Teachers' Experiences of Implementing the English Language Curriculum in Virtual Learning Environments: a phenomenological study in iranian lower secondary schools

Rahmat-Allah Khosravi✉ 1 (iD) | **Javad Hatami**2 (iD) | **Saeedeh Mohammadi**3 (iD) | **Nazanin Ghasemi**4 (iD)

1. Corresponding Author, Assistant Professor, Department of Educational Sciences, Farhangian University, Tehran, Iran. E-mail: khosravi1397@cfu.ac.ir

2. Professor, Department of Educational Sciences, Tarbiat Modares University, Tehran, Iran. E-mail: j.hatami@modares.ac.ir

3. Assistant Professor, Department of Teaching English as a Foreign Language, Farhangian University, Tehran, Iran. E-mail: s.mohammadi@cfu.ac.ir

4. Ph.D. Candidate of Curriculum Studies, Tehran University, Tehran, Iran. E-mail: nazanin.ghasemi79@ut.ac.ir

Article Info	ABSTRACT
Article type: Research Article **Article history:** Received 03 September 2025 Received in revised form 03 October 2025 Accepted 20 December 2025 Published online 20 January 2026 **Keywords**: English Language Teachers, Curriculum, Virtual Learning Environments, Teaching, Teachers' Experiences	This study examined teachers' experiences of implementing the English language curriculum in virtual learning environments in Iranian lower secondary schools. A qualitative approach was adopted in this study using a phenomenological research strategy. This study was carried out with English language teachers working in lower secondary schools in Zanjan Province. A total of twelve participants were recruited through purposive snowball sampling. Data were collected via semi-structured interviews and subsequently analyzed using thematic analysis. To ensure the study's validity, peer debriefing and participant feedback were employed, while reliability was established through Cohen's kappa coefficient. The findings revealed a comprehensive categorization of teachers' experiences, comprising 143 basic themes, seven organizing themes, and one overarching theme. These organizing themes encompassed teachers' mental, attitudinal, psychological, and technological preparation; the status of educational platforms; the status of educational media, materials, and learning resources; the status of learning activities; the status of teaching strategies; the status of evaluation strategies; and finally, the status of teachers' interactions. This study confirms that Iranian EFL teachers have made notable progress in virtual education despite various challenges. A contextually adapted blended approach has proven to be effective, and the findings may inform similar educational contexts when accounting for teachers' background variables.

Intruduction

The rapid development of information and communication technology has significantly impacted education, leading to a shift from traditional methods to distance education (Estaji & Qiasvand, 2022; Kamal et al., 2021). Virtual learning, which encompasses concepts such as e-learning and online and offline learning (Wu, 2021), involves teachers and learners separated by space and sometimes time, utilizing technology-based programs (Gikandi, et al., 2011; Moore, et al., 2011; Tzivinikou et al., 2020). Virtual learning utilizes multimedia technologies, digital platforms, and the internet to improve the quality of learning and facilitate access to resources and services (Deperlioglu & Kose, 2010; Holmes et al., 2019).

Virtual education is classified into synchronous, asynchronous, and hybrid types (Perveen, 2016). It has gained widespread recognition as a fundamental component in many educational institutions around the world, even before the emergency conditions of the Covid-19 pandemic (Tzivinko et al., 2020). According to Deng (2022), virtual education has five basic qualities that have made it popular, including openness, flexibility, intermediation, and manageability. It has been used in various contexts, including English language learning, to improve communication, reduce anxiety, and enhance motivation (Yang & Chen, 2007). However, challenges such as internet connectivity, evaluating students' learning, and presenting and clarifying content persist (Evans, 2020).

Many scholars have emphasized the use of virtual education under various circumstances. For instance, Wang and Lee (2021) suggested that technological advancements and the extensive use of computer capabilities provide an opportunity for teachers to incorporate multimedia in teaching English. Multimedia, due to its unique features such as combining different media and increasing learners' access to learning resources, improves learners' English language skills, especially vocabulary learning skills. In addition, it can enhance students' speaking (Shin et al., 2021), writing (Cong-Lem, 2018), and classroom interaction skills (Cai, 2021). Moreover, virtual education provides more freedom and equipment to use, discuss and converse, clarify content, and progress according to curriculum goals (Agustina & Cahyono, 2017). Virtual education is thus considered of great importance because of the facilities and opportunities it provides students to learn in EFL curricula. Furthermore, it can be a suitable alternative to face-to-face teaching when unprecedented events such as pandemics, pollution, or inclement weather occur. Such events prompt teachers to engage in strategic planning and develop teaching methods by relying on technology (Budianto et al., 2023; Schunk, 2016).

As the current generation of learners is well-versed in technology, it is impossible for these learners to imagine learning experiences without technology. Therefore, it is necessary for many teachers, including English language teachers, to develop their professional skills in the field (Kohnke & Moorhouse, 2022) because they gain valuable experience from virtual teaching, especially in emergency situations. In general, virtual education can bring

achievements to teachers and learners and improve the quality of their teaching and learning process.

As previously mentioned, virtual education was widely used in many leading educational systems before unexpected situations such as the Covid-19 pandemic emerged. However, it is noteworthy that in Iran's educational system, teaching and learning processes in schools are primarily conducted face-to-face. The emergence of the Covid-19 epidemic in Iran created unique circumstances in which face-to-face teaching was replaced by virtual education to observe social distancing and preserve people's health (Khosravi & Nezami, 2022). Consequently, a significant portion of teaching and learning in schools was virtually conducted, and after the peak of the crisis, the processes returned to the previous approach.

