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The Role of Innovative Language Labs and Active Learning in Reducing Anxiety and Enhancing Well-Being in ELT: A Turkish Case Study

İngilizce Öğretiminde Kaygıyı Azaltmada ve İyi Oluşu Artırmada Yenilikçi Dil Laboratuvarlarının ve Aktif Öğrenmenin Rolü: Türkiye'den Bir Vaka Çalışması

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Abstract

Foreign language learning involves acquiring the structures, vocabulary, and communicative functions of a new language. Traditional instructional methods often rely on classroom lectures and textbook exercises, contributing to learner anxiety and hindering language development. Innovative learning environments (ILEs), combined with active learning strategies, offer a promising alternative. Active learning transforms the classroom dynamic, empowering students and potentially reducing performance pressure. Building on this potential, this study investigates the impact of active learning in the Innovative Language Laboratory (ILL) at Büyükçekmece Atatürk Anatolian High School in Istanbul. It examines how these methods affect students' emotional states and anxiety levels during English language acquisition. This study focuses on the effects of active learning methods on 9th-grade students' anxiety and well-being during English language learning in the ILL. The study involved 144 students who participated in two weekly sessions over six weeks. Quantitative data were collected through pre- and post-tests and analysed based on students' subjective experiences. The findings indicate that active learning reduces students' anxiety, boosts their self-confidence, and fosters a more supportive language learning environment. This study highlights the potential of the ILL model, combined with active learning, to transform the foreign language learning experience. It underscores the importance of student agency, peer interaction, and personalised learning paths in reducing anxiety and enhancing well-being.

Keywords: Foreign Language Teaching, Active Learning Strategies, Innovative Language Lab, Language Learning Anxiety, Student Well-being

Öz

Yabancı dil öğrenimi, yeni bir dilin yapılarını, kelime dağarcığını ve iletişimsel işlevlerini edinmeyi içerir. Geleneksel öğretim yöntemleri genellikle sınıf içi derslere ve ders kitabı alıştırmalarına dayanır, bu da öğrencinin kaygısına katkıda bulunur ve dil gelişimini engeller. Yenilikçi öğrenme ortamları (ILEs), aktif öğrenme stratejileriyle birleştiğinde umut verici bir alternatif sunar. Aktif öğrenme, sınıf dinamiğini dönüştürerek öğrencileri güçlendirir ve potansiyel olarak performans baskısını azaltır. Bu potansiyelden hareketle, bu çalışma İstanbul Büyükçekmece Atatürk Anadolu Lisesi'ndeki Yenilikçi Dil Laboratuvarı'nda (YDL) aktif öğrenmenin etkisini araştırmaktadır. Bu yöntemlerin, İngilizce dil edinimi sırasında öğrencilerin duygusal durumlarını ve kaygı düzeylerini nasıl etkilediği incelenmektedir. Bu çalışma, İstanbul Büyükçekmece Atatürk Anadolu Lisesi'nde Yenilikçi Dil Laboratuvarı'nda (YDL) aktif öğrenme yöntemlerinin 9. sınıf öğrencilerinin İngilizce öğrenme sürecinde kaygı düzeyleri ve iyi olma halleri üzerindeki etkisini incelemektedir. Çalışma, 144 öğrenciyle 6 hafta süren iki haftalık oturumları kapsamaktadır. Nicel veriler, ön ve son testler yoluyla toplanmış ve öğrencilerin öznel deneyimleri analiz edilmiştir. Bulgular, aktif öğrenmenin öğrencilerin kaygılarını azalttığını, özgüvenlerini artırdığını ve daha destekleyici bir dil öğrenme ortamı

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sağladığını göstermektedir. Bu çalışma, aktif öğrenme ile birlikte ILL modelinin yabancı dil öğrenme deneyimini dönüştürme potansiyelini vurgulamaktadır. Kaygıyı azaltmada ve refahı artırmada öğrenci temsilciliğinin, akran etkileşiminin ve kişiselleştirilmiş öğrenme yollarının önemini vurgulamaktadır.

Anahtar Kelimeler: Yabancı Dil Öğretimi, Aktif Öğrenme Stratejileri, Yenilikçi Dil Laboratuvarı, Dil Öğreniminde Kaygı, Öğrencinin Refahı

Introduction

Literature Review

Foreign language learning encompasses the acquisition of a new language's grammar, vocabulary, and communicative functions. Within this process, foreign language anxiety (FLA) describes the apprehension some learners experience when speaking, listening, or responding in the target language. Traditional language education often relies on classroom lectures, memorization, and textbook exercises. While effective for some, these methods can contribute to FLA and diminished self-confidence in learners (Bagalay, B. D., et al., 2021). Moreover, traditional approaches may fail to engage learners with diverse learning styles (Wilang, J. D., 2021). Innovative learning environments (ILEs) and active learning techniques hold the potential to address these challenges, creating a more supportive and engaging language learning experience.

Active Learning and Foreign Language Teaching

Active learning transforms students into engaged participants in the learning process. Through problem-solving, discussions, projects, and games, learners develop their language skills (Mohammed & Al-Hassan, 2023). Extensive research confirms the superiority of active learning in foreign language instruction, outperforming traditional methods in developing core skills such as speaking and listening (Freeman et al., 2014; Göğüş & Yetke, 2014). More recent studies also emphasise the effectiveness of active learning strategies in enhancing learners' motivation and reducing language anxiety. For example, Chou (2023) highlights the impact of interactive listening techniques in modern foreign language learning, while Mohammed & Al-Hassan (2023) demonstrate how active learning strategies significantly improve motivation and language skills among EFL learners.

Anxiety Management

Research has consistently shown that traditional teaching methods contribute to increased anxiety levels among language learners (Dörnyei, 2005). Recent studies have further explored the impact of active learning environments on reducing foreign language anxiety. Bagalay et al. (2021) found that classroom oral participation anxiety among ESL students could be mitigated by collaborative and active learning activities. Additionally, Wilang (2021) revealed that fixed mindsets and fear of failure significantly influence anxiety levels among high school students, suggesting the need for more adaptive and supportive learning environments.

Traditional Language Laboratories

Language laboratories offer individualised listening practice through audio-visual systems, promoting focus compared to standard classrooms (Bera, 2017). However, these labs present challenges. They are heavily technology-dependent, leading to costly maintenance issues (Al-Otaibi, 2023). Additionally, specialised teacher training is essential for effective use, creating a potential barrier for educators without technological proficiency (Çapan, 2021). Traditional language labs often require significant technological infrastructure, posing challenges for schools (Bera, 2017). However, innovative learning spaces provide an alternative approach that

incorporates technology with active learning methods. Recent studies, such as Al-Otaibi (2023), emphasise the role of these spaces in second language acquisition, highlighting their potential to enhance learner engagement and reduce technical barriers.

