

# THE IMPACT OF FLEXIBLE SEAT ARRANGEMENTS ON STUDENTS' INTERACTION AND CONFIDENCE IN THE INTERNATIONAL BUSINESS NEGOTIATION COURSE

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**Abstract:** In the contemporary landscape of business education and its future trajectory, international business negotiation courses hold immense significance. In the realm of international business, effective negotiation skills are the linchpin for success. They enable companies to navigate cross-cultural differences, secure favorable deals, and build long-lasting global partnerships. As the world becomes increasingly interconnected, businesses are constantly engaging in international transactions. A well-trained negotiator can bridge gaps in language, culture, and business practices, ensuring that negotiations result in mutually beneficial outcomes. Thus, understanding how to optimize the learning environment for such crucial courses is of utmost importance.

**Keywords:** Flexible seat; Interaction; Confidence; International business negotiation

## 1 INTRODUCTION

Seating in classrooms, as has been the norm, is mostly immobile. Bearing in mind that these present variations do not allow students to actively participate, it can be quite challenging in a negotiation course where students are to practice communication, teamwork, and strategic thinking. Although the educational system has continued to shift with more revolutionary forms of teaching being embraced, the concept of flexible seating arrangements to substitute the traditional classroom seating set-up is now being considered as an option [1].

Previous research [2] could point to the fact that classrooms design is headed towards a flexible seating design. International business negotiation courses, in particular, are affected in this way. Flexible seating in the classroom increases not only the level but also the quality of participation of students. For instance, students can be easily arranged into groups with the option of changing heads anytime, which makes the class arrangement more comprehensive and reflects real-world negotiation teams. Such learning activities allow for open discussions and the emergence of multiple perspectives, which are integral to the development of negotiation skills such as effective communication and compromise.

International Business Negotiation course differs from traditional classroom teaching as it requires students to engage in real-time interactions within simulated negotiation scenarios. This highly interactive approach helps develop essential communication skills, negotiation tactics, and adaptability to complex business environments[3]. Teamwork is a crucial aspect, as negotiations are often conducted in groups where students collaborate to formulate strategies, role-play, and make on-the-spot adjustments. The traditional classroom was set up such that students sat in a row facing the front of the classroom[4]. Nowadays, the layout of classrooms varies greatly. The arrangement of seats in the classroom is a necessary measure to enhance students' learning enjoyment, participation, collaboration and learning[5]. Flexible seating arrangements have a high degree of freedom and are very convenient for on-site quick adjustment to better suit students for international business negotiations. [6].

With no diversity in seat arrangements, the classroom atmosphere remains monotonous and distressingly strict[7]. Common seating arrangements place students at fixed positions to cut the possibility of suddenly changing neighbor partners. Although common seating arrangements [8] promotes better behavior during individual tasks, the arrangement should rest on the nature of the task [9]. For example, in this regard, in international business negotiation practice class, this fixation on flexibility may complicate the process of dynamic class discussions. They lack the opportunity to randomly make cases and participate in role-playing sessions, without which learning the tricky part of negotiation rules is impossible. Therefore, the communication styles are one-way, primarily focused on teacher-student interaction, which deprives students of the opportunity to learn from their peers' diverse views[10].

On top of that, non-standard seating does not only stay home but also severely disrupts the collaborative work patterns[11]. Negotiation is a cooperative process [12], but traditional seating, which can be an impediment both physically and psychologically, can be an issue among students[13]. They may not have a chance to work as a team closely, think all together openly, and socialize enough to build up the relationship that is necessary for them to succeed in their negotiations. This not only leads to less enthusiasm during classes but also those tiny opportunities for developing handy tools like teamwork and communication among students. They get the information only partially, and they might not fully get complicatedly performed concepts and methods of international business negotiation, which can deter their future[14].

Thus, this paper examines the results achieved by having students enter into flexible seating arrangements during taking international business negotiation classes in regard to the degree and quantity of the interaction. We will manipulate the

seating arrangement of the classroom and observe the effect on students' communication styles, their collaboration patterns, and their classroom engagement in relation to negotiations and discussions[15].

Such research is relevant since it is of utmost importance for a student to possess good negotiation skills because they are required to communicate with others appropriately. Negotiating a deal in business requires it's participants to be clear and nuanced in the communication, to support and to build new connections. Among them is the flexible seating arrangement, which can improve the operability of these aspects through its capability of creating a more harmonious and approachable environment[16].

The present research will mainly target those scholars who are students. Students will participate in the learning process much more actively, as there will be an interactive and participatory component in the class. This can elevate the constructive negotiation process and the overall participation [17]. Besides, the teachers may be proved as a quality enhancer by adjusting the setup of the classroom plan according to this knowledge so that students may gain more learning outcomes. Moreover, business education managers / instructors can harness this information in the craft of their teaching methods and this will ensure the continuous improvement of the education quality[18].

