

How Seating Arrangements Affect Students' Engagement

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Abstract

This study explores how engagement, specifically behavioral and emotional engagement are reflected in group work in young language learners and how seating locations (front, middle and back of the classroom) affect these two types of engagement. Engagement refers to students' active involvement during lessons, behavioral engagement being related to task behavior and emotional engagement to students' reactions. Engagement is already a relevant topic in the language learning classroom and since peer interaction is important in this context, it is useful to be able to identify what behaviors and reactions are related to engagement during group work. Similarly, it is important to know how other variables, such as seating location, can affect and change these two types of engagement. The main objectives of this work were to understand how these two types of engagement are present in group work and if different seating locations had any influence on student engagement. Data was collected through student questionnaires, observation grids, audio recordings and group interviews. Findings suggest behavioral engagement was reflected in active participation, turn-taking, peer assistance and persistence in tasks while emotional engagement was reflected in students' reactions during activities where they expressed enjoyment, excitement and frustration. Seating position seemed to have little influence on student engagement but, nonetheless, it was found that sitting in the middle of the classroom promoted the most positive manifestations of behavioral and emotional engagement. Overall, the study highlights the importance of classroom and group organizations as well as interactions when it comes to promoting engagement in the English foreign language learner in the primary education context.

Keywords: Engagement, Behavioral Engagement, Emotional Engagement, Group work, Interaction.

Resumo

Este estudo explora como o envolvimento, especificamente comportamental e emocional, reflete-se em trabalho de grupo em jovens estudantes de línguas e como a disposição de lugares (frente, meio e fundo da sala de aula) afeta estes dois tipos de envolvimento. Envolvimento refere-se à participação ativa dos alunos durante as aulas, envolvimento comportamental sendo relacionado com o comportamentos durante as tarefas e o envolvimento emocional às reações dos alunos. O envolvimento é já um tópico relevante na sala de aula de aprendizagem de línguas e, como a interação entre colegas é importante neste contexto, é útil identificar quais os comportamentos e reações que refletem o envolvimento dos alunos durante o trabalho em grupo. Da mesma forma, é importante saber como outras variáveis, como a disposição de lugares, podem afetar e modificar estes dois tipos de envolvimento. Os principais objetivos deste trabalho foram compreender como estes dois tipos de envolvimento estão presentes no trabalho de grupo e se diferentes disposições de lugares influenciam o envolvimento dos alunos. Dados foram recolhidos através de questionários aplicados aos alunos, grelhas de observação, gravações de áudio e entrevistas de grupo. Os resultados sugerem que o envolvimento comportamental refletiu-se na participação ativa, na alternância de vezes nas atividades, na entreajuda e na persistência durante tarefas, enquanto o envolvimento emocional refletiu-se nas reações dos alunos durante as atividades, nas quais manifestaram satisfação, entusiasmo e frustração. A posição dos alunos na sala de aula pareceu ter pouca influência no seu envolvimento, mas, ainda assim, verificou-se que sentar-se no meio da sala promoveu as manifestações mais positivas de envolvimento comportamental e emocional. De um modo geral, o estudo destaca a importância da organização da sala e de grupos, bem como interações no que toca a promover o envolvimento do aluno de Inglês como Língua Estrangeira no contexto do ensino básico.

Palavras-chave: Envolvimento, Envolvimento comportamental, Envolvimento Emocional, Trabalho em grupo, Interação.

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Introduction

Teaching English as a foreign language to young learners is a process that requires careful consideration in terms of students' cognitive, behavioral, emotional and social skills. The learning experience for primary school students must be meaningful, interactional and structured appropriately, especially since while learning a new language, learners benefit from activities that promote meaningful communication, participation and collaboration in order to practice said language. Aspects like classroom organization and task design can influence the way young learners respond to lessons and so, because of this, it is important to understand that certain aspects influence students' participation and involvement in the classroom.

With this in mind, student engagement is a particularly relevant aspect of meaningful language learning. Engagement has been recognized as a crucial element in learning, especially in lessons where interaction and active communication is prioritized. It is generally defined as cognitive, constructive and positive focused participation in learning activities (Philp & Duchesne, 2016). According to Christenson et al. (2012, as cited in Philp & Duchesne, 2016), engagement's critical role is highlighted, stressing that engagement is what drives learning. In the primary English classroom, engagement plays a key role in both students' academic performance and in their emotional and social reactions and connections with the language and their colleagues (Leslie, 2020; Hiver et al, 2024). In the primary English classroom context, students are expected to work in groups and interact orally with their peers and while engagement can be observed in these conditions, it can also differ depending on classroom arrangement, tasks and the learning environment in general. This way, it is important for teachers to understand how different types of engagement: cognitive, behavioral, emotional and even social, can occur in the classroom in order for the students' learning experience to be as inclusive and as effective as possible.

Cognitive engagement represents students' critical thinking skills and use of learning strategies and can be observed through students' academic skills, and how they reflect on meaning and language structures as well as how they solve problems in the case of language learning (Hiver et al., 2024; Philp and Duchesne, 2016).

Behavioral engagement is represented through observable behaviors during students' participation, such as effort, turn-taking, on-task behavior and offering or asking for help when it comes to task-related situations (Philp & Duchesne, 2016).

Emotional engagement refers to emotions and reactions expressed by the students, like enjoyment, frustration and interest. These observable actions can influence how students participate and their willingness to do so (Hiver et al., 2024).

Social engagement is related to peer interaction, collaboration and participation (Hiver et al. 2024) and is a fairly recent notion, since most do not consider it a separate form of engagement, and what some consider social engagement can also be interpreted as behavioral and emotional engagement in certain situations. Engagement is socially influenced, especially when it comes to behavioral engagement (Steenberghs, 2021). Because of this, some aspects of emotional and behavioral engagement may overlap with aspects of social engagement since all are more observable through interaction.

All types of engagement are interconnected and can influence each other (Philp & Duchesne, 2016) and every type of engagement has its importance in the learning context. Having this in mind, emotional and behavioral engagement in specific are the focus of this research, with special attention to how these two types of engagement occur in group settings and how they can be affected by where the students are sitting.

In addition to that, while there is research concerning engagement in group work and research on engagement and how seating positions can affect it, there was a curiosity to know how these two ideas worked together: how these types of engagement are manifested in group work and, at the same time, how the seating positions of the groups affected these types of engagement.

If, with this study, it becomes possible to identify engaged students and how their seating positions affect their engagement, there will be a better general understanding of engagement and seating. The aim is not to seat all students in the same place, in the case, for example, that they are all more engaged while sitting at the front of the classroom. The objective is to understand and identify engagement present in students during group work and if that engagement suffers alterations when students move seating positions. This way, it will be possible to get a better understanding of balanced seating arrangements, which don't need to necessarily stay the same throughout the

school years. In fact, according to Bernardo (2025), adjusting classroom layout and seating arrangements can promote a more engaging and interactive atmosphere for students.

To achieve this purpose, the questions below were used as guidelines during this research in order to attain answers in a clear manner:

- How are behavioral and emotional engagement manifested in group work settings?

- How do seating positions in the classroom (front, middle and back) affect these two types of engagement?

Chapter I: Literature Review

Since this action research relates to student engagement in group work and seating locations, this review analyses research on student engagement, with a particular focus on emotional and behavioral engagement in group work settings and different seating arrangements. The literature shows separate research about how group settings and seating arrangements influence engagement as well as how seating position can affect engagement. This literature review will start with different perspectives on students' engagement, paying close attention to emotional and behavioral engagement. Then, research on engagement through group work and interaction will be examined, with a particular focus on collaborative learning. After that, research and findings on seating arrangements and classroom layout and how they influence students' engagement will be analyzed. Finally, the review will focus on differences and similarities between the literature and it will be related to the action research in question.

I. 1. Engagement in Education and Language Learning

In education, engagement is often associated with academic success and student persistence and motivation. Rather than being related just to students' interest in a subject, engagement refers to their active involvement in the learning process as well as the effort they put in and the emotions they feel. Engagement increases when students feel motivated, confident and supported and so, when engaged, students are more likely to be involved, put in the effort and develop deeper comprehension in terms of a specific subject or project (Alsebaie, 2023). Furthermore, rather than being something stable, engagement is fluid and changeable, shaped by interactions and context (Philp & Duchesne 2016; Sun et al., 2022).

Engagement in relation to language learning can be mainly defined as a dynamic and multidimensional notion that can be related to task-based learning and communication, (Philp & Duchesne, 2016) both important aspects of language learning. It is believed that since language use and interaction are seen as critical for language development, and engagement is directly connected to interaction, without engagement in the language learning classroom, meaningful learning is less likely to happen (Hiver et al., 2024).

Furthermore, engagement in the language learning classroom is not simply framed by participation in tasks but by participation in meaningful interaction that causes language learning opportunities (Leslie, 2020). This way, student engagement has become a core part of the language learning classroom due to its strong connection with motivation, learning success and academic achievement (Shernoff, et al. 2017).

I. 2. Behavioral and Emotional Engagement

While engagement can include cognitive, behavioral, emotional, and even social elements, this review will focus solely on behavioral and emotional implications.

Behavioral engagement refers to students' active participation in learning and while it is easier to notice in student interaction scenarios, behavioral engagement can also be present when students work individually. Aspects that refer to this type of engagement include on-task behavior such as time on task and task persistence as well as task related interactions between students and effort (Hiver et al. 2024).

On the other hand, emotional engagement refers to learners' emotional involvement in learning and is directly related to students' emotions and feelings (Philp & Duchesne, 2016). Reactions related to enjoyment and enthusiasm represent positive emotional engagement, while emotions such as anger, frustration and boredom represent students' negative emotional engagement (Hiver et al. 2024). This way, emotional engagement is considered to have a crucial impact on other types of engagement since students' emotions and perceptions can influence how they do tasks, affecting cognitive, behavioral and social aspects of engagement (Hiver et al. 2024).

While there is usually a focus on students' academic performance and understanding of a subject, behavioral engagement is equally important since it can be, but not strictly, a visible demonstration of students' learning involvement in the classroom. Students should not only know the subject, they should be involved in it and show interest. Students who are behaviorally disengaged may stay off-task and do not contribute to interactions, negatively impacting their learning process (Philp & Duchesne, 2016). Likewise, emotional engagement influences confidence and classroom environment since it connects to students' emotions, playing a critical role in student participation. Students that express interest and enjoyment are more willing to participate in tasks and

interactions, while students that express boredom, hesitation and boredom are less likely to participate in tasks (Philp & Duchesne, 2016). Therefore, these two types of engagement are connected and have equal importance in the language learning classroom, influencing how students feel and behave and, in turn, also influencing their understanding and academic achievements.

According to Philp and Duchesne (2016), engagement is a dynamic process influenced by the type of tasks, peer interaction and even social connections. It is highlighted that emotional and behavioral engagement are connected since students are more likely to actively participate when they are emotionally invested and feel supported. Nevertheless, their research focuses mainly on interaction patterns, which refer to different interactions students can have with teachers and with each other, and tasks, showing little regard for the physical structure of the classroom.

However, research done by Shernoff et al. (2017) underlines how classroom context such as physical space, influence students' engagement during lessons, arguing that different locations place students in different physical environments in the same classroom. While it is acknowledged that the learning environment is important for learners' involvement, and knowledge acquisition, distinct factors such as seating arrangements are suggested to need further consideration and exploration.

In general, the literature offers an enlightening basis for the understanding of behavioral and emotional engagement and their importance in learning but provides a narrow perception on how they are molded by specific seating arrangements and classroom layout.

I.3. Learning Spaces and Seating Arrangements in Education

There are various seating arrangements and classroom layouts that can be used in the classroom and these can influence how students and even teachers interact and communicate on certain tasks. Oblinger (2006) argues that traditional classroom layouts, such as sitting in individual rows, tend to limit active learning and promote teacher-centered lessons leading to a drop in student engagement since they have no active role in the lesson, while flexible and adaptable arrangements, such as sitting in

groups, promote interaction, collaboration and even motivation - reference. This way, to support engagement, Oblinger (2006) highlights how spaces where students are able to sit in clusters or circles encourage interaction and social learning, linking to students' engagement in terms of collaboration. However, while this work provides a better understanding of how learning spaces can support or restrict engagement, it is mainly descriptive and lacks actual classroom experience data.