Numerous studies have investigated teachers' experiences with virtual education, particularly in emergency situations, in various educational contexts, including English language learning, which indicates the importance and necessity of the subject (e.g., Chueng, 2021; Chung, et al., 2020; Khreisat, 2022; Li, 2022; Lie et al., 2020; Lukas & Yunus, 2021; Wang et al., 2023; Yan & Wang, 2022; Shiu, 2024; Fouche & Moodley, 2022). The study also revealed that English teachers' teaching abilities do not predict their understanding of the importance of online learning. Chung (2021) found that factors affecting the integration of technology include teachers' beliefs about pedagogy and contextual factors of teaching and learning. The results also showed that, despite the ease of using the synchronous online tools to transfer content, little opportunity was provided for student interaction and evaluating the quality of their learning. Using a mixed-method approach, Li (2022) found that teachers acknowledged the vital role of information and communication technology in the teaching process and were fully prepared to teach online, preferring blended learning over fully online learning.

Shiu (2024) reported that English language teachers encountered a range of challenges during the abrupt transition to online teaching. These challenges included limited technological infrastructure, insufficient training and institutional support, difficulties in classroom management, inadequate Technological Pedagogical and Content Knowledge (TPACK), students' lack of readiness, and insufficient parental involvement. Despite these barriers, teachers also recognized opportunities for professional development. They reported developing more positive attitudes toward technology, engaging in collaborative learning with colleagues, and experimenting with innovative pedagogical approaches, such as task-based and project-based learning, which fostered greater student interaction and autonomy. Similarly, Fouché and Moodley (2022) concluded that the experiences of foreign English language teachers in China were predominantly negative and marked by significant difficulties. Most participants reported feeling unprepared for online instruction and described heightened levels of anxiety and apprehension, except in cases where teachers had prior experience with digital teaching platforms. The absence of formal training and institutional support, recurrent technical issues,

limited access to educational resources, and language barriers were identified as the primary obstacles these teachers encountered.

Kusuma (2020) conducted a phenomenological study by interviewing eight teachers who taught English online in rural areas. The study found that teachers were prepared for online teaching during the Covid-19 emergency due to their familiarity with educational technology. However, they faced challenges such as the time-consuming preparation of online learning activities, insufficient access to the internet for teachers and students, lack of access to technology devices for some students, and lack of student motivation. Saputra et al. (2022) conducted a survey study that revealed challenges faced by language teachers in four areas: using technology, teaching English online, evaluating student learning, and challenges related to the students themselves. Challenges related to using technology included a lack of training in how to use educational platforms and disruptions in internet connection. Challenges related to teaching included the time-consuming nature of organizing online learning activities and teachers' inability to give oral presentations. Challenges related to learning assessment were mainly related to the students' insufficient technological ability to perform learning tasks. Finally, challenges related to students concerned their motivation to learn.

Several studies have investigated teachers' experiences with online education in Iran, including English language teaching (e.g., Badrkhani, 2021; Khosravi & Nezami, 2022; Nazari et al., 2023). For example, Khosravi & Nezami (2022) conducted a phenomenological study in Iran and analyzed the interactions of elementary school teachers with themselves, students, colleagues, and parents during the Covid-19 period. The study found that despite challenges in the teaching-learning process, teachers tried to increase the amount and quality of their interactions, with interactions between teachers and colleagues contributing less than interactions with themselves, students, and parents. Badrkhani (2021) conducted a survey of Iranian English teachers' design knowledge for online education and found that these teachers are in the preliminary stage of distance education and go through the difficult and complicated stages of online education. Similarly, Nazari et al. (2023) studied EFL teachers' coping strategies with virtual education during the Covid-19 pandemic and found that teachers' coping strategies positively and significantly predicted their work engagement. However, teachers' work engagement did not predict their coping strategies with virtual education, and their apprehension was influenced by their coping strategies with virtual education.

Overall, given the emergency conditions caused by the Covid-19 epidemic, virtual teaching has become the primary mode of instruction in Iranian schools. However, teachers were not adequately prepared for virtual teaching and had to quickly adapt to new and unforeseen conditions (Amin & Sundari, 2020; Gooran et al., 2022). In most cases, teachers use virtual teaching methods similar to their face-to-face counterparts, without making significant changes to curriculum content, teaching strategies, and evaluation methods. However, in crises,

educational systems should engage in rethinking, restructuring, and reorganizing to ensure effective and successful virtual teaching and learning (Mishra et al., 2020).

The acceptance and successful implementation of teaching with technology depend on various factors, some within the teacher's responsibility, such as TPACK and attitudes towards virtual teaching, and others beyond it, like the structure of the educational institution and cost of access to technological facilities (Antwi-Boampong, 2020; Jiang, 2022; Sangeeta & Tandon, 2021). Cheng (2021) identified four key elements that can affect teachers' perceptions of virtual teaching and learning: beliefs related to pedagogy, virtual teaching experience during professional practice, cultural and environmental factors, and teachers' expectations and perceptions of this virtual teaching-learning process. Berge (2008) posited that teachers play a role in virtual education in four critical areas: educational, managerial, social, and technical. However, EFL teachers are not deeply familiar with virtual education processes because virtual teaching and learning have received little attention in pre-service teacher training and in-service courses.

Accordingly, given the research problem in focus, this study aimed to investigate Iranian teachers' experiences of implementing the English language curriculum in lower secondary schools during the Covid-19 pandemic era. The research question guiding this study is as follows:

- What are the dimensions and characteristics of Iranian teachers' experiences with the virtual implementation of the English language curriculum in lower secondary schools?

