

New technologies are being adopted by classrooms in the twenty-first century more frequently because of their promise to make learning easier for students of all skill levels. In light of this, technology integration presents a strategy for coordinating classroom instruction with how students go about living their daily lives. In reality, research is starting to demonstrate that technology might improve education in numerous ways, including by potentially increasing student motivation and achievement (Lizcano et al., 2020; Maatuk et al., 2022). Teachers can differentiate their instruction in ways that were not conceivable when limited to traditional classroom media because of the immense flexibility of technology (Ms & Toro, 2013). Technology has a well-established place in general education classrooms, but it also offers many benefits to students with special needs. For instance, assistive technology comprises various tools and services that are specially made to support students with disabilities. Therefore, technology can enhance educational opportunities and improve outcomes in classrooms that include students with a variety of exceptionalities (Lara et al., 2020).

In debates about technology integration, the teacher's role is frequently ignored (Bitner & Bitner, 2002). Because of the enormous flexibility of technology, teachers can differentiate their instruction in ways that were not imaginable when restricted to traditional classroom media (Ms & Toro, 2013). In general education classrooms, technology has a well-established place, but it also has a lot to offer students with special needs. Assistive technology, for instance, consists of a variety of tools and services that are expressly designed to aid students with impairments. As a result, technology can increase learning opportunities and outcomes in classrooms where kids with a range of exceptionalities are present (Lara et al., 2020). The function of the teacher is frequently disregarded in discussions regarding technological integration (Bitner & Bitner, 2002).

Teaching and education have benefited from new and contemporary advantages as a result of the advent of a new information technology era and the advancement of computers and mobile devices (Xie et al., 2019). Many of us recall passively listening to our teachers as they lectured the material in front of the class during our school and college years. In those teacher-centered classrooms, students were merely passive receivers of knowledge rather than actively participating in their own learning processes. Fortunately, a new approach to learning known as blended learning has emerged as a result of the development and penetration of technology into education. Blended learning combines traditional instruction with online tasks and activities to create a collaborative, student-centered learning environment (Bonk & Graham, 2006). Due to its inverted learning process, the virtual classroom, which is a key component of blended learning, gives students more learning time before, during, and after the lesson (Bergmann & Sams, 2012).

In virtual classrooms, students receive input materials beforehand, such as lecture videos the teacher has recorded or downloaded from websites, and class time is spent working together on projects and having conversations (Xie et al., 2019). Cooperative learning strategies, such as computer-based instruction or digital learning, are crucial for the next generation because adult students or even young students would benefit from this method of instruction in terms of cognitive and social development, and in some circumstances where traditional classrooms are not appropriate, especially in Coronavirus era that we experienced it.

At these times, in light of the technological developments and extensive connections among learners, and due to the introduction of modern digital devices into classrooms, computer-assisted language learning (CALL) and computer-mediated communication has exerted significant effects on language learning and teaching, and it is worth noting that the universities, schools, and language and educational centers in Iran were not exceptions to use virtual or online classrooms. Based on my personal teaching experience as a high school teacher and as a person who was and is challenged by the virtual classrooms' revolution in educational settings, I was curious about exploring the perceptions and attitudes of EFL teachers at high schools about the opportunities,

challenges, barriers, and solutions to the virtual classrooms in a systemic and scientific study, as the point of views of teachers are diverse and the problems of virtual classrooms can be resolved under the detailed and analytical studies and research. The researcher in the current study was after investigating the perception of high school EFL teachers toward virtual learning systems' experience. Also, probing the perception of high school EFL teachers toward virtual learning systems' opportunities, exploring the perception of high school EFL teachers toward virtual learning systems' challenges and threats, and informing the educational society of the solutions to the barriers of virtual learning systems based on the perception of high school EFL teachers were the other objectives of the current study.

Literature Review

Definition and History of Digital Learning

Technology is advancing so quickly that education must keep up. They had to be able to learn anywhere, at any time (Wolfinger, 2016). Online education has been popular at various international institutions for the past 20 years. The majority of schools, colleges, and universities did not use this instructional modality prior to the COVID-19 pandemic, but as a result of the outbreak of the Coronavirus, educational institutions realized the need for digital learning and a variety of digital teaching aids emerged. A course called virtual or digital learning is created for students who participate in remote learning but do not attend traditional classes (Zhang et al., 2005). According to research, digital learning is particularly useful as an active learning environment since it can give students a range of cognitive and metacognitive activities to engage in while learning (Oliver, 1996).

It is argued that as students absorb and reflect on the material, they are learning, and their learning is enhanced. As a result, it develops a medium that can detect knowledge gaps and encourage learning in a collaborative setting. Additionally, reflecting time is offered by digital learning, which enables students to study more effectively and actively than in a traditional setting.