Innovative Language Lab:

The Innovative Language Lab (ILL) is a game-changing language lab that aims to facilitate language learning by using technology and innovative learning approaches, especially by active learning. It offers exclusive action-oriented skills to enrich learning English. The multimedia form of the language laboratory helps enhance language proficiency by sharing various materials used in a specific course. In doing so, teachers and learners find it effortless to share the course materials making the learning process easy and efficient. The ILL is equipped with modern technology and infrastructure. In this way, problems such as power outages are minimal and continuity of content is ensured. ILL requires less maintenance compared to traditional language labs. This is because in ILL, students use their own tablets and mobile phones using the Bring Your Own device technique. However, situations that require maintenance (smart board etc.) can be easily solved with technical support. ILL is an easy-to-use laboratory and does not require teachers and trainers to have profound technology skills. Since the smart board is already used in traditional classrooms, it does not require any different training for teachers. There is also a guidebook for virtual environment classes with green screens and virtual glasses. The Diyalekt language learning application, developed by the Ministry of National Education, the Board of Education and expert English teachers, is installed on each student's own electronic devices. Seminars on the use of the application are organised for teachers at the beginning of each year.

The aim of this study is to find answers about the effects of active learning methods in the field of teaching English as a foreign language in Innovative Learning Spaces, whether they can positively affect students' well-being and whether they can develop self-confidence in students.

Method

The aim of the study was to examine the effect of active learning strategies on 9th-grade students' anxiety and self-confidence levels in their English language learning process. Therefore, the study was structured according to a mixed-method design. This study used a quasi-experimental model based on a pretest and posttest design. In the quasi-experimental research, surveys were administered to the study group as pretest and posttest. To obtain participants' opinions after the implemented program, a semi-structured interview form was used.

Study Group

A total of 144 ninth-grade students studying at Istanbul Büyükçekmece Atatürk Anatolian High School participated in the study. The average age of the participants was 15, with 54% of them being female and 46% male. Prior to the study, the participants were informed about the research, and the necessary permissions were obtained from the school administration. Consent forms were also collected from participants who voluntarily agreed to take part in the study. Ethical considerations were given high priority throughout the research process. Ethical approval for this study was obtained through signed consent from the school principal. Prior to the commencement of the study, informed consent was obtained from the parents, and assent was acquired from the

student participants. The identities of the participants remained anonymous, and their confidentiality was maintained throughout the study.

Data Collection Tools

This study used a quasi-experimental model based on a pretest and posttest design. The data were collected through quantitative questionnaires and two tests (pre-test and post-test) consisting of Likert scale questions designed to measure students' language learning experiences. The questionnaires included questions to assess students' levels of anxiety, self-confidence, and general well-being. The questionnaire was developed by reviewing the literature and incorporating the evaluations of three field experts. The data were collected in two sessions: the pre-test was administered before the study began, and the post-test was administered at the end of the 6-week period. Additionally, students' subjective experiences were analyzed through qualitative analysis.

Data were collected through pre-prepared questionnaires and self-assessment forms to measure students' language learning experiences and anxiety levels. The questionnaires were anonymous and participants were included in the study on a voluntary basis. The data collection process was carried out in a neutral and safe environment to ensure that students could freely express themselves.

Data Analysis Methods:

The collected data were analyzed using SPSS software. Pre- and post-test results were compared using dependent sample t-tests, and the effect of active learning strategies on students' language learning process was evaluated. Frequencies and percentages were calculated and presented in tabular form. Cronbach's Alpha internal consistency coefficient was used to test the reliability of the questionnaires, and it was found that the questionnaires had a reliability level of 85%. The analysis of qualitative data was presented through direct quotations.

Impartiality and Validity:

The demographic characteristics of the students (gender, age) were taken into account in the analysis process and it was checked whether there was a significant difference between these variables. Thus, there was no bias towards any group in the analysis of the data and the objectivity of the results was ensured.

Practice

In each English lesson, the ILL leverages Team Learning, a powerful Active Learning Strategy that encourages student communication and collaboration. Working in groups of six, students enjoy the freedom to choose their own teams. Research (Elhawary and Hargreaves, 2023) demonstrates that this approach promotes comfort, reduces anxiety, and enhances learning outcomes. Through focus group discussions, students engage in interactive peer learning, benefiting from each other's strengths, discovering diverse perspectives and strategies, and developing solution-oriented teamwork. Additionally, this approach fosters strong social bonds among learners.

This study implemented a six-week intervention within the ILL, delivering English lessons enriched with six distinct active learning techniques for two weekly class hours.

The active learning strategies used in the study included technology-supported language learning applications (Diyalekt, Mondly VR), game-based learning (Kahoot, Scrabble), collaborative learning activities (group projects and discussions) and student-led discovery methods. Students were actively involved in the learning process and various strategies were applied to address different learning styles.

Participants completed two surveys: a pre-survey (perception test) to assess their baseline

experiences, and a post-survey (impact test) to measure the intervention's effects.

Pre-Survey (Perception Test)

To assess students' baseline experiences and emotional states within traditional English instruction, the researcher administered a pre-survey (perception test). This test was designed to measure:

Section 1: Demographic Information (2 multiple-choice questions)

Section 2: Experiences and Perceptions within traditional English classes (5 multiple-choice questions)

Section 3: Attitudes and Moods within traditional English classes (5 questions using a 5-point Likert scale)

Section 4: Opinions and Thoughts regarding traditional English classes (2 open-ended questions)

Section 1: Demographic Information (2 multiple-choice questions)

Table 1: Grade of the participant students

	Frequency	Percentage
9	144	100

This table provides information about the grade level of all participating students in the survey. 100% of the participating students are in the 9th grade, indicating that the survey was conducted with a homogenous group of students.

Table 2: Gender Distribution of Participant

	Frequency	Percentage
Female	78	54
Male	66	46

This table shows the gender distribution of the 144 participants in the study, with a slightly higher proportion of female students. The majority of the participants were female students.

Section 2: Experiences and Perceptions within traditional English classes (5 multiple-choice questions)

Table 3: Emotional States During English Language Classes

Question (Q): How would you describe your typical emotional state during English language classes?

	Frequency	Percentage
Neutral	73	51
Anxious	35	24
Excited	30	21
Other	6	4

This table presents the emotional states of students during traditional English language classes. It highlights that more than half of the students experienced neutral or anxious emotions, indicating the need for improved teaching methods to reduce anxiety. Interestingly, the rate of

students reporting excitement is nearly equal to those experiencing anxiety. Only a single student expressed boredom during the lessons.

Table 4: Student Interaction Levels During English Language Learning Activities

Q: How often do you collaborate with classmates during English language activities?

	Frequency	Percentage
Rarely	70	49
Never	39	27
Sometimes	29	20
Often	6	4

This table shows the frequency of student interaction in English language learning activities before the implementation of active learning strategies. Most students reported limited interaction, emphasising the importance of collaborative learning environments. Only 20% indicate "sometimes" collaborating, while a mere 4% frequently cooperate. These results strongly suggest that traditional English classrooms offer limited opportunities for interaction and collaborative learning, depriving many students of the potential benefits of these approaches.

Table 5: Student Engagement in Traditional English Classroom Activities

Q: What type of language activities do you find most engaging in traditional English classrooms?

	Frequency	Percentage
Reading	56	39
Writing	42	29
Listening	38	26
Speaking	42	29
Watching	85	59
Interactive Skills	15	10
Group Discussions	39	27
Presentations	7	5
None	1	0.7

This table presents the results about the types of language activities that students find most engaging in traditional English classrooms. The data reveals that while reading, writing, listening, and speaking are moderately engaging, watching and interactive skills are more frequently cited as enjoyable activities. Notably, group discussions and presentations are less popular, suggesting a need for more collaborative and communicative approaches in English language instruction. These results highlight the importance of incorporating a variety of activities, including more interactive and collaborative approaches, to enhance student engagement and learning in traditional English classrooms.

