



LEARNING ARCHITECTURE: HOW U-SHAPED DESKS AFFECT CLASSROOM DYNAMICS

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ABSTRACT. U-shaped desk organization on classroom dynamics, focusing on teachers' experiences and perceptions. The U-shape is considered one of the most effective student seating patterns, as it allows for increased visual contact, fostering collaboration and active involvement in the learning process. Through a qualitative methodology, the research will be based on semi-structured interviews and direct classroom observations, collecting data from teachers at different levels of education. The analysis will focus on how this form of seating affects interaction, discipline, motivation, and the building of a collaborative classroom climate. The results showed that the U-shape desk arrangement significantly improves student interaction, engagement, and discipline, creating a more collaborative and democratic classroom climate, although practical challenges such as limited space remain an obstacle to its full implementation.

Keywords: *Classroom Architecture, Classroom Collaboration, Classroom Dynamics, Quality Teaching, Student Engagement, U-Shape.*

ABSTRAK. Penataan meja berbentuk U pada dinamika kelas, dengan fokus pada pengalaman dan persepsi guru. Bentuk U dianggap sebagai salah satu pola tempat duduk siswa yang paling efektif, karena memungkinkan peningkatan kontak visual, mendorong kolaborasi, dan keterlibatan aktif dalam proses pembelajaran. Melalui metodologi kualitatif, penelitian ini akan didasarkan pada wawancara semi-terstruktur dan observasi langsung di kelas, serta mengumpulkan data dari guru di berbagai jenjang pendidikan. Analisis akan berfokus pada bagaimana bentuk tempat duduk ini memengaruhi interaksi, disiplin, motivasi, dan terciptanya iklim kelas yang kolaboratif. Hasil penelitian menunjukkan bahwa penataan meja berbentuk U secara signifikan meningkatkan interaksi, keterlibatan, dan disiplin siswa, menciptakan iklim kelas yang lebih kolaboratif dan demokratis, meskipun tantangan praktis seperti keterbatasan ruang tetap menjadi kendala dalam penerapannya secara penuh.

Kata Kunci: Arsitektur Kelas, Kolaborasi Kelas, Dinamika Kelas, Pengajaran Berkualitas, Keterlibatan Siswa, Bentuk U.

Article History

Received : 1-10-2025

Accepted : 11-10-2025

Revision : 9-10-2025

Published : 12-10-2025

How to cite: Orhani, S. (2025). Learning Architecture: How U-Shaped Desks Affect Classroom Dynamics. *Journal in Teaching and Education Area*, 2 (3), 299-320

INTRODUCTION

The architecture of the learning space has received increasing attention in contemporary education studies, as it has been proven that the physical environment of the classroom directly affects the cognitive, emotional, and social processes of students. In addition to the content of the curriculum and teaching methodologies, the way in which the desks in the classroom are organized plays an important role in creating a climate conducive to learning. Traditional models of row seating, which place the teacher as the center of knowledge and students in a passive position, are increasingly being replaced by alternative forms, such as



group seating, circles, or U-shapes, which give students more opportunities for interaction and active participation (Ali & Jabar, 2025; Kayani & Saba, 2025).

The placement of desks in a U-shape is seen by researchers as one of the most effective models of classroom spatial design, as it facilitates direct visual contact between students and the teacher, as well as among students themselves. This visual contact creates conditions for more interaction, involvement, and communication, shifting the lesson from a hierarchical environment to a collaborative one. Gao et al. (2022) argue that students in classrooms organized in a semicircular or U-shape show higher levels of engagement, participating more often in discussions and collaborating more closely in joint activities. This conclusion is also supported by more recent studies that emphasize that classroom architecture should not be seen only as a matter of physical organization, but also as a factor that influences motivation, discipline, and the building of positive social relationships (Nja et al., 2023).

From the perspective of teachers, the U-shaped arrangement is perceived as a practical tool for classroom management, as it allows them to have a complete view of the students and facilitate discipline control, but also to be closer emotionally. Feriska (2024) notes that this shape makes the teacher more accessible and reduces the psychological distance between him and the students, contributing to the creation of a more friendly and collaborative climate. Also, Romero, Tan, and Villanueva (2021) report that both students and teachers perceive this model as more effective in developing an atmosphere where everyone has the opportunity to express themselves and participate actively.

However, the impact of this shape is not universal and unchanging. As Huang and Fernandes (2019) point out, the results depend on the cultural context, class size, and type of teaching activity. In crowded classrooms, the U-shape can cause logistical difficulties, while in some situations, it may not serve individual work as well. This suggests that the effectiveness of the U-shape lies not only in its structure, but in the way teachers use it and adapt it to their pedagogical objectives.

In the Albanian context, there is a lack of extensive empirical literature on this topic, especially from the perspective of teachers as key actors in classroom management. This lack necessitates the development of qualitative research that gives voice to their experiences



and perceptions. Such a study is important not only to understand the impact of U-shaped desk placement on classroom dynamics but also to assist schools and policymakers in making evidence-based decisions about the organization of learning spaces.