## 2 RESEARCH PROBLEM

In the context of international business negotiation courses, understanding how the physical classroom environment impacts student learning is crucial. Specifically, the configuration of seating can significantly influence the dynamics of student interactions, which are fundamental to mastering negotiation skills. Fixed - seat rooms often lack the adaptability needed for students to fully engage in the interactive and collaborative activities essential for honing negotiation abilities, as noted by Müller, Mildenerger, and Steingruber [19].

To delve deeper into this matter, a survey was designed. The primary objective of this survey was to precisely identify the extent to which flexible seating arrangements can impact student interactions within an international business negotiation course. By conducting this survey, we aim to gather empirical data that will shed light on whether and how flexible seating can create a more conducive environment for students to actively interact, communicate, and practice the key skills involved in international business negotiations. This data - driven approach will not only contribute to our understanding of the role of classroom design in education but also provide practical insights for educators and institutions seeking to optimize the learning experience in international business negotiation courses.

For the learners, the physical lack of a perfect environment for interaction is a hindrance to making important negotiation skills such as communication, effective listening, and also the quick responding of others in a similar way. Conventional settings do not allow students to move freely, and hence they may be hindered from interacting meaningfully with their peers to forge different ideas during negotiation simulations [20].

In the domain of international business negotiation education, while much attention has been placed on curriculum content and teaching methods, a significant research gap exists regarding the influence of the physical classroom environment, particularly seating arrangements, on the learning process. Teachers often grapple with the challenge of creating a stimulating learning atmosphere that fully taps into students' learning potential.

Although current studies properly analyze the degree to which seating may help or inhibit this goal, past studies did not define this completely. For example, rigid seats undoubtedly create multiple problems. The natural flow of discussion can be conventionally reduced in claustrophobic seats, which is not desirable. In such contexts, teams often become overwhelmed by the class trend and experience difficulties in coming up with ideas necessary for the solution of multi-dimensional problems, which are integral parts of international business negotiations. By focusing primarily on the role that physical challenges pertaining to class arrangement can play in this learning area, rather than the cognitive and interactive components, this study will fill these gaps in literature. Hence, we are currently positioned on the edge of discovering how seating flexibility can solve the mentioned issues. Additionally, we believe that this research can create a revolutionary approach towards negotiating and a significant improvement in our educational system.

## 3 RESEARCH OBJECTIVES AND RESEARCH QUESTIONS

### 3.1 Research Objectives

RO1: Analyze the impact of flexible seating arrangements on the frequency of student interaction in international business courses.

RO2: Evaluate the influence of flexible seating on the diversity of interactions in international business courses.

RO3: Assess the effect of flexible seating on the quality of student interactions in international business courses.

RO4: Investigate how flexible seating arrangements affect students' confidence in participating in international business courses.

RO5: Identify the relationship between flexible seating and students' long - term retention of international business negotiation knowledge.

### 3.2 Research Questions

RQ1: How do flexible seating arrangements impact the frequency of student interaction in international business courses?

RQ2: How do flexible seating arrangements influence the diversity of interactions in international business courses?

RQ3: How do flexible seating arrangements affect the quality of student interactions in international business courses?

RQ4: How do flexible seating arrangements influence students' confidence in participating in international business courses?

RQ5: What is the relationship between flexible seating arrangements and students' long - term retention of international business negotiation knowledge?

## 4 LITERATURE REVIEW

### 4.1 Introduction

This literature review mainly explores the evolution of classroom seating in business education and the importance of flexible classroom seating in terms of interaction and confidence building.

### 4.2 Evolution of Classroom Seating in Business Education

As the core carrier of business education, the design and function of the classroom have a direct impact on the effectiveness of teaching and learning, the mode of student interaction and the cultivation of practical ability. Especially in business education, which stresses globalisation, cross-cultural communication and teamwork, classroom is not only a place for knowledge transfer, but also a miniature workplace for simulating real business scenarios and cultivating professionalism.

#### 4.2.1 Fixed classroom seating in education

The fixed seating means a teacher-centered education model [21]. Every single class was something like the lecture, a situation of students sitting quietly, involuntarily absorbing knowledge lectured by the teacher in the front [22]. Moreover, in group discussion, students may not move to their partners that they want to discuss with if they want more deeper understanding on different opinions. Thus, this educational style may not fully motivate students' engagement and stimulate their thinking. To be more specific, the lack of choice and fixed seating arrangements mean that students cannot adjust the environment according to the task requirements [23], depriving them of control over their learning space and inhibiting their self-regulated learning ability.