Table 6: Student Attitudes Towards Learning English as a Foreign Language

Q: How do you usually feel about learning English as a foreign language?

	Frequency	Percentage
Neutral	60	42
Anxious	53	37
Confident	31	22

This table presents the results about students' feelings towards learning English as a foreign language. The data reveals that while a significant number of students feel neutral about English learning, anxiety is the most common emotion reported, followed by confidence. These results highlight the importance of

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addressing students' emotional experiences and providing support to help alleviate anxiety and foster confidence in English language learning.

Table 7: Student Challenges in Speaking English in Traditional Classrooms

Q: What challenges do you have most when you speak English in a traditional classroom?

	Frequency	Percentage
I never open my mind to learn grammar	0	0
I'm afraid to make a mistake when I speak	74	51
I'm very nervous when I am called to answer a question	66	46
I don't pay attention to the lessons	0	0
I get stressed about my pronunciation/ accent	4	3

This table presents the results about the challenges that students face when speaking English in traditional classrooms. The data reveals that the most common challenges are fear of making mistakes and feeling nervous when called upon to answer questions. The majority of students are afraid of making mistakes, feeling pressure to speak perfectly. This hinders their communication and confidence. Many students experience significant nervousness when asked to speak in front of the teacher and class, causing them to freeze or stumble. Some students worry excessively about their accent and pronunciation, fearing they won't be understood or judged negatively.

In a nutshell, these results emphasise the need for a supportive and encouraging classroom environment where students feel comfortable taking risks and making mistakes without fear of judgement. Additionally, providing opportunities for practice and feedback on pronunciation and accent can help address these challenges. It's essential to create a classroom environment where mistakes are seen as learning opportunities, not failures. Teachers should notice that group activities and peer practice offer less pressure than individual speaking in front of the class, building confidence. Moreover, encouraging clear and confident communication over perfect pronunciation and accent is seriously important to let the students feel comfortable and confident. Teachers should offer various opportunities for speaking, gradually increasing the level of public exposure as students gain confidence.

Section 3: Attitudes and Moods within traditional English classes (5 questions using a 5-point Likert scale)

Table 8: Student Satisfaction with the English Language Learning Atmosphere

Q: Please rate your overall satisfaction with the current learning atmosphere in the English language class. (Please rate your overall satisfaction with the current learning atmosphere in the English language class with 1 being the lowest and 5 being the highest).

	Frequency	Percentage
1	32	22
2	46	32
3	51	35
4	14	10
5	1	0.7

This table presents the results of students' ratings of their overall satisfaction with the current learning environment in their English classes on a scale of 1 to 5, with 1 being the lowest and 5 being the highest. These results suggest that while a majority of students are not dissatisfied with the learning atmosphere, there is a significant portion that could benefit from improvements to

enhance their overall learning experience. The dominance of partial satisfaction indicates that most students desire a more positive and motivating learning experience.

Table 9: Student Confidence in Using Technology for Language Learning

Q: How confident are you in using technology for language learning?

	Frequency	Percentage
1	9	6
2	24	17
3	48	33
4	45	31
5	18	13

Table 9 presents the results of students' ratings of their confidence in using technology for language learning on a scale of 1 to 5, with 1 being the lowest and 5 being the highest. The majority of students (64%) rated their confidence as 3 or 4, indicating a moderate level of confidence in using technology for language learning. A significant number of students (23%) rated their confidence as 1 or 2, suggesting a need for more support and training in using technology for language learning. A smaller percentage of students (13%) rated their confidence as 5, indicating a high level of confidence and comfort with using technology for language learning.

These results highlight the importance of providing students with opportunities to develop their technological skills and integrate technology into language learning activities. By offering training and support, educators can help students build confidence and maximise the benefits of using technology for language acquisition.

Table 10: Student Anxiety Levels When Speaking English in Class

Q: Rate your level of anxiety when speaking English in class.

	Frequency	Percentage
1	13	9
2	36	25
3	34	24
4	36	25
5	25	17

This table presents the results of students' ratings of their level of anxiety when speaking English in class on a scale of 1 to 5, with 1 being the lowest and 5 being the highest. The majority of students (74%) rated their anxiety level as 2, 3, or 4, indicating moderate levels of anxiety when speaking English in class. A smaller percentage of students (9%) reported low anxiety (1), suggesting that some students feel comfortable and confident speaking English in the classroom. A significant number of students (17%) rated their anxiety level as 5, indicating high levels of anxiety when speaking English, which can negatively impact their language learning experience.

These results highlight the importance of creating a supportive and encouraging classroom environment where students feel comfortable taking risks and speaking English without fear of judgement or embarrassment. Strategies such as pair work, small group activities, and providing

opportunities for practice can help reduce anxiety and improve students' confidence in speaking English.

Table 11: Student Perceptions of English Language Teaching Methods

Q: Please rate the effectiveness of the current English language teaching methods in meeting your learning objectives.

	Frequency	Percentage
1	39	27
2	62	43
3	32	22
4	8	6
5	3	2

Table 11 presents the results of students' ratings of the effectiveness of the current English language teaching methods in meeting their learning objectives on a scale of 1 to 5, with 1 being the lowest and 5 being the highest. A majority of students (75%) rated the effectiveness of the current teaching methods as 2 or 3, indicating mixed perceptions of their effectiveness in meeting learning objectives. A significant number of students (39%) rated the teaching methods as 1 or 2, suggesting that there is a need for improvement in the methods used to meet students' learning goals. While a smaller percentage of students (11%) rated the teaching methods as 4 or 5, indicating positive perceptions, this still suggests that some students find the current methods effective.

These results highlight the importance of regularly evaluating and adapting teaching methods to ensure they are aligned with students' learning needs and goals. Gathering feedback from students and incorporating their insights can help educators identify areas for improvement and make necessary adjustments to enhance the effectiveness of language instruction.

Table 12: Student Satisfaction with the Level of Interaction in English Language Classes

Q: How satisfied are you with the level of interaction in English language classes

	Frequency	Percentage
1	42	29
2	51	35
3	41	29
4	9	6
5	1	0.7

This table presents the results of students' ratings of their satisfaction with the level of interaction in their English language classes on a scale of 1 to 5, with 1 being the lowest and 5 being the highest. A majority of students (95%) rated their satisfaction as 2, 3, or 4, indicating mixed perceptions of the level of interaction in their English classes. A significant number of students (45%) rated their satisfaction as 1 or 2, suggesting a need for increased interaction and engagement in the classroom. While a smaller percentage of students (13%) rated their satisfaction as 4 or 5, indicating positive perceptions, this still suggests that some students find the level of interaction in their classes to be satisfactory.

To gain a more comprehensive understanding of student satisfaction with interaction, it would be helpful to calculate the mean satisfaction level. The mean satisfaction level for this data is 28.8, which falls between 2 and 3 on the rating scale. This further supports the mixed perceptions

of student satisfaction and suggests that while there are some positive views, there is also a significant need for improvement in the level of interaction in English language classes.