Besides that, seating location in the classroom such as front, middle and back, can also influence students' performance, understanding and participation. Understanding seating arrangements and knowing how to use them can aid students in the classroom and influence the direction of lessons (Wannarka & Ruhl, 2008; Bernardo, 2025).

Shernoff et al. (2017) conducted a study with undergraduate university students who completed a student survey before measuring their self-reported engagement and seating location through the Experience Sampling Method (ESM). This method is similar to a student diary, where students are asked to report on their thoughts, feelings, behaviors and even environment. This way, real-time data was collected in terms of students' thoughts concerning seating arrangements and how they influenced their engagement. Findings showed that students sitting at the front and middle of the classroom show higher levels of engagement and quality experience than the ones sitting at the back of the classroom.

Similarly, Haya (2025), in a study concerning primary school students and how seating layouts can influence their motivation, stresses how motivation and engagement are closely related but are not identical notions. Engagement is considered the visible manifestation of motivation which: serves as an indicator that motivation is present in the learning process. Data was gathered through questionnaires and survey tools, more specifically the Motivated Strategies for Learning Questionnaire (MSLQ) and the Classroom Seating Rating Scale for Students (CSRS-S), as well as multiple tests given to the students. In this study in particular, students' engagement and how it changed was analyzed through seating locations (front, middle and back) and group settings. In the end, it was found that students sitting at the front and in the middle showed higher motivation levels than the ones sitting in the back.

In a study that examined how classroom layout influenced students' participation and engagement in Portuguese and English lessons, Bernardo (2025) highlights that seating positions affect students' willingness to participate and that the results can also depend on students' emotions. This was a study done on a class of 8th grade (students around 13 years old) and a class of 10th grade (students around 15 years old) in which three classroom layouts were applied in the classroom: individual rows turned towards the front of the classroom, two horseshoe table arrangements and a roundtable arrangement. Data collected from observation grids and student questionnaires concluded that students preferred arrangements like horseshoe and roundtable, both of which promoted better interaction in whole class discussions. But, just as these arrangements can affect students' engagement, emotions, as mentioned in Bernardo (2025), can also play a part. Some students, for example, prefer more discreet classroom positions in order to avoid attention and that can influence participation. Besides that, anxiety and confidence, which connect to emotional engagement, can vary and be influenced by seating arrangements. In addition, according to Classroom Management and Organization (2024), it is important to note that seating location can also influence how students communicate with each other and the way teachers monitor students, which can affect motivation and student engagement.

Overall, all of these studies show different seating layouts and what tasks they can be used for as well as how they can benefit students and also teachers. They highlight, for example, how group arrangements promote group work and interaction and how individual seating facing the front promotes teacher-centered learning (Oblinger, 2006). Even though horseshoe arrangements prove to promote interaction as well, they focus on whole class interactions and discussions and may cause not every student to participate actively (Bernardo, 2025).

I.4. Engagement in Group Interaction

Having this in mind, engagement can be best observed during collaborative work and collaborative learning environments in which interaction and active participation can be encouraged (Sun et al. 2022). Not to say that students cannot be engaged when working individually, but it is defended that observable aspects of engagement are more easily

noticed and present when students work together and interact with each other. Having this in consideration, group work that focuses on collaboration can stimulate emotional and behavioral engagement by promotion peer connection, confidence, peer support and dedication (Leslie, 2020; Haya, 2025).

Likewise, observational research shows that collaborative work promotes higher participation, enthusiasm and sustained interaction than direct teacher instruction (Sun et al. 2022). This study involved students from 5th grade classes in which each student was analyzed separately in videos and who they interacted with was noted to see how levels of engagement changed in social interaction. The results revealed that collaborative learning tasks caused greater visible engagement such as enthusiasm and interest, as well as oral participation.

Research done in language learning classrooms further emphasizes the presence of engagement during group work and peer interaction. In primary English classrooms, for example, students were shown to participate more actively when they felt emotionally supported and seen as an active member of their group (Leslie, 2020). In this context, behavioral engagement, manifested through turn-taking and verbal input, was connected to emotional engagement which included feelings of validation and a sense of belonging, showing that they can be influenced by one another. On a similar note, research in relation to collaborative work settings reports an enhancement of students' engagement in relation to participation and interaction during group work (Alsebaie, 2023). Despite the research's findings supporting the increase of behavioral engagement in collaborative work settings, emotional engagement is primarily mentioned in terms of confidence and motivation, lacking in-depth analysis of students' reactions and opinions.

Besides interactional scenarios in specific, the physical organization of group seating seems to also shape engagement in collaborative tasks. Group layouts, for example, were shown to facilitate peer communication and interaction as well as cooperation in primary to secondary school students, directly influencing behavioral engagement (Wannarka & Ruhl, 2008). However, there is emphasis in how seating configuration alone does not automatically guarantee engagement and that without structure and clear goals, off-task interaction may occur, negatively impacting learning engagement. Further research from primary classrooms indicated that students' engagement and

learning motivation was significantly higher in group settings compared to individual layouts (Haya, 2025), reinforcing the idea that seating positions and arrangements, as well as classroom layouts that promote student interaction, can enhance both behavioral and emotional engagement. Considering specific group layouts as examples, a study concerning how seating layout can affect participation in primary school reached the conclusion that while pair and small group arrangements supported peer interaction, a horseshoe arrangement promoted high levels of participation in group and class discussions, the latter being students' preferred arrangement (Rogers, 2020). This suggests that seating arrangements can influence both observable engagement and students' interactions.

On an interesting note, engagement in group work seems to be influenced by social proximity. According to further research, high school students seated together tend to show similar engagement responses, as demonstrated through self-reports and observations (Gao et al. 2021). These findings support the idea that engagement, especially behavioral engagement is not strictly an individual occurrence and that engagement is influenced by interaction.

The literature as a whole provides an understanding of how students' engagement can be impacted by various factors, such as social context, classroom tasks and seating arrangements (Hiver, et al 2024). Group work and interaction are consistently mentioned as promoting behavioral and emotional engagement. On a similar note, seating position can also be used as a positive influence on participation and interaction (Haya, 2025).

However, while some studies (Bernardo, 2025; Shernoff et al. 2017) analyze the influence of seating location (front, middle and back of the classroom) in lecture-based circumstances, other studies focus purely on group work settings in relation to engagement, with only Haya (2025) focusing on both aspects. Furthermore, some studies provide limited insight in how engagement is manifested during interactions.

Only three studies focus on primary school students to my knowledge: Haya (2025), Rogers (2020) and Leslie (2020), using fourth-grade students, while the rest of the literature focuses on higher education students. The students' age may influence how engagement manifests itself in group work and how seating arrangements influence emotional and behavioral engagement. Students of different ages act differently from

each other in terms of visual behavior and even attention regulation and so engagement is shaped by learners' maturity, emotional reactions and even social confidence (Philp & Duchesne, 2016).

I.5. Relation to Action Research

In the context of this action research, the literature provides a basis for studies and findings related to how emotional and behavioral engagement can manifest in group work settings and how seating position (front, middle and back) can affect these types of engagement. With the information provided by the literature, the action research intends to give classroom specific context and analyze both collaborative work settings and seating locations and see how both interact simultaneously and influence students' emotional and behavioral engagement.

Chapter II: The Action Research

II.1. Context

The participants in this study were 22 students of a 4th grade class in a relatively small primary school in Lisbon. The class consisted of 11 girls and 11 boys with 4 eight-year-old students, 15 nine-year-old students, 2 ten-year-old students and 1 eleven-year-old student. This class in particular had students of various nationalities and backgrounds, where most came from Portugal but others from various Portuguese speaking places in the African continent. The class also had a student with hyperactive behavior and a partially deaf student.

The school in itself had little playground space but spacious classrooms with windows along one wall with shutters. The classroom used was similar in space and had plenty of natural light as well as artificial light. The classroom also had a white board as well as a projector and computer and the walls were filled with students' work. Students had 1 hour English lessons twice a week and the lessons followed a clear structure. To open the lessons the students wrote the lesson number and date on their notebooks and the teacher explained what they would be doing for the lesson. Interaction and student-centered activities were usually the norm in English lessons save for the occasional writing practice and initial vocabulary introduction. Overall, interaction and language use was prioritized in the English classroom.

There is a need to clarify that before the project was put in motion and data was collected, consent from students and their parents to participate on the project was requested as well as authorization from the school to do the project (Appendix A, B and C). The director of the school district was given a document to ask for permission to do the project with details of what it would entail and how data would be collected. Students were given a letter that explained the project in simple terms and asked if the students would like to participate, highlighting that there would be no negative consequences if they did not wish to take part in it and that their identities would remain anonymous. The document given to the parents explained the project in more detail, explaining the course and objective of the research and how everyone involved in the project would remain anonymous.

II.2. Methodology

II.2.1. Classroom Activities

In this action research, the 22 students in the classroom were divided in six groups of three and two groups of two in which they did three tasks together throughout the semester: Pelmanism games to promote interaction between group members in order to observe engagement more effectively. All groups were organized so that there was a balance between students' cognitive abilities and participation. As such, groups were arranged so that there were both stronger and weaker students together and also shyer students with more outgoing students in order for them to encourage each other to participate.

The first task (Appendix D) was a telling the time game in which students were given two sets of cards with pictures of clocks. They had to turn the cards face down, mix them and then, in turns, choose two cards, say the time on each card in English and see if the clocks were a pair. Students did this until they found all the pairs. The second task (Appendix E) was a body parts game and was similar to the telling the time activity, in which they also had two sets of cards and the activity process was the same. Finally, the third task (Appendix F) was a places at school game in which students were given one set of cards with pictures of the school places and another set of cards with the written words. In the first task, two groups sat at the front, three sat in the middle of the classroom and three sat at the back. Then, in the next two tasks, groups switched seating positions until all groups sat at the front, middle and back of the classroom. Groups 7 and 8 moved together throughout the change in seating arrangements and groups 5 and 6 moved together as well. Group 4 was moved between the activities in a way that put groups 7 and 8 together so that they could be easier to track since they were the only pairs. Groups 1, 2 and 3 were switched in a specific order to keep track of audio recordings. Respectively, group 1 started at the front, group 2 in the middle and group 3 at the back. Then, groups were rotated in a front-to-back movement until all groups had sat in the three seating locations. This way, emotional and behavioral engagement can be looked for and analyzed in group work scenarios and if different seating positions for the group influence these types of engagement.

Table 1 – Group and Seating Locations Arrangement

	Front	Middle	Back
Telling the time memory game	Group 1 Group 4	Group 2 Group 5 Group 6	Group 3 Group 7 Group 8
Body memory game	Group 5 Group 6 Group 3	Group 1 Group 7 Group 8	Group 2 Group 4
Places at school memory game / word association	Group 2 Group 7 Group 8	Group 3 Group 4	Group 1 Group 5 Group 6

II.2.2. Data collection tools

II.2.2.1. Questionnaires

Questionnaires are proven to be an effective research tool to gather data, and, in this case they are useful to make opinion based questions. In total, students were given four questionnaires each. The first questionnaire (Appendix G) the most different of the four, focused on students' first impressions and basic opinions before they actually started to work with their respective groups. The objective of this questionnaire was to know how many students liked group work in general in order to understand if that affected their performance and interactions when they did the group activities. It also had the objective to see where students would like to sit best, location wise, and if that influenced their group work during the activities. This questionnaire consisted of four closed questions and one open question that asked students about how they felt in their current seat. The other three (Appendix H) were basically identical to each other and focused on students' thoughts, reactions and actions after each activity. Questionnaires 2 and 4 were the same with nine closed questions and four open questions while the only difference questionnaire 3 had from them was the inexistence of question 13, an open question that asked students where they thought they could concentrate better in the classroom. This decision was made since it was deemed more important to know students' opinions regarding seating locations in the beginning and end of the project so that there was a clear comparison between the two. The objective of these three

questionnaires was to gather students' perceptions on how their group work went, if they displayed engagement and how their seating location affected and changed their answers, the questions having been related to emotional and behavioral engagement but tailored for students understanding. The questions ranged from how much students liked to work in their groups and if they felt that where they were sitting influenced their group work positively or negatively, to questions regarding certain behaviors within the group (if they asked for help, if something went wrong and what,...). By answering these simple questions (What went well / wrong during group work? / Did your group finish the activity?), students reported behavioral and emotional engagement aspects related to their group work in general. For example, when students said what went right or wrong during the activity, it was possible to identify emotional engagement aspects, like their reactions and responses to certain situations, and even behavioral engagement aspects when they referenced on-task related situations.