In light of the prior discussion, the conceptual model of the research was formulated and is displayed in Figure 1.
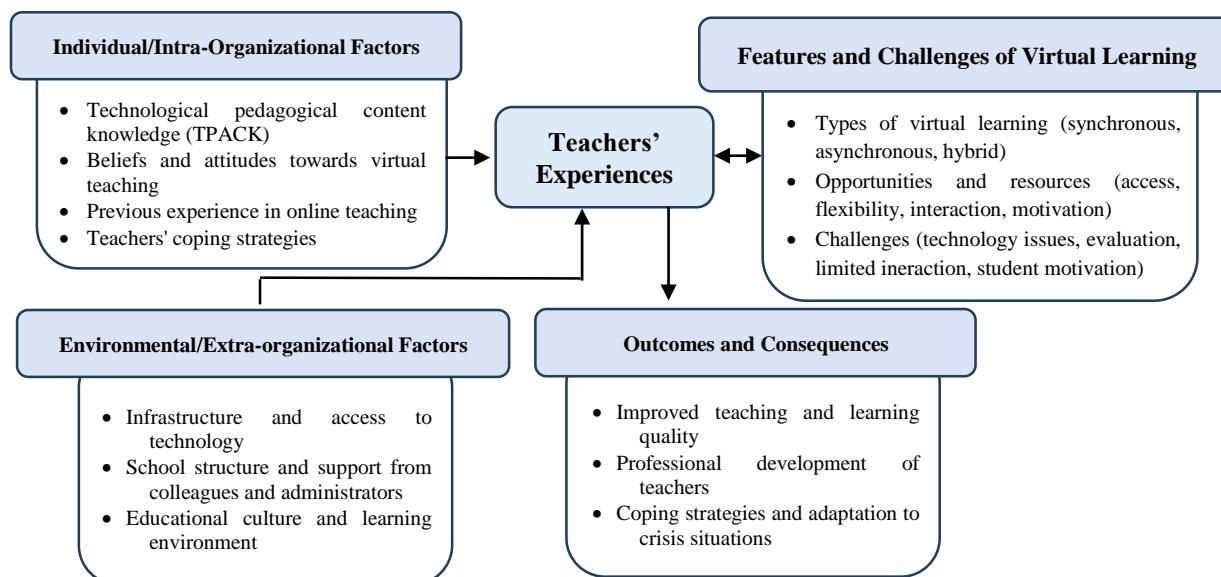

Individual/Intra-Organizational Factors
- Technological pedagogical content knowledge (TPACK)
- Beliefs and attitudes towards virtual teaching
- Previous experience in online teaching
- Teachers' coping strategies

Teachers' Experiences

Features and Challenges of Virtual Learning
- Types of virtual learning (synchronous, asynchronous, hybrid)
- Opportunities and resources (access, flexibility, interaction, motivation)
- Challenges (technology issues, evaluation, limited ineraction, student motivation)

Environmental/Extra-organizational Factors
- Infrastructure and access to technology
- School structure and support from colleagues and administrators
- Educational culture and learning environment

Outcomes and Consequences
- Improved teaching and learning quality
- Professional development of teachers
- Coping strategies and adaptation to crisis situations

Figure 1. *Conceptual model of teachers' experiences in implementing the English language curriculum in virtual learning environments*

Research methodology

The current study was conducted using a qualitative approach and phenomenological strategy. The phenomenological strategy adopted in this study specifically attends to two essential dimensions: description and interpretation. In the data collection phase, particular care was taken to capture teachers lived experiences of implementing the English curriculum in virtual learning environments as directly as possible, without the imposition of researchers' prior assumptions or biases. In contrast, the discussion and conclusion sections employ a reflective and contemplative stance, emphasizing meaning-making, in-depth analysis, and interpretation of the data in order to identify the challenges and opportunities associated with implementing the English curriculum within virtual learning environments.

Semi-structured interviews were used to collect data. The research population comprised English language teachers from lower secondary schools in Zanjan Province, selected through purposeful snowball sampling. In line with the phenomenological orientation of this study, participants were included if they voluntarily provided informed consent, had reliable internet access to support sustained interaction, possessed teaching experience beyond the novice level, had prior engagement in teaching English within virtual learning environments, and demonstrated the capacity to clearly articulate and reflect on their lived experiences. Exclusion criteria applied to participants who chose to withdraw from the study, expressed unwillingness to continue, or faced technical or time-related constraints that limited their ability to provide rich and sustained accounts of their experiences. A total of twelve participants were recruited and interviewed via Google Meet. Each interview lasted approximately 90 minutes. Table 1 summarizes the participants' characteristics. Data collection proceeded until saturation of data and meanings was reached. In other words, after twelve interviews, the information provided by participants became repetitive, and no new themes or meanings emerged.

Table 1. *Characteristics of Research Participants*

Participant (number/code)	Years of Teaching experience (up to 2023)	Educational Distdrict	Field of study	Academic degree
1	23	District 1	TEFL	BA
2	30	District 2	TEFL	BA
3	29	District 2	TEFL	BA
4	17	District 2	TEFL	BA
5	18	Tarom	TEFL	PhD
6	20	District 1	TEFL	MA
7	18	Khodabandeh	TEFL	MA
8	19	Sojasrood	TEFL	MA
9	17	Abhar	TEFL	MA
10	15	Bezinehrood	TEFL	MA
11	22	District 2	TEFL	MA
12	23	Khorramdarreh	TEFL	BA

The interviews were recorded and implemented with permission from the interviewees. Qualitative data were analyzed using Braun and Clarke's (2006) thematic analysis. The procedure involved six systematic steps: familiarization with the data, generation of initial codes, searching for potential themes, reviewing the identified themes, defining and naming the themes, and, finally, producing the report. The validity of the research was ensured by peer debriefing and information retrieval by participants. Peer debriefing involved a discussion session with participants experienced in qualitative research to assess the accuracy and quality of data collection and analysis. Most participants expressed satisfaction with the process.

The reliability of the research was evaluated using Cohen's kappa method. Two interviews were coded by two independent coders outside the research, and the basic and organizing themes were derived from the codes. Cohen's formula was used to evaluate the degree of agreement between the coders, resulting in an 82% agreement coefficient and confirming the stability of the answers.

Research findings

This phenomenological study investigated English language teachers' experiences of curriculum implementation in virtual learning environments in Iranian lower secondary schools. From the interview data, 902 initial codes—including duplicate entries—were identified and subsequently refined into 143 basic themes, seven organizing themes, and one overarching theme. Table 2 displays the frequency and percentage of propositions within each organizing theme.