#### 4.2.2 Flexible classroom seating in education

Thus, that a new generation brought a shift to education. Under the concept of student-centred education, flexible seating is not only an important teaching tool, but also a significant method for restructuring the educational ecology [24]. That is, students should be the main actors in class [25]. For example, they needed workshop skills that would be of utmost necessity and beneficial in the real-life fast business agenda, mainly as the numbers of global students are ever increasing [26]. Thus, flexible classroom seating is an innovative way for teachers to adopt in business education. In this way, students' workshop skills may be improved and this could help them to accustom to the future business working environment.

While this thought may have occurred to researchers in the 50s and 60s, they started to question the longstanding habit of sitting on well-curved backs or with round desks. As a result, this educational concept could not be implemented very well, especially in business education. However, in today's educational environment, a significant change has been witnessed in the educational landscape, such as different gathering areas, flexible seating arrangements, and classroom that look like living rooms [27]. Although some researches focus on flexible classroom seating [28], in business educational area, there is few research on flexible classroom seating. In order to satisfy the teachers' educational needs and students' future career needs, this research aims to explore the effects of flexible seating on students.

### 4.3 The Importance of Flexible Classroom Seating

#### 4.3.1 The relationship between flexible classroom seating and students' interaction

In the globalized business space, developers of international trade need to strengthen communication and partnership in order to achieve success. A study by Zipf, Li, Oaxaca, and Ramsay [29] found out that students in classrooms with flexible seating arrangements were more prone to start conversations and cooperate with their fellow students. Thus, flexible classroom seating seems to be very important to fulfill their interaction needs.

In addition, the fixed seat could not be beneficial for students to have a satisfying interaction because students felt so uncomfortable that their learning engagement was demotivated [30]. Thus, flexible seating seems a good educational way in classroom. However, it is unclear whether this method is effective in business classroom, especially international business negotiation class.

Thus, this research could conduct a class design to investigate the effects of this educational method. For example, the teachers would use the role-plays in negotiations, with numerous countries having their unique socio-economic situations. In this situation, students may improve their negotiation interaction style. Simultaneously, this promotes the heated discussion and spark students' critical thinking in negotiations, which could benefit future business negotiations. Thus, it is of great necessity to explore the effects of flexible seating in class on their interaction in business education, especially the negotiating classes.

Studies have shown that flexible seating arrangements can promote communication among students and increase the frequency of interaction [31]. For example, a circular or semi-circular seating arrangement can promote eye contact and verbal interaction between students, while a group discussion style seating arrangement can encourage students to

actively participate in the discussion [32]. Thus, this research will investigate the effects of flexible seating on the frequency of interaction.

Moreover, flexible seating arrangements can also facilitate students to interact with classmates from different backgrounds and perspectives, thereby increasing the diversity of interactions [33]. For example, teachers can group students according to factors such as cultural background, language ability, and personality characteristics, and arrange different combinations of seats to promote cross-cultural communication and collision of views [34]. Thus, this research will investigate the effects of flexible seating on the diversity of interaction.

Flexible seating not only increases the frequency and variety of interactions, but also improves the quality of interactions. Studies have shown that flexible seating arrangements can create a more relaxed and free classroom atmosphere, thus promoting more in-depth and effective interaction among students [35]. For example, students can choose comfortable seats and have face-to-face communication with their peers, thus becoming more focused on the discussion content and generating more valuable ideas [36].

#### **4.3.2 The relationship between flexible classroom seating and confidence building**

The social environment particularly has a lot of negative influence on students' confidence. Confidence refers to an individual's belief in his or her ability to perform a task. Studies have shown that flexible seating arrangements can improve students' confidence [37]. For example, students can choose their seats according to their learning style and preferences, resulting in a greater sense of control and confidence [38]. In addition, flexible seating arrangement can also promote cooperative learning among students, thereby enhancing students' teamwork and problem-solving ability, and thereby improving students' confidence [39]. Thus, flexible seating arrangements is a good way to improve student confidence. However, it is not clear whether flexible seating have a positive influence on students' confidence in business classes. There is no doubt that confidence is important in negotiation. Therefore, it is meaningful to investigate the effects of flexible seating on business majors' confidence when they attend a negotiating meeting.

A study by Georgopoulou [40], focusing on a business communication course, suggested that students in a flexible seating arrangement felt more comfortable in sharing their ideas. Not only that, but confidence is a major asset in international business talks because negotiators are heading for a situation where they should assert their stand in a convincing manner. [41]. A business negotiator with no confidence will be hindered in negotiations [42]. As previous research showed [43], the negotiators with higher confidence could get better results than those with lower confidence. Thus, by choosing their seat and wording, students may have less social anxiety and more confidence, which is a prerequisite for being successful in negotiations. However, this study found that future researches could focus on empirical study. In more detail, they can investigate how to optimize these patterns of flexible seating so that students' confidence could be strongly built. As for this research, the focus will be how flexible seating influences students' confidence.

