Challenges and Opportunities of Technology-mediated Language Learning: Iranian ESP Students' Views in Focus

Azar Bagheri Masoudzade, Akram Shekarian Behzadi [2]

[1]*Corresponding Author*: Department of General Education, Afzalipour School of Medicine,

Kerman University of Medical Sciences, Kerman, Iran

Azar.bagheri000@gmail.com

[2] Department of Education, Kerman, Iran

Shekarian.akram@gmail.com

ABSTRACT

Technology-mediated learning experiences are becoming the norm for today's language learning. In the technology-mediated society, the production and transformation of information is not restricted to published works, but to anyone with access to basic technology resources. This study was an endeavor to explore the ESP (English for Specific Purposes) learners' overall views of technology-mediated language learning. The research also focused on the overall idea of the participants about the challenges and opportunities of remote learning. To this end, the current mixed-methods study was used. The data-gathering tools included a related questionnaire and interview. By scrutinizing satisfaction levels, benefits, drawbacks, and skill preferences, the study sheds light on the nuanced dynamics of remote learning. Results of the study indicated a high satisfaction level among participants with remote education. The study further demonstrated a prior recognition of benefits over drawbacks. Notably, vocabulary and reading emerged as preferred skills for virtual learning. In summary, this study contributes to the understanding of ESP students' views in the context of remote learning, offering remote education that can be an educational strategy for the future.

1. Introduction

 The swift advancement of technology has brought about a new age in education, significantly altering how knowledge is obtained and shared. Nowadays, there is an

increasing interest in employing technologies in English language classes due to their advantages for language learners (Aghdasi Khabisi, Bagheri Masoudzade & Fatehi Rad, 2023). The importance of relevant digital content in technology-assisted language learning has been recognized globally (Nsyengula et al., 2025). However, a shift to online education has presented unique challenges for teachers, who have had to adapt to remote learning with minimal preparation time. The move to an online learning setting can be especially difficult for language instructors, whose primary objective is to assist students in improving their language skills by fostering significant and genuine interactions among them and offering appropriate feedback (González-Lloret, 2020; Lomicka, 2020).

With the advancement of information technology, remote language learning has increasingly been seen as an effective way to provide learners with more interactive and collaborative language learning environments (Choi & Chung, 2021). Remote learning and e-classes have seemed to be popular methods for learners to develop their education. The way people interact with others is given multiple possibilities with the advent of the Internet and computer-mediated environments (Shunina & Shunin, 2017). Teaching learners by remote learning is useful in enhancing the skills of students, although it needs financial resources (Ibrahim et al., 2023). Teaching an online course requires special facilities, which differ from the face-to-face classroom. In fact, instructors should increase their capacity in the online learning environment to make their materials impressive and engage them practically. Special teaching strategies can be used in online education and make the online class a successful experience for teachers and learners. Online teaching also needs unique kinds of interactions with students (Navarro & Mcgrath, 2022). Effective online teaching depends on collecting knowledge of experiences, which are appropriately facilitated and designed by the methods of knowledgeable instructors. Since inexperienced students of English in the online environment have inappropriate studying patterns and a mixture of learning methods, online instructors should plan for online activities that consist of multiple ways of learning about various topics in different literary genres (Chung, & Park, 2020).

Remote learning plays a fundamental role in the existing educational setting, as it changes the whole education system and has become one of the greatest preferred topics for academics. Using remote learning can save time and effort for living in distant places where they are registered, so, many scholars support online courses. Many users of remote learning know that online learning helps ensure that remote learning can be easily managed, and the learner can easily use the teachers and teaching materials. It also helped decrease the effort and other costs that accompany traditional learning. Remote learning impressively reduced effort, readiness and lecture recording, and presence. Teachers, like students, see that online learning methods encourage pursuing lessons from anywhere and in difficult situations that prevent them from attending universities and schools (Culduz, 2020).

The learner becomes a self-directed student at any time. However, there are many obstacles to remote learning. The most important is getting knowledge only on a theoretical basis without applying practical skills. Users' reliability is among the challenges of remote learning always related to the abuse of technology. Web education, digital learning, computer-assisted teaching and internet-based learning are known as "Remote learning" (Lara et al., 2019). It is mainly a web education system that provides learners with information or uses technology. The use of web technology for

educational goals has grown rapidly. Today, many universities have recognized the importance of remote learning as an important element of their learning system. Research has been done to recognize the obstacles, pros, and cons of remote learning. Remote learning needs the use of the internet and other necessary tools to utilize educational materials, teach learners, and present courses in an organization. Remote learning is flexible when considering time, place, and health issues. It increases the efficacy of knowledge and abilities by enabling access to a vast amount of data, and boosts collaboration. Remote learning can increase the quality of education. There is a thought about making remote learning materials available, which leads to progressive learning results.

The present research aimed to investigate the advantages which make remote learning valuable, the disadvantages which cannot be avoided, and the challenges which can be remedied or promoted. The challenges can be divided into two main categories: challenges that cannot be avoided, such as cheating, reduction of attention to materials while studying, and emotional breakdown or using close peer scaffolding; challenges that can be controlled of remedied are basically technological enhancement and usability of materials during remote learning. More importantly, the main problem of using remote learning is the lack of essential interaction among learners. It was found that developing countries face many problems in applying remote learning, including poor internet connections, insufficient knowledge about the use of technology, and weak content development.