Table 2. *Frequency and Percentage of Codes and Organizing Themes Extracted from Teachers' Experiences of Virtual Implementation of EFL Curriculum*

Overarching theme	Organizing themes	Frequency of initial codes	Percentage
	Teachers' mental, attitudinal, psychological, and technological preparation	168	18.62
Teachers' experiences of virtual implementation of EFL curriculum[1]	The status of educational platform (SHAD)	184	20.39
	The status of educational media, materials, and learning resources	165	18.29
	The status of learning activities prepared by teachers	91	10.08
	The status of teaching strategies	66	7.31
	The status of evaluation strategies	108	11.97
	The status of teachers' interactions	120	13.30
Sum	**7**	**902**	**100**

---

[1] The overarching theme is not mentioned in the following tables to avoid repetition.

Table 2 displays the frequency and percentage of propositions within each organizing theme, with the status of the SHAD program receiving the highest percentage of statements and the status of teaching strategies used by teachers receiving the lowest. The data obtained from the interviews indicated significant experience related to the virtual implementation of the EFL curriculum. In the following, explanations and excerpts of the interviewees' answers about each of the dimensions are presented.

Organizing theme 1: Teachers' mental, attitudinal, psychological, and technological preparation

The first organizing theme, teachers' mental, attitudinal, psychological, and technological preparation, comprised 168 initial codes, which were combined into 27 basic themes and one organizing theme. Table 3 provides the details of these themes.

Table 3. *The Status of Teachers' Preparation*

Organizing theme	Basic themes	Frequency of initial codes	Participant number
	Shock and confusion at the start of virtual education	9	1,2,4,5,6,7,8,9,10
	Insufficient background about online teaching and learning	12	1,2,3,4,5,6,7,8,9,10,11,12
	Self-instructional familiarization with online teaching and learning	8	1,2,3,8,9,10,11,12
	Attention to new solutions in the new educational situation	8	3,4,5,6,7, 8,10,11,12
	Gradual awareness of the importance and place of technology in education	7	1,2,3,4,6,7,8
Teachers' mental, attitudinal, psychological, and technological preparation	The initial resistance of teachers and students to the virtualization of teaching and learning	12	1,2,3,4,5,6,7,8,9,10,11,12
	Negative attitude towards SHAD program and preference for WhatsApp and Telegram	3	1,4,6
	Improved teacher preparation over time	8	1,2,3,4,6,7,8,11
	Gradual recognition of virtual education	7	1,2,3,4,7,8,9
	Decreased learning expectations compared to face-to-face teaching	2	2,7
	Concerns about appropriate methods for virtual teaching	4	3,4,6,10
	Concerns about producing suitable electronic content	7	1,2,3,5,6,9,11
	Worry about insufficient recognition of students, especially new students	5	1,2,3,5,7
	Worry about lack of proper communication with students, especially new students	10	1,2,3,4,5,7,8,10,11,12

Concerns about the lack of psychological support from the Department of Education	5	1,2,6,7,8
Worry about weaknesses in soft and hard infrastructures of virtual education	5	2,4,7,8,9
Concerns about falling behind on content and time budgets	5	1,3,4,7,11
Concerns about interpersonal feedback	7	1,2,3,6,7,11,12
Concerns about insufficient student participation in teaching and learning	4	1,4,6,9
Worry about students' homework being done by others	3	1,5,9
Concerns about transfer of learning given the large number of students	6	1,2,3,5,6,10
Concerns of parents and teachers regarding the unsafe environment of Telegram and WhatsApp for students	4	2,3,5,9
Concerns about some students lacking access to the internet and technology due to financial problems	10	1,2,4,5,7,8,9,10,11,12
Worry about students' academic, behavioral, and familial problems	3	2,3,6
Worry about non-specialist involvement and supervision of parents in the learning process	4	5,6,7,11
Concerns about meeting different expectations of parents, school, and education	5	1,2,5,6,9
Worry about students' sedentary lifestyle due to not attending school	5	3,4,7,8,10
Sum	**27**	**168**

As shown in Table 3, teachers' experiences mainly indicated that they felt confused and uncertain at the beginning of virtual education due to the sudden shift from traditional teaching methods to online platforms. Through trial and error, they gradually prepared themselves for new conditions. For example, one interviewee stated,

> Initially, both teachers and students resisted virtual education, but the situation became widely accepted over time. (P2[1]).

In addition, teachers' experiences indicated concerns about using the platform, content, processes, methods, and efficient online teaching tools. Another participant said in this regard:

---

[1] This refers to the Number of Participant in the study used for the purpose of anonymity.

> I was worried if I could have appropriate methods for language teaching on this platform that replaced the entire school and classroom space considering the limited time of online classes (P4).

Besides, several concerns were raised about proper interaction with students and parents, lack of access to the internet and phones, and lack of proper student activity in the teaching-learning process. One interviewee said,

> Some students had problems with their phones and the internet. They did not interact with their friends. Some of them were weak in language lessons. I was worried that my educational materials would have little effect in the limited class time and I could not manage them well (P5).

Similarly, the possibility of being affected by the Covid-19 virus has been another important issue that has caused more stress. For example, one participant mentioned that,

> At the beginning, I was very stressed about Corona. I was even sensitive to my laptop. But gradually I became more knowledgeable about the virus and my stress decreased (P6).

Organizing theme 2: The status of educational platform (SHAD program)
Regarding the second dimension, 184 initial codes were extracted from the interviewees' responses, which were later combined into 22 basic themes and one organizing theme with two subcategories. The details of these themes are presented in Table 4.