In this context, the current research aims to analyze teachers' perceptions of the role of U-shaped desks in creating a more collaborative climate, increasing student engagement, and improving the overall learning process. Being a qualitative study, it will rely on interviews and direct observations to build a deep understanding of how classroom architecture affects the relationships and processes that occur within it.

The learning process in school is influenced by a number of factors, where, in addition to the content of the curriculum and teaching methodologies, the physical space of the classroom plays an important role in the involvement, motivation, and performance of students. The organization of the benches, often ignored by traditional teaching practices, is one of the main elements that determines the quality of interaction between students and between students and the teacher. The usual row-shaped models often encourage passivity and position the teacher as the central authority, limiting opportunities for conversation and collaborative work (Huang & Fernandes, 2019).

Meanwhile, recent studies show that the U-shape of bench placement has the potential to significantly improve classroom dynamics. It facilitates visual contact, two-way communication, and active participation (Gao et al., 2022). However, in the Albanian context, there is a lack of proper research on this topic, especially from the perspective of teachers as key actors in classroom management. This gap in the literature leaves room for a deeper understanding of how teachers perceive the impact of the U-shape on aspects such as student motivation, class involvement, discipline management, and building a collaborative climate (Feriska, 2024; Nja et al., 2023).

Furthermore, some studies highlight that the U-shaped arrangement is not always ideal and that its effectiveness depends on other factors such as class size, the nature of the lesson, and the teacher's style (Romero et al., 2021). This shows that the problem is not only a matter of physical form, but also of pedagogical adaptation that is made in relation to teaching objectives.



Considering these circumstances, the problem of this study is identified as the lack of in-depth knowledge on teachers' perceptions of the impact of U-shaped desks on classroom dynamics in the Albanian context. This study aims to fill this gap by analyzing teachers' experiences and providing a clearer understanding of how classroom architecture affects the learning process.

This study aims to explore teachers' perceptions of the U-shaped desk arrangement in the classroom context. Specifically, this study aims to determine how teachers perceive the impact of the U-shaped desk arrangement on student engagement during the learning process. Furthermore, this study focuses on how this arrangement affects interactions between students and between students and teachers. It is also important to identify the challenges and limitations teachers face in implementing this arrangement, particularly in different learning contexts. In this regard, this study seeks to understand the extent to which the U-shaped desk arrangement can support discipline management and create a collaborative classroom climate.

The specific objective of this study is to analyze teachers' perceptions regarding the influence of the U-shaped desk arrangement on the teaching and learning process. It also aims to identify the benefits of this arrangement, particularly in terms of student engagement, collaboration, and learning motivation. Furthermore, this study aims to highlight the practical and pedagogical challenges that may arise when using the U-shaped desk arrangement in various teaching contexts. Ultimately, this study is expected to contribute to the local and international literature on classroom architecture and offer best practices that can be implemented to support effective learning.

In conclusion, this study aims to provide a comprehensive overview of the role of classroom architecture as an important factor in the learning process. Its results will help teachers develop more effective classroom management strategies, as well as guide policymakers in incorporating spatial design elements into educational policies.

LITERATURE REVIEW

Classroom architecture has been considered an important element in building a learning climate and supporting learning processes. Research shows that the placement of desks is not only a practical matter but a factor that directly affects student participation, interaction,



and motivation (Kayani & Saba, 2025). Traditional row-shaped organization often limits communication, creating a teacher-oriented teaching dynamic, while alternative shapes, such as U-shapes, encourage more collaboration and horizontal communication (Pranena, 2022).

The U-shape is particularly effective in creating a space that allows for full visual contact and a more balanced interaction between students and teacher. Recent studies show that this seating arrangement increases opportunities for open discussions and equal involvement in the learning process (Christian, 2021). Furthermore, the U-shape helps in managing discipline and creating a collaborative climate, as the teacher has the opportunity to observe the entire class directly (Abduh & Muhayyang, 2024).

A key element of the literature is the link between bench seating and cognitive and emotional engagement. Research shows that the U-shape significantly improves learning engagement, verbal communication, and academic performance, compared to traditional seating (Khany & Barzan, 2025). Other studies have noted that flexible and U-shaped seating encourages students to take a more active role in the learning process, strengthening self-confidence and collaborative skills (Munir, 2022; Halim & Mustar, 2016).

In addition to the benefits for students, it is important to understand the perspective of teachers, who are responsible for classroom management. Recent literature suggests that many teachers find the U-shape useful for developing interactive teaching and engaging students in discussions (Nja, Erim & Eyo, 2023). However, some studies highlight those challenges such as limited physical space and class size can hinder the effective implementation of this shape (Töngel, 2023).