All the questionnaires were given to the students by the teacher, who explained the questions and asked students if they had doubts before they started filling them in. The first questionnaire was given at the beginning of the semester before the students started to work in groups while the remaining questionnaires were given right after students worked with their groups to know their opinions regarding the group work in specific.

The first questionnaire was analyzed separately and compared to the other questionnaires and interviews to understand how students' opinions regarding group work and seating positions changed. The other three questionnaires were analyzed by seating location. So, for example, questionnaire 2 was separated in three corresponding to students that sat at the front, middle and back during the activity and this was done for the questionnaires 3 and 4. This way, it is possible to check students' answers and engagement marks based on their seating positions and if there are patterns or inconsistencies observed. Furthermore, quantitative data (closed questions) was organized in percentages while quantitative data (open questions) was analyzed individually, by writing down students' answers and noting how many students gave similar or identical answers, and then the data was compared in order to find similarities and differences between answers.

II.2.2.2. Observation Grid

To gather observable data, one observation grid was made and used for every activity. The observation grid was chosen because of its effectiveness in gathering visual data during the students' group work. Its objective was to identify observable emotional and behavioral engagement actions in students in order to see how engagement appeared during group work and if there were any changes in engagement depending on the groups' locations. The same observation grid was used in the three activities. The criteria chosen for the observation grid was separated by the two types of engagement. Firstly, for behavioral engagement, the grid displayed the categories: Stay on task, participate often, take turns, follow instruction, persistence even when hard and help each other, all aspects that reflect behavioral engagement. While helping peers can be a sign of social engagement, when related to task-specific aspects and situations, it can be associated with behavioral engagement. When students persisted with peers and corrected wrong answers, it represented on-task behavior and participation in task-related situations, both core aspects of behavioral engagement (Steenberghs et al., 2021). For emotional engagement, the observation grid had the criteria: Show enthusiasm, enjoyment, frustration, peer connection, bored/tired and arguing. These categories were chosen since they represented signs of positive and negative emotional engagement. The "arguing" category was added during the first observation in task 1 since it was observed during group work and could be useful to realize which groups had more negative signs of emotional engagement.

The tasks weren't long and it was almost impossible to observe all the groups in detail at the same time. With the observation grid, the observer could walk around and tick visual representations of engagement during group work. Data from the observation grid was gathered through direct observation and note-taking, so that visual engagement signs in different groups could be noted down quickly and later compared data collected from the grid of each activity and, again, examined to find consistencies and inconsistencies related to group work and seating arrangements.

Observation grids were compared side by side, noting how often certain reactions related to each type of engagement appeared in each group and in which activities. The data from the observation grids was analyzed quantitatively by writing down which groups reflected certain behaviors and interactions in each activity and seating location.

Later, groups were separated by their respective seating arrangements in each grid and notes were taken in relation to common reactions of engagement in each seating location and if there were inconsistencies or few changes in behavior. Then, data was organized by groups who had little to no changes in behavior throughout the activities and groups who had some or distinct changes to see if group arrangements had more influence in engagement than seating locations. This way, it was possible to observe which groups showed certain engagement related behaviors and how other factors, such as seating arrangements in specific, could have had an influence in said engagement. In the results section of this work, the observation grid used in each activity was divided in two, presenting one grid with the observable behavioral engagement in group work and another with the observable emotional engagement. This way, it was possible to reference to specific data from both emotional and behavioral engagement separately.

II.2.2.3. Audio Recordings

While observation grids are useful, they cannot gather details and so three groups were chosen to be audio recorded. The three groups were recorded throughout the three activities, so, in total, there were nine audio recordings, three of each group. The objective of these recordings was to collect detailed interactions between students and see how these two types of engagement were present in them. This way, these three groups could be analyzed in detail to see how emotional and behavioral engagement were present in specific interactions during group work and how these were affected when students switched seating locations. Furthermore, it was also possible to follow the groups' progress and how their engagement changed in detail. In this research, three specific groups were picked to be recorded during the group activities. These three were chosen to be the recorded groups since they consisted of students who could easily interact with anyone and were active participators in group work but also students who had difficulties interacting with others, promoting interesting interactions and manifestations of engagement in audio recordings. Before group task, each of the three groups had an audio recorder on their table with the objective to record interactions between group members that could be analyzed in more detail. Since each group sat in three different seating arrangements (front, middle and back), each group was recorded three times. So, in total there were nine recordings, three of each group. Through the

audio recordings it was possible to collect data related to students' interactions and behaviors that could be related to the two types of engagement present in this study.

The data collected from the recordings was organized by group, taking into consideration students' personalities by taking note of students who were more shy or outgoing or students who liked to be in charge and how that affected interactions and also taking in consideration their seating arrangements. Specific conversations were analyzed for signs of emotional and behavioral engagement. Reactions such as students calling the attention to their group members, taking turns and even arguing were examples of signs of engagement in student interactions. Later on, after each recording was analyzed separately, each groups' actions were compared qualitatively in relation to their seating arrangements to look for common behaviors.

II.2.2.4. Group Interviews

After each group worked in all the seating positions, audio recorded group interviews were carried out with every group to know their final thoughts regarding their group work and seating arrangements and to clarify answers from the questionnaires (Appendix I). The questions asked were developed to clarify questionnaire answers and get different student perspectives to see if their opinions concerning seating locations and group arrangements clashed with the data already collected. Additionally, some comments were added during the interviews depending on students' reactions or need for further clarification. Data was collected by writing down students' answers and noting their reactions to further clarify students' opinions. Rather than transcribing every interview, only certain answers and moments were transcribed such as specific interactions between students while they were answering interview questions. The remaining answers were written in a simplified manner, directly stating what the students said. The justification for this that some students gave very short and direct answers while others took some time to get to reach their answer. Nonetheless, no answer from any student was dismissed and all of their opinions and ideas were all written down and taken in consideration.

Lastly, the data collected from the interviews was analyzed by listening to each individual interview various times and taking notes of information deemed relevant and

useful as well as trying to find patterns. Then, each interview was compared in order to note answers that were not shared by most groups or group members as well as similar opinions within peers related to their group works in general and the places they sat. Having this in consideration, the results gathered mean to answer the research questions: -How are behavioral and emotional engagement manifested in group work settings and how do seating positions in the classroom (front, middle and back) affect these two types of engagement?

II.3. Results

This study's objective was to understand how behavioral and emotional engagement was manifested in group work by using memory games and how seating locations influence these types of engagement. This section shows the findings and outcomes of this research. The data collection tools included questionnaires, observation grids, audio recordings of group interactions and group interviews in order to analyze students' behaviors, reactions and perceptions. Firstly, the findings on how behavioral and emotional engagement were manifest in group work will be described, followed by how seating locations (front, middle and back) influenced these two types of engagement. There will be references to patterns and themes found in the analysis supported by examples from the data.

II.3.1. Behavioral Engagement in Group Work

II.3.1.1 Observation Grids (Behavioral Engagement– Group Work)

Behavioral engagement was manifested in group work through active participation, assistance between peers and persistence during challenging moments in activities. According to data collected from observation grids, in all three activities, most groups remained on task most of the time and displayed collaborative behaviors such as helping peers and taking turns.

Table 2 – Observation Grid, Behavioral Engagement –Task 1

	Group 1 (front)	Group 2 (middle)	Group 3 (back)	Group 4 (front)	Group 5 (middle)	Group 6 (middle)	Group 7 (back)	Group 8 (back)
Stay on task	x	x	x	x		x	x	x
Participate often	x	x		x	x	x	x	x
Take turns	x	x	x	x	x	x	x	x
Follow instructions	x	x	x		x	x	x	x
Persistence even when hard	x	x	x		x	x	x	x
Help each other	x	x	x		x	x	x	x

As it can be observed in table 2, most groups showed all of the signs of behavioral engagement present in the table's criteria in task 1. One criteria that every group showed during their work was turn-taking but the other criteria was not always present in every group. Group 5, for example, displayed off-task behavior and in group 3 not every member participated often. Group 4 showed the least signs of behavioral engagement compared to the other groups, struggling to follow task instructions, not persisting when they had difficulties and not helping colleagues.

Table 3 -Observation Grid, Behavioral Engagement –Task 2

	Group 1 (middle)	Group 2 (back)	Group 3 (front)	Group 4 (back)	Group 5 (front)	Group 6 (front)	Group 7 (middle)	Group 8 (middle)
Stay on task	x	x	x	x	x	x	x	x
Participate often	x	x		x	x	x	x	x
Take turns	x	x	x	x	x	x	x	x
Follow instructions	x	x	x	x	x	x	x	x
Persistence even when hard	x	x	x	x	x	x	x	x
Help each other	x	x	x	x	x	x	x	x

In table 3, only one group lacked one sign of behavioral engagement. In group 3, once again, not every group member participated often but, other than that, all groups stayed on task, took turns, followed instructions, persisted when they had difficulties and helped each other.

Table 4 -Observation Grid, Behavioral Engagement –Task 3

	Group 1 (back)	Group 2 (front)	Group 3 (middle)	Group 4 (middle)	Group 5 (back)	Group 6 (back)	Group 7 (front)	Group 8 (front)
Stay on task	x		x	x	x	x		x
Participate often		x		x	x	x	x	x
Take turns	x	x	x	x	x	x	x	x
Follow instructions	x	x	x	x	x	x	x	x
Persistence even when hard	x	x	x	x	x	x	x	x
Help each other	x	x	x	x	x	x	x	x

In table 4, most groups showed signs of behavioral engagement during task 3, with four groups lacking one criteria each. While all groups showed signs of turn taking, instruction following, persistence and helpfulness, in groups 1 and 3 not every member participated often and groups 2 and 7 didn't stay completely on task during the activity.

II.3.1.2. Questionnaires (Behavioral Engagement– Group Work)

In relation to the information on the observation grids bellow, on task behavior, turn taking, instruction following and helping colleagues all contribute to the finishing of the activity, an aspect that is related to the task and so can be related to behavioral engagement. In relation to this, in figure 2, in questionnaires 3 and 4, the majority of students reported that their groups finished the activity while, in questionnaire 2, only 40,9% of students reported having finished the activity in full. The reason for this drastic difference in questionnaire 2 could be due to the fact that it was the students' first activity in groups, which could have influenced their performance. In relation to the observation grid data, most students reported in questionnaires (figure 1) that they helped their colleagues when they had doubts, matching the information gathered during observations. Besides that, most students reported that everyone in the group participated during the activities. These answers suggest task persistence and involvement. These findings together with the data collected from audio recordings show a constant presence of cooperation and on-task behavior.

Regarding questionnaire data, there were no other results that emphasized signs in specific during group work that related to behavioral engagement.

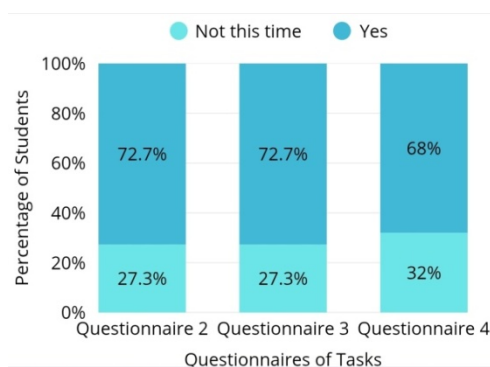


Figure 1 – Students that Helped if their Colleagues Had Doubts (Questionnaires)

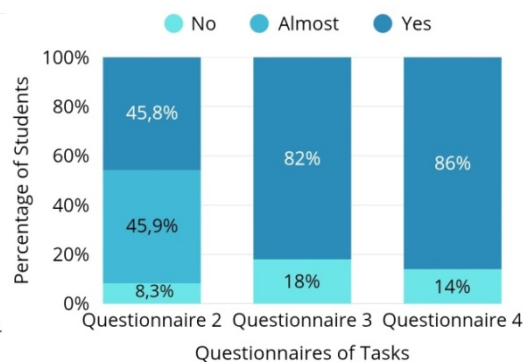


Figure 2 – Groups that finished the Activity (Questionnaires)

II.3.1.3. Audio Recordings (Behavioral Engagement– Group Work)

In audio recordings, there was clear evidence of students supporting each other in task-related situations during group work and persisting with colleagues to remember words and to pronounce them correctly in activities when they had difficulties. This behavior relates to the criteria showed in the observation grids and questionnaire data, in which students help each other and, in turn, show persistence to say the correct vocabulary. In group 3, for example, student 2 often helped student 3 who usually had difficulties in the activities by directing them to the correct word and pronunciation or simply by encouraging them to keep trying:

Excerpt 1 - Group 3 –Task 3

- 1 S2 To...?
- 2 S3 Gym...and gym.