Table 4. *The Status of Educational Platform*

Organizing theme	Subcategories	Basic themes	Frequency of initial codes	Participant number
The status of educational platform	Possibilities and opportunities	Possibility of access to education due to free student internet	6	1,2,4,5,7,9,10
		Possibility to install on the phone without the need for a computer	6	2,3,4,6,9,11
		Possibility of sending voice, image, and video, and making video calls with students	5	1,2,6,7,8
		Possibility of asking and answering questions	6	2,4,6,7,8,12
		Possibility of grouping students and better management of class events	8	1,3,5,6,7,9,1,12
		Possibility of using attendance bots and polls	9	1,2,3,4,5,6,7,9,10
		Possibility of students interacting through chatting and sending voice messages	8	1,2,3,4,5,9,10,12

	Possibility of holding live and interactive classes	7	*2,4,5,6,10,11,12*
	Possibility of saving educational content for later use	9	*1,2,3,5,6,9,10,11,12*
	Safe information exchange between students and teachers	10	*1,2,3,4,5,6,9,10,11,12*
	Creating an atmosphere similar to a real school and classroom	11	*1,2,3,4,5,6,7,8,10,11,12*
	Possibility of using learning resources and SHAD educational channels	7	*2,3,4,5,6,9,10*
	Ability to communicate with students and track their learning assignments outside of school hours	6	*1,2,5,7,8,10*
	One-sidedness of live teaching in SHAD	11	*1,2,3,4,5,6,7,9,10,11,12*
	Negative effects due to the slow speed of the program	7	*3,4,5,7,8,10,11*
	Lack of electronic folder to store students' learning activities	8	*1,2,4,5,6,7,9,10*
	Absence of a desktop version and inefficiency of the web version	12	*1,2,3,4,5,6,7,8,9,10,11,12*
Limitations	Insufficient and varied interactive opportunities due to the slow speed of SHAD	10	*1,2,4,6,7,8,9,10,11,12*
	Impossibility of two-way visual communication between teachers and students	12	*1,2,3,4,5,6,7,8,9,10,11,12*
	Inapplicability of the activity and task design bot	9	*1,2,4,5,6,7,9,10,11*
	Slow rate of uploading and downloading materials due to limited capacity of SHAD	10	*1,2,3,4,5,6,7,8,11,12*
	Possibility of sending and receiving only small files in SHAD	7	*1,4,6,7,9,10,12*
Sum		*22*	*184*

Table 4 shows that the status of the educational platform used by English teachers can be divided into two subcategories: possibilities and limitations. The possibilities and opportunities of the platform included features such as the ability to send voice and images, classify materials, hold question-and-answer sessions, conduct polls, and live broadcast lessons. For example, one interviewee stated that they found the platform's voice and image capabilities particularly useful for teaching language skills. It was just a network that was dedicated to the teacher and the students, and it gave me the feeling of a real school and class (P6).

One subject also said:

> I used the same possibility of presence and absence for class surveys, tests, and quick assessments, and I could put the evaluation questions in the saved messages the previous day to send to the class during teaching (P9).

The second subcategory of emerging themes pertains to the limitations of the educational platform from the perspective of English teachers. The teachers identified issues such as the lack of face-to-face and efficient interaction with students, difficulty in downloading and uploading materials, ineffective management of the platform, and challenges in grouping students. These limitations have been reported to negatively affect the quality of virtual teaching and learning. For example, one interviewee said, only one student could activate his camera in SHAD Live, and other students could not participate in interactive voice messaging, they only chatted, and the other students also said that it was continuously connecting and disconnecting (P1).

Or another participant stated, We encountered traffic and internet problems. We had to send files or ask students for homework when the internet traffic load was low (P12).

Organizing theme 3: The status of educational media, materials, and learning resources

In the third dimension, 165 initial codes, including repeated codes were obtained from interviewees' responses. Furthermore, these codes were converted into 18 basic themes and one organizing theme. Table 5 presents details of this category.

Table 5. *The Status of Educational Media, Learning Materials, and Resources*

Organizing theme	Basic themes	Frequency of initial codes	Participant number
The status of educational media, materials, and learning resources	Educational books and aids	*11*	*1,2,3,4,5,6,7,8,10,11,12*
	Images collected from internet sources	*9*	*1,2,3,4,6,7,8,9,10*
	Educational resources and content prepared by other colleagues	*9*	*1,3,4,5,6,7,10,11,12*
	Available worksheets	*7*	*1,3,4,6,7,9*
	Ready-made audio-books, audio files of poetry, conversation, story and short text	*12*	*1,2,3,4,5,6,7,8,9,10,11,12*
	Interesting internet videos and clips	*11*	*1,2,3,4,5,6,7,8,9,11,12*
	Educational booklets prepared by the teacher himself	*5*	*2,4,6,8,10*
	Teacher's own audio and video files inspired by ready-made teaching videos and files	*12*	*1,2,3,4,5,6,7,8,9,10,11,12*
	English language teaching websites and links	*8*	*1,2,3,4,5,6,8,11*
	Related and available Word, PDF and PowerPoint files	*11*	*1,2,3,4,5,6,7,8,9,10,12*

Teacher's audio explanations and recorded voices to provide feedback to students	*8*	*2,4,5,6,7,8,9,11*
Television trainings of the Education Network	*8*	*1,2,3,5,6,7,8,9*
Learning materials produced by educational groups in the province and region	*11*	*1,2,3,4,5,6,7,8,9,10,11*
Learning resources available on social networks (e.g., Telegram channels, Instagram pages, etc.)	*9*	*2,4,5,6,8,9,10,11,12*
A collection of learning resources available in Shad Program	*9*	*1,2,3,5,6,7,8,9,11*
Reference books such as dictionaries in specialized fields	*7*	*2,3,4,6,7,8,10*
Events such as seminars, workshops, and educational webinars	*10*	*1,2,3,4,6,7,8,9,11,12*
Programs like Camtasia, Kine-Master, In-Shot, etc. in making clips and movies	*8*	*2,3,4,5,6,7,9,10*
Sum **18**		*165*

The topics listed in Table 5 indicate that teachers mainly used media like books, worksheets, audio and video files, pamphlets authored by the teacher or other colleagues, etc. for teaching. Another participant said,

> I used any media, mostly my books and explanations, but I produced the largest volume of media because the students did not like the files made by others (P11).