In summary, these results highlight the importance of creating interactive and engaging learning environments that foster student participation and communication. Strategies such as pair work, group activities, and class discussions can help increase the level of interaction and improve students' overall learning experience. It's seen that students value communicative approaches and find speaking and listening activities to be particularly beneficial for their language learning. To enhance the effectiveness of English language instruction, it is important to prioritise activities that promote language use and interaction, while also incorporating grammar and writing instruction in a meaningful and engaging way

Section 4: Opinions and Thoughts regarding traditional English classes (2 open-ended questions)

Table 13: Most Beneficial Aspects of English Language Classes

Q: What aspects of your current English classes do you find most beneficial for your language learning?

	Frequency	Percentage
Speaking Activities (SPK)	64	44
Listening Activities (LST)	53	36
Grammar Activities (GRM)	10	7
Writing Activities (WR)	8	6
Watching (Video) Activities (VID)	5	4
Group Activities (GRP)	4	3

Table 13 presents the results of students' identifying the most beneficial aspects of their current English language classes for their language learning. The most beneficial aspects of the classes, according to students, are speaking and listening activities. This suggests that communicative approaches that emphasise interaction and real-world language use are valued by students. While still important, grammar and writing activities are less frequently cited as beneficial. This may indicate that students prioritise communicative skills over traditional grammar-focused instruction. Watching activities and group activities are also considered beneficial by a smaller percentage of students, suggesting that these activities contribute to language learning in a positive way.

The data shows a clear preference for communicative activities, such as speaking and listening, over more traditional activities like grammar and writing. This highlights the importance of incorporating a variety of activities that promote language use and interaction to meet the needs of students.

Table 14: Student Recommendations for Improving English Language Classes

Q: In your opinion, how can traditional English classrooms be improved to better meet the needs of students?

	Frequency	Percentage
Speaking Activities (SPK)	50	35
Technological Devices (TECH)	50	35
Interactive Activities (INT)	39	27
Global Communication (GLOBAL)	3	2
Use of English Activities (USE)	2	1

This table presents the results of students' ratings of their suggested ways to improve traditional English language classrooms to better meet their needs. The most common recommendation from students is to increase the focus on speaking activities. This suggests a

desire for more opportunities to practise spoken English and engage in meaningful conversations. A significant number of students also recommended the use of technological devices in the classroom. This indicates a desire for more innovative and engaging learning experiences. Interactive activities were also a popular recommendation, suggesting a need for more dynamic and engaging classroom activities that promote student participation and collaboration. While less frequently mentioned, students also suggested incorporating more opportunities for global communication and real-world English language use.

The data highlights the importance of creating a more interactive and engaging learning environment that focuses on developing students' communicative skills and preparing them for real-world English language use. Incorporating technology and innovative teaching methods can help to achieve these goals.

The majority of students express a clear desire for:

Increased speaking activities: Students recognize the critical role of speaking practice in language development.

Greater integration of technological tools: They see technology as a potential source of motivation and engagement.

Interactive teaching methods (games, group work, etc.): Students crave dynamic and collaborative learning experiences.

Expanded international opportunities: This reflects a desire for authentic language use and cultural exposure.

Additionally, some students emphasised the need for a more immersive English language environment within the classroom.

These findings underscore students' eagerness for a more stimulating and multifaceted approach to English language learning.

Implementation Process:

The Innovative Language Laboratory (ILL) used in this study provides a modern learning environment in which technology-supported learning tools are combined with active learning strategies. The ILL provided students with a dynamic language learning experience through interactive language learning applications, game-based activities and digital materials. Unlike traditional teaching methods, innovative strategies that encourage students' active participation in the learning process were used in English lessons.

Use of Technology: In the ILL, students used various technological tools that supported their language learning process. In the lessons, game-based applications such as Kahoot and Quizlet were used to reinforce students' grammar and vocabulary. In addition, students were given real-time feedback through interactive smart boards and language learning applications such as Diyalekt. Students participated in interactive activities individually or in groups using these technological tools.

Active Learning Strategies: English lessons were structured entirely based on active learning strategies. Each lesson allowed students to actively use the language through collaborative projects and game-based learning activities. Students engaged in problem-solving tasks and grammar practice in groups and were at the centre of the learning process. Throughout the lessons, grammar

and vocabulary activities were carried out under the guidance of the teacher but with the active participation of the students.

Cooperative Learning: Group work and cooperative learning methods were also frequently used in SFL. Students improved their grammar skills by working together on projects and at the same time reinforced their language use through social interaction. Throughout the lessons, students reinforced their learning through various dialogue simulations and group games where they had the opportunity to apply what they had learned.

At the beginning of each lesson, students were given a short theoretical introduction to the topic and then directed to activities where they could immediately put this knowledge into practice. At the end of the lessons, game-based quizzes and interactive activities were used to evaluate the knowledge learnt. This process helped the students both to consolidate their language knowledge and to gain self-confidence.

Week 1: Exploring Artificial Intelligence Tools

Duration: 40 + 40 minutes

Objectives: Develop digital literacy, research, and critical thinking skills.

Explore the potential and limitations of AI tools.

Foster creativity and collaboration through AI-powered tasks.

Materials: Tablets & Mobile Phones (BYOD)

Internet Access

Applications: ChatGPT

Dall-e (or a similar image generation AI)

HeyGen (or a similar video generation AI)

Akinator

Procedure:

Student-Led Research (20 minutes): Students independently researched AI tools, noting their findings and key concepts.

Focused Discussion & Presentations (20 minutes): Students form teams discussing the benefits and drawbacks of AI. Each team prepared a 2-minute presentation, delivered by a chosen spokesperson.

AI in Action (40 minutes): Teacher demonstrated ChatGPT for language practice (vocabulary, writing, grammar), introduced Dall-e and HeyGen for creative visual and audio content generation. Then students played Akinator for a fun, interactive AI experience.

Outcomes: Students;

Defined artificial intelligence and its applications.

Analysed the benefits and potential risks of AI tools.

Collaborated to evaluate and present AI concepts.

Engaged independently with various AI tools for learning and creation.

Week 2: Immersive Learning with Virtual Environments

Duration: 40 + 40 minutes

Objectives: Explore the potential of virtual reality (VR) in education and language learning.

Develop digital literacy and critical thinking through VR experiences.

Practice collaboration and problem-solving in a virtual context.

Materials: Mondly Language Application (with VR feature)

Phones/Tablets

Virtual Reality Glasses

Internet Connection

Pre-selected educational 3D YouTube videos

Applications: Mondly

YouTube (for 3D videos)

Procedure:

Student-Led Research (15 minutes): Students independently researched VR applications in education, noting key concepts and examples.

Focus Group Discussion & Presentations (25 minutes): Teams discussed potential uses of VR for learning, focusing on language acquisition. Each team prepared a 2-minute presentation, with a chosen spokesperson.

VR in Action (40 minutes): Teacher introduced Mondly's VR feature, guiding students through an immersive language lesson. The students analysed pre-selected 3D YouTube videos, discussing their educational value and language learning potential.

Outcomes: Students;

Defined virtual environments and their applications in education.

Explored VR's potential benefits and limitations for language learning.

Experienced immersive language learning through VR applications.

Week 3: Vocabulary Showdown - Scrabble Tournament

Duration: 40 + 40 minutes

Objectives: Expand English vocabulary through a competitive and engaging game.

Practise strategic thinking and word formation skills.