Utilizing student-centered methods is encouraged by digital learning, which also creates a dynamic learning environment with plenty of visual and auditory stimulation (Pi-Hua, 2006). Despite playing a significant part in the learning environment, digital learning has several disadvantages. For instance, it is difficult to tell whether the instructor considers learning to be their responsibility or only gives students the barest amount of direction. It is also challenging to determine whether the results of the acquired knowledge are both creative and productive (AbuSeileek, 2012).

Learning a foreign or second language, such as English, has seen a significant transformation in the modern day because of technology and the usage of newly developed tools like computers, which can enhance the teaching and learning processes. Digital learning is one of the areas of technology that are related to learning a second language.

According to Niu et al. (2022), digital learning, also known as hybrid learning, is a sort of teaching and learning approach that combines in-person or tutorial learning with an online learning environment. The degree of complexity of online learning can range from straightforward proprietary lessons that are simple to use and produce to more sophisticated online learning lessons that have many intriguing features. Both the teacher and the student must take the time to learn how to search, choose, upload, and store these challenging online learning activities. The cost of adult basic education is covered by the integrated online curricula chosen by a program, institution, or state education authority (Gilakjani & Rahimy, 2019).

The broad field of virtual or digital learning is where the current study fits in. On the Internet, remote distance learners can participate in virtual education, also known as e-learning. The teacher and student enter the virtual classroom at a set time and engage with each other in a

virtual environment. It is one of the varieties of virtual education and unquestionably the greatest type of virtual education (Sharma & Barrett, 2007).

In online virtual learning, the teacher can offer PDF files, PowerPoint presentations, as well as audio and video, to the pupils in order to share the necessary instructional themes. It is feasible to educate practically by allowing students access to the teacher's desktop and by allowing them to see the environment of various software in real-time. According to Aparicio, et al. (2016), e-learning is not a novel idea that focuses on the use of digital systems to facilitate and enhance learning. The educational need and purpose that underlies online learning are established by those two factors (Valverde Berrocoso et al., 2020). Sangrà, et al (2012) claim that e-learning is the delivery of learning and training programs through the use of technology. Its goal is to provide educational programs through electronic means. Because both students and teachers can speak with one another while participating in online learning and teaching, it acts as a means of communication. Allowing pupils to use information and communication technologies, it enhances their learning.

Njenga and Fourie (2010) claim that e-learning is a powerful tool that should be employed by all educational institutions. It might take the place of interpersonal communication while simultaneously bringing down the price of education. It makes learning more interesting. As a result, students are rarely bored when using technology, which makes the learning process fascinating. It is web-based learning that gives teachers and students instruction and growth via online means like the Internet, audio, and video, among other things.

Theories Supporting Virtual Learning **Vygotsky's Symbolic Mediation Theory**

Lev Vygotsky (1979) developed a number of ideas over his educational career that highlight the meditative aspect of learning, whether by signs or via human mediation, such as using signs as psychological instruments or a Zone of Proximal Development. Virtual learning in particular and digital learning, in general, are both supported by Vygotsky's symbolic mediation theory. The social, cultural, and developmental processes are all connected in Vygotsky's theory. In his study of learning and memorization, Vygotsky (1979) placed a strong emphasis on the significance of sign operations involving auxiliary signs, writing that the use of signs leads humans to a specific structure of behavior that breaks away from biological development and creates new forms of a culturally-based psychological process (1979). The learner and the knowledge that has to be acquired are connected through these external signs. The conventional stimulus-response model with a symbolic mediator is shown in Figure 1 (Vygotsky, 1979).

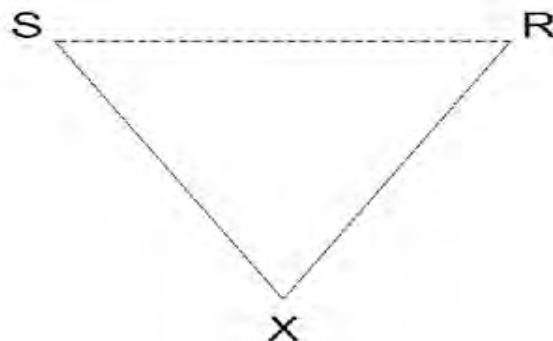
The method of sign operation that takes place during learning and memory is shown in the diagram. The system exhibits the usage of a "psychological tool," or external sign, which is identified in the structure of a stimulus-response process by its mediating role (1979). This implies that sign operation is involved in cognitive activities such as learning and memory since one uses "indirect (mediated) activity" (1979, p. 54) through symbolic signals such as schemes or pictures. The system is based on Vygotskian sign operation representations, as demonstrated in Figure 2.1, and shows how mediation functions when a variety of learning sources are used. In digital settings, this sort of mediation enables the learner to interact with the course material utilizing a variety of sign systems, such as pictures, videos, collages, and situations.