In this excerpt, student 2 persisted with student 3 in turn 1 by giving them a chance to try and have more time to think and encouraged them to say the words during the activity. In turn 2, it is clear that student 3 took the encouragement and said the correct words.

This behavior can also be observed in group 2 in excerpt 2 which both student 1 and student 3 corrected student 2 during the activities (turn 2) but also reached correct answers together in the process (turn 8 and 9). In excerpt 2, in turn 1, student 2 says the incorrect time, having been corrected by student 3 in turn 2. Then, in turns 4 and 5, both student 1 and 3 told student 2 to think and focus. This is related to the criteria and data collected from other data collection tools since it represents on-task behavior and persistence even when students had difficulties.

Excerpt 2 - Group 2 –Task 1

- 1 S2 Hmm...past eight.
- 2 S3 No...
- 3 S2 Hmm...
- 4 S3 Vá (S2), tens de pensar. [Come on (S2), you have to think.]
- 5 S1 Valá, student 2. [Come on, (student 2).]
- 6 S3 Isto é...uh twelve. *points* [This is...uh twelve.]

...

- 7 S3 Tá no six ou no five? Não dá para perceber! (referencing the clock hands) [Is it on six or on five? You can't tell!]
- 8 S1 Se tiver á frente do seis é seis, se tiver atrás do seis é cinco.[If it's in front of the six, it's six, if it's behind the six, it's five.]
- 9 S3 Ok, half past...five.

In excerpt 2, in turn 7, Student 3 was confused during the Telling the time memory game in relation to the clock hands and student 1 explained what the hands' position meant in turn 8. These interactions between students showed both persistence and collaborative working. Even when one student kept making mistakes, they kept trying and their colleagues kept encouraging and correcting them.

Besides that, students were often heard taking turns and even urged each other to speak in English. Turn-taking is associated with behavioral engagement since it represents on-task behavior and participation, directly relation to the data collected from observation grids and questionnaires. In groups 2 and 3, as observed in excerpt 4, there were specific moments caught in audio recordings where group members stressed the need to speak in English or just started speaking English in order to encourage others to do the same.

Excerpt 4 - Group 3 – Task 2

- 1 S1 É a tua vez, (S3). [It's your turn, (S3).]
- 2 S2 In English, please.
- 3 S1 Your turn, your turn.

During the body parts memory game, in excerpt 4, student 1 called to the attention of student 3 in turn 1 to say it was their turn and in turn 2, student 2 corrected them and stressed for them to speak in English, an aspect that was part of the task. This way, it was possible to match these findings to the ones collected from observation grids and questionnaires, highlighting how most groups took turns during tasks and tried to stay on task.

In one of the memory games, in a curious interaction between the members of group 1, students often counted down from ten in English to measure time and encourage peers to choose cards when it was their turn, sharing responsibility for task progress. Students

also did this so that peers wouldn't take too long picking the cards, highlighting management of time on task. These were clear manifestations of behavioral engagement, in which group members collaborated with each other in order to complete the task.

II.3.1.4. Group Interviews (Behavioral Engagement– Group Work)

As a further reinforcement, in group interviews, when asked what they believe is needed for group work to succeed, the most common answers were “team work”, “taking turns”, “helping others” and “listening to each other”. This suggests that students associate behaviors that reflect behavioral engagement with effective group work. Besides that, when asked what they would do if they found the activity hard, most students answered that they would keep trying and ask for help. But when it came to this question, an interaction between members of group 4 in specific raised awareness that not all students enjoy group work or are engaged enough to correct and help others. While student 2 and 3 gave answers like “communicate and “having patience”, student 1 said they had no patience and that group could work without respect, refusing to elaborate on why and how. In a similar question asking what they did if a group member spoke little, students argued and offered little enlightenment. In fact, this group in particular was the one that most often displayed less task responsibility since in questionnaire answers they often said they didn't call group members attention back to the task at hand if they got distracted.

Excerpt 5 - Group 4 - Interview Question 4

- | | | |
|---|----|---|
| 1 | T | O que fizeram se alguém do vosso grupo falou pouco? [What did you do if someone in your group spoke little?] |
| 2 | S1 | Nada. [Nothing.] |
| 3 | S2 | Eu dizia que era a vez deles. [I would say it was their turn.] |
| 4 | S3 | (S2) fazia mais vezes isso. Eu não aproveitava muito a minha vez para falar porque não sabia o que dizer. [(S2) would do that more often. I wouldn't really use my turn to talk because I didn't know what to say.] |
| 5 | S2 | Eu ajudava! [I would help!] |
| 6 | S1 | Eu dizia ao (S3) que era a vez dele mas ele tava a me ignorar. [Nothing. I told (S3) that it was his turn and he ignored me.] |

7 S2 Ui, ui... [Ouch, ouch...]

In the audio transcription in excerpt 5, when asked what they would do if someone in their group spoke little, in turns 2 and 4, student 2 immediately made it known that they would remind them of their turn or help them. However, in turn 1, student 1 first expressed how they wouldn't do anything and then in turn 5 said that when they called the attention of student 3 they wouldn't listen while in turn 3, student 3 revealed they didn't speak much and confirmed what student 2 said. Turn 6 shows student 2 cringing at student 1's comment, revealing some uneasiness within the group.

Excerpt 6 – Group 4 – Interview Question 5

- 1 S2 Eu tento dizer mas os outros não tentam me ajudar. [I try to say but the others don't try to help me.]
2 S1 Nada. Não fizeram nada. [Nothing. No one did anything.]
3 S3 Também. [Me too.]

In excerpt 6, when asked what they did if they found the activity hard, student 2 expressed a lack of support from peers in turn 1 and student 1 and 3 said that they didn't do anything if they found the activity hard in turns 2 and 3 and refused to clarify their answer. These interactions in specific show that group work does not always result in positive behavioral and emotional engagement and that these can change depending on how group members interact and what they feel. Their personalities can clash, especially when students don't normally enjoy working in groups, which is the case of student 1 from group 4.

Despite that, behavioral engagement in this research was manifested through peer support, collective effort, turn-taking and active task participation, as revealed by the data collected from observations, audio recordings, questionnaire responses and interviews.

II.3.2. Emotional Engagement in Group Work

II.3.2.1. Audio Recordings (Emotional Engagement– Group Work)

Emotional engagement during group work was manifested through demonstrations of enjoyment, excitement and even frustration that were observed in students' verbal interactions, and self-reported feelings in questionnaires and interviews.

Various moments of positive emotional engagement were captured in audio recordings, students having celebrated together and using expressions such as “Yayy!!” and “Finish!” when they completed tasks successfully. In some groups, students expressed excitement over finding pairs and eagerness to take turns, showing emotional investment in the tasks and their outcome.

Excerpt 7 – Group 3 – Task 3

- 1 S1 Classroom...and classroom!
- 2 S1, S2 Yayyy!
 & S3

In excerpt 7, turn 1, student 1 finds a pair during the activity and, as observed in turn 2, group members celebrate together.

Excerpt 8 – Group 1 – Task 3

- 1 S2 Finished!
- 2 S3 Finished!!
- 3 S1 Finiiiiiiished!!

In excerpt 8, turn 1, student 2 exclaims that they finished the task, being followed by student 3 and student 1 in turns 2 and 3 in which they also let out their own exclamations.

However, emotional engagement was not solely positive. Audio data revealed frustration in some students when group members struggled to say vocabulary correctly and even occasionally arguing between students. In group 2, for example, student 3 often served as a mediator between student 1 and 2 when these moments occurred. Even though every group took turns, sometimes they would argue about who would start.

Excerpt 9 - Group 2 – Task 3

- 1 S2 Agora sou eu primeiro. [Now I'm the first.]
- 2 S1 Não, tu és a ultima! [No, your the last one!]
- 3 S2 Não... [No...]
- 4 S3 Fazemos assim, começa... [Let's do like this, the one who starts is...]
- 5 S1 Eu! [Me!]
- 6 S3 Sim, faz sentido, és o mais novo. [Yes, makes sense, you're the youngest.]
- 7 S1 E um dos mais altos! [And one of the tallest!]
- 8 S2 E um dos mais chatos. [And one of the most annoying.]
- 9 S1 É um elogio. [That's a compliment.]
- 10 S3 Vá, ou és tu ou (S2). [Come on, it's either you or (S2).]
- 11 S2 'Tas a dizer que sou chata?? [Are you saying that I'm annoying??]
- 12 S3 Não!!! É um de vocês que vai ser o primeiro! [No!! It's one of you who will be the first!]

In group 2, student 1 and 2 were arguing about who would go first in turns 1, 2 and 3. In turn 4, student 3 interrupted to try and de-escalate the situation and keep them on task. However, as observed in turns 8 and 9, student 2 brought back tension by trying to insult student 1. Student 3, once again served as a mediator in turn 10 by bringing their focus back to the task at hand. After student 2 misinterpreted student 3's comment that it had to be one or the other to start, it was clear that student 3 got upset and reminded them again about turn-taking and starting the activity.

These moments, although not so positive in tone, indicated emotional engagement all the same, since students were invested enough in the tasks and group work to react intensely.

II.3.2.2. Questionnaires (Emotional Engagement– Group Work))

In questionnaire answers, this variety of emotions was further displayed by students' own opinions. In the last questionnaire, students had to finish the sentence "Working with my group was..." by ticking different words as answers. The students would tick as

many options as they wanted between seven tick boxes. In this question, 54% of students ticked that working with their groups was fun and 59% ticked that working with their groups was easy. Similarly, 59% of students found that working with their group was okay and 45% found that it was interesting. These four options were often ticked together. The less chosen options were that group work was hard or boring, with both 22% and that group work was neutral, which was chosen by 18% of students. The low percentage of negative answers suggests that disengagement and disconnection in emotional terms was limited.

Group interviews brought further insight for the reasoning of these emotions. Most students reported feeling comfortable while working with their groups, especially when there was collaboration and focus on the task at hand. Even so, some students mentioned feeling uncomfortable or nervous when group members spoke all at the same time or when there were conflicts. A few students also mentioned feeling upset or frustrated when group members were distracted or not participating much. For example, in group 5, students 1 and 2 said that student 3 often tried to cheat or was distracted and that interfered with their work. This group as well as group 6 also expressed how they sometimes got overwhelmed due to everyone speaking at the same time.

Overall, these findings showed how manifestations of emotional engagement in group work were varied and dynamic. Positive emotions were linked to cooperation and collaboration as well as task completion while negative emotions were often linked unequal participation, off-task behavior, task difficulties and even complications in communication.

II.3.3. Influence of Seating Position in Behavioral Engagement

II.3.3.1. Audio Recordings (Behavioral Engagement)

Even though these two types of engagement were manifested through group work throughout the research, seating locations show that they had some influence on how behavioral engagement manifested itself in groups. Audio recordings registered that when groups 1, 2 and 3 sat in the middle, they expressed more patience in helping others and some students were even comfortable asking for help directly, showing task persistence and collaboration between students in relation to the task. In group 1, during

the body memory game, as observed in excerpt 8, student 3 asked student 1 for help in turn 1 and, in turn 2, student 1 kept persisting even though they were getting the words wrong.

Excerpt 10 - Group 1 –Task 2

- 1 S3 I....(S1), ajuda. [I...(S1), help.]
- 2 S1 Uhhhh fingers? Ah não fingers é da mão. [Uh hh fingers? No, fingers is from the hand.]