The interviewee (4) also said that,

> For the English comprehension section, I sent worksheets to the group and then sent questions to the group. The students would take photos after answering and send them to me (P4).

Furthermore, as the fundamental themes in Table 4 reveal, English teachers have relied on various resources to support their learning in virtual teaching and learning. These resources included reference books, learning materials provided by educational groups in the provincial and regional levels, seminars, and educational workshops. One interviewee stated,

> I mostly used telegram channels, dictionary books, and educational groups in the province and district, but I also asked other colleagues and shared content and tools (P10).

Organizing theme 4: The status of learning activities prepared by the teachers
In the fourth dimension, 91 initial codes, including duplicate codes, were derived from the interviews. In the next steps, these codes were converted into 20 basic themes and one organizing theme. The details of these themes are listed in Table 6.

Table 6. *The Status of the Learning Activities*

Organizing theme	Basic themes	Frequency of initial codes	Participant number
The status of learning activities	Using workbook exercises to strengthen writing and reading skills	8	1,2,3,5,6,7,8,10
	Using mechanical learning activities such as repetition, practice, and recitation	7	2,3,4,6,7,10,11
	Using communicative learning activities such as role playing and mixed conversation	5	1,2,3,6,11
	Using activities based on creative writing such as story-making, paragraph writing and essay writing, …	8	2,3,5,7,8,9,11,12
	Relative attention to the level of students and their needs and favourite subjects in the preparation of activities	7	1,2,3,5,6,8,10
	Not giving multiple assignments to each person in the class	5	1,3,4,6,7
	Request to implement the transcripts of audio files in listening skill exercises	3	1,5,9
	Using challenging and engaging individual and group assignments as needed	3	3,6,11
	Using games for spelling learning activities	2	2,8
	Using learning activities based on images to strengthen students' speaking skills	5	2,4,5,6,8
	Trying to use learning activities based on participation and dialogue	7	1,2,4,6,8,11,12
	Attention to educational justice in preparing learning activities for all students	3	2,4,7
	Using text files with blank spaces in learning activities related to correct spelling	2	1,4
	The complexity and time-consuming follow-up of learning assignments	5	2,4,6,9,10
	Failure to check all the learning tasks completely and check examples of them	4	2,5,8,10
	Failure to submit assignments on time by students and creating disorder in teachers' personal lives	5	2,3,5,7,11
	Preparing learning activities based on the participation of family members	4	1,2,5,9
	Provision of limited group learning activities outside the classroom	1	9
	Emphasis on doing learning activities in the class process due to its reliability	4	2,4,6,8
	Dissatisfaction with learning activities related to writing and reading skills	3	2,5,12
Sum	**20**	**91**	

As shown in Table 6, the status of the learning activities prepared by the teachers in the virtual implementation of the English language curriculum includes factors such as workbook exercises, and activities based on role-playing, games, story-making, fluent reading, communication and engagement, and creative writing, all of which aim to strengthen the four language skills. In this regard, a subject mentioned, I asked the student to read the text of the conversation or reading comprehension fluently and send it to me in the form of a video (P3).

Or another interviewee clarified: I used to tell the students that they should prepare a role-play with anyone in the house, record a video, and send it to me, and many of the parents liked it. I also asked them to record monologues about various topics and send them to me (P11).

In addition, the teachers mainly acknowledged the difficulties of following up on assignments, strengthening English reading and writing skills, and preparing individual activities to meet students' learning styles and group activities.

For instance, a subject mentioned, Since the students could not form groups in SHAD, I put them in groups myself and asked the group leaders to help the weaker students. It was difficult and time-consuming for me to follow all the assignments (P10).

Organizing theme 5: The status of teaching strategies used by teachers

In the fifth dimension, 11 basic themes and one organizing theme were derived out of the combination of 66 initial codes related to the status of teaching strategies. Table 7 presents the details of these themes.

Table 7. *The Status of Teaching Strategies*

Organizing theme	Basic themes	Frequency of initial codes	Participant number
	Using interactive speech strategies in teaching	7	1,3,4,6,8,9,10
The status of teaching strategies	Providing real-time feedback during teaching	5	2,4,7,8,10
	Using the method of brainstorming and connecting the lesson with students' lives	7	1,2,4,5,7, 9,12
	Using question and answer method and participatory-communicative approaches	6	2,4,5,8,9,11
	Using the teacher's assistant in the teaching process	4	2,4,6,8
	Using strong students to help weak ones in the learning process	3	1,5,11
	Teaching by students (learning through teaching)	6	2,4,5,7,8,9
	Applying a flipped classroom approach	9	1,2,4,5,6,8,9,10,11
	Emphasis on eclecticism in teaching	4	2,4,7,9
	Limited interaction between students in English in the teaching process	8	1,3,5,7,8,9,11,12
	Less active communication between students in the teaching and learning process	7	1,3,5,6,8,10,11
Sum	**11**	**66**	

Concerning this dimension, one of the teachers said, I asked the students to study a topic together. I assigned group assignments and used an interactive method. In general, I used different teaching methods based on the topic and content of teaching (P9).

Similarly, another interviewee stated, Regarding the educational content, I used to teach interactively and question and answer, but for some parts like grammar, I used to send videos before the class, but the teaching was mostly in lecture format (P5).

Also, another teacher mentioned: From the beginning, I did not ask the children to teach, but at higher levels, I wanted stronger students to prepare a PowerPoint file and teach to all the students or their teammates (P11).

Organizing theme 6: The status of evaluation strategies of students' learning

In connection with the sixth dimension, 108 initial codes were obtained from the interviews. In further steps of the analysis, these codes were converted into 19 basic themes and one organizing theme. Table 8 represents the themes related to this dimension.