It is crucial to remember that in the context of digital learning environments, the sign that mediates new knowledge can take many different forms, including video, music, photographs, and written text. These forms are all part of a sign system that is different from the one you are used to. We can therefore assume that a mediator is a member of a different sign system than the one that is used to convey knowledge. This sort of representation, where a written, artistic text is

supported by a multimedia representation and the study material is transmitted through various digital media, is best exemplified by the platform education on screen. In a digital learning environment, this sort of representation calls for the use of multiple auxiliary mediators, such as signals, to connect the learner and the knowledge, such as signs (x) of symbolic sign systems.

Figure 1

The Vygotskian scheme of stimuli (S), response ®, and mediator (X) (Vygotsky, 1979)



Computer Assisted Language Learning (CALL)

As stated by Dung (2020), Computer Assisted Language Learning (CALL) "derives its significance as a dynamic and advanced approach of teaching and learning, in which the computer and computer-based resources such as the Internet are widely used to present, reinforce, and assess the learning contents" in the field of teaching English as a second language. As indicated, the current study attempted to stick to the issues existing in the virtual learning domain. Just like other online provisions, the usage of CALL frequently faces prominent concerns from teacher training, IT infrastructure, investment budget, etc. (Sлимп & Bartels, 2019).

Mobile Assisted Language Learning (MALL)

MALL is the other idea that underpins virtual learning. Mobile learning is defined as learning done on small, portable computing devices that can be used to enhance both the student and instructor's learning experience overall (Hafour, 2022). The student's performance rate can be raised and the learning environment will also be of higher caliber with mobile assistance. You can incorporate active learning in settings where you haven't done it before (Sorensen, 2009). The wireless technology industry is expanding quickly. The majority of the developments support mobile learning's viability and the variety of course software that may be created for it. Each of these has actively pushed for the development of mobile learning and made a contribution to the enrichment of courses on mobile phones (Nikolopoulou, 2018).

Related Empirical Studies

Numerous studies have been conducted on virtual learning, including those on the perceptions of important stakeholders as well as the efficiency of virtual classrooms and web-based training. Gobbo and Girardi (2001) looked at teaching methods and computer integration to see how teachers felt about technology-based classrooms. They claimed that teachers' attitudes and computer training are positively correlated. Teachers' use of computers in the classroom is influenced by their training. The results showed that the implementation of computers in instructors' classes depends heavily on both teaching philosophies and computer proficiency.

There should be a sufficient chance for teachers to learn about new technology. Teachers' views regarding CALL were studied by Cavas and Keserciolu in 2003. The results showed that many teachers had favorable opinions of CALL, and there was no gender difference in their opinions on computer-assisted instruction. Despite the fact that many teachers lacked appropriate computer knowledge, Mcalister et al. (2005) observed that teachers' attitudes toward computers were generally positive. They stressed the need for teachers to have IT training and to be respected as role models for their students. Additionally, Gulbahar (2008) found that instructors' proficiency with computers was impacted by poor technical infrastructures and a lack of training. The role of teachers is influenced by their views and interest in computers. According to Ocak and Akdemir (2008), instructors' computer literacy is important for computer use.

Teachers who are computer literate are better able to include computers in their lessons. In actuality, instructors' views about computers and their computer proficiency are related. Recent research by Gherhes et al. (2021) concentrated solely on the educational process's beneficiaries and sought to understand how they felt about face-to-face and online learning, as well as if they would want to return to the traditional method of instruction. 604 Politehnica University of Timisoara students were expected to respond anonymously to an 8-question survey from December 2020 to February 2021, and their responses served as a representation of their perceptions.

The findings reveal the respondents' levels of interest in going back to school (particularly for those who have only benefited from online courses) and their level of participation in such courses. The findings also detailed the benefits and drawbacks of the two educational models from the perspectives of first-year students (who benefited only from e-learning) and upper-year learners (beneficiaries of both face-to-face and e-learning). The study outlined important data on e-learning from the viewpoints of the students, which should be taken into account to comprehend the continuous changes in the educational process and to address any unique issues it may have in order to ensure its durability.