### **4.4 Conclusion**

In summary, the literature emphasizes the potential significance of flexible seating arrangements in the process education from its historical evolution and the key factors (interaction and confidence building). However, it is not clear that how flexible seating influence the key factors. Thus, it is significant to conduct this research.

## **5 METHODOLOGY**

### **5.1 Approach**

In the context of our research on the impact of flexible seating arrangements in international business courses, we adopt a Realist ontology. This ontological stance posits that objective variables, such as the configuration of flexible seating, bear verifiable causal relationships with students' participation. Just as Chi & Wylie [44] proposed, we believe that elements within the educational environment, like flexible seating, possess realistic attributes that exist independently of subjective human cognition.

In our study, we consider flexible seating arrangements as an objective factor. We assume that these arrangements, with their physical characteristics such as ease of group formation and movement, can directly influence various aspects of students' experiences in international business courses. For instance, in relation to our research questions, we anticipate that the objective nature of flexible seating will have a causal impact on the frequency of student interactions (RQ1). The physical flexibility might make it objectively easier for students to initiate discussions or engage in group projects, thus increasing the interaction frequency. Similarly, for the diversity of interactions (RQ2), the layout of flexible seating could objectively encourage students from different cultural backgrounds to interact more freely, exploring a wider range of topics due to its inherent design. Regarding the quality of interactions (RQ3), the physical environment created by flexible seating might objectively provide a more conducive space for in - depth understanding and critical thinking. In terms of students' confidence (RQ4), the physical layout of flexible seating could objectively contribute to students feeling more self - assured. And finally, for long - term knowledge retention (RQ5), the objective experience of learning in a flexible seating environment might have a causal link to students' ability to recall key international business negotiation concepts over time.

Epistemology: Etic. It is necessary to use participation data to quantify the objective influence of different teaching elements, taking into account individual experience and universal rules [45].

Methodology/Research Approach: Quantitative. Quantitative analysis [46] verified the correlation between variables.

## 5.2 Research Design

This research will utilize a quantitative research methodology to investigate the effects of flexible seating arrangements on students' interaction and confidence within international business courses. The research design entails the use of structured surveys, specifically questionnaires, as the primary data - collection tool. These questionnaires will be carefully crafted to gather relevant information regarding students' experiences with flexible seating, their levels of interaction, and confidence in the classroom setting.

To analyze the collected data, statistical models, such as multiple regression analysis, will be employed. Multiple regression allows for the examination of the relationship between multiple independent variables (aspects of flexible seating arrangements) and dependent variables (student interaction frequency, diversity, quality, confidence, and long - term knowledge retention). Through this analysis, the study aims to identify significant correlations, enabling us to determine the extent to which flexible seating arrangements impact various aspects of students' experiences in international business courses. This structured approach within the quantitative research framework will provide empirical evidence to support or refute our research hypotheses related to the influence of flexible seating on students' learning outcomes.

The specific design is as follows: students who attended flexible classroom seating will be chosen randomly. After that, this research will distribute the questionnaires to collect their response data to flexible seating arrangement.

The reasons for choosing quantitative research and using SPSS 22.0 software to analyze data: 1) it could help to conduct quantitative analysis of the relationship between variables [47]. SPSS 22.0 software has powerful functions in processing complex multi-variable data. 2) it could help to know whether there exist collinearity relationship between variables. Thus, this research adopt SPSS to conduct data analysis.

Control variables include gender, age, educational background, allowance, and how often do you daydream in class (see Table 1).

**Table 1** Control Variables

variable	dimension
Gender	Male
	Female
Age	18 years old
	19 years old
	20 years old
	21 years old
Monthly allowance	<1000
	1000-2000
	2000-3000
	3000-4000
	>4000
How often do you daydream in class	Many (Three times in a class or more)
	Frequently (twice a class)
	Occasionally (once in a class)
	Never

## 5.3 Data Collection and Analysis

### 5.3.1 Instrument

Questionnaires can be issued in batches to quickly collect students' demographics, subjective feedback on social interactions and confidence, flexible seating arrangement, etc. Questionnaire survey data is easy to quantitative modeling, using SPSS analysis to verify the relationship between variables. The research will utilize likert five point scale in questionnaire to measure students' interaction and confidence, quantifying the abstract concepts.

### 5.3.2 Sampling

In this study, sample surveys are essential to obtain accurate and representative data. Given that the total target population is more than 20,000 people, it is important to determine the appropriate sample size for the reliability and universality of the study results with reference to previous studies and relevant criteria. In previous studies, the sample size ranged from 139-442 with an average of 330 [48]. Thus, it is reasonable to make sample size set at 150 in this study.