Considering the above discussion, this paper aims to introduce issues related to the use, pros, cons, and obstacles of remote learning programs among ESP students. The intent of this mixed-method study is to investigate the ESP students' overall views of technology-mediated language learning. The study also focused on the overall idea of participants about the challenges and opportunities of remote learning. In order to meet the research objectives, the following questions have been raised:

Research Question 1: How do ESP students feel overall about technology-mediated language learning?
Research Question 2: What are the most important pros and cons of technology-mediated language learning?

2. Review of Literature
This part strives to offer a comprehensive overview of the pertinent scholarly literature, aiming to do justice to the breadth and depth of existing knowledge on the subject matter. In this brief section findings of available studies are reported.

Cummings et al. (2015) and Fadol et al. (2018) presented a comparative analysis of online versus traditional learning that found that traditional teaching was preferred by students. These studies revealed that learners concern technology, availability, and cheating during examinations. The studies also refer to gaps including need for high quality learning materials, the ability to deliver learner assessment that assures test security and validity, and, the lack of training to facilitate online learning. In another study, Aini et al. (2020) explored remote learning challenges and reported that both learners and instructors faced many challenges. Students were challenged by connectivity, remote learning system support, and technological and self-regulation issues. However, Omwenga et al. (2020) argued that remote learning technology gives the learners control over content, rate, and the ability to select material to their interest.

Elberkawi et al. (2021) evaluated issues and challenges of online learning reported that the social challenge comes at the forefront with a large percentage, then there's the issue of students' problems as they relate to remote learning. The challenges that arise from the lecturers are not as effective as social and student challenges. In the same year, Amarneh et al. (2021) investigated advantages and challenges of remote learning among some university students. Findings revealed that virtual education decreases quality of receiving materials that can be understood in-person. Pham and Sampson (2022) also conducted a study about pros and cons of remote learning and the findings support flexibility, affordability, accessibility and effectiveness, better attendance, work-life balance. The study showed that online college cons or disadvantages are inability to focus, prone to tech troubles, lack of community feeling, additional training for teachers.

In Iranian context, Behzadian and Kazemzadeh (2023) evaluated remote learning in Iranian universities to discover challenges that students faced. They performed the study based on technology acceptance model and external factors. The results disclosed that perceived ease of use was a strong predictor of perceived usefulness. Both perceived usefulness and perceived ease of use displayed a significant role as a predictor of attitude. In the same vein, Alizadeh et al. (2023) assessed Iranian EFL teachers' perceptions towards online teaching-learning approaches. They revealed that Iranian EFL teachers had either a negative or a neutral attitude toward online assessment and after the second phase of the study using interview offered more insight into the challenges that teachers encounter during online assessment. They indicated that the most significant challenges were the high risk of students cheating and plagiarism, the issue of internet connectivity, and poor technological infrastructures. In the same year, Ibrahim et al. (2023) explored the impact of e-learning and remote education technologies. Through a comprehensive analysis of existing research, the article examines the advantages, challenges, and lessons learned from the sudden transition to online education. It delves into the role of digital tools, innovative strategies, and equitable access considerations in facilitating effective remote learning experiences. The paper provides insights into the future of e-learning beyond the pandemic, emphasizing the importance of informed evolution in education. In the most recent study, Sazegar (2024) investigated the Iranian EFL learners' perspectives on online education courses. The results showed that EFL learners generally approved of the effectiveness of the approach and their study habits; while, they undervalued the personal suitability and teachability of online learning.

The scholarly literature surrounding methods development demonstrates a notable inclination towards employing technology-mediated language learning methods i.e. remote learning. This interest has been more observed in the recent investigations. However, the field of technology-mediated learning research appears to face a shortage, particularly in the area of mixed-methods studies to the use, pros, cons, obstacles, challenges and opportunities of remote learning among ESP students' overall views. In order to address this deficiency, the current investigation was undertaken.

3. Methods
3-1. Research Design
In line with the nature of the objectives of this study, the researchers used a mixed-methods approach, which lends itself well to collecting, analyzing, and mixing or integrating both quantitative and qualitative data within a single study (Creswell et al.,

2011). The purpose of using mixed-methods research is to build on the strength that exists between qualitative and quantitative research methods (Gay et al., 2006). Therefore, the design offers both a more complete picture of the issue studied and enhanced reliabilities (Lodico et al., 2010).

3-2. Participants and Sample

The population of the present study was made up of 150 EFL learners of Farhangian university of Kerman, where the researchers were teaching there. Thus, it was more convenient for the researchers to survey them. It is worthy to note that ethical approval and written consent were obtained. The participants were teachers-students who were being taught through LMS since they started their profession as teachers in elementary schools of different towns around Kerman. They participated in ESP course that was English for the students of preschool and primary education. All were male students with the age range of 21 to 24. That is to say, they received remote learning for 2 hours a week and there were no opportunities of actual English use outside the classroom. The participants were selected through convenience sampling that is they were chosen based on their availability.

3-3. Data Collection Instruments

This study investigated ESP students' views using a standard researchers-designed questionnaire (see App.) which includes ten items (each constitutes subcategories) for quantitative method and two items for qualitative method together in different levels (beginner, intermediate, and advance). The questionnaire used in this study was developed by the researcher based on an extensive review of the existing literature on online English language learning, learner satisfaction, and the advantages and disadvantages of virtual instruction. To establish content validity, the initial draft of the questionnaire was reviewed by a panel of experts, including university professors in applied linguistics and educational technology, as well as experienced English language instructors. Their feedback was used to revise and refine the questionnaire items for clarity, relevance, and appropriateness. Additionally, the questionnaire was pilot-tested with a small group of participants (n = 45) similar to the target population to ensure the items were understandable and interpreted as intended. Minor revisions were made based on the results of the pilot test. This process contributed to ensuring that the questionnaire accurately measures the constructs it is intended to assess, including learners' experiences, satisfaction levels, perceived benefits and drawbacks of online learning, and preferences for different modes of instruction. The internal consistency of the questionnaire was assessed using Cronbach's alpha. The overall reliability coefficient was found to be $\alpha = 0.82$, which indicates an acceptable to high level of internal consistency based on established standards ($\alpha \geq 0.70$).

