (2007) emphasized the importance of proper classroom layout, stating that poor seating arrangements can negatively affect students' learning by up to 50%. This shows

that inappropriate seating design can significantly reduce learning effectiveness and student performance. Overall, the literature shows that seating arrangements significantly influence student engagement, communication, behaviour, classroom management, and student participation. However, it is still not clear which seating arrangement is the most effective for increasing student participation. Some classrooms continue to use traditional seating, even though it may limit interaction and engagement. Therefore, further investigation is needed to understand how different seating arrangements influence students' participation and learning outcomes.

The purpose of this study is to examine how various classroom seating arrangements influence student engagement and participation in Grade 4 classes. This research aims to identify which seating layouts promote more active learning and interaction among students.

Research questions:

1. How do different classroom seating arrangements affect student engagement in Grade 4 classrooms?
2. Which seating layouts encourage more student participation and interaction?
3. How does the teacher's position in the classroom influence student attention and involvement?

This paper first explains how different classroom seating arrangements can affect student engagement. Then it reviews studies on classroom layouts and participation. The methodology and results show which arrangements promote active learning. Finally, it discusses ways to increase student engagement and concludes with recommendations for teachers.

MATERIALS AND METHODS

Research design: At the beginning of the study, students were seated in traditional rows. Five students sitting at the back were talking to each other, which limited their focus and participation. This initial seating arrangement showed that some students were easily distracted and did not fully engage in classroom activities.

In this study, a mixed-method research design was used to see how different seating arrangements affect students' participation and interaction during English lessons. This method was chosen because using only one type of data would not give a full understanding of what happens in the classroom. The study was carried out at Secondary School No. 20 in the Uzbekistan district of Fergana region. The participants were 15 Grade 4 students, including both boys and girls, all with a similar level of English.

Both numerical data and observations were collected to see how students behave under different seating arrangements. The survey results helped to show general trends, while observing students in class gave a better idea of how they interact and take part in activities. Earlier studies in language teaching show that the classroom setup affects how students communicate, work together, and participate. This research looked at the same idea in a real classroom, testing different ways of arranging the students' seats.

Lessons were conducted normally, without any artificial changes, so students acted naturally. Using both surveys and observations made the results more trustworthy and balanced.

Procedure and tools: In this study, seating arrangement was treated as the independent variable, while students' participation, interaction, and engagement were considered the dependent variables. To collect data, three main tools were used: teacher survey, student survey, and observation checklist.

Student survey: A paper-based survey was conducted with the 15 students to understand their preferences and feelings toward different seating arrangements. The survey was completed anonymously, allowing students to express their opinions honestly and freely.

Reason for paper-based survey: Since the students are in Grade 4 and do not have access to mobile devices or computers in class, a paper-based survey ensured that all students could participate easily and answer honestly. This format also made it simpler for the researcher to distribute, collect, and analyze the responses.

Student survey questions;

1. Do you like your current seat? A) Yes; B) No; C) A little.
2. Where do you prefer to sit? A) In the front; B) In the middle; C) In the back; D) Alone.
3. Which seating style do you like most? A) Rows; B) Groups; C) U-shape; D) Circle.
4. Do you get distracted easily in your current seat? A) Yes; B) No; C) Sometimes.
5. What distracts you the most? A) Classmates talking; B) Noise from outside; C) Sitting with friends; D) Being too far from the board.
6. Does your seat help you participate more in class? A) Yes; B) No.
7. Do you like working in groups? A) Yes, very much; B) A little; C) No.
8. Do you talk more when you sit next to your friends? A) Yes; B) No; C) Sometimes.
9. Write one thing that makes it hard for you to pay attention.
10. Write one thing that helps you pay attention in class.

Teacher survey: Teachers completed a short survey to provide their perspectives on how seating arrangements affect student participation and interaction. This allowed for additional insights based on teaching experience.