Table 8. *The Status of Evaluation Strategies*

Organizing theme	Basic themes	Frequency of initial codes	Participant number
The status of evaluation strategies of students' learning	Limited use of evaluation bots in the SHAD program	6	1,2,4,6,8,9,10,11
	Evaluation through the review of activities and homework done at home	6	1,2,4,5,7,8
	Using free internet test tools (Google Forms, DijiForms, Quiz 24, etc.) to design questions	9	1,2,3,4,5,7,10,11,12
	Using the evaluation dissolution strategy in the teaching-learning process	8	2,4,5, 7,8,9,10,12
	Using video calls for oral exams	4	2,4,6,7
	Limited use of self-assessment and peer assessment techniques	5	2,4,6,9,10
	Inadequate validity of online test results due to the possibility of cheating	9	2,4,5,6,8,9,10,11,12
	Inconsistency between written test scores and actual performance of students in class	5	1,2,4,7,9
	Difficult and time-consuming correction of exam answer sheets	4	1,3,7,11
	Sending exam question files to students and asking for answer sheets within a certain period of time	8	1,2,4,7,8,9,10,11
	Ignoring the importance of students' learning by the parents and answering their exam questions	5	2,5,6,7,10
	Providing individual and general feedback to students about the quality of their answers to exam questions	7	2,4,5,7,9,11,12

	Basic themes	Frequency	Participant
	Limiting the possibility of participating in the online tests (only once) in order to increase its level of reliability	4	2,4,3,5,8
	Entering the exam with a password to increase the confidence level of the exam	3	3,5,9
	Creating a significant time limit for answering questions to prevent cheating	5	4,8,9,10,12
	Reducing the impact of the final exam in measuring students' learning	6	1,3,6,8,9,10
	Impossibility of proper assessment of writing and reading skills of all students in English due to some limitations	5	4,6,7,9,12
	Evaluation of students' presentation skills in the form of self-filming	4	5,6,7,11
	The difficulty of correcting the answer sheets sent by students due to the poor quality of the image or bad handwriting	5	1,3,6,7,9
Sum	**19**	**108**	

In this dimension, an interviewee said: My most important strategy was to set an evaluation criterion in every homework session that I asked the students to do and to rework and fix the problems based on the weaknesses of the children in the class (P10).

Another subject also stated that, I tried to evaluate indirectly through the interactions and activities of the students in the class and all the meetings and I did not emphasize much on the grade, but I think I was not very successful in this regard (P7).

Also, another subject said that, I tried to set a time for the online exams, reduce the effect of the final exam, and everyone only participating in the exam once, but cheating still happened and it was unavoidable (P9).

Organizing theme 7: The status of teachers' interactions

In the seventh dimension, one organizing theme with three subcategories, and 26 basic themes were obtained out of the combination of 120 initial codes. The details of these themes are given in Table 9**.**

Table 9. *The Status of Teachers' Interactions*

Organizing theme	Subcategories	Basic themes	Frequency of initial codes	Participant number
The status of teachers' interactions		Consultation with colleagues in virtual groups about teaching methods and tools used in teaching English	5	1,3,5,7,8
		Participation in national groups and getting to know the views of colleagues from other provinces	4	2,5,8,9

Interactions with colleagues	Sharing educational content with colleagues in the same field	5	1,4,6,8,10
	Collaborating with colleagues in designing test questions and exploiting their experiences	3	2,5,6
	Overcoming the stress and problems of virtual teaching with the support of other colleagues	7	1,2,5,7,8,10,11
	Cooperation and exchange of ideas with the principal and assistants of the school to gain more knowledge to solve knowledge problems	7	1,3,5,7,8,11,12
	Understanding the possible problems of some students due to the absence of parents at home, lack of internet, etc.	5	2,4,6,8,10
Interactions with students	More communication with students in different dimensions but their low effectiveness	3	2,6,7
	Taking advantage of the survey capacity of the SHAD program in interaction with students	3	4,8,11
	Using art and fun activities to keep students happy	3	2,5,8
	Conducting daily and general dialogues to create intimacy with students	2	1,4
	Interaction with students in order to justify and explain educational points	4	2,5,8,9
	Less seriousness of the teacher in SHAD classes and more intimacy with the students	2	1,6
	Interaction with students, although less effective, to solve their emotional and psychological problems	5	3,6
	Double engagement with disadvantaged students outside of school to help them improve	5	1,5,8,9,12
	Determining specific times outside the class schedule to communicate more with students	3	2,5,8
	Using motivational sentences and encouraging students' positive activities	7	1,2,4,8,9,10, 12
	Interpersonal interaction with the target students to avoid cheating	2	2,6
	The possibility of more and better interaction with parents compared to face-to-face teaching and learning	4	3,5,10,12

Interactions with parents	Double interaction with parents of weaker students in order to guide and track their learning assignments	9	1,2,3,4,5,7,8,10,12
	Explaining students' academic weaknesses, nutritional tips, moral, psychological, and emotional issues to the students' parents	4	2,5,9,10
	Non-use of parents in the teaching process due to the lack of sufficient knowledge and expertise in language lessons	6	1,4,7,8,9,11
	Cultural barriers caused by the involvement of some parents in the teaching process	4	1,2,7,9
	Interaction with parents to handle and continuously monitor students' participation in online classes	9	2,3,4,5, 7,8,9,10,12
	Organizing meetings with parents and teachers in person or virtually, especially at the beginning of the school year to attract their support	4	2,5,8,11
	Taking advantage of the capacity of the principal and deputy of the school in communicating with some parents to solve students' problems	5	4,5,6,8,12
Sum	**26**	**120**	

Cultural barriers and parents' lack of expertise in language lessons were mentioned as the reasons for parents' lack of intervention in the teaching process. For example, an interviewee mentioned that:

> Sometimes the parents did not have a correct understanding of the language lesson and its importance, and they expected high scores from the teacher (P8).