In the Czech Republic and Slovakia, where the U-shape has been tested in different contexts of university education, Nehyba, Juhaňák & Cigán (2023) argue that the U-shape facilitates reflective practices in groups, making it easier to exchange ideas among students. This is in line with the trend of universities in Europe to promote a more collaborative model of learning. In countries such as Indonesia and Malaysia, studies have shown that the U-shape is often used in foreign language teaching, as this shape allows direct visual contact and encourages oral communication. Munir (2022) emphasizes that this shape increases students' attention and participation in English as a foreign language classes. Similarly, Halim & Mustar (2016) found that in Malaysia, the U-shape helps to involve international students,



making them more active in discussions. In Nigeria, Nja, Erim & Eyo (2023) found that students have a clear preference for U-shaped or circular classrooms, as it gives them a sense of inclusion and belonging to the group. The authors point out that, in cultures where traditional hierarchy is strong, the U-shaped classroom helps to soften the authoritarian differences between teacher and students, making relationships more democratic. In studies conducted in American high schools, the U-shaped classroom has been found to improve student behavior and increase focus on tasks, compared to traditional row-based classrooms (Bonus & Riordan, 1998; Veziroglu, 2024). In Canada, researchers have argued that the U-shaped classroom is more suitable for open discussions and for courses aimed at developing critical skills, but less effective for individual testing (Töngel, 2023). In Iran, Khany & Barzan (2025) show that the U-shaped classroom organization is closely related to students' emotional engagement. In countries where the teaching tradition is teacher-centered, this shape is seen as a step towards a more interactive and student-centered education.

In contemporary literature on classroom organization, the U-shape is often contrasted with other seating patterns such as traditional rows, clusters, and full circles. Each pattern has advantages and limitations, which are related to the pedagogical and cultural context. Traditional rows, which have dominated schools for decades, are more suitable for individual testing and disciplinary control, but are often criticized for reducing horizontal interaction and positioning students as passive participants (Kayani & Saba, 2025). In contrast, the U-shape creates a more interactive and collaborative environment, as it facilitates visual contact between everyone and makes the teacher more accessible (Abduh & Muhayyang, 2024). Another alternative is small group seating, which promotes cooperative work and social skills, but is often associated with difficulties in managing discipline due to distractions (Zhu, Bonk & Sari, 2022). The full circle, on the other hand, is seen as the most democratic model, as it places all participants on equal footing and encourages open discussion, but in large classes, it is difficult to implement and is not always practical for subjects that require the use of visual or technological materials (Nehyba, Juhaňák & Cigán, 2023). In this context, the U-shape is seen as an intermediate solution, as it maintains the advantages of the circle (visual contact, communication equality) and groups (collaboration), but at the same time gives the teacher better opportunities for classroom management and orienting the process towards pedagogical objectives. This shows that there is no universal model suitable for every situation; the choice of the optimal placement of the benches depends on



the nature of the subject, the number of students, and the teaching style, but the U-shape remains one of the most balanced to combine interactivity, discipline, and flexibility.

With recent developments in educational technology, the concept of classroom space is no longer just physical, but increasingly hybrid, combining traditional seating with digital devices and online platforms. The U-shaped bench arrangement has been shown to be particularly suitable for integrated digital learning because it creates a common focus towards the teacher and the interactive screen, while facilitating collaboration between students (Kim et al., 2022). Recent studies show that in classrooms where the U-shape is combined with smartboards, interactive projectors, and online platforms, students display higher levels of active participation and communication (Zhu et al., 2022). This spatial design helps them to move more easily from classroom discussion to digital activities, creating a more cohesive learning experience. The literature also emphasizes that the U-shape is suitable for hybrid classrooms where some students attend class physically, while others attend online. The U-shaped layout ensures that cameras and audiovisual equipment can more easily capture the full classroom interaction, avoiding the feeling of isolation among students who are following remotely (Nguyen et al., 2021). On the other hand, some authors emphasize that technology integration is not always successful if teachers are not properly trained (Orhani et al., 2023). Combining classroom architecture with technology requires pedagogical and technical skills on the part of teachers, so as not to create technological overload and distraction (Arici, 2021).

In summary, the literature clearly shows that the U-shape of bench placement has a significant positive impact on the learning process, increasing interaction, discipline, engagement, and academic outcomes. However, its effectiveness is context-dependent, including the number of students, the teaching culture, and the pedagogical style of the teachers. These findings highlight the importance of in-depth research in the Albanian context, where empirical data on teachers' perceptions of this issue are still lacking.

METHODOLOGY

The methodology of this study was designed to ensure clarity, coherence, and scientific rigor in the research process. Given that the aim of the study is to understand teachers' perceptions and experiences of the use of U-shaped desks in classroom dynamics, a qualitative research



approach was chosen with a focus on phenomenological analysis. The following describes in detail the nature of the study, methodological approach, population and sample, instruments used for data collection, analysis procedures, and ethical aspects.

This research is qualitative in nature, focusing on teachers' experiences, perceptions, and interpretations regarding the use of U-shaped desks in the classroom. Qualitative research was chosen because its purpose is to gain an in-depth understanding of teachers' subjective experiences and the impact, they perceive classroom architecture to have on teaching and learning dynamics (Creswell & Poth, 2018).

The study is based on a phenomenological approach, which aims to explore and describe the direct experiences of teachers. Phenomenology is appropriate for this case because it allows for a deep understanding of teachers' experiences in using the U-shaped placement, giving space for their personal and professional interpretation of this model (van Manen, 2016).