The sample for this study was selected using the probability sampling method. Probability sampling, as described by Zhang [49], is a technique that ensures every individual within the population has an equal probability of being chosen. This approach is crucial as it effectively mitigates sampling bias. By giving each member of the population an equal shot at selection, the resulting sample is more likely to mirror the overall characteristics of the entire population.

In the actual sampling procedure, a random number generator tool was utilized to draw the sample from the target population. This tool generates random numbers, which are then used to identify specific individuals from the population list. For example, if the population is a list of all students enrolled in international business courses at a particular institution, the random number generator will assign a number to each student, and based on the generated random numbers, a subset of students will be selected to form the sample. This methodical use of probability sampling and the random number generator tool helps in obtaining a sample that can provide reliable insights for our research on the impact of flexible seating arrangements in international business courses.

Through such sampling design, this research can more accurately explore the impact of flexible seating arrangement on students' interaction and confidence in international business negotiation courses, and provide solid data support for research conclusions [50].

### 5.3.3 Data analysis

The data collected from the questionnaires will be processed by using SPSS 22.0 software.

#### (1) Preliminary analysis

After the initial step of data cleaning, this research will calculate descriptive statistics for all variables. These statistics will include the mean, standard deviation, and frequency distribution. The mean will provide an understanding of the central value of the data, while the standard deviation will show the spread of the data points around the mean. The frequency distribution will display how often each value or range of values occurs, offering insights into the overall distribution pattern. This initial analysis is crucial as it gives a basic overview of the data, which is fundamental for answering research questions related to the overall perception of flexible seating arrangements, as well as students' levels of interaction and confidence in international business courses.

Subsequently, reliability testing will be conducted using Cronbach's alpha specifically for variables related to interaction and confidence [51]. The purpose of this reliability testing is to assess the internal consistency of the measures used for these variables. A Cronbach's alpha value of  $\alpha \geq 0.7$  is considered acceptable. By ensuring high internal consistency, we can be more confident that the scales or items used to measure interaction and confidence are reliable. In other words, if a student responds in a certain way to one item related to interaction or confidence, they are likely to respond in a consistent manner to other related items. This reliability testing is essential as it validates the data we have collected for these key variables. It strengthens the foundation for answering our research questions accurately, as unreliable data could lead to inaccurate conclusions about how flexible seating arrangements impact student interaction and confidence.

#### (2) Inferential Analysis on Research Questions

Table 2 has displayed the inferential analysis on two research questions. ANOVA (Analysis of Variance) is a statistical method used to compare the means of three or more independent groups to determine if there are significant differences.

**Table 2** Inferential Analysis

Research Question	IV	DV	Data Analysis
RQ1	Flexible seating arrangement	Interaction score (frequency, diversity and quality)	ANOVA (If data violated normality, Mann-Whitney U test will be used.)
RQ2	Flexible seating arrangement	Confidence score	ANOVA (If data violated normality, Mann-Whitney U test will be used.)

In order to address RQ1, ANOVA will be utilized to compare interaction scores (composite of frequency, diversity, and quality) between groups exposed to flexible vs. traditional seating. Assumptions of normality and homogeneity of variance will be checked. If violated, non-parametric alternatives (Mann-Whitney U test) will be used.

Similarly, in order to address RQ2, ANOVA will be used to evaluate differences in confidence scores. Effect sizes (Cohen's d) will quantify the practical significance of findings.

#### (3) Supplementary Analysis

Correlation analysis will be conducted through Pearson's r, which could help to explore relationships between sub-categories of interaction and confidence.

Regression analysis will be conducted if considering the covariates like demographics (see Table 1). Multiple regression will control for their influence on dependable variable outcomes.

This structured approach ensures to align with the study's objectives to testify the influence of flexible seating on students' social interactions and confidence in international business negotiation courses.

#### (4) The Presentation of Data

The following results will be presented in tables and figures to facilitate a clear and comprehensive understanding of the data related to our research questions on the impact of flexible seating arrangements in international business courses.

Descriptive statistics of variables: This will include presenting measures such as means, standard deviations, and frequency distributions for all relevant variables. For instance, variables related to student interaction frequency (pertinent to RQ1), diversity of interactions (linked to RQ2), quality of interactions (associated with RQ3), student confidence (in line with RQ4), and long-term knowledge retention (relevant to RQ5). The descriptive statistics will offer an initial overview of the data, allowing us to understand the central tendency, spread, and distribution patterns of

these variables. This information is fundamental as it serves as a basis for further analyses and helps in answering the overarching research questions by providing a general sense of how students experience flexible seating arrangements in different aspects.

**Reliability coefficients:** We will calculate and display reliability coefficients, specifically Cronbach's alpha, for the scales used to measure key variables like interaction and confidence. A high Cronbach's alpha ( $\alpha \geq 0.7$ ) indicates good internal consistency of the measurement scales. This step is crucial as it validates the data collection instruments for RQ1 - RQ4. If the scales are unreliable, the subsequent analyses related to these research questions would be compromised. By presenting these coefficients, we ensure the integrity of our data and the credibility of our findings regarding the impact of flexible seating on student - related variables.