Reflective journaling: The teacher kept a reflective journal to record daily observations about how different classroom seating arrangements influenced student participation and engagement. Six lessons were observed over three weeks to identify patterns and changes in students' behavior. Firstly, student participation was recorded in each lesson based on seating positions, such as front, middle, back rows, and group or traditional seating. The teacher noted how often students answered questions, asked questions, and took part in discussions. The general classroom atmosphere and students' motivation were also recorded, as they helped to understand engagement levels.

Secondly, the teacher reflected on instruction clarity and classroom management. It was observed whether students in different seating positions understood the lesson equally well and how seating affected their attention and focus. Any problems, such as low participation or off-task behavior, were also noted for analysis. Lastly, after each lesson, the teacher wrote suggestions for improvement, such as changing seating arrangements or grouping students differently to increase interaction. Students' informal feedback was also considered to understand their preferences. These reflections helped improve future lesson planning and student engagement.

The study was conducted over a three-week period. Each lesson was observed for approximately 45 minutes during regular classroom instruction. The main focus was to examine how different seating arrangements affect student participation and engagement.

In the first phase, traditional row seating was used. Students were seated in straight rows facing the teacher. This arrangement was used as a baseline to observe students' normal participation and behavior in a traditional classroom setting. In the following phases, alternative seating arrangements were introduced. First, the seating was changed to a U-shaped arrangement, where desks were organized in a semi-circle to allow better visibility and interaction between students and the teacher. After that, group seating was implemented, where students were placed in small groups to encourage discussion, cooperation, and peer interaction.

Throughout all lessons, students were not moved based on behavior, and seating positions remained consistent during each session. The teacher observed and recorded student participation, engagement, and attention levels under each seating arrangement. However, it is still not clear which seating arrangement is the most effective for increasing student participation. Some classrooms continue to use traditional seating, even though it may limit interaction and engagement. Therefore, further investigation is needed to understand how different seating arrangements influence students' participation and learning outcomes. The purpose of this study is to examine how various classroom seating arrangements influence student engagement and participation in Grade 4 classes. This research aims to identify which seating layouts promote more active learning and interaction among students.

RESULTS

The results show that most students do not really like their current seats. Only 33.3% of students said they like their seat, while 40% said "a little" and 26.7% said they do not like it. This means many students are not fully satisfied. The main finding is that most students prefer to sit in the front of the classroom (46.7%). Fewer students prefer the middle (26.7%), the back (13.3%), or sitting alone (13.3%). This shows that students feel more comfortable and focused when they sit in the front. In terms of seating style, 40% of students prefer group seating and 33.3% prefer U-shape, while only 26.7% prefer traditional rows. This means students like interactive seating more. However, distraction is still a problem. About 33.3% of students said they get distracted easily, and 40% said "sometimes." The main distractions are classmates talking (60%) and sitting with friends (46.7%). Participation is slightly higher, as 60% of students said their seat helps them participate more in class, while 40% said it does not.

Teacher survey results

Question 1: What grade level do you teach?

According to the chart, the respondents are equally divided between primary school (42.9%) and middle school (42.9%) teachers. A smaller portion of the sample, representing 14.3%, consists of teachers working with high school students (grades 10–11). Overall, the results indicate that the seating strategies discussed are primarily being applied in early and intermediate education stages.

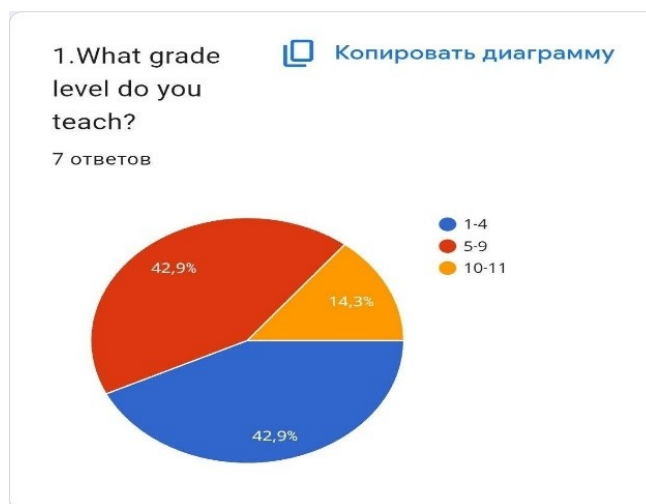


Diagram 1. Teacher survey results: grade level

Question 2: How many years of teaching experience do you have?