In the back of the classroom, while groups showed high participation and energy, other behaviors were less consistent. Audio recordings showed that while students were involved in the tasks, the occasional impatience and distraction was more commonly seen in groups at the back than in the middle, as well as more overlapping talk and fast pacing.

Excerpt 11 – Group 2 – Task 2

- 1 S1 Quickly!
- 2 S3 (S2)!
- 3 S1 No, It's you, (S1)!

II.3.3.2. Questionnaires (Behavioral Engagement)

In fact, in task 3, according to questionnaire 3, as observed in figure 3, a higher percentage of students asked for help when sitting at the front. Similarly, as observed in figure 4, during the same activity, more students helped their colleagues when sitting at the front and middle of the classroom. In the other questionnaires, the highest number of answers corresponding to asking for help and helping colleagues were also of students sitting at the front and in the middle of the classroom, with the exception of questionnaire 2, in which the students that said they helped their colleagues the most were sitting in the back.

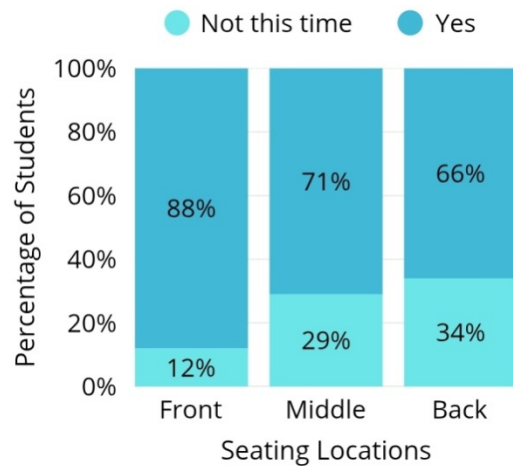


Figure 3 –Students that asked for Help (Questionnaire 3)

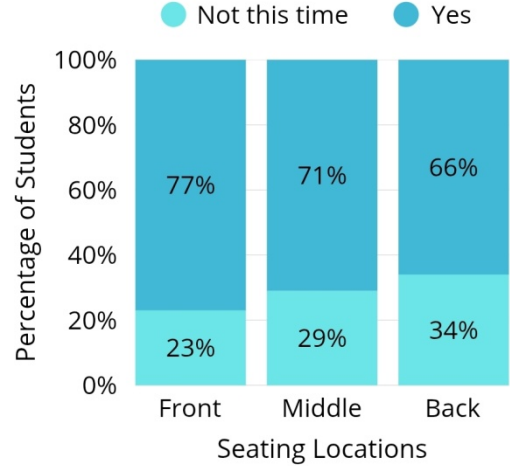


Figure 4 – Students that helped their colleagues (Questionnaire 3)

According to questionnaire data below (Figures 6 and 7), in questionnaires3 and 4, there was a higher percentage of groups that didn't finish the activity when sitting in the back of the classroom.

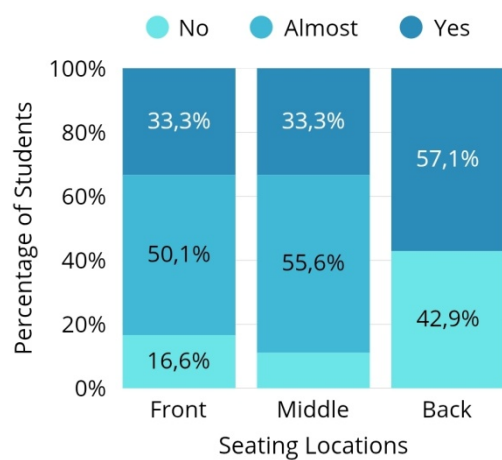


Figure 5 – Groups that Finished the Activity (Questionnaire 2 – Task 1)

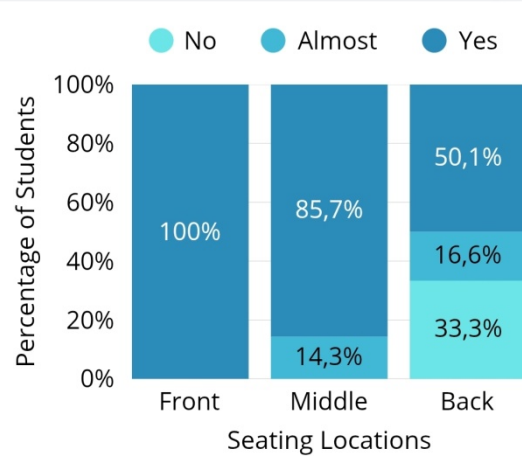


Figure 6 – Groups that Finished the Activity (Questionnaire 3 – Task 2)

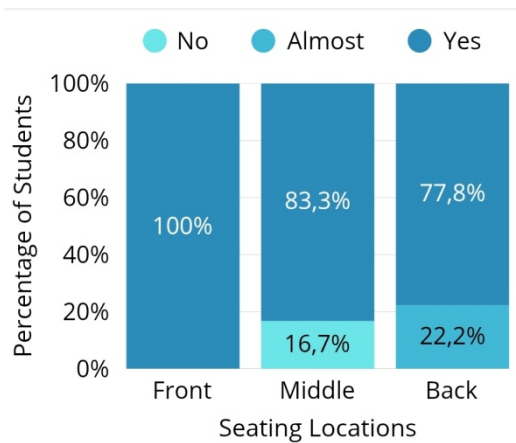
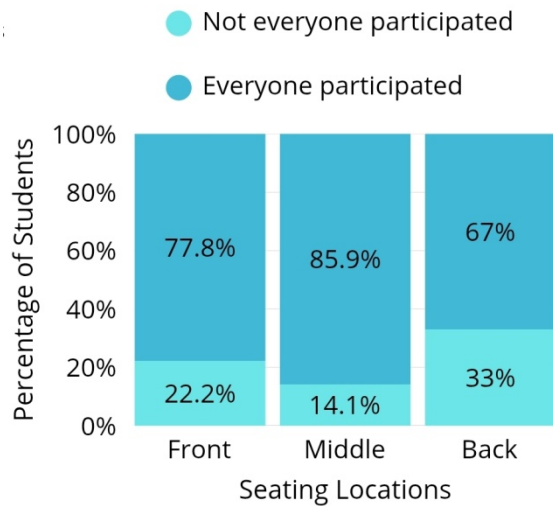


Figure 7 – Groups that Finished the Activity (Questionnaire 4 – Task 3)

However, in the first activity done by the students which was a clocks / telling the time game, in questionnaire 2, a higher number of students sitting at the front and in the middle expressed how their group didn't complete the task in time compared to students at the back.

These questionnaire answers show some inconsistencies when it comes to this aspect and it is important to note that the fact that it was the students' first activity while working in their assigned groups might have had some influence in the way they worked. For example, group 4 was sitting at the front in the first activity and was the group that exhibited less positive engagement marks throughout the research and were part of the 66,6% of students sitting at the front that didn't finish the activity, Likewise, they were also part of the 50% of students sitting at the back in the second activity that didn't finish the task. In the third and final activity (places at school memory game), this group in particular was sitting in the middle when they exhibited more positive aspects of both behavioral and emotional engagement and reported that they finished the activity. This situation may have been influenced by the group sitting in the middle, which throughout the results shows to be the most successful and positive location for on-task behavior and emotional reactions but it could also have been influenced by the fact that the students in that group were getting used to working together.



Still, in terms of participation, student opinions in questionnaires concerning the body parts memory game reflected that it was more likely that everyone in the group participated when they were sitting in the middle of the classroom and less likely when sitting at the back.

Figure 8- Student Participation (Task 2)

Taking this in consideration, while sitting in the middle of the classroom showed a good balance in engagement manifestations, the front and back had opposing observations and opinions, where some groups barely changed behaviors and others had clear changes, more specifically related to emotions and interactions between group members. However, while in questionnaires and recordings, differences between seating locations was clearer, according to observation data, as seen in tables 2, 3 and 4, results are barely contrasting.

As it is possible to observe, behavioral engagement marks stay mainly consistent on every group no matter where they are sitting, except group 4 that showed few positive aspects of behavioral engagement. Most groups stayed on task except for groups 2 and 7 when sitting at the front and group 5 when sitting in the middle, revealing inconsistencies when it comes to the influence of seating arrangements on behavioral engagement between groups. Additionally, group 3, for example, displayed that not everyone in the group participated no matter their seating location. Since group 4 was also sitting at the front when displaying negative reactions related behavioral engagement, those findings show how group members and their interactions can influence observable engagement more than seating locations.

II.3.4. Influence of Seating Position in Emotional Engagement

II.3.4.1. Observation Grids (Emotional Engagement)

In terms of emotional engagement, in the observation grids (tables 5, 6 and 7), clearer differences were revealed regarding the influence of seating location. While there were some inconsistencies and some groups expressed the same amounts of emotional engagement regardless of seating locations, other groups had distinctive changes. Groups 7 and 8 for example, remained consistent throughout seating changes while other groups displayed some alterations in behavior throughout the three different activities.

In the back of the classroom, there was more arguing and frustration between group members even if visible excitement was shown. As seen in the Table 7, group 1, for example, compared to emotional engagement marks of the other grids where they were sitting in the front and middle, showed less positive emotional engagement while sitting in the back of the classroom, expressing less enjoyment and more arguing between peers.

Table 5 -Observation Grid, Emotional Engagement –Task 1

	Group 1 (front)	Group 2 (middle)	Group 3 (back)	Group 4 (front)	Group 5 (middle)	Group 6 (middle)	Group 7 (back)	Group 8 (back)
Show enthusiasm	x		x		x	x		x
Enjoyment	x		x		x	x	x	x
Frustration	x	x	x	x	x			
Peer connection		x	x		x	x	x	x
Bored / tired		x		x			x	
Arguing				x	x			
Notes:			Student 3 only participated to say the time when turning the cards	-Student 2 was hesitant to participate -Student 1 was distracted and didn't know the words (didn't ask for help)	-Student 3 kept getting off task			

In table 5, group 8 is the only group to only show positive signs of emotional engagement during task 1, showing enthusiasm, enjoyment and peer connection. However, these three aspects are not shown by group 4 who, on top of that, showed signs of arguing. Group 2 also didn't show signs of enthusiasm or enjoyment and although there was no arguing they did express frustration like groups 1, 3, 4 and 5. Despite that, not many groups showed signs of boredom or arguing.

Table 6 -Observation Grid, Emotional Engagement –Task 2

	Group 1 (middle)	Group 2 (back)	Group 3 (front)	Group 4 (back)	Group 5 (front)	Group 6 (front)	Group 7 (middle)	Group 8 (middle)
Show enthusiasm	x	x	x	x	x	x	x	x
Enjoyment	x	x			x	x	x	x
Frustration		x		x	x	x		
Peer connection	x	x	x		x		x	x
Bored / tired								x
Arguing		x		x	x			

In table 6, all of the groups displayed signs of enthusiasm and most groups showed signs of enjoyment. Even though there was some arguing and frustration, overall there was a more positive display of emotional engagement in this task compared to the previous one.

Table 7 -Observation Grid, Emotional Engagement –Task 3

	Group 1 (back)	Group 2 (front)	Group 3 (middle)	Group 4 (middle)	Group 5 (back)	Group 6 (back)	Group 7 (front)	Group 8 (front)
Show enthusiasm	x		x		x	x	x	x
Enjoyment		x	x	x	x	x	x	x
Frustration	x	x			x			
Peer connection		x	x		x		x	x
Bored / tired								
Arguing	x				x			

Taking in consideration the three observation grids made for the three activities, while most groups didn't show too many distinct changes, group 4, as mentioned before, was the one with most noticeable changes in behavior and emotional involvement throughout seating locations. To better show this difference, tables 5, 6 and 7 are displayed above. As can be observed, group 4 exhibited negative emotional engagement through reactions like frustration and arguing between peers while sitting in the front and back of the classroom in tables 5 and 6. However, in the middle of the classroom, in table 4, students showed signs of enjoyment with no arguing observed.

Group 4 in specific was a group where students' personalities didn't quite align and so conflict was more present while enjoyment felt lacking. But, as observed in grids 5, 6 and 7, while sitting in the middle the group manifested the most amount of positive emotional engagement compared to sitting at the front and back of the classroom.