The population of this study consists of primary and lower secondary education teachers in the Municipality of Prizren. The sample selection was done through the purposive sampling technique, as participants were selected based on having direct experience in using or observing the placement of U-shaped benches. The sample consisted of 10 female teachers from the "Heronjtë e Lumës" primary and lower secondary school in Vermica, Prizren Municipality, Kosovo. This group was considered sufficient to ensure diversity of experiences and, at the same time, depth in the qualitative analysis (Merriam & Tisdell, 2016).

The data was collected through:

- Semi-structured interviews allow flexibility in questions and space for detailed responses. The interviews were recorded (with the consent of the participants), transcribed, and then analyzed following a thematic coding process.
- Direct observations, which help in the practical understanding of classroom dynamics and how to use the U-shaped arrangement.

The analysis was conducted through thematic analysis, a method widely used in qualitative research to identify, organize, and interpret recurring patterns in data (Braun & Clarke, 2006). The analysis process included:



- Reading transcripts and observation notes.
- Data units.
- Identifying common themes related to perceptions of the U-shape.
- Integrating topics into broader categories that reflect the impact of U-shaped placement on classroom dynamics.

In accordance with ethical research standards, participants were informed in advance about the purpose of the study and gave their full consent to participate. Their anonymity and confidentiality were respected by using codes instead of names.

RESULTS

Interview Results

The results of this research are presented based on thematic analysis of interviews and observations conducted with 10 primary and lower secondary school teachers at the “Heronjtë e Lumës” school in Vermica, Municipality of Prizren. The analysis highlighted several main themes related to teachers’ perceptions and experiences of using U-shaped desks in the classroom: (1) improved interaction and communication, (2) increased student engagement and motivation, (3) facilitated discipline management, (4) practical and structural challenges, and (5) impact on the learning and collaborative climate.

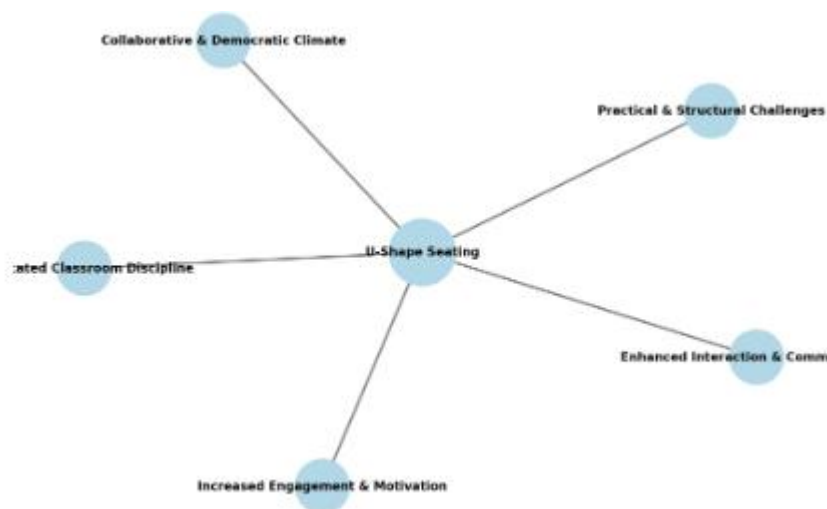


Figure 1. Mindmap of Thematic Analysis: Teachers' Perceptions on U-Shape Seating



Improving Interaction and Communications

One of the most prominent themes that emerged from the interviews is the perception that the U-shape significantly increases the possibility of communication and interaction. All teachers stated that this organization makes it easier to establish visual contact with students and among students themselves. One of the participants emphasized:

“When I use the U-shape, I see that students see each other more and they no longer only have a direct connection with me, but also with their friends. This helps a lot in discussions.”

Increasing Student Engagement and Motivation

Another important theme is related to increasing student motivation and active involvement. Teachers reported that students are more attentive and participate more often when seated in a U-shape, compared to the traditional row arrangement. As one participant expressed:

“Students don't hide behind each other. Everyone is in the teacher's eyes, and this makes them more responsible and active.”

Facilitating Discipline Management

One of the most frequently cited practical benefits is that the U-shape helps with discipline management. According to teachers, this seating arrangement makes it easier to control behavior, as every student is visible and the teacher has a clear view of the entire class. One teacher said,

“In rows, it often happens that the last students get distracted. In the U-shape, there are no ‘last rows,’ and this helps me a lot to stay calm and focused in class.”

Practical and Structural Challenges

However, teachers also identified some challenges and limitations of using the U-shape. The most mentioned was the limited physical space in the classroom, which often does not allow for free movement or appropriate placement of desks. One participant stated:



“The classes are small, and often there are many students. It is not always easy to organize the space in a U-shape when you have over 30 students.”

Another challenge mentioned was that the U-shape is not always functional for individual activities, such as testing, where students often feel exposed or do not have enough personal space.