3-4. Data Collection Procedure

To accomplish the purpose of the present study, the following procedures were carried out. In the first place, 150 ESP teachers-students of Farhangian university of Kerman were chosen based on convenience sampling method. Every participant gave their written informed consent before the data collection began. This study centered on the Internet via LMS application which was created for virtual classes. LMS is a software for remote training, presentation, desktop sharing and web conferencing. In fact, it is an application where language students can participate in the class and express their ideas,

raise questions, and discuss matters related to the course outside of class. It is also a software where the lecturer shares documents such as handouts and Power Point slides. The participants benefited remote learning for a term. The course implemented in 10 sessions and the timing of each session was 90 minutes.

At the end of the term, a related questionnaire was published with the students after their participation in the online classroom. That is to say, to explore the students' overall views of remote language learning, the questionnaire distributed among them. Moreover, by answering the questionnaire, students described their challenges and opportunities of the remote learning during their learning in the virtual classroom. Before administering the questionnaire, all the students were given a brief overview of the questionnaire and the given time for answering the items. Also, they were told that their answers would be remained anonymous. As mentioned earlier, the original English questionnaire was translated into Persian to be more understandable and to ensure that the participants easily followed the items. The participants in three different levels of proficiency filled the questionnaire. Besides, they answered the questions of interview without any time limitation. Then, the completed questionnaires sent to SPSS software for analyzing and interpreting data. The interviews were also recorded to allow for transcription and close analysis. In fact, they were interviewed to reflect their attitudes on the remote learning. At last, the researchers investigated their responses about promoting remote learning, students' feeling and also advantages and disadvantages of online classes and then compared the three levels of participants.

3-5. Data Analysis
With regards to the data analysis process, certain statistical procedures are utilized to analyze and interpret the data elicited by the study. Data analysis was conducted at the quantitative and qualitative levels. At the quantitative level, descriptive statistics was run includes one sample T- test and the second one is The Friedman test for questionnaire. At the qualitative level, content analysis was done on the transcribed interview data. In this way, the EFL learners' overall views of challenges and opportunities of the remote learning were uncovered. This process involves several phases: First, the transcribed responses of the participants was carefully read to identify the meaningful data units based on the purpose of the study. Then the units were labeled through the concepts borrowed from the literature or the terms used by the participants themselves. Finally, these labels helped to identify the themes underlying the participants' views, perspectives and experiences.

4. Results
Throughout this section, the results of quantitative and qualitative data analysis are elaborated respectively.

4-1. Quantitative Results (Descriptive Statistics of the Questionnaire)

Table 1

Participants' Online Experience and Duration of Participation

Participants	With online experience	Without online experience
150	125 (83%)	25 (17%)

| 125 | One-year /110 (88%) | More than 1 year/15 (11%) |

As Table 1 shows, 83% of the students used online classes and 17% of the learners didn't use remote learning conveyed their aversion towards participating in online classes. Moreover, among 125 participants who engaged in online classes, 110 (almost 88%) reported one-year experience with online classes, while 15 (almost 12%) indicated having engaged in online classes for more than one year. Based on the results, most students used online classes, and among them, the vast majority had just one year of experience. Those who didn't participate generally had a negative attitude toward online learning.

Table 2

Participants' Satisfaction with Online Classes

			One-Sample Test			
			Test Value = 0			
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Q3	40.622	149	.000	2.67623	2.632	2.785

Results of the students' satisfaction with online classes disclosed that the mean level scores are 2.67 out of 3 that indicates the high level of students' satisfaction with online classes. The level of significance that is investigated in this case (sig=.000) indicates that students are significantly different in case of their level of satisfaction with online education that approves online education method to be replaced in-person education. In short, students are generally very satisfied with online learning, and the data strongly suggests that online education is a valid alternative to face-to-face teaching.

The fourth question of the questionnaire asked about benefits or advantages of online learning and the participants answers ranged from 1 to 3 (low=1, to some extent=2, and high=3). Scores normally can range from 10 to 30 due to the number of items and the 3 Likert scales. Result of the mean level and significance of scores is represented in table 3.

Table 3

Analysis of Benefits of Online Education

			One-Sample Test			
			Test Value = 0			
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Q4	68.112	149	.000	20.2623	19.685	20.852

The mean level 20.26 indicated that most of the students were satisfied with remote learning to some extent and more than half of them agreed with benefits of remote learning such as saving time, cost and expenses, flexibility, saving environment,

etc. The level of significance for benefits of using remote learning (sig=.000) indicates that the level of differences between scores does not significantly represent the validity of online education in comparison to in-person education. However, participants showed that there are benefits for remote learning to some extent that indicates there is not a high level of satisfaction or rating for benefits of remote learning. According to the results, students reported some advantages to remote learning but are not overwhelmingly satisfied or convinced that it's clearly better than traditional in-person education.