Applying computers in English as a Foreign Language (EFL) programs in Iran has been the subject of extensive research. Dashtestani (2013) conducted research on the attitudes of Iranian teachers toward computers. The results showed that teachers view using computers in the classroom favorably. Additionally, research about Iranian teachers' views on using computers was conducted by Mollaei and Riasati in 2013. The findings indicated that Iranian teachers have a favorable attitude toward using computers in their lessons. A study by Sadeghi et al. (2014) revealed that Iranian teachers who used computers more frequently than other teachers had favorable sentiments regarding using them in L2 classes. Pourhossein Gilakjani (2018) also looked into how teachers felt about using computers to teach English pronunciation. The results demonstrated that teachers were interested in using computer technology because it gave them a fun and engaging atmosphere, assisted them in learning the correct pronunciation, and enhanced the effectiveness of their pronunciation education.

The results also showed that employing computer technology increased teachers' desire and trust in it because it had a strong potential to alter their teaching methods. The results also showed that teachers believed employing computer technology was not a danger to the conventional ways but instead produced better results than these methods and that they had sufficient knowledge of computer technology to assist them to teach pronunciation successfully. Even though more study on virtual learning has been done in recent years, there are still a lot of unresolved problems (Girish et al., 2022). Wang (2003) discovered that the aspect of learner satisfaction with e-learning is rarely included in the study.

We must, however, gain a better understanding of where, when, and under what circumstances online learning can be applied most effectively as well as how it can be applied, as the use of e-

learning and online classrooms persists to significantly increase in higher education and professional contexts. We assume that using online courses as a result of the Coronavirus pandemic is unavoidable in the world in general and in Iran, in particular, taking into account the above-mentioned research and the fact that Iranian EFL learners are restricted in using widely popular online media such as Twitter and YouTube. However, EFL teachers' perceptions towards virtual learning, particularly in large schools in Iran's context, are unaffected so far. Even though Pourhosein Gilakjani (2018) attempted to investigate teachers' perspectives on technology-based classrooms, in reality, he neglected the difficulties and possibilities, the obstacles, and their solutions in virtual classrooms; consequently, the current study is an effort to fill the gap in the literature. In short, based on the objective of the study, the following research questions were formulated:

RQ1: *What is the perception of high school EFL teachers toward virtual learning systems' experience?*

RQ2: *What is the perception of high school EFL teachers toward virtual learning systems' opportunities?*

RQ3: *What is the perception of high school EFL teachers toward virtual learning systems' challenges and threats?*

RQ4: *What are the solutions to the barriers of virtual learning systems based on the perception of high school EFL teachers?*

METHOD

Participants

The research sample was taken from EFL teachers in an EFL context like Iran. Based on convenience sampling, a total of one hundred and twenty EFL teachers were chosen as the sample of the study from among 170 teachers of four high schools in Urmia, Iran, in order to fill out a questionnaire in online teaching. The initial participants of this study were 170 and from the initial 170 administered questionnaires by the teachers, a number of 50 of them were excluded from analyses due to their incomplete and careless answers. As a result, the final number of participants was 120. Table 1 illustrates the demographic information gathered by a set of questions from the scale under study.

Table 1

Demographic information gathered from EFL teachers

		Frequency	Percentage
Gender	Male	67	56%
	Female	53	44%
	20-30	32	27%
Age	30-40	78	65%
	40-50	7	6%
	50 and above	3	2%
Academic degree	BA	28	23%
	MA	86	72%
	PhD candidate	5	4%
	PhD	1	1%

Instruments

In order to gather data, an attitude questionnaire was used. For the investigation and data collection, an online survey-based questionnaire was designed to estimate the online learning challenges and the solutions to the existing problems. The survey-based questionnaire contains 20 multiple questions (yes/no, multiple-choice, and open-ended questions), which covered the study's objectives. It was designed via Google Forms and distributed among high school EFL teachers using WhatsApp groups at the end of the first semester of 2021. The questionnaire consists of different parts; the first part is about teachers' demographic information, the second part includes a set of questions about teachers' experiences with online learning platforms and the facilities which they could use, the third part is about the problems which they encountered during online learning, the fourth part is about their satisfaction with online learning, and finally, open-ended questions to get any extra information about online education teachers to want to add or mention. The questionnaire was checked for validity and reliability fulfillment. The reliability of the scale was estimated during the pilot study that was done with 20 EFL teachers from the same sample and the value was reported to be .79. Furthermore, the validity of the questionnaire was expert-validated.

Procedure

To achieve the purpose of this study and address the questions posed, certain procedures were followed as follows:

In order to investigate EFL teachers' attitudes towards technology-based classrooms in high schools, over a two or three-month period, the researcher collected data using the questionnaire devised by the researcher. The participants at four high schools (two male and two female high schools) were required to inform about the demographic information. At first, having checked the comprehensibility of the item statements, the questionnaire was distributed to the EFL teachers. The questionnaires were delivered to the teachers at different branches in person or via social networking groups and emails. The respondents had as much time as they needed to fill out the questionnaires and sent them to the researcher. In trying to put the quantitatively collected data in meaningful ways, the researcher used SPSS version 21 (Statistical Package for the Social Sciences).