Because of these results, it is important to note that students' relationships can also have influence in how they display different types of engagement and, in this study, it didn't solely depend on seating locations.

To support these findings, in the questionnaire for task 3 in particular, 33.33% of students sitting at the back, including members from group 1, found that where they were sitting made the group work harder.

II.3.4.2. Audio Recordings (Emotional Engagement)

During this activity, in excerpt 9 turn 1, student 1 was delaying the task by taking too long to choose the cards and using a song to make a decision. However, as observed in turn 2, students 2 and 3 immediately got annoyed at this behavior and urged student 1 to just pick the cards, repeating their urgency and frustrations in turns 3 and 4 by saying "Choose one!" and "Go go go go".

Excerpt 11 - Group 1 – Task 3

- 1 S1 Hmm não sei...one two three four...não...um do li tá cara de amendoá... [Hmm I don't know...one, two, three, four...no...eeny, meeny, miny, moe...]

- 2 S3& (S1), vá! Escolhe uma! [(S1), come on! Choose one!]
S2
- 3 S2 Escolham lá, fogo! [Choose one, damn!]
- 4 S3 Vai vai vai vai. [Go go go go.]

II.3.4.3. Group Interviews (Emotional Engagement)

According to students' own opinions in the interviews, most groups preferred sitting in the front or the middle and believed group work was best in those locations as well. In the figures below, students' answers were organized into percentages since first they were simply asked where they liked to sit and where they believed their group worked best before justifying and developing their answers.

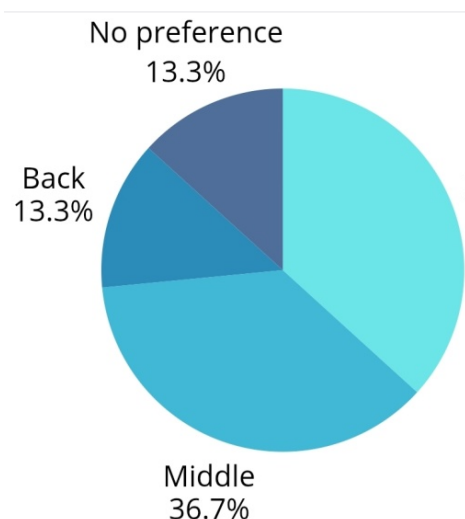


Figure 5 - Where students Liked to sit best

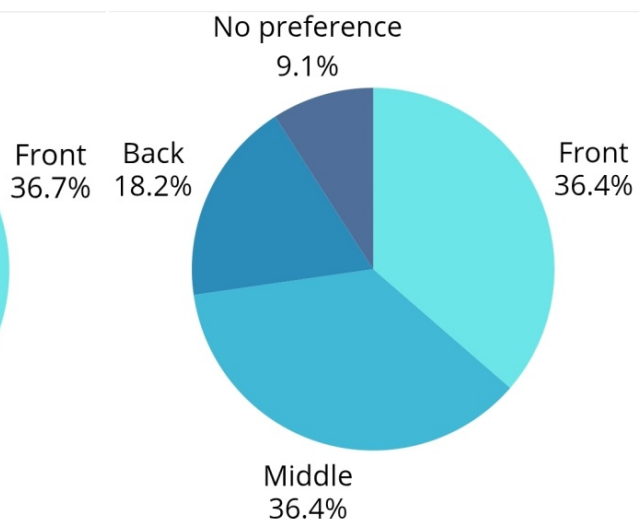


Figure 6 - Where students believed their group worked best

In these first two questions from the interviews, students often associated the front of the classroom with a structured atmosphere and teacher assistance, implying that this seating location encourages more focus and responsibility rather than excitement. Interestingly enough, the back was described by some students as peaceful and away from colleagues' noise while others described the exact opposite. The middle was seen as the middle ground, the most common justification for its preference the fact that "it's not too at the front or too at the back".

II.3.4.4. Questionnaire Data

In terms of emotional engagement, questionnaires didn't have many questions that gathered information about it after activities. Open questions could be open to interpretation, but, not every student gave an answer that reflected emotional engagement. For example, question 11 "What do you think went well during the activity?" and question 12 "What do you think went wrong during the activity?" were written with the intention that students might have expressed reactions and situations during the activity that could be related to emotional engagement. However, in question 11 most students answered "Everything" without further clarification in all the questionnaires. In question 12, the common answer between students that could be related to emotional engagement was "colleagues were arguing" which was answered in questionnaire 3 by students sitting in the middle and back of the classroom and in questionnaire 4 by students sitting at the front. Other than that, the most common answer for this question was "colleagues were distracted", which is more closely related to behavioral engagement.

By looking at tables 8, 9 and 10, it's possible to observe the questions and answers of the three questionnaires given to the students after each task and how emotional but especially behavioral engagement were present during group work.

Table 8 – Questionnaire 2 – Task 1

Quantitative Answers	Students sitting at the front			Students sitting in the middle			Students sitting in the back		
1. How much did you like working with your group?	☺ 50%	☹ 33,3 %	☹ 16,6 %	☺ 33,3 %	☹ 55,5 %	☹ 11,1 %	☺ 71,4 %	☹ 28,5 %	☹ 0%
2. Where did your group sit?	Front			Middle			Back		
3. Where you worked made the activity...	Easier: 16,6 %	The same: 83,8 %	Harder: 0%	Easier: 0%	The same: 88,8 %	Harder: 11,1 %	Easier: 42,8 %	The same: 57,1 %	Harder: 0%
4. If you had any doubts, did you ask for help?	Yes: 16,6 %	Some times: 33,3 %	Not this time: 50%	Yes: 22,2 %	Some times: 11,1 %	Not this time: 66,6 %	Yes : 28,5 %	Some times: 42,8 %	Not this time: 28,5 %
5. Did you share your ideas with the group?	Yes: 0%	Some times: 33,3 %	Not this time: 66,6 %	Yes: 11,1 %	Some times: 44,4 %	Not this time: 44,4 %	Yes : 71,4 %	Some times: 0%	Not this time: 28,5 %
6. If your colleagues had any doubts, did you help them?	Yes: 50%	Some times: 16,6 %	Not this time: 33,3%	Yes : 44,4 %	Some times: 33,3 %	Not this time: 22,2 %	Yes : 28,5 %	Some times : 42,8 %	Not this time: 28,5 %
7. Did your group finish the activity?	Yes: 33,3 %	Almost: 50%	Not this time: 16,6%	Yes : 33,3 %	Almost: 55,5 %	Not this time: 11,1 %	Yes : 57,1 %	Almost: 0%	Not this time: 42,8 %
8. Did everyone in the group participate?	Yes: 66,6%	Not this time: 33,3%		Yes: 55,5%	Not this time: 44,4%		Yes: 100%	Not this time: 0%	
9. Working with my group was... (choose as many options as you wish)	Fun: 66,6% Easy: 50% Okay: 50% Interesting:33,3% Hard: 0% Boring: 16,6% So so: 33,3%			Fun: 44,4% Easy: 44,4% Okay: 22,2% Interesting: 22,2% Hard: 33,3% Boring: 11,1% So so: 55,5%			Fun: 85,7% Easy: 42,8% Okay: 14,3% Interesting: 57,1% Hard: 0% Boring: 0% So so: 14,3%		
	Overall: Fun: 63,6% Easy: 50% Okay: 27,2% Interesting: 36,3% Hard: 13,6% Boring: 9,1% So so: 36,3%								

Table 8 corresponds to the answers of the questionnaire of the first task students had to do in their respective groups. In relation to emotional engagement, as observed in table 8, question 1, students sitting at the back expressed the highest percentage in relation to having liked working with their groups. In question 9, students sitting in the back of the classroom were the ones that chose “fun” as a description of their group work the most, and while this choice was also made by students sitting at the front and in the middle, it was significantly lower in number. Still, there were some students that picked “boring” as an option, even if few. Most students, in question 2, felt like their seating location didn’t affect their work. Furthermore, in relation to behavioral engagement, most students, regardless of their seating location, didn’t ask for help when they had doubts, but, as seen in question 6, in the front of the classroom a higher number of students said they helped their colleagues when needed. In questions 5, 7 and 8, it was students sitting at the back that displayed the most positive answers.

Table 9 – Questionnaire 3 – Task 2

Quantitative Answers	Students sitting at the front			Students sitting in the middle			Students sitting in the back		
1. How much did you like working with your group?	☺ 33,3 %	☹ 55,5 %	☹ 11,1 %	☺ 66,6 %	☹ 42,8 %	☹ 0%	☺ 16,6 %	☹ 50%	☹ 33,3%
2. Where did your group sit?	Front			Middle			Back		
3. Where you worked made the activity...	Easier: 33,3 %	The same: 66,6 %	Harder: 0%	Easier: 14,3 %	The same: 85,7 %	Harder: 0%	Easier: 0%	The same: 66,6 %	Harder: 33,3%
4. If you had any doubts, did you ask for help?	Yes: 83,3 %	Some times: 33,3 %	Not this time: 11,1 %	Yes: 28,5 %	Some times: 42,8 %	Not this time: 28,5 %	Yes: 33,3 %	Sometimes: 33,3 %	Not this time: 33,3%
5. Did you share your ideas with the group?	Yes: 22,2 %	Some times: 44,4 %	Not this time: 33,3 %	Yes: 57,1 %	Some times: 14,3 %	Not this time: 28,5 %	Yes: 33,3 %	Sometimes: 33,3 %	Not this time: 33,3%
6. If your colleagues had any doubts, did you help them?	Yes: 66,6 %	Some times: 11,1 %	Not this time: 22,2 %	Yes: 0%	Some times: 71,4 %	Not this time: 28,5 %	Yes: 33,3 %	Sometimes: 33,3 %	Not this time: 33,3%
7. Did your group finish the activity?	Yes: 100%	Almost: 0%	Not this time: 0%	Yes: 85,7 %	Almost: 14,3 %	Not this time: 0%	Yes: 50%	Almost: 16,6 %	Not this time: 33,3 %
8. Did everyone in the group participate?	Yes: 77,8%		Not this time: 22,2%	Yes: 85,7%		Not this time: 14,3%	Yes: 33,3%		Not this time: 66,6%
9. Working with my group was... (choose as many options as you wish)	Fun: 33,3% Easy: 33,3% Okay: 66,6% Interesting: 11,1% Hard: 11,1% Boring: 22,2% So so: 44,4%			Fun: 85,7% Easy: 71,4% Okay: 42,8% Interesting: 42,8% Hard: 0% Boring: 14,3% So so: 0%			Fun: 16,6% Easy: 0% Okay: 16,6% Interesting: 16,6% Hard: 16,6% Boring: 50% So so: 33,3%		
	Overall: Fun: 45,5% Easy: 36,3% Okay: 45,5% Interesting: 22,7% Hard: 9,1% Boring: 27,2% So so: 36,3%								

In table 9, there is a distinct difference between students sitting at the back in table 8. In terms of emotional engagement, in question 1, students sitting in the middle were the ones who liked working with their groups the most and students sitting at the back were the only ones to say that where they sat made group work harder. In addition, in question 9, when asked to pick options to describe their group work, the majority of students sitting in the back chose “boring” while most students sitting in the middle chose “fun”. In questions 4, 5 and 6, answers of students sitting in the back of the classroom were balanced while at the front, data collected shows that students sitting in the front were the ones to ask more for help if they had doubts and students sitting in the middle were more likely to share their ideas with the group and help others. Consistently, in relation to questions 7 and 8, students sitting in the front and middle of the classroom expressed the highest number of students claiming that their group finished the activity and that every group member participated.