The fifth question of the questionnaire includes 10 items that asked about disadvantages of remote learning and the answers ranged from 1 to 3 (low=1, to some extent=2, and high=3). Scores normally can range from 10 to 30 due to the number of items and the 3 Likert scales. Result of the mean level and significance of scores is represented in table 4.

Table 4

Analysis of Disadvantage of Online Education

	One-Sample Test Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Q5	68.523	149	.000	7.4842	7.3701	7.6890

The mean level 7.484 indicated that a little of the students are dissatisfied with remote learning more than to some extent, and more than half of them agreed that there are disadvantages for remote learning such as frequent disconnection of internet, high price of internet, low speed, etc. The level of significance for disadvantages of using remote learning (sig=.000) indicates that the level of differences between scores significantly represent the validity of online education in comparison to in-person education. However, participants reported that there are some disadvantages for remote learning but still they prefer it. That is to say, the statistical significance of these disadvantages (p = .000) means that the differences in students' responses are statistically meaningful, indicating that these issues genuinely affect the perceived quality of remote learning when compared to in-person learning. Despite recognizing these drawbacks, many students still prefer remote learning overall.

Table 5

Comparison of Advantages and Disadvantage of Online Education

		Paired Samples Test Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Q3 - Q5	-.2197	1.21	.106	-.4295	-.0098	-2.071	149	.040

Paired sample test examining differences in significance of advantages and disadvantages revealed that the mean levels are different and show that there are advantages and disadvantages simultaneously but participants believe that there are advantages more than disadvantages. Examining significance of differences of advantages and disadvantages was examined using pair sample analysis and results showed that the level of significance is less than 0.05 (P=0.04) which highlighted with 95% confidence there is no significant difference between the level of advantages and disadvantages to adverse the online learning, because it benefits from several advantages though still there are many disadvantages in which most of them refer to insufficient substructures and educational facilities for online education. However, despite this statistical significance, It can be said that there is no meaningful difference between the advantages and disadvantages of online learning that would strongly oppose or discredit it. In other words, online learning still offers many benefits, although there are notable disadvantages, most of which are related to poor infrastructure and lack of educational facilities.

Table 6

Analysis of Better and the Simplest Skill in Online Education

Language skills	Listening	Speaking	Vocabulary	Reading	Grammar
Frequency and percentage	3 (2%)	15 (10%)	65 (43.5%)	43 (28.5%)	24 (16%)

The sixth question investigates the most effective and straightforward skill to acquire in virtual learning. According to the findings, 65 individuals (43.5%) favored vocabulary as the better option, then 43 individuals (16%) considered speaking to be more advantageous and easier to learn. Additionally, 24 individuals (16%) chose grammar, 15 individuals (10%) opted for speaking, and 3 individuals (2%) voted for listening. The results highlight that both vocabulary and reading are perceived as superior tasks for online learning. Moreover, the study suggests that students recognize the value of tasks that can be learned without requiring in-person interaction. The data suggests that vocabulary and reading are considered the most suitable skills for online learning, likely because they can be acquired individually without the need for face-to-face interaction. This implies that students tend to value learning tasks in virtual environments that are independent and do not rely heavily on interaction, like vocabulary and reading.

Table 7

Variability of Curriculum in Virtual Learning in Comparison to In-person Classes

	Virtual learning is less variable	Both are equal	Virtual learning is more variable
Participants	37 (24.5%)	48 (32%)	65 (43.5%)

The seventh question investigates variability of curriculum in virtual learning in comparison to in-person classes and participants had to answer based on three items

namely "Virtual learning less variable," "Both are equal," and "Virtual learning is more variable". Results of the analysis indicated that 48% of the participants believed that both curriculums have equal variability, and 24.5% of them agreed that virtual learning is less variable, while most of the students (43.5%) reported that virtual learning is more variable. These results suggest that opinions are somewhat divided, but most participants either see no difference or feel virtual learning is more variable in terms of curriculum. A smaller portion sees virtual learning as offering less variability.

Table 8

Students' Interests to Participate in Online and In-person Classes

	Low	To some extent	Very much
Online	25 (16.5%)	57 (38%)	68 (45.5%)
In-person	62 (41.5%)	47 (31%)	41 (27.5%)

The eighth and ninth questions aimed to assess participants' inclination to engage in different classes. Based on the findings, 25(16.5%) of participants indicated "Low" interest, 57(38%) showed interest "To some extent," and 68 (45.5%) expressed strong interest "Very much" in participating in online classes. Conversely, the outcomes differed somewhat for in-person classes, with 62(41.5%) indicating "Low" interest, 47(31%) noting interest "To some extent," and 41(27.5%) selecting "Very much." The statistical findings suggest that students exhibit a greater inclination to participate in online classes. These results indicate that students are generally more interested in online classes than in-person ones. Nearly half are highly interested in online classes, while less than a third feel the same about in-person classes. A larger percentage of students report low interest in in-person classes compared to online classes. The statistical data clearly shows that students have a stronger preference for online learning over traditional, face-to-face instruction.

Table 9

Students' Interest to Learn English Virtually in Future

	Low	To some extent	Very much
Online	31 (20.5%)	42 (28%)	77 (51.5%)

The final inquiry of the study explored participants' prospective interest in virtual English learning in future and findings revealed that 20.5% (31 individuals) indicated "Low" interest, 28% (42 individuals) expressed interest "To some extent," and 51.5% (77 participants) displayed significant interest "Very much." The outcomes suggest that a majority of students are inclined to embrace online classes for future English learning endeavors. These results indicate that the majority of students are highly interested in continuing with virtual English learning in the future, while a smaller portion are not very interested.