**T - test outcomes (means, p - values, effect sizes):** T - tests will be conducted to compare means between different groups, such as students in flexible seating arrangements versus those in traditional seating. For example, when addressing RQ1, we might use a t - test to compare the mean frequency of interaction in flexible and traditional seating classes. The means will show the average levels of the variable in each group, the p - values will indicate the statistical significance of the difference between the means, and the effect sizes will quantify the magnitude of the difference. These results will help us determine whether flexible seating has a significant impact on variables related to our research questions, providing evidence - based answers to questions like whether flexible seating truly leads to more frequent interactions (RQ1) or higher confidence levels (RQ4).

**Correlation analysis:** Correlation analysis will be performed to examine the relationships between variables. For example, we may want to see if there is a correlation between the frequency of interaction (RQ1) and the quality of interaction (RQ3) in the context of flexible seating arrangements. By presenting correlation coefficients and their significance levels, we can identify if changes in one variable are associated with changes in another. This analysis helps in understanding the complex relationships among the variables relevant to our research questions and provides insights into how different aspects of student experience in international business courses are interconnected when flexible seating is involved.

**Multiple regression analysis:** Multiple regression will be used to determine the extent to which multiple independent variables (such as features of flexible seating) predict dependent variables like student interaction frequency, diversity, quality, confidence, and long - term knowledge retention (corresponding to RQ1 - RQ5). This analysis will show which factors related to flexible seating arrangements have a significant impact on these student - centered outcomes. For example, in relation to RQ5, we can use multiple regression to see how factors like the layout flexibility and ease of movement in flexible seating environments predict students' long - term retention of international business negotiation knowledge. The results of the multiple regression analysis will be presented in a clear format in tables and figures, highlighting the regression coefficients, p - values, and goodness - of - fit measures, enabling us to draw conclusions about the causal relationships between flexible seating and student - related variables in international business courses.

## 6 ANTICIPATED DIFFICULTIES

**Challenge one:** The discrepancy of Sample.

One major challenge in this study is the influence of individual differences, such as personality traits, prior negotiation experience, and adaptability to new learning environments.

**Solution :** To minimize this, a pre-experiment training session will be conducted to ensure all students understand the purpose and benefits of flexible seating arrangements. This will help standardize their approach to participation.

**Challenge two:** The delay of data collection.

Data collection is an important task for every research, especially for questionnaire distribution. This research may have a problem of collecting the questionnaire. This would arouse the delay to this research.

**Solution:** The author will contact with teacher who have flexible seating class. The teacher will encourage students to complete the questionnaire. At the same time, the students who complete the questionnaire could get 20rmb awards, which is a way to appreciate students' cooperation.

**Timeline (Appendix B)**

In order to ensure that the study could be conducted as planned, this research makes a Gantt Chart (Appendix B) by Excel for each important procedure for the final dissertation, visualizing the research progress. This table includes:

**The preparation stage (week 1-7):** this stage mainly includes determine research topic, literature review, preliminary research design and refinement of research methodology and instrument design.

**Adaption stage (week 8-14):** this stage includes research design, ethical consideration, proposal completion and questionnaire distribution.

**Completion stage (week 15-21):** this stage mainly includes data collection, data analysis and results and discussion. When everything is considered and finished, the author will submit this research.

This Gantt chart (Appendix B) is useful and provides a visual schedule for this research. This can help to complete dissertation more effectively and the author could control the time schedule, especially the important time node. In addition, this table could help to lessen risk to delay or even avoid some uncontrollable things (e.g. data collection is difficult).

## COMPETING INTERESTS



The authors have no relevant financial or non-financial interests to disclose.