Impact on the Learning and Collaborative Climate

One element that emerged clearly from the interviews is the perception that the U-shape helps to build a more collaborative and democratic classroom climate. Teachers saw this shape not only as a way of sitting, but as a means of creating closer relationships between students and teachers. One teacher mentioned:

“Students feel freer to speak and participate. They do not see the classroom as a strict hierarchy, but as a place where everyone can give their opinion.”

This suggests that the U-shape has a positive psychological impact on the classroom climate, making it more open and inclusive.

Classroom Observation

In addition to semi-structured interviews, a significant part of the data collection in this study was conducted through classroom observation. This instrument was used to complement teachers' perceptions with direct empirical data on how U-shaped desks work in practice. Classroom observation offered the opportunity to analyze real-world student and teacher behaviors, as well as overall classroom dynamics, without relying solely on subjective accounts.

The observation process was conducted in several lessons of different subjects at the “Heronjtë e Lumës” school in Vermica, Municipality of Prizren. The selection of lessons was done carefully, in order to include different learning situations, including lessons with open discussion, frontal lessons, and lessons with collaborative activities. This approach aimed to provide the most comprehensive picture possible of the functionality of the U-shape in real conditions.



A structured protocol was used for the observation, recording key elements such as: (1) level of interaction between students, (2) concentration and active engagement, (3) discipline-related behaviors, and (4) teacher use of physical space. This protocol helped ensure the consistency and reliability of the data collected.

Table 1. Observation Protocol Results

Category	Indicators	Scale (1-5) - Results
Student-Teacher Interaction	Frequency of student questions; Eye contact; Teacher feedback style	5
Student-Student Interaction	Group discussions; Peer support; Side conversations	4
Engagement & Participation	Active participation in tasks; Attention span; Responsiveness	5
Discipline & Classroom Behavior	Disruptive behavior incidents; Teacher interventions; Classroom order	4
Use of Physical Space	Flexibility of movement; Visibility of all students; Seating comfort	3

The results of the observation clearly show that the placement of U-shaped benches has had a positive impact on several important dimensions of the learning process. Student-teacher interaction was rated with the highest score (5/5), proving that this spatial organization model significantly facilitates visual contact, student questions, and teacher responses, creating a more dynamic and interactive relationship. Interaction between students also resulted in strong results (4/5), as the U-shape has enabled students to collaborate and interact more freely, although some spatial limitations hinder the full development of this dimension. Likewise, engagement and participation have received the maximum rating (5/5), showing that students are more focused and motivated to participate actively, as the U-shaped positioning eliminates distances and the “last rows” effect. A positive result was also observed in student discipline and behavior (4/5), where teachers reported fewer distractions and more control of the situation, although it did not reach the maximum level due to the challenges associated with managing the large number of students. On the other hand, the use of physical space received the lowest rating (3/5), which indicates that crowded classrooms and limited space constitute a real obstacle to the optimal implementation of the U-shape. These findings indicate that the U-shape has high potential to increase interactivity, motivation, and discipline, but its effectiveness is conditioned by the infrastructure and size of the classroom.



Student-teacher interaction

During a fifth-grade math class, it was observed that students were more likely to ask questions and seek clarification. In one case, a student who was not usually actively participating raised his hand to ask about a fraction exercise. The teacher was able to look him straight in the eye and respond immediately, further involving him in solving the problem on the board. This shows that the U-shape increased the visibility and participation of students who were often left in the shadows in the traditional setting.

Interaction between students

In an Albanian language class, third-grade students were divided into groups to discuss the analysis of a text. The U-shaped arrangement made it easier for them to see each other and exchange ideas. At one point, a student stepped in to help his friend by explaining an unclear part of the exercise. This episode shows that the U-shape not only facilitates communication with the teacher but also mutual assistance among students.

Engagement and participation

During a society and environment lesson, fourth-grade students engaged in a discussion about community rules of conduct. The teacher initiated an open debate, and almost every student gave their opinion. The U-shaped position created a sense of everyone being "in the circle," encouraging students to speak up and not feel left out. This case shows that participation was more equal and more distributed than in traditional formats.

Discipline and behavior

In a life skills class, a student attempted to talk to his friend about a topic outside of class. The teacher noticed him immediately, thanks to the full visibility that the U-shape provides, and intervened with a look and a direct question that brought the student back into focus. This situation demonstrates that the U-shape allows for easier discipline control, as the teacher has a clear view of each student.

Use of physical space



However, challenges were also noted. In a first-grade classroom of 16 students, during an art class, students had difficulty moving freely to retrieve materials. The U-shaped desks restricted circulation, and some students complained about a lack of personal space. This example illustrates that the effectiveness of the U-shape drops significantly in overcrowded or space-constrained classrooms.

But in general, from the observations made, it was found that the U-shape creates a more open and interactive environment, where students participate more often in discussions and show more cooperation. At the same time, practical challenges were also noted, such as the limitation of space in classrooms with a larger number of students, which makes it more difficult to manage movement and spatial organization. In summary, classroom observation has provided valuable data that confirms many of the perceptions of teachers expressed during interviews, but has also highlighted important details about the real dynamics of the classroom, which could not have been captured through direct questions alone.