Foster teamwork, communication, and a positive learning environment.

Materials: Scrabble Game (enough sets for teams)

Procedure:

Game Introduction (10 minutes): Teacher introduced Scrabble rules, scoring, and its value for vocabulary development and mentioned some highlight key strategies for success (e.g., prefixes, suffixes, word patterns).

Team Up! (5 minutes): Teacher formed the teams of 6 students and let them prepare for the tournament.

Tournament Time! (30 + 40 minutes): Teams faced off in Scrabble matches, with clear time limits for each round. Winning teams advanced, culminating in an exciting final showdown the next lesson.

Outcomes: Students;

Learned Scrabble rules and strategies.

Applied and expanded their English vocabulary in a competitive setting.

Developed strategic thinking and word-building skills.

Collaborated with teammates, enhancing communication and cooperation.

Experienced the joy of learning through a fun and challenging game.

Week 4: Global Connections - Mystery Skype

Duration: 40 + 40 minutes

Objectives: Develop critical thinking and problem-solving through strategic questioning.

Enhance communication skills, adapting to different accents and styles.

Foster intercultural awareness through discovery and respectful exchange.

Build global friendships and ignite curiosity about the world.

Materials: Google Meet (or a similar video conferencing platform)

Pre-arranged Mystery Skype partners (ideally, two different countries)

Procedure:

Mystery Introduction (10 minutes): Teacher announced a surprise virtual exchange with classes from around the world and explained Mystery Skype rules: asking yes/no questions to guess the partner's location.

Round 1: Detective Time (30 minutes)

Connect with the first partner class (Vietnam).

Students took turns asking strategic questions to deduce the country. Then, they briefly discussed notable aspects of Vietnamese culture.

Round 2: Cultural Exchange (40 minutes): Students connected with the second partner class (England), guessed the location, then transitioned into a friendly cultural exchange.

Then, they discussed similarities and differences (food, holidays, school life)

Outcomes: Students;

Practised problem-solving and critical thinking through strategic questioning.

Adapted communication styles to interact with students from different cultures.

Expanded their knowledge and appreciation of diverse cultures.

Made new friends and experienced the excitement of global connections.

Week 5: All About Me - Grammar Game

Duration: 40 + 40 minutes

Objectives: Reinforce Simple Present Tense grammar through a personalised, interactive game.

Encourage self-expression and improve speaking confidence in English.

Create a fun and engaging learning environment.

Materials: Smartboard

Internet Connection

Wordwall (with preloaded "About Me" questions in Simple Present)

Wheel of Names

Procedure:

Game Setup (5 + 5 minutes): Teacher introduced the game and its focus on Simple Present Tense and loaded the Wheel of Names with student names. Teacher opened the Word Wall activity.

Let's Play! (35 + 35 minutes): Teacher spun the Wheel of Names to select the first student.

The student picked a Word Wall box, revealing an "About Me" question. The teacher rephrased the questions for clarity when needed. The student answered the question using Simple Present Tense and then spun the Wheel of Names to select the next player.

Game continued until all students had participated.

Outcomes: Students;

Practised using Simple Present Tense in a personalised and engaging context.

Improved speaking skills and confidence in self-expression.

Experienced the fun of learning through a dynamic game format.

Week 6: Level Up with Diyalekt

Duration: 40 + 40 minutes

Objectives: Introduce the Diyalekt language app and explore its features.

Practice A2 level vocabulary and grammar through interactive exercises.

Discover how Diyalekt can be a valuable tool for independent learning.

Materials: Mobile Phones

Internet Connection

Diyalekt App (pre-installed)

Procedure:

Meet Diyalekt! (15 minutes): Teacher introduced the Diyalekt application, explaining its goals, design, and potential benefits. Then, students explored the navigation and how to find exercises.

Team Challenge (25 minutes): Students formed teams and downloaded Diyalekt. Teams completed the first two A2 level exercises from the "Work and Jobs" vocabulary unit.

Grammar Power-Up (Next Lesson - 40 minutes): Students focused on shifts to A2 level grammar exercises within Diyalekt.

Outcomes: Students;

Gained familiarity with the Diyalekt app and its features.

Experienced success completing A2 level exercises, boosting confidence.

Discovered Diyalekt as a fun and engaging way to practise English outside of class.

Recognized the potential of Diyalekt to support their language learning journey.

Active Learning Strategies in Practice

This study implemented a variety of active learning strategies, including:

Team Learning: Activities consistently promoted teamwork, enhancing collaboration skills and fostering peer-to-peer learning.

Student-Led Research: Students engaged in independent research on AI, VR, and language applications, deepening their knowledge and critical thinking.

Brainstorming & Discussion: Discussions surrounding AI's pros and cons encouraged students to articulate their perspectives and consider diverse viewpoints.

Hands-On Application: Students directly applied their learning through various tools and applications, solidifying practical skills.

Interactive Games: Gamified activities (Scrabble, Mystery Skype) cultivated a competitive yet supportive environment, boosting motivation and engagement.

Gamification Techniques: Game-like elements within lessons (e.g., About Me) made learning enjoyable, increasing student interest and participation.

Final Survey (Impact Test)

To assess the impact of active learning strategies within the ILL, a post-questionnaire (impact test) was administered. This survey measured students' emotional states, experiences, and perceptions, allowing for direct comparison with pre-implementation data. The survey's structure included:

Section 1: Demographic Information (2 multiple-choice questions)

Section 2: Experiences and Perceptions (4 multiple-choice questions)

Section 3: Attitudes and Moods (10 questions using a 5-point Likert scale)

Section 4: Open-Ended Reflections (2 questions)

Detailed analysis of the impact test data is presented below.

Section 1: Demographic Information

Table 15: Grade Level of Participating Students

Q: Grade

	Frequency	Percentage
9	144	100

This table provides information about the grade level of all participating students in the survey. 100% of the participating students are in the 9th grade, indicating that the survey was conducted with a homogenous group of students.

Table 16: Gender Distribution of Participating Students

	Frequency	Percentage
Female	78	54
Male	66	46

Table 16 provides information about the gender distribution of the participating students in the survey. 54% of the participants are female, while 46% are male. This indicates a slightly higher proportion of female students in the survey sample.

Section 2: Experiences and Perceptions (4 multiple-choice questions)

Table 17: Emotional States During Active Teaching Methods

Q: How would you describe your typical emotional state during active teaching methods harmonised English language classes in the ILL class when compared to traditional classes?

	Frequency	Percentage
Excited	69	47
Neutral	66	45
Anxious	9	6

This table presents the results of comparing students' emotional states during active teaching methods in the ILL class to those in traditional classes. The data suggests that active teaching methods in the ILL class are more likely to evoke positive emotions, such as excitement, compared to traditional classes. This may indicate that these methods create a more engaging and motivating learning environment for students. Additionally, the lower levels of anxiety reported during active teaching methods suggest that these approaches may be less stressful for students.

Table 18: Collaboration During Active Teaching Methods

Q: How often did you collaborate with classmates during active teaching methods harmonised English language activities in the ILL class when compared to traditional classes?

	Frequency	Percentage
More often	95	67
The same	37	26
Less often	12	8

This table compares the frequency of student collaboration during active teaching methods in the ILL class to that in traditional classes. A majority of students (67%) reported collaborating with classmates more often during active teaching methods in the ILL class compared to traditional classes. 26% of students reported similar levels of collaboration in both types of classes. Only 8% of students reported collaborating less often during active teaching methods.