Table 10 – Questionnaire 4 – Task 3

Quantitative Answers	Students sitting at the front			Students sitting in the middle			Students sitting in the back		
1. How much did you like working with your group?	☺ 71,4 %	☹ 14,3 %	☹ 14,3%	☺ 50%	☹ 16,6%	☹ 33,3%	☺ 44,4 %	☹ 44,4 %	☹ 11,1 %
2. Where did your group sit?	Front			Middle			Back		
3. Where you worked made the activity...	Easier: 28,5 %	The same: 57,1 %	Harder: 14,3%	Easier : 16,6 %	The same: 66,6%	Harder: 16,6%	Easier: 0%	The same: 66,6 %	Harder: 33,3 %
4. If you had any doubts, did you ask for help?	Yes : 28,5 %	Some times: 0%	Not this time: 71,4%	Yes: 16,6 %	Sometimes: 16,6%	Not this time: 66,6%	Yes: 11,1 %	Some times: 0%	Not this time: 88,9 %
5. Did you share your ideas with the group?	Yes : 85,7 %	Some times: 14,3 %	Not this time: 0%	Yes: 33,3 %	Sometimes: 0%	Not this time: 66,6%	Yes: 66,6 %	Some times: 11,1 %	Not this time: 22,2 %
6. If your colleagues had any doubts, did you help them?	Yes : 42,8 %	Some times: 42,8 %	Not this time: 14,3%	Yes: 33,3 %	Sometimes: 16,6%	Not this time: 50%	Yes: 44,4 %	Some times: 22,2 %	Not this time: 33,3 %
7. Did your group finish the activity?	Yes : 100 %	Almost: 0%	Not this time: 0%	Yes: 83,7 %	Almost : 0%	Not this time: 16,6%	Yes: 77,8 %	Almost: 22,2 %	Not this time: 0%
8. Did everyone in the group participate?	Yes : 85,7 %	Not this time: 14,3%		Yes: 66,6%		Not this time: 33,3%	Yes: 88,9 %	Not this time: 11,1%	
9. Working with my group was... (choose as many options as you wish)	Fun: 71,4% Easy: 57,1% Okay: 71,4% Interesting: 57,1% Hard: 14,3% Boring: 14,3% So so: 0%			Fun: 33,3% Easy: 83,3% Okay: 33,3% Interesting: 50% Hard: 33,3% Boring: 33,3% So so: 33,3%			Fun: 55,5% Easy: 44,4% Okay: 77,8% Interesting: 33,3% Hard: 11,1% Boring: 22,2% So so: 22,2%		
	Overall: Fun: 54% Easy: 59% Okay: 59% Interesting: 45% Hard: 22% Boring: 22% So so: 18%								

Table 10 corresponds to questionnaire answers of the last task students did in their groups. This table in particular is more similar to table 9 but also has some similarities to the data found in table 8. Overall, students that sat in the front were the ones to express they liked working with their groups the most, hinting at positive emotional engagement. However, in question 3, much like in table 8, the majority of students, regardless of where they sat, answered that their seating location had no influence in their work. In question 9, plenty of students sitting at the front described their group work during this task as “fun” and “okay”, being followed by “easy” and “interesting”. Students sitting in the middle chose “easy” as the main description and at least half of those students picked “interesting” while students at the back mainly chose “okay” and “fun”. In relation to behavioral engagement, while students at the back were the ones that asked for help and helped their colleagues the most, as observed in questions 4 and 6, students sitting in the front were the ones to mostly express sharing their ideas with the group. However, in relation to questions 7 and 8, both students sitting in the front and in the back of the classroom were the ones to say that their group finished the activity and that everyone in their group participated. In general, this is the questionnaire that shows the most inconsistencies compared to questionnaires 2 and 3.

While there are results that reveal that students display more positive engagement in the middle of the classroom, like helping and participation, there are still some inconsistencies and some of the results are inconclusive. For example, in table 8, questionnaire 2, most students sitting at the back expressed that their location made their work easier or the same but in table 10, questionnaire 4, students at the back actually expressed that where they were sitting made the work harder. These inconsistencies could be related not only to the groups in general and how their relationships with their group members affected their work regardless of seating location but also to the tasks and their theme, which could make work harder or easier depending on students’ strengths.

Overall, patterns were found by comparing data collected from the various research tools used in the study. While seating in the middle, observation grids showed that more groups maintained steady participation and cooperation with fewer situations of conflict. Audio recordings also revealed peer assistance and balanced exchanges without the same level of urgency experienced by groups sitting at the back. Questionnaire data showed that most students believe they can concentrate best while

sitting in the middle of the classroom, supporting interview answers that described the middle as the balance and comfortable. All of these findings combined suggest that the middle provides both emotional comfort and behavioral stability. Overall, compared to the literature's findings, emotional and behavioral engagement in group work was similar in interactions between students during tasks. They showed behavioral and emotional engagement by participating, staying on task, collaborating and by expressing reactions associated with excitement, enjoyment and even arguing. In relation to seating locations, while literature's findings showed that engagement was most observed while students sat at the front, the findings of this research mainly showed that sitting in the middle promoted the most behavioral and emotional engagement.

II.4. Discussion and Conclusion

This study aimed to answer two research questions: How behavioral and emotional engagement are manifested in group work settings and how seating position in the classroom (front, middle and back) affect these two types of engagement.

The findings showed that behavioral engagement was manifested through participation, peer assistance, on-task behavior persistence in completing tasks and active collaboration. Students often helped each other, corrected mistakes and encouraged group members to participate. Emotional engagement was manifested through expression of emotions like enjoyment, collective celebration and the occasional frustration when there were difficulties or peers were distracted. In general, emotional and behavioral engagement in group work depended on peer interaction across all seating locations. These results in specific were expected due to previous research but, a surprising factor was that more students argued with each other than expected.

In relation to how seating arrangements affected these two types of engagement, findings suggest that sitting in the middle promoted more positive manifestations of behavioral and emotional engagement, including greater emotional comfort, steady cooperation and fewer conflicts. While front and back findings were often inconsistent, sitting at the back was found to cause high levels of participation and excitement but it also brought more instances for frustration and conflict. Although in the front these findings were similar at times, it was also associated with rule-following and support. These results in particular were unexpected since, based on research, it was thought that students would show more positive aspects of engagement while sitting at the front but this was not always the case. The fact that the middle was the location most prone to positive engagement may have been due to, like students expressed, it being the balance in relation to seating locations in the classroom.

II.4.1. Implications of Results for Teaching

These results imply that engagement is reflected in group work interactions and can be shaped by the physical and also social environment of the classroom. Across all seating locations, students expressed engagement when they collaborated with each other during tasks. The occasional frustration does not necessarily mean that students were

disengaged, it reflects emotional involvement in group performance and task completion. Still, some moments of disengagement were observed, especially in a student in particular who showed resistance in working with their group and often found the activities boring.

There is also the implication that according to these findings, students benefit from working in the middle of the classroom. However, these two types of engagement can be more influenced by group members rather than seating location in specific, at least during collaborative work, since results between groups sitting at the front and back were varied and inconsistent. Still, while some results were inconsistent regarding seating locations, students expressed how they thought they worked better while sitting in the middle of the classroom and that should be taken into consideration. It is also important to note that while this research focused on group work and seating locations, other aspects, like tasks, could have had an influence in student engagement as well. Since this research used similar tasks, it was not possible to see how they could affect engagement in students.

As a trainee teacher, these results helped in understanding how emotional and behavioural engagement manifested in group work and how students' relationships could influence their work and interactions. Some surprising findings were how students preferred working at the front and in the middle, even though audio recordings and observations revealed inconsistent results and positive and negative interactions that were both seen in the middle and back of the classroom. It was also interesting to note the opposing opinions regarding seating positions, especially in regard to students who liked sitting at the back to avoid noise and prying eyes of other colleagues while other students reflected how sitting at the back meant more exposure to noise.

Having these findings in mind, classroom seating location should be changed throughout the school year so that every group can effectively work together and interact by displaying positive manifestations of behavioural and emotional engagement. Groups who have less connections with their members should work in the middle more frequently since, as seen by group 4 in this research, those groups show better emotional engagement and collaboration in that location in specific.

In different classrooms, groups should be formed not only regarding students' level of English, so that stronger students can help others with difficulties, but also regarding

social relationships between the students. It is important to identify students that can easily work with anyone and students that prefer to work alone and have less patience. In my classroom, group 4 consisted of a student with various difficulties and two students who were considered stronger in order to help the other student. However, as they were working together one student revealed resistance working in groups in general and little patience to help others while another student, even though strong in class terms, was shy and hesitant to participate and call their colleagues' attention while in the presence of her group members. This is why all aspects should be taken in consideration when making groups so that students can effectively interact with each other and positively engage in group work.

II.4.2. Limitations of Research

Even though this research and its findings were enlightening, there were limitations that require further research. Firstly, the research was done in a span of four months, with only three arrangements to collect data from. This lack of time may have influenced research findings since some students mentioned how in the first arrangement they weren't used to their group so interactions and engagement manifestations were lacking but in the next arrangements they knew how to work together and were more comfortable. Because of this, seating location could have had little influence in students' engagement in the beginning.

Furthermore, because of the little time students worked in their groups, they most likely didn't form bonds that could have strengthened over time by working together often and could have expressed engagement manifestations more clearly. Even though most of the students had already studied together for years, working with a specific group arrangement that they may not have been used to could have affected their work. Besides that, only three groups were chosen to be recorded due to little time to analyze and compare data, in order to observe the changes seating location could induce in emotional and behavioural engagement. It would have been even more useful to have recordings of all groups to look further for patterns and interactions between different groups. On top of that, students were kept in the same groups and did similar tasks in order to observe distinct changes in engagement when they switched seating locations, so it wasn't possible to observe how switching groups and activities would affect their

engagement. More challenging activities could have negatively impacted students' behavioural and emotional engagement since all types of engagement overlap constantly, including cognitive.

II.4.3. Suggestions for Future Research

For future research, a much longer time span should be saved to use for the study to note gradual differences in how students' interactions varied by location but also time spent together. Seating students in the same location various times should be considered since various factors can affect students' emotions and behaviours and only having them sit in certain locations once can be very limiting in terms of identifying specific moments of engagement and how they can change depending on seating location. On top of that, it would be interesting to have students change groups to see how their manifestations of engagement would change and how much it can affect their interactions and behaviours.

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Appendix A – Letter of Consent (School)



Lisboa, 28 de Setembro de 2025

Maria Leonor Caires
Aluna de Mestrado
Universidade Nova de Lisboa

Exma. Sra. Diretora

Devido à minha realização do estágio do Mestrado em Ensino de Inglês do 1º Ciclo na Faculdade de Ciências Sociais e Humanas na Universidade Nova de Lisboa, venho por este meio solicitar a Vossa autorização para a efetuação do trabalho de investigação incluído no meu relatório final do mestrado.

O projeto que vou realizar denomina-se *How seating arrangements affect students' engagement (Como a distribuição de lugares afeta o envolvimento dos alunos)* e terá início em setembro de 2025 e desfecho em dezembro de 2025 no decorrer do meu estágio. Este estudo tem como objetivo entender melhor o envolvimento dos alunos nas aulas de inglês através de interações em grupo e da alteração da disposição dos lugares na sala de aula, para que seja possível uma distribuição de lugares equilibrada.

Para recolha de dados serão realizados questionários, anotações num diário de professor, observações em aula, entrevistas e gravações de áudio. Serão pedidas autorizações aos encarregados de educação e alunos sendo que, os quais podem escolher não participar em qualquer instância, sem exceção.

A Instituição, os professores, funcionários e alunos permanecerão anónimos, dos quais não vai ser recolhida alguma forma de imagem ou fotografia.

Agradeço a Vossa colaboração e acolhimento e peço que, para qualquer esclarecimento, eu seja contactada pelo email: marialcaires29@gmail.com

Lisboa, 23 Setembro de 2025
Maria Leonor Sousa Caires
FCSH, Universidade Nova de Lisboa

Professora Doutora Carolyn Leslie
Orientadora do Estágio

Eu, _____

Diretor(a), declaro que fui informado(a) dos objetivos do projeto *How seating arrangements affect students' engagement (Como a distribuição de lugares afeta o envolvimento dos alunos)* e autorizo os alunos da turma a participar no estudo.

Data: _____

Assinatura: _____

Appendix B – Letter of consent (students)



Olá!

Eu sou a “Teacher Leonor” e estou a realizar um estudo, que faz parte do meu mestrado, sobre como podemos reagir de maneiras diferentes nas aulas de inglês dependendo de onde estamos sentados, para que possamos todos aprender da melhor maneira. Gostaria de saber se te interessavas em participar no meu projeto.

Proponho que neste primeiro semestre de aulas me ajudes, dando a tua opinião e, claro, divertindo-te enquanto aprendes Inglês! Para realizar o meu estudo vou precisar de fazer questionários, entrevistas e gravações de voz para saber como está a correr o projeto e para saber a tua opinião sobre os lugares que vais te sentar e as atividades que vamos fazer.