Results

Investigating the First Research Question

In order to answer the first research question, which investigated the perception of high school EFL teachers toward virtual learning systems' experience, a set of questions were used. Table 2 shows the teachers' beliefs about their virtual learning systems' experience.

Table 2

EFL Teachers' Beliefs on Virtual Learning Systems' Experience

Personal experience in virtual learning before Covid-19	Yes	Frequency	Percentage
			76
	No	44	37%
Level of E-learning literacy	Highly proficient	19	16%
	Above average	39	33%
	Average	58	48%
	Slightly proficient	4	3%
	Not proficient	0	0
The level of comfortability with virtual	Very	5	4%

classrooms	uncomfortable	
	Uncomfortable	21
Neutral	7	6%
Comfortable	85	72%
Very comfortable	2	1%

As it is clear from Table 2, more than half of Iranian EFL teachers (63%) had personal experience in virtual learning before Covid-19; however, just 37% of them reported a lack of this experience before the Coronavirus pandemic, which made distance learning inevitable. Moreover, around 60% of the teachers stated that their E-learning literacy level was average. Less than half of them (39%) had a level of above average, with 16% that saw themselves as highly proficient. Less than four percent were slightly proficient, and none of the teachers reported their unproficiency. The level of comfortability with virtual classrooms was the other question that aimed to gauge teachers' experience with virtual learning. As the results showed, most of the teachers (72%) were comfortable with virtual classes and just 17% were uncomfortable with the existing situation on virtual learning, and 4% as very uncomfortable teachers with the E-learning context. Moreover, from the total of 120 high school teachers, 7 of them had no idea about this item and just 1% of them choose the item as very comfortable. In general, most Iranian EFL teachers had less difficulty with virtual classrooms and already experienced virtual classrooms before Corona pandemic.

Investigating the Second Research Question

In order to answer the second research question, which is concerned with the perception of high school EFL teachers toward virtual learning systems' opportunities, a set of questions in the form of 5 points Likert scale was designed. The teachers were required to answer the questions to explore their attitudes towards E-learning opportunities that can be considered as virtual classrooms 'advantages. Table 3 illustrates the attitudes of teachers to virtual learning systems' opportunities.

Table 3

EFL Teachers' Beliefs on Virtual Learning Systems' Opportunities

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Social and national savings	10/8%	14/12%	15/13%	81/67%	0
Data retention power	0	6/4%	1/1%	78/65%	35/30%
Positive social impacts	14/12%	9/7%	8/6%	69/58%	20/17%
Quick and easy access	3/2%	5/4%	16/13%	67/56%	30/25%
High interaction	14/12%	22/18%	17/14%	62/52%	5/4%
High approximate of verbal language	20/17%	31/26%	15/13%	49/40%	5/4%

As the results obtained from Table 3 indicate, Iranian high school EFL teachers had different attitudes to the virtual learning systems' opportunities and they reported their satisfaction with virtual classrooms due to their merits. Regarding social and national savings, 67% of teachers considered it as a positive factor in virtual classrooms, 13% had no idea, 12% disagreed with the item, and finally, 8% strongly disagreed with it. Data retention power was favored by most of the teachers as more than 90% of them agreed (both agree and strongly agree) with this factor. The

same result was reported with the factor of quick and easy access. The role of positive social impacts was similar to the first item (social and national savings), and teachers had different views on it; however, the weight of agreement was high in comparison with the disagreement. In terms of the last two items (High interaction & High approximate of verbal language), the point of view was to some extent different since the teachers were not satisfied with these items and the results in agreement and disagreements were fifty and fifty (about 50% in each pole). In sum, data retention power and quick and easy access were two items favored by high school teachers and they believed these two items can be regarded as positive opportunities.

Investigating the Third Research Question

The focus of the third research question was on the problems which EFL teachers at high schools encountered in virtual classrooms due to their demerits. Table 4 indicates the results.

Table 4

EFL Teachers' Beliefs on Virtual Learning Systems' Challenges and Threats

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Low interaction and communication with learners	6/5%	9/7%	9/7%	79/67%	17/14%
Low internet access	3/2%	6/5%	4/3%	91/77%	16/13%
Low time management	14/12%	32/27%	10/9%	49/41%	15/12%
Depression due to the social isolation	11/9%	29/24%	17/14%	50/43%	13/10%
Low concentration	5/4%	9/8%	8/7%	80/67%	18/15%
Negative social impacts	17/14%	21/17%	9/8%	71/60%	2/1%

Based on the findings of Table 4, the items of low interaction and communication with learners, low internet access, and low concentration were the challenges and threats that EFL teachers of high schools mostly encountered with. As it is axiomatic, 90% of the teachers agreed with the big problem of low internet access and about 70% agreed on the other two items (low interaction and communication with learners and low concentration) as the other prevalent threats to virtual classrooms. Low time management and depression due to social isolation were the challenges that about half of the teachers regarded as challenges and the other half disagreed with their nature as problems.