The data suggests that active teaching methods in the ILL class promote more frequent collaboration among students compared to traditional classes. This may indicate that these methods create a more collaborative and interactive learning environment, which can enhance students' language learning experiences.

Table 19: Student Preferences for Engaging and Active Language Activities

Q: What type of language activities did you find most engaging and active teaching methods harmonised English language activities in the ILL class when compared to traditional classes?

	Frequency	Percentage
Digital Technologies	76	53
Games	68	47
Speaking Exercises	27	19
Watching Exercises	39	27
Interactive Exercises	56	39
Group Discussions/ Team works	57	40
Gamification (Kahoot, Wordwall etc)	85	60
Language Applications (Diyalekt, Mondly etc)	6	4

The table above reveals that students in the ILL class overwhelmingly prefer digital technologies and gamification as the most engaging and active teaching methods. Over half of the respondents (53%) indicated a strong preference for digital tools, while 60% found gamified

activities particularly engaging. This suggests that the ILL class effectively harnessed the potential of technology and game-based learning to create a more dynamic and interactive learning environment compared to traditional classes.

While speaking exercises and group discussions were also popular, they were less favoured than digital and gamified approaches. This may indicate a need for further development of these activities to make them more engaging and interactive. The relatively low preference for language applications suggests that these tools may not be as effective in fostering engagement and active learning as other methods.

The results highlight the importance of incorporating digital technologies and gamification into language learning to create a more stimulating and effective learning experience for students.

Table 20: Student Confidence in Learning English in ILL Class vs. Traditional Classes

Q: How did you feel about learning English as a foreign language in the active teaching methods harmonised English language activities in the ILL class when compared to traditional classes?

	Frequency	Percentage
Confident	93	65
Neutral	49	34
Anxious	2	1

The data presented in Table 20 indicates that a significant majority of students (65%) felt confident in their English language learning experience in the ILL class. This suggests that the active teaching methods employed in the ILL class were effective in boosting students' confidence and creating a positive learning environment. Only a small percentage of students (1%) reported feeling anxious about learning English in the ILL class. This is a positive finding, as it suggests that the active teaching methods were not overwhelming or stressful for most students. The ILL class's active teaching methods were successful in fostering student confidence and creating a supportive learning environment for English language learners.

Section 3: Attitudes and Moods (10 questions using a 5-point Likert scale- 1 being the lowest and 5 being the highest)

Table 21: Student Satisfaction with the Learning Atmosphere in the ILL Class

Q: Please rate your overall satisfaction with the current learning atmosphere in the ILL class.

	Frequency	Percentage
1	4	3
2	4	3
3	37	26
4	36	25
5	63	44

Table 21 demonstrates that the majority of students (44%) are very satisfied with the learning atmosphere in the ILL class. This is a positive indicator of the effectiveness of the active teaching methods and the overall learning environment. While a significant portion of students (26%) are somewhat dissatisfied, it's important to note that only a small percentage (3%) are very dissatisfied. This suggests that while there may be areas for improvement, the overall learning atmosphere is generally positive and the ILL class has successfully created a learning environment that is satisfying for a majority of students.

Table 22: Student Confidence in Using Technology for Language Learning

Q: How confident were you in using technology for language learning in active teaching methods harmonised English language activities in the ILL class when compared to traditional classes?

	Frequency	Percentage
1	1	0,6
2	8	6
3	39	27
4	50	35
5	46	32

The data presented in Table 22 indicates that a significant portion of students (32%) felt very confident in their ability to use technology for language learning in the ILL class. This suggests that the active teaching methods employed effectively integrated technology into the learning process, empowering students to use digital tools confidently. While a smaller percentage of students (27%) felt somewhat unconfident in their technology skills, it's important to note that only a minimal number (0.6%) felt very unconfident. This suggests that the overall level of comfort with technology was relatively high and the ILL class's active teaching methods successfully fostered students' confidence in using technology for language learning, providing them with valuable digital literacy skills.

Table 23: Student Anxiety Levels When Speaking English in the ILL Class

Q: Rate your level of anxiety when speaking English in the active teaching methods harmonised English language activities in the ILL class when compared to traditional classes?

	Frequency	Percentage
1	66	46
2	51	35
3	27	19
4	0	0
5	0	0

The data presented in Table 23 reveals that a significant majority of students (81%) experienced high or very high anxiety when speaking English in the ILL class. This suggests that while the active teaching methods may have been effective in other areas, they did not significantly alleviate anxiety related to speaking English.

It's important to note that no students reported low or no anxiety. This indicates that speaking English remains a challenging aspect for all students, regardless of the teaching methods employed. The results suggest that the ILL class's active teaching methods, while effective in other areas, did not effectively address the issue of anxiety related to speaking English. Further strategies may be needed to help students overcome this barrier.

Table 24: Student Perceptions of the Effectiveness of Active Teaching Methods

Q: Please rate the effectiveness of the English language active teaching methods in the ILL class when compared to traditional English class?

	Frequency	Percentage
1	0	0
2	0	0
3	10	7
4	78	54

The data presented in Table 24 indicates that a significant majority of students (71%) perceive the active teaching methods employed in the ILL class as very effective. This suggests that the innovative approaches used in the ILL class were highly successful in enhancing English language learning. Only a small percentage of students (7%) rated the active teaching methods as somewhat ineffective. This further reinforces the positive perception of the teaching methods and their effectiveness in improving English language skills.

The results suggest that the active teaching methods implemented in the ILL class were overwhelmingly perceived as effective by the students. This highlights the importance of adopting innovative and engaging teaching approaches to enhance language learning outcomes.

Table 25: Student Satisfaction with Interaction Levels in ILL Class

Q: How satisfied are you with the level of interaction in the active teaching methods harmonised English language activities in the ILL class when compared to traditional classes?

	Frequency	Percentage
1	0	0
2	1	0
3	31	22
4	50	35
5	62	43

The data presented in Table 25 reveals that a majority of students (78%) are satisfied or very satisfied with the level of interaction in the ILL class. This suggests that the active teaching methods successfully fostered a more interactive and collaborative learning environment compared to traditional classes. Only a small percentage of students (22%) expressed some dissatisfaction with the level of interaction. This indicates that while there may be room for improvement, the overall interaction level is generally positive.

The results suggest that the ILL class's active teaching methods effectively enhanced student interaction, creating a more engaging and collaborative learning experience.

Table 26: Impact of ILL and Active Learning on Student Well-being

Q: To what extent do you feel the introduction of ILL and active learning techniques have positively impacted your overall well-being in English language classes when compared to traditional English classes?

	Frequency	Percentage
1	1	0
2	1	0
3	28	19
4	90	63
5	24	17

Table 26 indicates that a significant majority of students (80%) perceive the introduction of ILL and active learning techniques as having a positive impact on their overall well-being in English language classes. This suggests that these innovative approaches have created a more supportive and enjoyable learning environment. Only a small percentage of students (19%) reported a somewhat negative impact. This could be attributed to individual preferences or challenges in adapting to new teaching methods.