The data show that the vast majority of respondents (85.7%) are early-career educators with 0–3 years of teaching experience. The remaining 14.3% have between 4 and 7 years of experience.

This suggests that the feedback reflects the perspectives of a younger generation of teachers who may be more inclined to experiment with classroom management techniques.

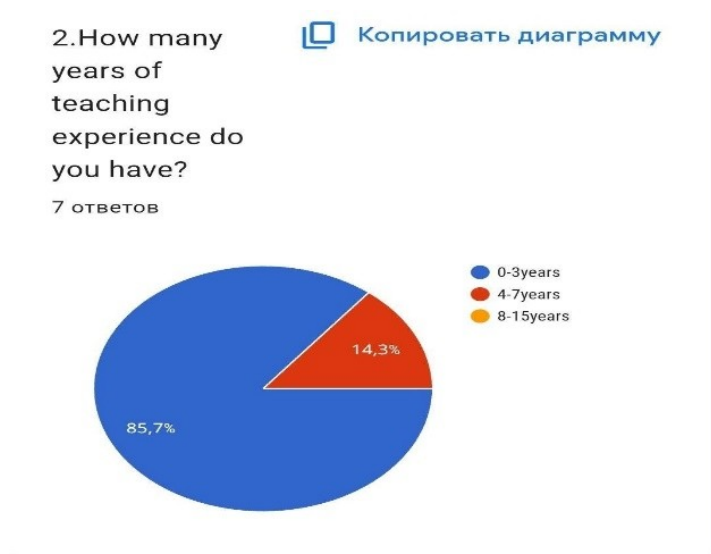


Diagram 2. Teacher survey results: teaching experience

Question 3: Do you have pupils who like to talk to each other instead of paying attention?

The results for this question are unanimous, with 100% of respondents indicating that they deal with students who prioritize peer conversation over classroom instruction. This highlights that student distraction is a universal challenge, regardless of the teacher's experience or the grade level taught.

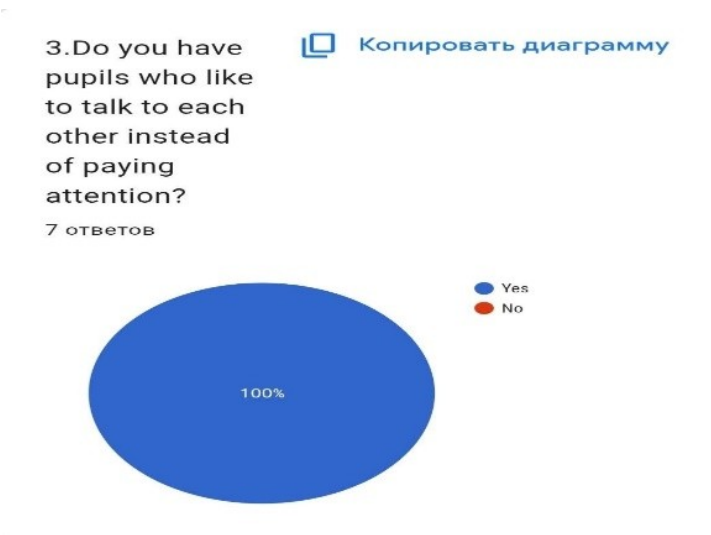


Diagram 3. Teacher survey results: pupils talking instead of paying attention

Question 4: How often do you change seating arrangements?

According to the survey, the largest proportion of teachers (71.4%) change their students' seating arrangements every week. Meanwhile, 14.3% of respondents perform this task every day, and another 14.3% do so every month. This frequent rotation indicates that teachers actively use seating as a dynamic tool for classroom management.