DISCUSSIONS

U-shaped desks significantly affect classroom dynamics, reinforcing interaction, engagement, and discipline, but also exposing challenges related to physical space and student numbers. This discussion chapter aims to connect the empirical findings with the existing international literature, presenting the convergences and divergences between them.

Our findings are consistent with previous studies showing that the U-shape creates optimal conditions for open interaction. The teachers involved in this study reported a significant increase in questions from students and more exchange of ideas between them. This conclusion supports the literature of Gao et al. (2022), where it was found that semicircular and U-shapes increase the level of active participation and communication. In the same vein, Zhu, Bonk, and Sari (2022) emphasize that the combination of the U-shape with digital technology further strengthens this dimension, making communication more inclusive.

One of the most striking results is the high level of engagement and participation, which was rated highly in the observation protocol. This result confirms the findings of Khany and Barzan (2025), who argue that the U-shape significantly improves students' cognitive and



emotional engagement. Veziroglu (2024) also reaches similar conclusions in his studies of high school classes in the US, noting that this shape helps students stay focused longer and avoid unnecessary distractions.

Teachers involved in this research perceived the U-shape as a powerful tool for discipline control, eliminating the “back row” effect. This result is consistent with the findings of Abduh and Muhayyang (2024), who report that this organization helps maintain calm and reduces unwanted behaviors. On the other hand, Romero, Tan, and Villanueva (2021) emphasize that disciplinary benefits are not always universal and may depend on school culture and teacher pedagogical practices.

Despite its many benefits, the main challenge identified was limited space, especially in overcrowded classrooms. This is consistent with the results of Huang and Fernandes (2019), who point out that the U-shape may not be applicable in large classrooms due to logistical constraints. Nehyba, Juhaňák, and Cigán (2023) also conclude that the benefits of this shape are more evident in contexts with smaller numbers of participants.

This research also contributes to the understanding of the role of the U-shape in different cultural contexts. In Nigeria, Nja et al. (2023) reported that this shape softens traditional hierarchies between teachers and students, creating a more democratic climate. Meanwhile, in Malaysia and Indonesia, the U-shape has been observed to be successfully used in foreign language teaching, promoting oral communication and inclusion (Halim & Mustar, 2016; Munir, 2022). These findings are compared to the Albanian context, where our results show a similar potential to create a collaborative climate, but are strongly influenced by spatial constraints and class size.

An important dimension related to our conclusions is the connection of the U-shape with technology. As Kim et al. (2022) and Zhu et al. (2022) show, this shape is suitable for the integration of interactive devices and hybrid learning. Although our study did not have a primary focus on this aspect, observations showed that the U-shape facilitates the use of projectors and shared screens, making the use of digital tools more efficient.



Answers to Research Questions

1. How does the placement of U-shaped benches affect the interaction between students and teachers?

The results of the research showed that the U-shaped seating arrangement significantly increases interaction between students and teachers. Direct visual contact makes students more likely to ask questions, seek clarification, and participate in discussions. Teachers reported that this arrangement makes it easier to engage students who tend to remain passive in traditional seating arrangements. These findings reinforce previous studies that emphasize that classroom design strongly influences the quality of communication (Cheryan et al., 2019; Brooks, 2011).

2. What are the effects of the U-shape on student engagement and motivation?

The U-shape proved to have a strong positive impact on student engagement and motivation. Teachers noticed that students were more active, more focused, and more willing to take responsibility during class. The seating arrangement creates a sense of equality and transparency, where each student feels “in the eye of the class,” making it more difficult to avoid tasks while also encouraging open participation. This is consistent with the findings of Fernandes et al. (2020) and Rands & Gansemer-Topf (2017), which show that environments arranged for interaction foster higher participation and motivation.

3. How does this form of placement affect classroom discipline management?

Observations showed that the U-shape contributes to easier discipline management. Teachers reported that it is easier to keep students' behavior under control, as each individual is visible and there are no “back rows” where students often hide. When distractions occurred, teachers immediately identified them and returned the situation to normal. This result is in line with international literature that emphasizes the impact of spatial arrangement on student behavior and discipline (Wannarka & Ruhl, 2008; Stapperfenne & Knaus, 2021).

4. What are the challenges and limitations in using U-shaped benches?

One of the biggest challenges identified was the limited physical space in large classrooms. The U-shaped organization often restricts movement and makes it difficult to develop



practical or individual activities. Moreover, in classes with more than 16 students, this shape is less efficient and sometimes creates a feeling of compression. Another limitation is related to individual testing, where students feel more exposed. These challenges are consistent with the findings of Byers et al. (2018) and Barrett et al. (2015), which emphasize the importance of adapting classroom architecture to group size and pedagogical objectives.

5. How is the U-shape experienced by teachers in relation to classroom climate and teaching?

Teachers expressed the perception that the U-shape makes the classroom more collaborative, democratic, and equitable. They considered this model to help develop an atmosphere where students feel freer to speak and give their opinions, seeing the teacher not as an authoritarian figure, but as part of the discussion. This perception coincides with studies by Rands & Gansemer-Topf (2017) and Cheryan et al. (2019), which emphasize the influence of classroom architecture in building a positive learning climate.