4-2. Qualitative Results (Content Analysis of the Interview)

Considering the second research question, remote learning, or online education, has become increasingly prominent in recent years. While remote learning offers numerous advantages, it also presents certain challenges. Here are some of the most important pros and cons of remote learning in examining the participants' views:

Pros
Flexibility and Convenience: Remote learning allows learners to access content and participate in classes from anywhere with an internet connection. This convenience is particularly beneficial for individuals with busy schedules or those who cannot attend traditional classes due to geographical constraints.
Self-Paced Learning: Many remote learning platforms offer self-paced courses, allowing learners to progress through the material at their own speed. This caters to different learning styles and paces.
Cost Savings: Remote learning often eliminates the need for commuting and physical resources, reducing associated costs. It can also be more affordable than traditional education, making higher education accessible to a broader audience.
Access to a Wide Range of Courses: Remote learning opens up a wealth of educational opportunities, as learners can enroll in courses offered by institutions around the world. This is especially valuable for niche subjects or specialized fields.
Global Learning Community: Remote learning platforms facilitate interaction and collaboration among learners from diverse backgrounds and geographic locations, fostering a rich learning environment.
Multimedia Learning: Remote learning leverages multimedia elements such as videos, interactive simulations, and animations, enhancing engagement and comprehension for visual and auditory learners.

Cons:
Lack of Face-to-Face Interaction: Remote learning lacks the in-person social interaction and immediate feedback that traditional classrooms offer. This can lead to feelings of isolation and reduced engagement for some learners.
Self-Motivation and Discipline: Remote learning requires a high level of self-motivation and discipline to stay on track with coursework, as there is no physical class to attend and deadlines may be more flexible.
Technical Challenges: Reliable internet access and technical proficiency are essential for successful remote learning. Technical glitches and connectivity issues can disrupt the learning experience.
Limited Hands-On Experience: Some subjects, particularly those requiring hands-on practical skills or laboratory work, may be challenging to teach effectively in an online environment.
Question of Quality: The quality of remote learning can vary widely. Not all online courses or platforms provide the same level of educational rigor, and learners may find it challenging to discern the quality of a course before enrolling.
Potential for Distractions: Remote learning often takes place in learners' own environments, which can be prone to distractions from family members, pets, or other responsibilities.
In light of these pros and cons, remote learning can be a powerful tool for education, but its effectiveness depends on various factors, including the subject matter, the learner's preferences and learning style, and the quality of the remote learning platform or course.

Many institutions are working to address the cons of remote learning by integrating hybrid models that combine online and in-person instruction, aiming to provide the benefits of both modes while mitigating their respective drawbacks.

5. Discussion

This study delves into the realm of remote learning, focusing on ESP students in the unique context of different towns, Kerman province. The presented study provides a comprehensive exploration of ESP learners' perceptions and experiences with remote learning. The findings shed light on the intricate tapestry of feelings, preferences, and challenges that emerged as learners navigated the transition to virtual platforms. The analysis of satisfaction levels with online English classes reflects a high satisfaction rate suggesting remote learning in replacing the in-person learning experience.

Regarding the first research question, this study provides valuable insights into how ESP students perceive and experience remote learning. The findings reveal a diverse range of perspectives among the participants, shedding light on their satisfaction levels, preferences, and challenges associated with remote language learning. The study acknowledges the pivotal role of the e-classes in prompting the adoption of virtual learning platforms, which became the new norm for many learners. The unique aspect of this research lies in its exploration of foreign language learning in particular, acknowledging that language acquisition entails interactive elements that might be affected differently in a virtual setting. The findings reflect the mixed sentiments among participants towards remote learning. The analysis of satisfaction levels with online English classes indicates a high satisfaction rate. This suggests that most students might find the online format acceptable. The study also highlights the statistical significance of this satisfaction difference, emphasizing the complex task of evaluating the effectiveness of online education compared to traditional in-person instruction. The research then delves into participants' perceptions of the advantages and disadvantages of remote learning. The results reveal that participants generally acknowledge the benefits of online learning, such as time and cost savings, flexibility, and environmental considerations. However, they also express significant dissatisfaction with certain aspects, such as internet connectivity issues and high costs associated with online learning. The study's detailed exploration of both positive and negative aspects of remote learning provides a holistic view of learners' experiences.

Considering the second research question, the study's examination of perceived benefits and drawbacks underscores the multifaceted nature of remote learning, where participants acknowledge advantages such as flexibility and cost savings, but also express dissatisfaction with issues like connectivity and costs. The observation that participants lean slightly more towards recognizing the benefits in the paired sample test accentuates the potential of remote learning despite acknowledged drawbacks. The insights regarding participants' preferences for specific skills amenable to virtual learning, manifold curriculum in online over in-person classes, and the higher interest in online discussions illuminate the importance of social interaction in language learning. Moreover, the majority expressing high interest in future virtual English learning signifies rejection for traditional in-person instruction. In the broader context, the study underscores the dynamic landscape of remote learning, where its advantages, such as flexibility and accessibility, converge with its limitations, including the lack of face-to-face interaction. The synthesis of traditional and virtual modes of instruction emerges as a compelling approach to balance the benefits and drawbacks of remote learning. As

educational institutions strive to optimize online education, the results hold relevance for educators, learners, and researchers. They provide insights for educators to enhance online learning experiences by addressing technical challenges, fostering interactive environments, and adapting pedagogical strategies. Learners are encouraged to embrace the benefits of remote learning while honing self-motivation skills. Further research directions could explore cultural influences, effective strategies for virtual interactions, and long-term language proficiency outcomes. As the educational landscape continues to evolve, these findings serve as guideposts to navigate the easiness of remote learning and its ongoing transformation.