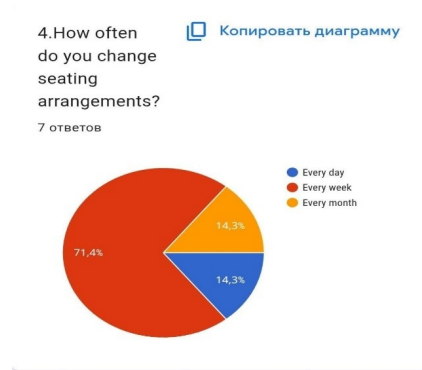


Diagram 4. Teacher survey results: frequency of changing seating arrangements

Question 5: In your opinion, does changing seating arrangements improve students' attention?

The chart demonstrates total consensus among the participants, as 100% of respondents believe that changing seating arrangements effectively improves student attention. This indicates a high level of confidence in the pedagogical benefits of rotating student positions.

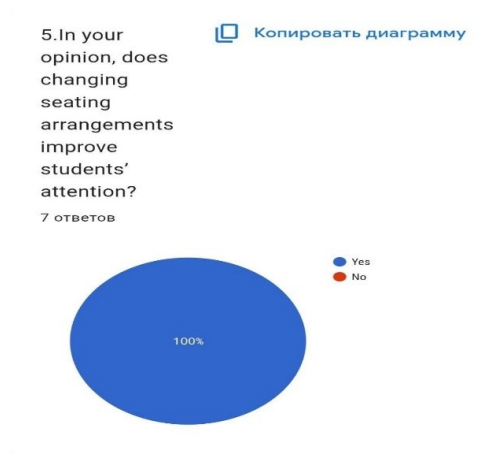


Diagram 5. Teacher survey results: effect of seating change on attention

Question 6: What type of seating arrangement do you usually use?

According to the chart, traditional rows remain the most common setup, used by 42.9% of respondents. Both U-shaped and group seating arrangements are utilized by 28.6% of teachers each. This shows a diverse approach to classroom layout, with over half of the teachers moving away from traditional seating.

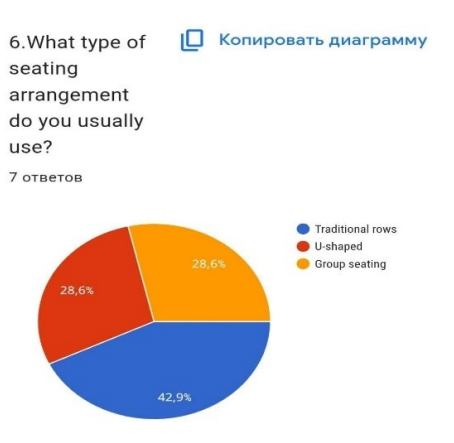


Diagram 6. Teacher survey results: seating arrangement usually used

Question 7: Have you noticed increased focus after changing seats?

The feedback shows that 100% of teachers have noticed a tangible increase in student focus after rearranging the classroom. These results confirm that physical changes in the learning environment have a direct and positive impact on student concentration.

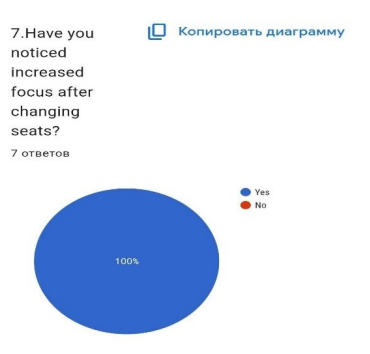


Diagram 7. Teacher survey results: increased focus after changing seats

Question 8: Students participate more when they sit:

The data reveal that the majority of teachers (71.4%) believe students participate more when they are seated near the teacher. On the other hand, 28.6% of respondents found that sitting in mixed-ability groups encourages higher participation. Interestingly, no teachers indicated that sitting with friends increases academic engagement.