Investigating the Fourth Research Question

To give solutions to the above-mentioned threats to virtual classrooms, the teachers were asked to present statements in the form of comments. One of the novice teachers with a BA degree believed that a solution for low internet access can be using visuals:

Extract 1: If you're faced with a *poor connection*, your speech can become distorted and hard to follow. *Using a range of visuals such as pictures and diagrams* is helpful to keep students following the lesson, even if they can't hear you clearly. Drawing visuals during your live lesson will be more successful than displaying static images on the screen. Students can easily follow the process if they draw and talk simultaneously.

The other teacher (female, MA, at the age range of 30-40) stated that recording lessons can be the other cure for poor connection:

Extract 2: although virtual classrooms are easy to access, however, I prefer traditional and face-to-face classrooms. *Recording live teaching* provides a way for students with poor access to watch lessons in their own time due to low internet access. We can upload each video to a shared area and explain how to find it. Not only is it inclusive for learners with limited access to devices, but it's also useful when a student is unwell and needs to catch up.

Preparing for low connection was the other suggestion to manage the problem, as reported by one of the male teachers with the age range of 40-45.

Extract 3: Teachers should be *prepared for the worst so they're ready if their poor internet connection prevents a live lesson from taking place*. Sending Emails to students before teaching and sharing any resources they'll need can be helpful. Teaching them what to do if facing a connection problem that stops the lesson from happening. They can use the resources the teacher has sent to complete activities in their own time.

Since the statements were brief and short in length, and most of them were repeated; hence, some of the important solutions reveal in the form of a list.

For low concentrations, teachers can teach lessons via colorful and attractive slides.

Increasing peer interaction through various tasks can be helpful for low interaction.

Teachers can ask students to answer the questions via microphones. This can increase concentration.

The chat function by getting students to share answers, opinions, ideas, etc., can be a fantastic tool for teachers in the online classroom to overcome the low interaction and communication.

Planning interaction patterns can be useful for overcoming low communication in virtual classrooms.

Discussion

The goal of the current study was to find out how Iranian EFL teachers felt about advantages and threats, as well as about the problems and solutions associated with virtual classrooms and how happy they were with the virtual classrooms they used during the Coronavirus pandemic. While some EFL teachers were happy taking their courses online and in virtual classrooms, others still prefer taking their sessions in a physical classroom. For causes including data retention capacity and rapid and easy access, the majority of teachers had favorable attitudes regarding virtual classrooms; yet, they complained about some difficulties like slow internet and poor interaction rates.

This supports research by Brown and Liedholm from 2002, which evaluated student learning outcomes in an online course. They discovered that students taking the course online did noticeably lower on tests than those taking it in the traditional format. Second, the majority of students concur that communicating with teachers has gotten more difficult as a result of online learning, and they also concur that connecting with teachers has grown more difficult. Third, most students do not feel motivated to participate when attending online courses, their productivity has not grown, and their comprehension of the subject matter has gotten worse.

Our results are consistent with those of Boling et al. (2012), who found that most study participants believed online courses reduce interaction with others and individualize learning. Our findings on the issue of decreased interaction are consistent with those of McConnell (2006), who found that one major issue with online learning was that students felt more alone and were reluctant to connect and communicate. But this issue can be resolved by several methods, such as creating interaction plans and encouraging students to express their responses via chat boxes, as Instructors in this study stated.

The findings concur with those of Shi and Fan (2021), who investigated the attitudes of professors and students of online teaching courses in China, in terms of obstacles and concerns. In all, 34 teachers and 255 marine students from various maritime education and training (MET)

institutions in China took part in this study. According to the survey, China's online ME education remained undeveloped. For teaching and learning ME, simple and constrained online approaches were used. The use of innovative online approaches was significantly hampered by the exam-focused teaching style. Individual learning needs should be addressed as a result of the fact that many online features had not been used to their full potential.

As previously said, one of the major obstacles cited by the high school instructors in this survey was the lack of internet access, which is undoubtedly related to Iran's current political climate.