The paired sample test examining the differences in significance between advantages and disadvantages adds another layer of insight. This analysis suggests that participants lean slightly more towards recognizing the benefits of online learning over its drawbacks. This observation is particularly relevant as it underscores the notion that remote learning can offer certain advantages despite its limitations. Participants' preferences for specific skills to acquire through online learning provide valuable guidance for educators. Vocabulary and speaking emerged as the most favored skills, hinting at the adaptability of these areas to virtual instruction. This finding resonates with the idea that certain language skills can be effectively taught online, while others may require more direct interaction and practice. The study's exploration of curriculum variability in remote learning versus in-person classes indicates that many participants perceive a degree of parity in content delivery between the two formats. This suggests that educators have made efforts to maintain consistency despite the sudden shift to remote instruction. One noteworthy insight emerges from participants' differing interest levels in participating in class discussions between online and in-person classes. The higher level of interest observed in virtual environments underscores the value of indirect interaction and social engagement in the language learning process, rather than in _ person class.

More importantly, the study's examination of participants' prospective interest in future virtual English learning reveals a substantial majority expressing high interest in continuing with online classes. This finding implies that while remote learning has its defect, many learners prefer the online learning mode of instruction for language learning rather than traditional in-person. As educational institutions continue to navigate the challenges of remote learning, these insights can inform decision-making and help shape effective strategies for providing a balanced and engaging learning experience that caters to the diverse needs of learners.

Another key consideration that arose from the findings was learner autonomy and how it affected students' experiences with remote learning. While utilizing online platforms, students took on more responsibility of managing their time, sustaining attention and engagement with content without instructors being constantly present. While autonomy benefited many learners and created a flexible environment for them to thrive in, some learners expressed difficulties with self-discipline and maintaining motivation. This variation in autonomy supports the necessity of including self-regulation training and study skills within online ESP curricula to help prepare learners for autonomous learning. The study similarly highlights the digital divide as a key factor in learner satisfaction. While there was recognition of the benefits of online learning through cost and time savings, lingering technical challenges, more specifically internet connectivity and access to digital devices, were identified across the study as barriers. These technical issues reflect larger structural limitations, which exist outside

pedagogy. Such inequalities ultimately must be addressed within the context of a broader meta-review of educational policy and infrastructure provisioning to ensure equitable access to online language learning.

Moreover, these findings also prompt consideration regarding the nature of interaction within virtual learning environments. While participants expressed a preference for engaging in discussions in an online course, this increased engagement may be more reflective of a reduction in social anxiety toward a digital interaction, rather than an inherent advantage of learning in virtual settings. By way of example, learners who may have thought twice about speaking in a traditional classroom may feel more at ease using their voice within a virtual, online environment. Sitting back and adhering to a take-turns approach in an online course may not incite the same insecurity. However, it is nonetheless an important consideration not to diminish the significance of face-to-face dialogue for developing situationally nuanced interpersonal and intercultural communicative competence. As per the results, it is suggested that a return to a blended approach that combines the two is the most effective means of supporting ESP learners.

It is worthy to note that the findings of this work are in accordance with some studies exposed to online learning. Several of them have explored remote learning with a focus on challenges and opportunities that are in line with the findings of the present study. Maatuk et al., (2022) highlighted the sudden shift to online learning, revealing students' belief in its contribution to learning but also its impact on faculty workload. Amarneh et al., (2021) found that while remote learning provides opportunities, it fully replaces in-person education. Aini et al., (2020) reviewed challenges faced by both students and instructors, including connectivity issues and isolation. Elberkawi et al., (2021) emphasized social and student-related challenges in the transition. Behzadian and Kazemzadeh (2023) examined remote learning acceptance, revealing factors like ease of use and external influences. In contrast, the findings of this research are not supported the results of a more recent study by Alizadeh et al., (2023) who explored EFL teachers' negative attitudes toward online assessment due to cheating risks and connectivity issues. Moreover, Cummings et al., (2015) and Fadol et al., (2018) presented a comparative analysis of online versus traditional learning that found that traditional teaching was preferred by students.

6. Conclusion
The present study offers a nuanced exploration of ESP students' perceptions and experiences with remote learning. The research illuminates the availability, and easiness that emerged as learners' preferences to virtual platforms. The study's findings highlight the diverse range of perspectives among participants, reflecting both satisfaction and areas of improvement within the remote learning landscape. Moreover, the study brings to the forefront the essential role that the pandemic played in propelling the adoption of remote learning, reshaping educational paradigms globally. The analysis of advantages and disadvantages encapsulates the multifaceted nature of remote learning, demonstrating its potential while acknowledging its limitations. Notably, participants' leanings towards recognizing the benefits more than drawbacks in the paired sample test underscore the promise that remote learning holds despite its challenges. As remote learning continues to evolve, it remains pivotal to address the facets that affect learners' experiences. The study's insights, encompassing preferences for specific skills,

perceptions of curriculum, and preferences for online interactions, offer educators valuable guideposts for crafting effective virtual learning environments. Additionally, the study's exploration of learners' prospective interest in future virtual English learning modes of instruction.