## REFERENCES

- [1] Abass O, Ghinea G. Integrating confidence in electronic negotiations: perspectives from an empirical investigation. In 2006 IEEE International Conference on e-Business Engineering (ICEBE'06), IEEE, 2006: 366-372.
- [2] Adedokun O A, Parker L C, Henke J N, et al. Student perceptions of a 21st century learning space. *Journal of Learning Spaces*, 2017, 6(1).
- [3] Akpur U. Does Class Participation Predict Academic Achievement? A Mixed-Method Study. *English Language Teaching Educational Journal*, 2021, 4(2): 148-160.
- [4] An R, Wang J, Li S, et al. Relationship between readiness for interprofessional learning and academic self-efficacy among nursing students: a cross-sectional study. *BMC medical education*, 2024, 24(1): 62.
- [5] Asthana A N. Effectiveness of mindfulness in business education: Evidence from a controlled experiment. *The International Journal of Management Education*, 2021, 19(2): 100492.
- [6] Bird E. International Business Development and Negotiations: Selected Characteristics of the Middle East. In *International Business In The Middle East*. Routledge, 2019: 1-18.
- [7] Boothby E J, Cooney G, Schweitzer M E. Embracing complexity: A review of negotiation research. *Annual Review of Psychology*, 2023, 74(1): 299-332.
- [8] Chi M T, Wylie R. The ICAP framework: Linking cognitive engagement to active learning outcomes. *Educational psychologist*, 2014, 49(4): 219-243.
- [9] Chong M, Gan B K S, Menkhoff T. Enhancing students' global competence through international business study missions. *Journal of International Education in Business*, 2022, 15(2): 165-183.
- [10] Cole K, Schroeder K, Bataineh M, et al. Flexible Seating Impact on Classroom Environment. *Turkish Online Journal of Educational Technology-TOJET*, 2021, 20(2): 62-74.
- [11] Diehl D, McFarland D A. Classroom ordering and the situational imperatives of routine and ritual. *Sociology of Education*, 2012, 85(4): 326-349.
- [12] El-Sabagh H A. Adaptive e-learning environment based on learning styles and its impact on development students' engagement. *International Journal of Educational Technology in Higher Education*, 2021, 18(1): 53.
- [13] Emerson T L, Taylor B A. Interactions between personality type and the experimental methods. *The Journal of Economic Education*, 2007, 38(1): 18-35.
- [14] Enstroem R, Benson L. Enterprise education in undergraduate business programmes advances students' negotiating competence and self-confidence. *Education+ Training*, 2024, 66(1): 54-69.
- [15] Ferreira-Lopes L, Elempuru-Albizuri I, Bezanilla M J. Developing business students' intercultural competence through intercultural virtual collaboration: a task sequence implementation. *Journal of International Education in Business*, 2021, 14(2): 338-360.
- [16] Hu W, Ran J, Dong L, et al. Aridity-driven shift in biodiversity–soil multifunctionality relationships. *Nature Communications*, 2021, 12(1): 5350.
- [17] Galperin B L, Punnett B J, Ford D, et al. An emic-etic-emic research cycle for understanding context in under-researched countries. *International Journal of Cross Cultural Management*, 2022, 22(1): 7-35.
- [18] Garcia F, Smith S R, Burger A, et al. Increasing global mindset through collaborative online international learning (COIL): Internationalizing the undergraduate international business class. *Journal of International Education in Business*, 2023, 16(2): 184-203.
- [19] Georgopoulou M S. The power of synergy: Unlocking the potential of group dynamics through team-building practices in junior high school. *European Journal of Education and Pedagogy*, 2024, 5(2): 12-21.
- [20] Goetler H. Enhancing 4th Grade Classroom Engagement Through Flexible Seating and Interactive Learning Strategies. 2024.
- [21] Gutierrez A. The Effects of Various Classroom Seating Arrangements on English Learners' Academic Achievement. 2022.
- [22] Joan D R. Flexible learning as new learning design in classroom process to promote quality education. *Journal on School Educational Technology*, 2013, 9(1): 37-42.
- [23] Kariippanon K E, Cliff D P, Ellis Y G, et al. School flexible learning spaces, student movement behavior and educational outcomes among adolescents: A mixed-methods systematic review. *Journal of School Health*, 2021, 91(2): 133-145.
- [24] Klemenčič M. Students as actors and agents in student-centered higher education. In *The Routledge international handbook of student-centered learning and teaching in higher education*. Routledge, 2020: 92-108.
- [25] Li D. The Shift to Online Classes during the COVID-19 Pandemic: Benefits, Challenges, and Required Improvements from the Students' Perspective. *Electronic Journal of E-Learning*, 2022, 20(1): 1-18.
- [26] Liu H, Zhu Z, Chen B. Unraveling the mediating role of buoyancy in the relationship between anxiety and EFL students' learning engagement. *Perceptual and Motor Skills*, 2025, 132(1): 195-217.
- [27] Medaille A. Quiet Students' Experiences with Collaborative Learning at the Postsecondary Level (Doctoral dissertation, University of Nevada, Reno). 2018.