The results suggest that the implementation of ILL and active learning techniques has been largely beneficial for students' well-being, contributing to a more positive and fulfilling English language learning experience.

Table 27: Impact of ILL and Active Learning on Technology Confidence

Q: How has your confidence level in using technology for language learning changed since the introduction of ILL and active learning activities when compared to traditional classes?

	Frequency	Percentage
1	2	1
2	0	0
3	60	42
4	53	37
5	29	20

The data presented in Table 27 reveals that a majority of students (59%) have experienced an increase in their confidence level in using technology for language learning since the introduction of ILL and active learning activities. This suggests that the innovative approaches employed in the ILL class have effectively empowered students to use technology more confidently. While a significant portion of students (42%) have experienced a decrease in their confidence level, it's important to note that this is likely due to the initial challenges of adapting to new technologies and teaching methods. Over time, as students become more familiar with these tools and approaches, their confidence levels may increase.

The results suggest that the ILL class's active teaching methods have been effective in fostering students' confidence in using technology for language learning. While there may be initial challenges, the long-term impact is generally positive.

Table 28: Impact of ILL and Active Learning on Anxiety Levels

Q: Rate the impact of the ILL and active learning activities on reducing anxiety levels during English language activities when compared to traditional classes?

	Frequency	Percentage
1	1	0
2	2	1
3	35	24
4	74	51
5	32	22

Table 28 indicates that a majority of students (73%) have experienced a decrease in their anxiety levels during English language activities since the introduction of ILL and active learning techniques. This suggests that the innovative approaches employed in the ILL class have been effective in creating a less stressful and more supportive learning environment. While a smaller percentage of students (25%) have experienced an increase in their anxiety levels, it's important to note that this is likely due to individual differences and the challenges of adapting to new teaching methods.

The results suggest that the ILL class's active teaching methods have been effective in reducing anxiety levels among students, contributing to a more positive and enjoyable English language learning experience.

Table 29: Impact of Active Learning on Student Comfort

Q: Please rate the effectiveness of active learning activities in making you feel comfortable compared to traditional activities.

	Frequency	Percentage
1	1	0
2	2	1
3	35	24
4	74	51
5	32	22

The data presented in Table 29 reveals that a majority of students (75%) perceive active learning activities as effective or very effective in making them feel comfortable. This suggests that these innovative approaches have created a more welcoming and supportive learning environment. Only a small percentage of students (25%) expressed some dissatisfaction with the impact of active learning on their comfort levels. This indicates that while there may be individual preferences or challenges, the overall effect is generally positive. The results suggest that active learning activities have been successful in fostering student comfort, contributing to a more positive and enjoyable learning experience.

Table 30: Student Satisfaction with Interaction Levels in ILL Class

Q: How satisfied are you with the level of interaction in active teaching methods harmonised English language activities in the ILL class when compared to traditional classes?

	Frequency	Percentage
1	1	0
2	2	1
3	35	24
4	74	51
5	32	22

The data presented in Table 30 indicates that a majority of students (75%) are satisfied or very satisfied with the level of interaction in the ILL class. This suggests that the active teaching methods successfully fostered a more interactive and collaborative learning environment compared to traditional classes. Only a small percentage of students (25%) expressed some dissatisfaction with the level of interaction. This indicates that while there may be room for improvement, the overall interaction level is generally positive.

The results suggest that the ILL class's active teaching methods effectively enhanced student interaction, creating a more engaging and collaborative learning experience.

Section 4: Open-Ended Reflections (2 questions)

Q1: Impact of Active Learning Activities- How did specific active learning activities within the ILL influence your language learning experience and overall well-being compared to traditional classes?

Students overwhelmingly identified games, collaborative activities, and speaking practice as the most influential aspects of their language learning experience in the ILL class. These activities were seen as engaging, motivating, and effective in improving communication skills.

Students found games to be enjoyable and motivating, contributing significantly to their learning experience. Group work and collaborative projects were praised for their effectiveness in fostering teamwork, communication, and problem-solving skills. They emphasised the importance of opportunities to practise speaking English, such as exercises, presentations, and Q&A sessions. Moreover, they acknowledged the continued importance of developing foundational skills through reading, vocabulary activities, and competitions.

Student Quotes:

"Playing games contributed a lot."

"Group work and speaking activities were very useful."

"Mystery Skype helped me learn new words."

"Reading texts and competitions improved my vocabulary."

Q2: Suggestions for Improvement and Expansion- How can we improve ILL activities? What kind of activities would you like to see in the ILL?

Students offered a variety of suggestions for improving and expanding the ILL activities. These suggestions can be categorised into several themes:

Game-Based Learning: Students prioritise activities that are enjoyable and engaging. They expressed a desire for more game-based activities, including classics like Scrabble and Taboo, as well as more immersive options like Murder Mystery.

Collaborative Activities: Students called for more group discussions, Mystery Skype sessions, detective-themed activities, and expanded project work.

Spoken Communication: Students emphasised the need for more opportunities to practise spoken English, such as presentations, structured discussions, dialogues, and role-playing scenarios.

Diverse Learning Experiences: Students appreciate a diverse range of activities and the use of innovative teaching methods, including reading and writing activities, vocabulary-focused exercises, film/TV series viewings, and increased technology integration.

Learner Involvement: Students desire more autonomy and involvement in the learning process. Also they expressed a desire to be more involved in the decision-making process, suggesting that their ideas should be taken into account and that they should have more choice in activities.

Student Suggestions for Improvement & Expansion

Game-Based Learning: Kahoot, Who is the Killer?, Country Guessing, etc.

Scrabble, Taboo, other table games, Murder Mystery for extended problem-solving

Collaborative Activities: More group discussions and Mystery Skype sessions,

Detective-themed activities, Expanded project work, team games

Focus on Spoken Communication: Presentations, structured discussions, dialogues

Role-playing scenarios for authentic practice

Opportunities to interact with Erasmus students or native English speakers

Diverse Learning Experiences: Reading/writing activities & competitions

Vocabulary-focused exercises

Film/TV series viewings with linked activities

Increased technology integration

Outdoor activities for a change of pace

Student Quotes:

"The games and group work are very fun and instructive."

"Speaking activities help me improve my English."

"More interactive activities can be done using technology."

"I want to practise speaking with native speakers."

"Outdoor activities would be more motivating."

"It would be nice to take students' ideas into account and give them more choice."

Students clearly desire:

Playful elements and collaborative tasks are highly favoured.

Opportunities to practise authentic speaking are essential.

A mix of activities using diverse tools is valued.

Involving learners in the decision-making process fosters ownership.

We can conclude that the student responses highlight the importance of creating a dynamic, engaging, and authentic language learning environment. By incorporating these suggestions, the ILL program can continue to enhance student learning experiences and foster a positive and supportive atmosphere.

Discussion

This study makes important contributions to the literature by examining the use of active learning strategies and technology-supported Innovative Language Laboratory (ILL) model in language learning. In particular, the use of such innovative approaches in English language teaching at high school level in Turkey offers a new model for language teaching.

Theoretical Contributions:

The study highlights the potential of active learning strategies to reduce anxiety levels and increase students' self-confidence in foreign language learning. These findings draw attention to the importance of student-centred and collaborative approaches in language teaching. Furthermore, this study provides a new perspective to the theoretical studies on anxiety reduction and enhancing success in language learning.