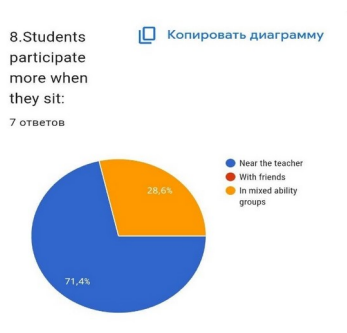


Diagram 8. Teacher survey results: seating position and participation

Question 9: After changing seats, students become:

The chart shows that 100% of respondents observed that students become more active after a seating change. This suggests that the novelty of a new seat prevents passivity and re-energizes the students' interest in the lesson.

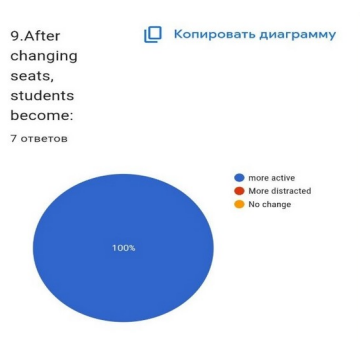


Diagram 9. Teacher survey results: student behaviour after changing seats

Question 10: What challenges do you face when changing seating arrangements?

According to the results, the primary obstacle for teachers is classroom space (57.1%), indicating that room size limits layout options. Additionally, 28.6% of respondents face student resistance, while 14.3% struggle with time management. These findings suggest that while the method is effective, physical and logistical constraints remain a significant hurdle.

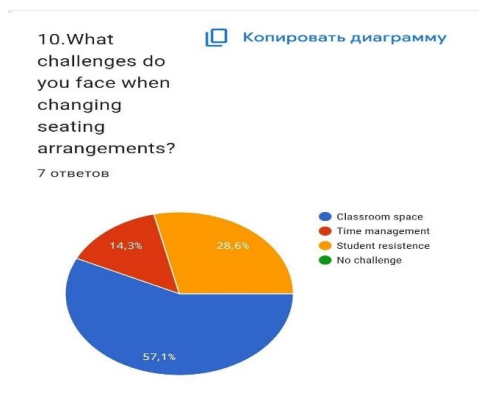


Diagram 10. Teacher survey results: challenges in changing seating arrangements

DISCUSSION

This section explains the reasons for the obtained results. The effectiveness of different seating arrangements can be explained by several factors. First, students sitting in the front rows were more focused and attentive during the lesson. They had better eye contact with the teacher, which increased their participation.

In addition, seating arrangements such as U-shape and group seating encouraged more interaction among students. This made it easier for them to communicate, share ideas, and work together. As a result, students became more active in classroom activities. Another reason is that some students did not like their current seating positions. According to the survey results, many students felt uncomfortable or less motivated in their usual seats. Changing the seating arrangement helped improve their interest and engagement.

Overall, flexible seating arrangements created a more active and supportive learning environment, which improved students' participation.

CONCLUSION

In conclusion, this study showed that classroom seating arrangement has a significant impact on students' participation and engagement. The results demonstrated that students sitting in front rows were more attentive, while interactive seating arrangements such as U-shape and group seating increased communication and collaboration among students. The findings also revealed that many students were not fully satisfied with their current seating positions. Changing the seating arrangement helped improve their motivation and classroom involvement. Overall, the study confirms that seating arrangement is an important factor in creating an effective learning environment. Teachers should consider using flexible and student-centered seating strategies to enhance participation and improve learning outcomes.

References

1. Marx Alexander, A., Fuhrer Ulrich, U., & Hartig Terry, T. (1999). Effects of classroom seating arrangements on children's question-asking. *Learning Environments Research*, 2(3), 249–263.
2. Wannarka Rachel, R., & Ruhl Kathy, K. (2008). Seating arrangements that promote positive academic and behavioural outcomes: A review of empirical research. *Support for Learning*, 23(2), 89–93.
3. Black Paul, P. (2007). The impact of classroom environment on student learning. *Educational Studies Journal*, 33(2), 101–115.
4. Sommer Robert, R. (1967). Classroom ecology. *Journal of Applied Behavioral Science*, 3(4), 489–503.