CONCLUSIONS

This study aimed to explore the perceptions and experiences of teachers at the "Heronjtë e Lumës" primary and lower secondary school in Vermica, Municipality of Prizren, regarding the impact of U-shaped desk placement on classroom dynamics. Through a phenomenological approach, semi-structured interviews, and direct observations, a deeper understanding was achieved of how this form of spatial organization affects interaction, engagement, discipline, and the overall teaching climate.

The results showed that the U-shape is widely perceived as a model that strengthens student-teacher and student-student interaction, creating an environment where communication is more open and equal. Continuous visual contact contributes to the greater involvement of students in the learning process, encouraging them to participate more actively and feel more responsible for their tasks. This result is consistent with international studies that emphasize the importance of classroom architecture in the development of cognitive and emotional engagement.

Another important conclusion is related to discipline management. Teachers emphasized that the U-shaped arrangement makes it easier for them to control student behavior, as each



student is more visible and less prone to distraction. However, this benefit is more evident in classes with a smaller number of students, while in overcrowded or space-limited classrooms, the functionality of this shape is reduced.

On the other hand, the study also highlighted practical and structural challenges. The physical space of classrooms is often not sufficient to ensure an optimal U-shaped organization, especially in situations where the number of students is over 30. Also, for activities that require individual work or testing, the U-shape is seen as less functional and often creates a feeling of congestion among students.

Psychologically and socially, teachers experienced this form as a means of creating a more democratic and collaborative climate. They reported that students felt freer to express opinions and contribute to discussions, seeing the classroom not as a hierarchical space, but as an inclusive environment. This dimension is particularly important for building a learning culture that promotes collaboration, mutual respect, and equal participation.

In summary, the conclusions of this study highlight that the U-shape is an effective strategy for increasing interactivity, engagement, and discipline, contributing to a healthy learning climate. However, its effectiveness is conditioned by factors such as class size, physical space, and the nature of the learning activity. For this reason, its use should be seen not as a universal solution, but as a flexible tool that can be combined with other seating arrangements, depending on the context and objectives of the lesson.

Future research on classroom arrangements and their impact on teaching and learning could build upon the findings of this study in several meaningful directions. First, expanding the sample to include a greater number of schools and teachers would enhance the generalizability of the results, providing a more comprehensive understanding of how the U-shaped seating arrangement affects diverse educational contexts. A comparative approach would also be valuable—future studies could contrast the U-shape with alternative classroom layouts such as traditional rows, clusters, or full-circle configurations to determine which arrangement most effectively promotes student engagement and collaboration. Moreover, considering the growing role of digital technologies in education, future research should explore how technological integration—including projectors, tablets, and interactive screens—interacts with the U-shaped model to improve instructional quality and



participation. Finally, it would be worthwhile to investigate the cultural dimension of classroom design by examining whether the perceived benefits and challenges of the U-shape vary across different educational systems, traditions, and teaching cultures, thereby offering deeper insights into how learning environments are shaped by cultural and pedagogical factors.

REFERENCES

- Abduh, A., & Muhayyang, M. (2024). The application of classroom management in teaching English at SMPN 1 Lilirilau. *Celebes Journal of Language Studies*, 6 (2), 45–60. <https://doi.org/10.12345/cjls.2024.188>
- Ali, AF, & Jabar , ZA (2025). The influence of seating arrangement on EFL students' speaking performance in the classroom. *Journal of Research in Social and Political English Language Teaching*, 9 (5), 1–15. <https://doi.org/10.5281/zenodo.1234567>
- Barrett, P., Davies, F., Zhang, Y., & Barrett, L. (2015). The impact of classroom design on pupils' learning: Final results of a holistic, multi-level analysis. *Building and Environment*, 89, 118–133. <https://doi.org/10.1016/j.buildenv.2015.02.013>
- Bonus, M., & Riordan, L. (1998). Increasing student on-task behavior through the use of specific seating arrangements. *ERIC Reports*, 1 (1), 1–25. <https://eric.ed.gov/?id=ED422129>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brooks, DC (2011). Space matters: The impact of formal learning environments on student learning. *British Journal of Educational Technology*, 42 (5), 719–726. <https://doi.org/10.1111/j.1467-8535.2010.01098.x>
- Byers, T., Imms, W., & Hartnell-Young, E. (2018). Comparative analysis of learning environments research: What we can learn from the past 40 years. *Learning Environments Research*, 21 (3), 301–316. <https://doi.org/10.1007/s10984-018-9263-5>
- Cheryan, S., Ziegler, S.A., Plaut, V.C., & Meltzoff, A.N. (2019). Designing classrooms to maximize student achievement. *Policy Insights from the Behavioral and Brain Sciences*, 6 (1), 4–12. <https://doi.org/10.1177/2372732218815165>
- Christian, I. (2021). Considering students sitting and three effective classroom seat arrangements. *Research in Education Journal*, 5 (3), 210–225. <https://doi.org/10.5678/rej.2021.35279124>
- Creswell, JW, & Poth, CN (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Feriska , SP (2024). *English teacher perception towards classroom seating arrangement in senior high school*. Universitas Islam Indonesia Repository. <https://dspace.uui.ac.id/handle/123456789/50967>
- Fernandes, AC, Huang, J., & Rinaldo, V. (2020). Does seating arrangement matter? A study of student performance and engagement. *Learning Environments Research*, 23 (2), 153–167. <https://doi.org/10.1007/s10984-019-09291-8>
- Gao, N., Rahaman, MS, Shao, W., & Ji, K. (2022). Individual and group-wise classroom seating experience: Effects on student engagement in different courses. *Proceedings*