Practical Contributions:

The use of SFL demonstrates the benefits of providing students with a more supportive and interactive environment in technology-enhanced language teaching. These findings show how teachers can use active learning and technology integration in language learning more effectively and shed light on educational policies. The study provides important recommendations for future educational reforms.

The findings of this study show that active learning strategies reduce 9th grade students' anxiety levels and increase their self-confidence in English language learning processes. These

findings are in line with other studies in the literature. According to the findings, the application of active learning strategies reduced students' English language learning anxiety. Bagalay et al. (2021) reported that students' anxiety levels during oral participation in the classroom decreased in active learning and collaborative learning environments. Our study supports this finding and reveals that active learning is an important tool in anxiety management.

In our study, a significant increase in students' self-confidence levels was observed. Mohammed & Al-Hassan's (2023) study emphasises the potential of active learning to increase the self-confidence of language learners. These findings suggest that students' active participation and techniques such as gamification have positive effects on language learning.

The data obtained show that cooperation and interaction increase in an active learning environment. In Chou's (2023) study, it is stated that collaborative and interactive listening strategies are effective in improving students' language skills. The development of students' ability to work together supported the language learning process.

These findings suggest that language teachers should use active learning strategies more widely in the classroom. Active learning can be used as an effective method to reduce students' anxiety and make the language learning process more enjoyable. Furthermore, this study demonstrated that lessons incorporating active learning strategies within the ILL had a significant positive impact on students' English language learning experiences. Key findings from the post-implementation survey (impact test) include:

Reduction of Anxiety Levels

In our study, a significant decrease in students' foreign language anxiety was observed in the SFL environment where active learning methods were used. Bagalay et al. (2021) stated that anxiety experienced during oral participation in the classroom can be reduced through supportive and interactive learning environments. Similarly, Wilang (2021) emphasised that students' fixed mindsets and anxiety can be transformed through active learning strategies. In line with these studies, our findings show that active learning is an effective method to reduce anxiety.

Increased Self-Confidence and Technology Use

The increase in students' self-confidence levels can be considered as a result of the integration of active learning strategies and technology. Mohammed and Al-Hassan (2023) stated that active learning strategies increase language learners' motivation and self-confidence. In addition, Al-Otaibi (2023) showed that the technological infrastructure of language laboratories increases students' interest and engagement in language learning. In our study, students improved their language skills by using technology effectively, which positively affected their self-confidence.

Interaction and Collaboration

Increased interaction and cooperation between students in an active learning environment contributed to language learning. Chou (2023) emphasised that interactive listening strategies and collaborative learning are important in developing language skills. Students' interaction with group work and game-based activities enriched their learning experience.

ESL students often experience heightened anxiety during classroom oral participation (Bagalay et al., 2021) and Like Thai high school students, Turkish students hold a fixed mindset on their effort (Wilang, 2021). Our research confirms this, indicating considerable levels of anxiety among participants. Specifically, we have found that students primarily experience anxiety stemming from fear of making mistakes while speaking (51%), nervousness when asked to answer questions (46%), and a lack of confidence in their accent/pronunciation (3%). These findings align

with our expectations and prompt us to consider precautions to enhance the language learning experience. To address these anxieties and create a more positive learning environment, we conducted our study on active learning techniques in an innovative learning space designed to optimise the students' language learning experience.

This study provides compelling evidence that integrating active learning strategies with the technologically-enhanced Innovative Language Laboratory (ILL) promotes greater student well-being, confidence, and engagement with English language learning. Key findings demonstrate:

Reduced Anxiety: The active learning environment within the ILL significantly decreased foreign language anxiety, creating a more relaxed and conducive space for language practice.

Enhanced Confidence: Students overwhelmingly reported boosted confidence in their language abilities and in utilising technology as a learning tool.

Well-being and Motivation: The vast majority of participants experienced enhanced well-being, motivation, and overall enjoyment within the ILL's active learning context.

Interaction and Collaboration: Active learning methods within the ILL proved highly effective in fostering meaningful student interaction, leading to greater engagement and perceived language learning progress.

These findings affirm the transformative potential of combining active learning with innovative learning spaces. By prioritising student-centred approaches, collaboration, and purposeful technology integration, educators can create environments that nurture language skills while optimising student confidence and well-being.

Conclusions and Recommendations

This study is one of the first studies to examine the effects of active learning strategies and the Innovative Language Laboratory (ILL) model in English language learning. In particular, the use of a technology-supported language laboratory in a high school in Turkey and the application of active learning strategies in this environment fills a gap in the literature.

This model, which combines active learning with technology, offers an effective method to reduce students' anxiety and increase their self-confidence in language learning processes. In this respect, the study makes important contributions to both language learning pedagogy and educational technologies.

The study is innovative in that it goes beyond traditional language teaching methods to examine the effects of providing a student-centred, collaborative and technology-supported learning environment on student well-being. These findings provide important clues for future research and educational practices.

To maximise the benefits of active learning and technology-rich learning spaces for all students, consider the following recommendations:

Professional Development: Investing in ongoing professional development for educators, equipping them with the skills to design and implementing a variety of active learning strategies in conjunction with effective technology use.

Individualised Support: Recognizing that some students might require additional support with specific technologies or may experience lingering anxiety. Providing targeted interventions and scaffolding to ensure everyone benefits from the active learning environment.

Activity Variety: Offering a diverse range of engaging active learning activities to cater to different learning styles and maintaining student enthusiasm over time.

Student Choice: Incorporating opportunities for students to have some control over activity selection or design, boosting ownership of their learning and increasing engagement.

Collaborative Learning Design: Designing activities that foster meaningful interaction and collaboration, emphasising communication and cooperation for language practice.

Technology for Learning: Emphasising the purposeful use of technology, choosing tools that directly support student language development and enhancing the learning experience.

Continual Refinement: Collecting student feedback on an ongoing basis to inform adjustments to the ILL environment, technology integration, and the implementation of active learning strategies.

Future Directions

The findings of this study revealed the effects of active learning strategies and the technology-supported Innovative Language Laboratory (ILL) model on students' language learning processes. However, this study has some limitations and it is suggested that these limitations should be overcome in future studies.

Firstly, this study was limited to 9th grade students only. Future research could examine how students in different age groups respond to active learning strategies and technological learning environments. Future studies at primary, middle and high school levels will be useful in evaluating the applicability of these methods to different age groups.

Secondly, the study was conducted for a limited period of six weeks. Future studies can examine the long-term effects of active learning strategies by conducting longer-term studies. In particular, long-term follow-up studies can be conducted to understand how students' anxiety levels and self-confidence change over time and whether these effects are permanent.

Thirdly, the study was limited to a single school and students in a specific region. Future research could be conducted with students from different geographical regions and cultural contexts to increase the generalisability of the findings. Furthermore, future studies with groups of students from different socioeconomic backgrounds may reveal how effective these learning models are in different social contexts.

Finally, this study examined the effects of technology-supported active learning strategies. Future research could examine the effects of different technological tools (e.g., augmented reality, virtual reality, artificial intelligence-based language learning applications) on language learning in more depth. The effects of such technological innovations on student achievement, motivation and language skills can be investigated.

Future research in line with these recommendations will reveal the potential of active learning strategies and technology-supported learning environments in language teaching in a more comprehensive way.

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