The findings are consistent with Khan and Abid's study from 2021, which attempted to evaluate how remote labs and classrooms would be affected by the "social separation" caused by the COVID-19 pandemic. According to the authors, there are a number of obstacles to creating virtual schools, such as a lack of internet connectivity nationwide and few resources available to a broad community during such outbreaks. These results highlight the need of using interactive technology in online social work classrooms in order to promote the human interaction that is so crucial for student learning and practice (Hitchcock et al., 2019). To build and implement the systems for virtual classrooms, one needs appropriate training in this technology as well as thorough program preparation, requirements that were mainly missing in teaching training courses in Iran.

Conclusion

Online education is a novel and fascinating method to learn almost anything. It has had a favorable effect on both teachers' and students' lives (Kulal & Nayak, 2020). The quality of education has increased as a result of the expanding use of technology in the learning environment, particularly in the Covid 19 era. As the findings demonstrated, these classrooms really had certain advantages, such as strong data retention and quick access, despite the difficulties EFL teachers experienced, such as limited internet connection and low concentration on students' turns. Teachers were actually positive about virtual classrooms, although there is always space for growth in terms of online learning. It is clear that there are more substantial advantages to online learning, such as the fact that it increases literacy rates by creating engaging, high-quality virtual classrooms (Lin & Zheng, 2015). But there are several considerations that must be made in order for implementation to be successful in a place like Iran.

This entails bolstering infrastructure facilities, enhancing Internet connectivity, raising the bar for interaction and communication, changing students' and teachers' attitudes, etc. Colleges and other educational institutions must give students and professors effective instruction and assistance about the use of virtual classrooms in order to increase their satisfaction. Online classes demand a learner-centered atmosphere where students must be self-motivated and self-directed, in contrast to traditional classroom learning, where students are frequently accused of being spoon-fed. Colleges and educators must make every attempt to alter students' perspectives. Colleges or the government must routinely bring training and development programs to instructors and students in order to accomplish this goal. The study also demonstrated that although virtual classrooms will play bigger roles in the future, they cannot take the place of traditional face-to-face classroom instruction. It can be challenging to switch completely to online instruction. However, given what EFL teachers indicated, we cannot discount the advantages of virtual learning environments.

As a result, it is necessary to comprehend the barriers to accepting online learning and take appropriate action to overcome them.

References

- AbuSeileek, A. F. (2012). The effect of computer-assisted cooperative learning methods and group size on the EFL learner's achievement in communication skills. *Computer and Education*, 58(1), 231–239.
- Bergmann, J., & Sams, A. (2012). Before you flip, consider this. *Phi Delta Kappan*, 94(2), 25-25.
- Bitner, N., & Bitner, J. O. E. (2002). Integrating technology into the classroom: Eight keys to success. *Journal of technology and teacher education*, 10(1), 95-100.
- Boling, E. C., Hough, M., Krinsky, H., Saleem, H., & Stevens, M. (2012). Cutting the distance in distance education: Perspectives on what promotes positive, online learning experiences. *The Internet and Higher Education*, 15(2), 118-126.
- Bonk, C. J., & Graham, C. R. (2012). *The handbook of blended learning: Global perspectives, local designs*. John Wiley & Sons.
- Brown, B. W., & Liedholm, C. E. (2002). Can web courses replace the classroom in principles of microeconomics? *American Economic Review*, 92(2), 444 - 448.
- Cavas, B., & Kesercioglu, T. (2003). Primary science teachers' attitudes toward computer assisted learning. *Ege Eğitim Dergisi*, 3(2), 12-34.
- Dashtestani, R. (2013). Implementing Mobile-Assisted Language Learning (MALL) in an EFL Context: Iranian EFL Teachers' Perspectives on Challenges and Affordances. *Jalt CALL journal*, 9(2), 149-168.
- Gilakjani, A. P., & Rahimy, R. (2019). Factors influencing Iranian teachers' use of computer assisted pronunciation teaching (CAPT). *Education and Information Technologies*, 24(2), 1715–1740.
- Girish, V. G., Kim, M. Y., Sharma, I., & Lee, C. K. (2022). Examining the structural relationships among e-learning interactivity, uncertainty avoidance, and perceived risks of COVID-19: Applying extended technology acceptance model. *International Journal of Human-Computer Interaction*, 38(8), 742-752.
- Gherheș, V., Stoian, C. E., Fărcașiu, M. A., & Stanici, M. (2021). E-learning vs. face-to-face learning: Analyzing students' preferences and behaviors. *Sustainability*, 13(8), 4381.
- Gobbo, C., & Girardi, M. (2001). Teachers' beliefs and integration of information and communications technology in Italian schools. *Journal of Information Technology for Teacher Education*, 10(1-2), 63-85.
- Gulbahar, Y. (2008). ICT Usage in Higher Education: A Case Study on Preservice Teacher and Instructions. *Online Submission*, 7(1).
- Hafour, M. F. (2022). The effects of MALL training on preservice and in-service EFL teachers' perceptions and use of mobile technology. *ReCALL*, 1-17.
- Kulal, A., & Nayak, A. (2020). A study on perception of teachers and students toward online classes in Dakshina Kannada and Udupi District. *Asian Association of Open Universities Journal*, 15(3), 112-145.
- Lara, J. A., Aljawarneh, S., & Pamplona, S. (2020). Special issue on the current trends in E-learning Assessment. *Journal of Computing in Higher Education*, 32, 1–8.
- Lin, C., & Zheng, B. (2015). Teaching practices and teacher perceptions in online world language courses. *Journal of Online Learning Research*, 1(3), 275-304.
- Lizcano, D., Lara, J. A., White, B., et al. (2020). Blockchain-based approach to create a model of trust in open and ubiquitous higher education. *Journal of Computing in Higher Education*, 32, 109–134.
- Maatuk, A. M., Elberkawi, E. K., Aljawarneh, S., Rashaideh, H., & Alharbi, H. (2022). The COVID-19 pandemic and E-learning: challenges and opportunities from the perspective of students and instructors. *Journal of Computing in Higher Education*, 34(1), 21-38.