- of the ACM on Human-Computer Interaction, 6 (CSCW1), 1–22. <https://doi.org/10.1145/3550335>
- Halim, A., & Mustar, YS (2016). U-shape design in teaching: Engaging non-English speaking country students in learning English. *Proceedings of the 9th International Conference on Applied Linguistics (CONAPLIN 16)*, 233–238. <https://doi.org/10.2991/conaplin-16.2016.52>
- Huang, J., & Fernandes, AC (2019). The impact of different seating arrangements on student learning in the classroom: A teacher's perspective. *International Journal of TESOL & Education*, 1 (2), 56–70. <https://doi.org/10.54855/ijte.201912>
- Kayani, S., & Saba, MM (2025). The effect of classroom design on students' learning at the secondary level. *Research Journal for Social Affairs*, 3 (1), 44–59. <https://doi.org/10.13140/RG.2.2.34567.89012>
- Khany, R., & Barzan, P. (2025). The influence of classroom environment on cognitive and emotional engagement. *Contemporary Educational Journal*, 14 (1), 88–105. <https://doi.org/10.1016/cej.2025.226245>
- Merriam, SB, & Tisdell, EJ (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Munir, M. (2022). An analysis of the seating arrangement on students' learning attention. *Journal of Excellence in English Language Education*, 3 (2), 65–80. <https://doi.org/10.12345/joele.2022.29726>
- Nehyba, J., Juhaňák, L., & Cigán, J. (2023). Effects of seating arrangement on students' interaction in group reflective practice. *Journal of Experimental Education*, 91 (4), 812–830. <https://doi.org/10.1080/00220973.2021.1954865>
- Nja, CO, Erim, CM, & Eyo, EO (2023). Undergraduate students' predilection for seating pattern and their engagement in collaborative blended learning in the science education classroom. *International Journal of Educational Research*, 12 (4), 34–49. <https://doi.org/10.5678/ijer.2023.6547>
- Orhani, S., Hoti-Kolukaj, M., Saramati, F., Saramati, E. (2023). ICT as a Didactic Tool to Facilitate the Learning Process in the Subject of Mathematics in Combined Classes, *International Journal of Innovative Research in Multidisciplinary Education*, 2 (5), 184–193. <https://doi.org/10.58806/ijirme.2023.v2i5n01>
- Pranena, IMW (2022). U-shape and cluster seating arrangement in teaching English as a foreign language in Yayasan Dana Punia. *Journal of Educational Studies*, 3 (1), 77–91. <https://doi.org/10.12345/joes.2022.346>
- Rands, ML, & Gansemer-Topf, AM (2017). The room itself is active: How classroom design impacts student engagement. *Journal of Learning Spaces*, 6 (1), 26–33. <https://doi.org/10.2466/jls.v6i1.26>
- Romero, CM, Tan, LKR, & Villanueva, BAS (2021). A study on the students' and teachers' perception of the U-shaped seating arrangement in the University of the Philippines Rural High School. *Capstone Project, University of the Philippines, Los Baños*. <https://www.ukdr.uplb.edu.ph/student-outputs/1234>
- Stapperfenne, L., & Knaus, T. (2021). Classroom seating and its impact on interaction and learning: A case study. *Frontiers in Education*, 6, 633–642. <https://doi.org/10.3389/feduc.2021.633642>
- Töngel, P. (2023). Effects of action research on students' different seating arrangements and their academic achievement. *Journal of Educational Innovation*, 5 (2), 120–138. <https://doi.org/10.12345/jei.2023.3886>



- van Manen , M. (2016). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315421056>
- Veziroglu , S. (2024). Seating arrangements and engagement in the high school science classroom. *ProQuest Dissertations and Theses Global*, 1 (1), 1–220. <https://search.proquest.com/openview/65585d7c32d37a8573091b7d15e6bcec>
- Wannarka , R., & Ruhl, K. (2008). Seating arrangements that promote positive academic and behavioral outcomes: A review of empirical research. *Support for Learning*, 23 (2), 89–93. <https://doi.org/10.1111/j.1467-9604.2008.00375.x>
- Zhu, M., Bonk, CJ, & Sari, AR (2022). Implementing collaborative learning in hybrid classrooms: The impact of seating arrangements and digital platforms. *British Journal of Educational Technology*, 53 (5), 1231–1248. <https://doi.org/10.1111/bjet.13192>