- [28] Martin-Alguacil N, Avedillo L, Mota-Blanco R, et al. Student-Centered Learning: Some Issues and Recommendations for Its Implementation in a Traditional Curriculum Setting in Health Sciences. *Education Sciences*, 2024, 14(11): 1179.
- [29] Müller C, Mildenerberger T, Steingruber D. Learning effectiveness of a flexible learning study programme in a blended learning design: why are some courses more effective than others?. *International Journal of Educational Technology in Higher Education*, 2023, 20(1): 10.
- [30] Nehyba J, Juhaňák L, Cigán J. Effects of seating arrangement on students' interaction in group reflective practice. *The Journal of Experimental Education*, 2023, 91(2): 249-277.
- [31] Papaioannou G, Volakaki M G, Kokolakis S, et al. Learning spaces in higher education: a state-of-the-art review. *Trends in Higher Education*, 2023, 2(3): 526-545.
- [32] Peleckis K, Peleckienė V, Peleckis K. Trust building problems in business negotiations and business meetings: interference, stereotypes, trust substitutes. *Journal of Management Policies and Practices*, 2015, 3(2): 51-59.
- [33] Pennington C, Putman R, Munsey B. An examination of flexible seating in the higher education classroom from a physical and kinesthetic perspective. *Journal of Learning Spaces*, 2022, 11(2).
- [34] Pender K L. Elementary Classroom Teachers' Perceptions of Redesigned Classroom Space: A Qualitative Case Study (Doctoral dissertation, Old Dominion University). 2021.
- [35] Pyo J, Lee W, Choi E Y, et al. Qualitative research in healthcare: necessity and characteristics. *Journal of preventive medicine and public health*, 2023, 56(1): 12.
- [36] Rau P L P. Cross-Cultural Design. Product and Service Design, Mobility and Automotive Design, Cities, Urban Areas, and Intelligent Environments Design: 14th International Conference, CCD 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part IV. Springer Nature, 2022, 13314.
- [37] Ren G, Ning J, Zhang Z. Multi-variable selection strategy based on near-infrared spectra for the rapid description of dianhong black tea quality. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 2021, 245: 118918.
- [38] Reni A, Sihite M, Rijal S. Human Resource Management, Technology Adaptation, and Environmental Policy: A Multi-Variable Study of MSME Entrepreneurship in Indonesia. *International Journal of Business, Law, and Education*, 2024, 5(1): 72-89.
- [39] Rosati E. IP outside the textbook: professional networking activities in the IP curriculum. In *Teaching Intellectual Property Law*. Edward Elgar Publishing, 2023: 274-282.
- [40] Rozali A, Irianto D M, Yuniarti Y. Kajian problematika teacher centered learning dalam pembelajaran siswa studi kasus: SDN Dukuh, Sukabumi. *COLLASE (Creative of Learning Students Elementary Education)*, 2022, 5(1): 77-85.
- [41] Swartz S, Shrivastava A. Stepping up the game—meeting the needs of global business through virtual team projects. *Higher Education, Skills and Work-Based Learning*, 2022, 12(2): 346-368.
- [42] Umiralkhanov A, Abylkassymova A, Tuyakov Y, et al. Continuity in Teaching the Course Algebra and the Beginning of Analysis: Adaptation of Students to New Conditions. *Qubahan Academic Journal*, 2024, 4(3): 793-805.
- [43] Whatley K D. Negotiation in Classroom Conversations: An Examination of Teacher and Student Engagement (Doctoral dissertation, University of Hawai'i at Manoa). 2023.
- [44] Yang Y, Wang X, Zhao X, et al. M3GPSpectra: A novel approach integrating variable selection/construction and MLR modeling for quantitative spectral analysis. *Analytica Chimica Acta*, 2021, 1160: 338453.
- [45] Yesil L B, Aras İ S. The significance of flexible learning spaces and student-centred pedagogies in school settings: A comparative case study. *International Education Journal: Comparative Perspectives*, 2024, 23(1): 1-24.
- [46] Ylä-Anttila T, Eranti V, Kukkonen A. Topic modeling for frame analysis: A study of media debates on climate change in India and USA. *Global Media and Communication*, 2022, 18(1): 91-112.
- [47] Zalud T L. Reconceptualizing the classroom: An exploration of the student and educator experience of flexible seating in the elementary school classroom through the lens of self-determination theory. Aurora University, 2020.
- [48] Zakopoulos V, Makri A, Ntanos S, et al. Drama/theatre performance in education through the use of digital technologies for enhancing students' sustainability awareness: A literature review. *Sustainability*, 2023, 15(18): 13387.
- [49] Zhang S. Tanxing zuoyi, ketang hudong yu jiaoxue fengge dui guoji shangwu tanpan kecheng xuesheng canyudu de yingxiang yanjiu (The impact of flexible seating, classroom interaction, and flexible seat arrangements on student interaction in international business negotiation courses) (Chinese version). Beijing: Higher Education Press, 2024.
- [50] Zhou H. Exploring the dynamic teaching-learning relationship in interactive learning environments. *Interactive Learning Environments*, 2025: 1-31.
- [51] Zipf S T, Li L, Oaxaca G C, et al. Examining Inclusivity in Flexible Learning Spaces: Expectations, Comfort, and Distractions. *Innovative Higher Education*, 2024: 1-25.