- McAlister, M., Dunn, J., & Quinn, L. (2005). Student teachers' attitudes to and use of computers to teach mathematics in the primary classroom. *Technology, Pedagogy and Education, 14*(1), 77-105.
- McConnell, D. (2006) *E-learning groups and communities*, Open University Press, Maidenhead.
- Mollaei, F., & Riasati, M. J. (2013). Teachers' perceptions of using technology in teaching EFL. *International Journal of Applied Linguistics and English Literature, 2*(1), 13-22.
- Ms, P., & Toro, U. (2013). A review of literature on knowledge management using ICT. *Higher Education., 4*(1), 62–67.
- Nikolopoulou, K. (2018). Mobile learning usage and acceptance: perceptions of secondary school students. *Journal of Computers in Education, 5*(4), 499-519.
- Niu, L., Wang, X., Wallace, M. P., Pang, H., & Xu, Y. (2022). Digital learning of English as a foreign language among university students: How are approaches to learning linked to digital competence and technostress? *Journal of Computer Assisted Learning, 4*(2), 121-138.
- Njenga, J. K., & Fourie, L. C. H. (2010). The myths about e learning in higher education. *British journal of educational technology, 41*(2), 199-212.
- Ocak, M. A., & Akdemir, O. (2008). An Investigation of Primary School Science Teachers' Use of Computer Applications. *Turkish Online Journal of Educational Technology-TOJET, 7*(4), 54-60.
- Pi-Hua, T. (2006) Bridging pedagogy and technology: User evaluation of pronunciation-oriented CALL software. *Australasian Journal of Educational Technology, 22*(3), 375–397.
- Pourhosein Gilakjani, D. (2018). Teaching pronunciation of English with computer technology: A qualitative study. *International Journal of Research in English Education, 3*(2), 94-114.
- Sadeghi, B., Rahmany, R., & Doosti, E. (2014). L2 teachers' reasons and perceptions for using or not using computer mediated communication tools in their classroom. *Journal of Language Teaching and Research, 5*(3), 663.
- Shi, J., & Fan, L. (2021). Investigating teachers' and students' perceptions of online English learning in a maritime context in China. *SAGE Open, 11*(3), 1-17.
- Slimp, M., & Bartels, R. (2019). *How the Internet of Things is changing our colleges, our classrooms, and our students*. London, UK: Rowman and Littlefield.
- Sorensen, E. (2009). *The materiality of learning: Technology and knowledge in educational practice*. Cambridge University Press.
- Wang, Y. S. (2003). Assessment of learner satisfaction with asynchronous electronic learning systems. *Information & Management, 41*(1), 75-86.
- Wang, X., & Reeves, D. S. (2003, October). Robust correlation of encrypted attack traffic through stepping stones by manipulation of interpacket delays. In *Proceedings of the 10th ACM conference on Computer and communications security* (pp. 20-29).
- Wolfinger, S. (2016). *An exploratory case study of middle school student academic achievement in a fully online virtual school*. Drexel University.
- Xie, H., Zou, D., Zhang, R., Wang, M., & Kwan, R. (2019). Personalized word learning for university students: a profile-based method for e-learning systems. *Journal of computing in Higher education, 31*(2), 273-289.
- Vygotsky, L. S. (1979). Consciousness as a problem in the psychology of behavior. *Soviet psychology, 17*(4), 3-35.
- Zhang, W. Y., Perris, K., & Yeung, L. (2005). Online tutorial support in open and distance learning: Students' perceptions. *British Journal of Educational Technology, 36*(5), 789-804.