Se tiveres alguma dúvida sobre este estudo não hesites em perguntar-me a mim, à Teacher Vera ou aos teus pais, que estão informados sobre o meu projeto e o porquê de eu precisar da tua ajuda.

Para além disso, podes desistir a qualquer momento! A tua identidade permanecerá anónima, por isso, poderás escolher um nome que gostes para participar comigo neste projeto. Este projeto e a tua participação não contam para a tua nota na disciplina!

Muito obrigada.

Quero participar no projeto da Teacher Leonor

☐

Não quero participar no projeto da Teacher Leonor

☐

(Pinta o círculo que corresponde à tua resposta)

Data: _____

Assinatura: _____

Appendix C – Letter of Consent (Parents)



Pedido de autorização aos Encarregados de Educação

Caros Pais e Encarregados de Educação,

O meu nome é Maria Leonor Sousa Caires, e é com muito gosto que irei estagiar com o v/educando durante o 1º semestre deste ano letivo.

De momento, estou a fazer o Mestrado em Ensino de Inglês do 1º Ciclo na Faculdade de Ciências Sociais e Humanas na Universidade Nova de Lisboa, no qual implica a realização de um estágio. Durante o estágio, é necessária a realização de um trabalho de investigação que fará parte do meu relatório final com a denominação *How seating arrangements affect students' engagement (Como a distribuição de lugares afeta o envolvimento dos alunos)*. Com este estudo, tenciono adquirir um melhor conhecimento sobre o envolvimento dos alunos, especialmente em trabalhos de grupo, e sobre distribuição de lugares na sala de aula. Deste modo, a distribuição de lugares será equilibrada e flexível, de modo a promover o envolvimento dos alunos em todas as aulas.

Assim, venho por este meio pedir autorização para que o v/educando seja incluído no meu projeto final, que terá início em outubro de 2025 e terminará em dezembro de 2025, conforme a duração do meu estágio. Após ser recebida a autorização, a recolha de dados necessários seria feita através da realização de questionários, observações realizadas por mim, entrevistas e gravações de áudio dos alunos. As informações obtidas serão referidas no meu relatório final de estágio e, eventualmente, em artigos académicos e conferências.

A Instituição, os professores, funcionários e alunos permanecerão anónimos, dos quais não vai ser conseguida alguma forma de imagem ou fotografia. Em qualquer altura, o v/educando pode decidir não participar nas atividades incluídas neste projeto.

Se for necessário o esclarecimento de algum aspeto, peço que me contacte pessoalmente ou através da diretora da turma. Agradeço a atenção e solicito a entrega do documento com a maior brevidade possível.

Lisboa, 23 Setembro de 2025
Maria Leonor Sousa Caires
FCSH, Universidade Nova de Lisboa

Professora Doutora Carolyn Leslie
Orientadora do Estágio

Eu, _____

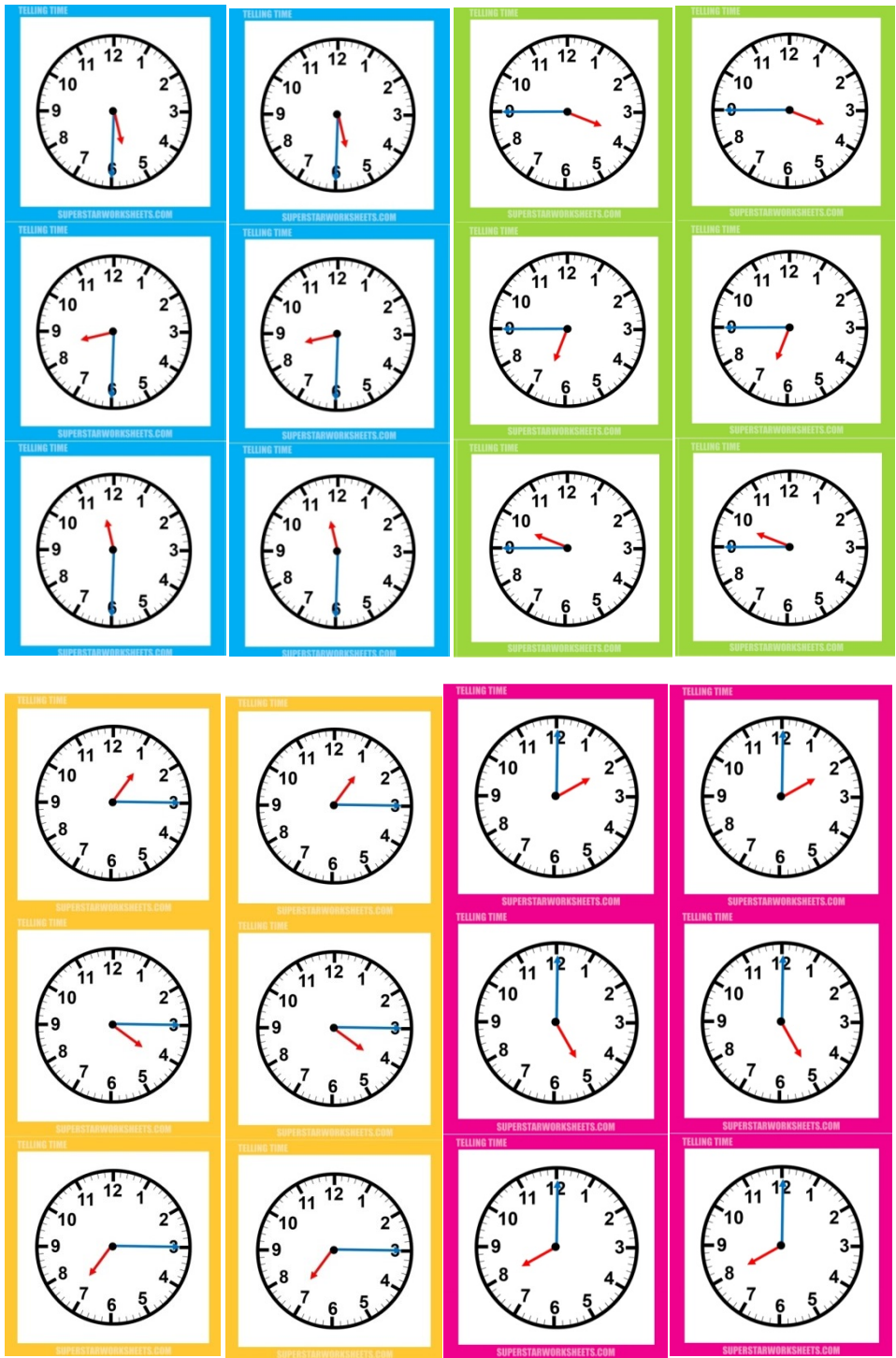
Encarregado de Educação de _____

Declaro que fui informado(a) dos objetivos do projeto *How seating arrangements affect students' engagement (Como a distribuição de lugares afeta o envolvimento dos alunos)* e autorizo o meu educando a participar neste estudo.

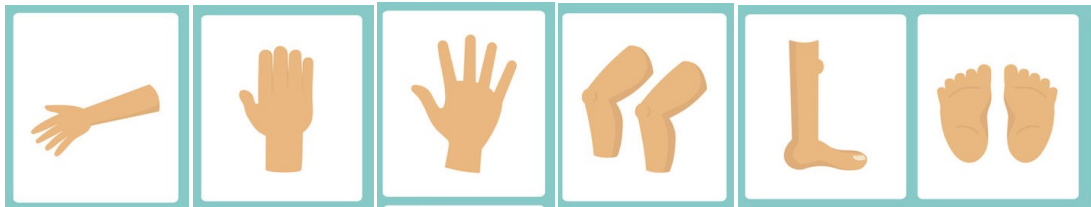
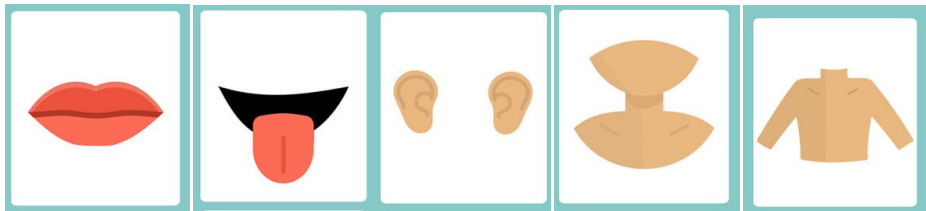
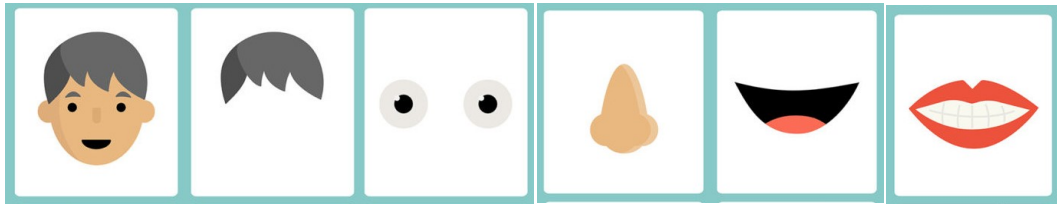
Data: _____

Assinatura: _____

Appendix D -Telling the time memory game



Appendix E -Body memory game



Appendix F - Places at school memory game / Word association game



Classroom

Playground

Gym

Canteen

Library

Appendix G

Questionnaire 1

Nome: _____

1. Gostavas do lugar que te sentavas antes?

☐ Sim ☐ Não ☐ Às vezes

2. O que achas do lugar que estás sentado/a agora?

3. Gostavas de mudar de lugar mais vezes?

☐ Sim ☐ Não ☐ Àlvez

4. Mete por ordem onde achas que gostarias mais de te sentar na sala.
(1=Gostava mais 3=Gostava menos)

☐ À frente
☐ No meio
☐ Atrás

5. O quanto gostas de trabalhar em grupo (grupos de 3 ou mais)? (Circula a tua resposta.)



Appendix H

Questionnaire 2 and 4

Nome: _____

1. O quanto gostaste de trabalhar com o teu grupo?

Circula a tua resposta.



2. Onde é que o teu grupo se sentou?

- ☐ Na frente da sala
- ☐ No meio da sala
- ☐ Na parte de trás da sala

3. Onde estavam sentados tornou o trabalho de grupo...

- ☐ Mais fácil
- ☐ Igual
- ☐ Mais difícil

4. Se não entendeste alguma coisa, pediste ajuda?

- ☐ Sim ☐ Desta vez, não.
- ☐ Às vezes

5. Partilhaste as tuas ideias com o teu grupo?

- ☐ Sim ☐ Desta vez, não.
- ☐ Às vezes

6. Ajudaste os teus colegas se eles tiveram uma dúvida?

- ☐ Sim ☐ Desta vez, não.
- ☐ Às vezes

7. O teu grupo acabou a atividade?

- ☐ Sim ☐ Desta vez, não.
- ☐ Quase

8. Toda a gente do teu grupo conseguiu falar?

☐ Sim ☐ Desta vez, não.

9. Trabalhar com o meu grupo foi...

Escolhe quantas respostas quiseres.

☐ Divertido ☐ Interessante

☐ Ok ☐ Borrecido

☐ Mais ou menos ☐ Fácil

☐ Fácil

10. O que fazes quando alguém do teu grupo não está a prestar atenção?

11. O que achas que correu bem no trabalho de grupo?

12. E o que correu mal?

13. Onde achas que te concentras melhor?

- ☐ Na frente da sala
- ☐ No meio da sala
- ☐ Na parte de trás da sala

Porquê? _____

Appendix I

Group Interviews

- 1. Where did you like to sit best in the classroom and why?**
- 2. Where do you think you worked better, front middle, back and why?**
- 3. What do you think is needed for a group to work well?**
- 4. What did you do if someone in your group spoke little?**
- 5. What did you do if you found the activity hard?**
- 6. Were there any moments where you felt uncomfortable or nervous during group work? Why?**
- 7. Were there moments where you were upset? Why?**
- 8. Were there moments where you had fun? Why do you think you had fun?**
- 9. Did you like to work with your group in general? Why?**
- 10. If you could, would you change your group?**
- 11. Would you change any of the activities?**