While the study enriches our understanding of ESP students' sentiments towards remote learning, it also prompts broader considerations of the remote learning landscape. The examination of the most important pros and cons of remote learning underscores the potential and restrictions of this mode of education. The flexibility, accessibility, and global reach of remote learning are underscored as compelling advantages, but the lack of face-to-face interaction, self-motivation challenges, and technical issues stand as key cons that require attention. In the midst of this ongoing transformation of education, the study's findings and the exploration of remote learning's pros and cons converge to emphasize the need for balanced approaches. The synthesis of both traditional and virtual instruction, catering to the diverse needs and preferences of learners, remains a crucial pursuit for educational institutions. As we navigate the evolving educational landscape, these insights provide valuable signposts to guide effective strategies about the potential of remote learning.

On the basis of findings, the study has certain implications for some individuals. At first, the study's insights emphasize the importance of maintaining a high approach in designing online courses. Acknowledging students' preferences for online interactions and addressing technical challenges can enhance engagement. Integrating multimedia elements and fostering collaborative online environments can optimize remote learning experiences. Next, teachers should adapt pedagogical strategies to cater to different language skills and leverage the adaptability of remote learning for specific areas such as vocabulary and speaking. Moreover, students should recognize the benefits of remote learning, including flexibility and a wide range of courses. Self-motivation and time management skills are crucial for successful online learning. They can seek courses that align with their preferred learning styles and consider courses that emphasize skills best suited for virtual instruction. Students should also maintain an open mindset towards online learning, as it can offer unique opportunities for skill acquisition. At last, researchers can build upon this study by exploring diverse contexts and subjects to understand the high impact of remote learning. Finally, the long-term implications of these findings go beyond the learners' immediate experience. With many participants highlighting continued interest in future online learning environments, the institutions must consider whether their traditional modes of language teaching are appropriate. Along with the higher acceptance of online learning as a relevant and legitimate practice for student and learner expectations and demand, universities and language organizations must offer more flexible learning modes that support students' journeys into being online learners and subject matter experts. If managed properly, this can allow for better access and new possibilities in ESP-based pedagogy. At the same time, learners and educators should expect the use of relevant digital investment - infrastructure, instructor training, and relevant curriculum design that focuses on inclusivity and interactivity.

Limitations of the present study are related to some issues. Firstly, due to limitations generated by the remote learning for teachers-students through LMS, accessing the participants and data collection were associated with some challenges for the researchers. Secondly, due to practicality constraints, the researchers could not select the participants through random sampling, and this may threaten the validity of

findings. Thirdly, like any study concerned with human participants, the present study participants might not answer honestly to interview and questionnaire questions. Finally, since the process of data collection was conducted virtually, probably, the pace of the research was reduced due to such issues as cooperation rate of the participants, internet speed problems, and so on.

Further investigations into effective strategies for enhancing virtual interactions and minimizing technical challenges can improve online education quality. Comparative studies on student preferences and outcomes in hybrid models versus traditional classrooms can also contribute to refining educational approaches. Additionally, researchers can delve into the long-term effects of remote learning on language acquisition and overall educational experiences. Eventually, conducting a longitudinal study to examine the long-term impact of remote learning on language proficiency among ESP students is required.

Acknowledgments

Conflict of Interest

References

Aini khoyimah, N., Khoyimah, N., & Santoso, I. (2020). Improving students speaking ability through repetition drill. *PROJECT (Professional Journal of English Education) 3*(1), 26-37. DOI:10.22460/project. v3i1.p26-35

Alizadeh, E., M. Safaie, M. Momeni., & E. Kamrani (2023). Population dynamics of two morphotypes of green tiger shrimp Penaeus semisulcatus de Haan, in the northern coast of Iran. *Indian Journal 69*(2),7-18.

Amarneh, B., Alshurideh, M., Alkurdi., B., & Obeidat, Z. (2021). *The impact of COVID-19 on e-learning: Advantages and challenges.* The international conference on artificial intelligence and computer vision. DOI:10.1007/978-3-030-76346-6_8.

Behzadian, R. B., & Kazemzadeh, A. (2023). A comprehensive literature review on methodologies and applications. *European Journal of Operational Research, 200*(1), 198-215. DOI: 10.1016/j.ejor.2009.01.021

Choi, L., Chung, S. (2021). Navigating online language teaching in uncertain times: Challenges and strategies of EFL educators in creating a sustainable technology-mediated language learning environment. *Sustainability, 1*(3), 3-14. https://doi.org/ 10.3390/su13147664

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research.* (2nd Ed.). Sage Publications

Culduz, M. (2020). Benefits and challenges of e-learning, online education, and distance learning. *Incorporating the Human Element in Online Teaching and Learning, 1*(1), 1-27. DOI:10.4018/979-8-3693-4131-5.ch001

Cummings, M., Chaffin, K. (2015). Comparative analysis of an online and a traditional MSW program: Educational outcomes. *Journal of Social Work Education 51*(1),109-120. DOI:10.1080/10437797.2015.977170

Elberkawi, E. K., Maatuk, A.M. Elharish, S., & Tajoury, V. (2021). *Online learning during the COVID-19 pandemic: Issues and challenges.* IEEE 1st International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering MI-STA. DOI:10.1109/MI-STA52233.2021.9464505

Fadol, Y., Aldamen, H., & Saadullah, S. (2018). A comparative analysis of flipped, online and traditional teaching: A case of female Middle Eastern management students. *The International Journal of Management Education 16*(2), 266-280. DOI:10.1016/j.ijme.2018.04.003

Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational rResearch: Competencies for analysis and applications.* Columbus: Merrill Greenwood.

Gilakjani, A. (2012). The significant role of multimedia in motivating EFL learners' interest in English language learning. *International Journal of Modern Education and Computer Science 4*(4), 55-68. DOI:10.5815/ijmecs.2012.04.08

González-Lloret, M. (2020). Collaborative tasks for online language teaching. *Foreign Langanguage Research, 5*(3), 260–269.

Ibrahim, U., Argungu, J., Mungadi, I., & Yeldu, A. (2023). E-learning and remote education technologies: Lessons from the pandemic. *International Journal of Education and Life Sciences (IJELS), 1*(3), 159-174. DOI: https://doi.org/10.59890/ijels.v1i3.828

Khabisi, M.A., Masoudzade, A.B., Rad, N.F. (2023). On the effectiveness of receiving teacher and peer feedback as a mediator on Iranian EFL learners' writing skill: Mobile-mediated vs. direct instruction. *The Scientific Temper, 14*(3), 792-798. Doi: 10.58414/SCIENTIFICTEMPER.2023.14.3.35

Lara, J. A., Aljawarneh, S., & Pamplona, S. (2019). Special issue on the current trends in e-learning assessment. *Journal of Computing in Higher Education 3*2(11), 122-135. DOI:10.1007/s12528-019-09235-w

Lee, S., Chung, J.E., & Park, N., (2020). Network environments and well-being: an examination of personal network structure, social capital, and perceived social support. *Health Commune, 3*(3), 22–31.

Lodico, M., Spaulding, D., & Voegtle, K. (2010). *Methods in educational research: From theory to practice.* John Wiley & Sons, San Francisco.

Lomicka, L. (2020). Creating and sustaining virtual language communities. *Foreign Language Research, 5*(3), 306–313.

Maatuk, A., Elberkawi, E., Aljawarneh., S., & Rashaideh, H. (2024). E-learning: Challenges and opportunities from the perspective of students and instructors. *Journal of Computing in Higher Education 34*(1), 45-59. DOI:10.1007/s12528-021-09274-2

Navarro, J., & Mcgrath, P. (2022). Strategies for effective online teaching and Learning: practices and techniques with a proven track of success. *Online Education, 2*(4), 88-99. DOI:10.4018/978-1-7998-8275-6.ch029

Nsyengula, S., Haule, E., Mhagama, W., Wanguba, J., & Yassin, A. (2025). Challenges and opportunities for technology and language learning. *Journal of Classroom Action Research, 4*(1), 7-14.

Omwenga, E., Mwololo, T., & Wagacha, P. (2020). E-Learning in public institutions in Kenya: Implementation challenges. *Journal of Information Engineering and Application, 3*(2), 55-68.

Pham, S.T.H., & Sampson, P.M. (2022). The Development of artificial intelligence in education: A review in context. *Journal of Computer Assisted Learning, 38*, 1408-1421. https://doi.org/10.1111/jcal.12687

Shunina, T., & Shunin, Y. (2017). Technology impact on developing virtual identity. *Research Gate, 4* (2), 22-254.

Appendix
Research Questionnaire
[Remote Learning]
Source for this questionnaire

1	Have you ever used online classes for learning English?	Yes ☐ No ☐
2	If you have used online classes for learning English, what is the period of using such classes?	Less than a year ☐ More than a year ☐
3	How much are you satisfied with online classes of learning English?	Low ☐ to some extent ☐ High ☐
4	Read benefits of online classes and vote: A: possibility of connecting classes everywhere even in trips. B: Access to educational content by merely a smart phone. C: Variety of educational materials in different dimensions. D: Saving time (not consume time in traffic) E: Saving costs (not paying taxy price) F: Flexible curriculum (while interconnection of classes it was possible to connect other instructors) G: Possibility of reusing classes (recorded classes) H: Being up to date with technology for participating classes J: Developing resume (access to various classes and participation in whatever classes without travel to other cities) K: Saving environment (decreasing of transportation and pollution)	Low ☐ to some extent ☐ High ☐
5	Which items are the post important disadvantages of online classes? A: High price of Internet. B: Lack of access to facilities such as smart phone and Tablet. C: Students disconnection from social friends and decreasing the level of self-esteem. D: frequent disconnection and low speed of Internet. E: postponing learning and accomplishment of homework. F: Inappropriateness for practical courses such as laboratories and workshops. G: Immobility and increasing the level of laziness. H: High pressure on families (due to lack of instructor's control on students' families control on students' needs to be compensated) J: Low level of reliance (the possibility of paying tuition and lack of holding classes). K: Internet based interruptions.	Low ☐ Average ☐ High ☐

6	Learning which item is better and simpler in virtual learning?	Listening☐ Speaking☐ Vocabulary☐ Reading☐ Grammar☐
7	How is the variability of curriculum in virtual learning in comparison to in-person classes?	Virtual learning is more variable ☐ Both are equal☐ Virtual learning is more variable ☐
8	To what extent are you interested to participate in online classes?	Low☐ To some extent☐ Very much☐
9	To what extent are you interested to participate in in-person classes?	Low☐ To some extent☐ Very much☐
10	To what extent are you interested to learn English language virtually in the future?	Low☐ To some extent☐ Very much☐

Interview Questions

11. What are the advantages of technology-mediated language learning methods i.e. remote learning?

12. What are the disadvantages of technology-mediated language learning methods i.e. remote learning?