In addition, some of the teachers' experiences indicate their interactions with their colleagues in many cases.
Or another participant stated:

> Our colleagues helped each other a lot, and this cooperation was high among language colleagues. This helped us in overcoming our mental pressure (P2).

Discussion and Conclusion

This study investigated the dimensions and characteristics of teachers' experiences in implementing the English language curriculum within virtual learning environments in lower secondary schools. The findings indicate that virtual English instruction, particularly in emergency contexts, constituted a complex experience for Iranian EFL teachers, encompassing

a range of challenges as well as opportunities. Consistent with the findings of Lukas and Yunus (2021) and Shiu (2024), EFL teachers' limited preparation for online teaching led to resistance toward virtual education and reluctance to recognize it as an official component of the educational process.

As regards *the status of teachers' mental, attitudinal, psychological, and technological preparation*, As regards the status of teachers' mental, attitudinal, psychological, and technological preparation, similar to the findings of Fouche and Moodley (2022), yet contrary to Li's research (2021), teachers in Iran were not prepared for virtual teaching during the emergency situation. This lack of preparedness stemmed from the fact that teachers, including EFL teachers, had been trained for face-to-face teaching prior to the COVID-19 pandemic, and their professional identities had been shaped accordingly.

They were concerned about the quality of students' learning, strategies of teaching English online, materials development, preparation of learning activities, how to interact with students and their parents, and generally everything related to the students' learning processes. However, despite the lack of mental, attitudinal, psychological, and technological preparation, teachers recognized the significance of virtual teaching and learning over time. Besides, as with the results of the research of Nikolopoulou and Kousloglou (2022), Fouche and Moodley (2022), teachers were not fully supported by the school and education system regarding the procedures of virtual instruction. However, they entered the technology-based learning context by relying on their self-learning capacity in the virtual teaching and learning process.

The launch of the SHAD application improved *the status of the educational platform* as one dimension of virtual teaching and learning, providing maximum coverage and free access to students and teachers and eliminating confusion caused by using multiple platforms. The SHAD program created an environment similar to a real school and classroom, making interaction safer for teachers and students and providing easy access to various learning resources. However, as the program was the first official educational virtual platform for school education at the national level, both teachers and students faced various challenges, including insufficient and unstable access to high-speed internet, which made it difficult to download and upload learning content, consistent with the findings of Kusuma (2020) and Lukas & Yunus (2021). Additionally, the SHAD program was not suitable for comprehensive interaction and evaluation of students' learning, similar to the Zoom program, as found by Cheung (2021). These findings indicate that the mere provision of an educational platform, in the absence of reliable technical infrastructure and systematic user support, is insufficient to guarantee an effective teaching–learning process. Moreover, the lack of suitable space and digital resources for the program created obstacles for English teachers, thereby compromising instructional delivery and student engagement. Together, these results underscore the need for coordinated investment in both technological infrastructure and virtual learning environments to realize the intended pedagogical benefits of technology-enhanced programs.

The *status of educational media, learning materials, and resources* used by EFL teachers was a key factor in the effectiveness of virtual teaching and learning. Beyond conventional educational books and teaching aids, teachers utilized a wide range of internet-based resources, including Instagram pages, Telegram channels, and other online platforms. Both ready-made audio files—such as poems, conversations, stories, and audiobooks—and teacher-prepared recordings were incorporated to enhance students' learning, given that language acquisition is inherently interactive and grounded in listening and speaking. Furthermore, teachers actively engaged in professional learning events, such as seminars, workshops, and webinars, and benefited from instructional materials developed by their colleagues.

The *status of learning activities* prepared for students was another aspect of virtual teaching and learning of the English language curriculum in the present study. Some learning activities were similar to those used in face-to-face teaching, such as book exercises and discussion-based activities. However, as found by Kusuma (2020), preparing learning activities for students was time-consuming for EFL teachers. To engage students, teachers designed challenging individual and group assignments, but these assignments were the same for all students. Teachers also made learning activities more interesting by assigning group work as homework, using games in class, and paying attention to students' proficiency level, particularly in different areas of writing skills, such as spelling and sentence construction. This approach to designing engaging and challenging learning activities is consistent with best practices in online and blended learning.

The factor of *teaching strategies* was obtained as another aspect of the virtual implementation of the English language curriculum. Teachers in the present study used collaborative learning strategies, flipped classroom procedures, and interactive lectures, consistent with the findings of Lukas & Yunus (2021) and Khreisat (2022). They also appointed student assistants to manage the class more effectively and provided some students with the opportunity to teach the class. Despite good interactions between the teacher and students, the number of interactions between students was insufficient due to the prevalence of individualized learning culture and lack of cooperative tasks. This underscores the importance of designing learning tasks that deliberately foster collaboration and cooperative learning in virtual teaching and learning contexts.

The *status of evaluation strategies* represented another key consideration in the virtual teaching and learning of the English language curriculum. Consistent with the findings of Lukas & Yunus (2021), evaluating students' learning in online contexts posed significant challenges due to potential cheating and parents' limited understanding of the value of literacy and the depth of learning. To address these challenges, teachers in the present study reduced the weight of final exams and distributed evaluation across the teaching–learning process to more accurately gauge students' progress. They also strengthened the validity of final assessments by implementing measures such as time limits and private passwords for exam sessions.

Furthermore, teachers devoted considerable time to planning and implementing evaluation strategies to provide precise and meaningful feedback to students. Collectively, these actions emphasize the importance of carefully adapting evaluation methods to the constraints and unique characteristics of virtual learning environments to ensure fair and meaningful evaluation.

Finally, the *status of teachers' interactions* was another significant dimension in virtual EFL instruction. As the results indicated, Iranian teachers' interactions with students, parents, and colleagues had undergone significant changes. Similar to the findings of Khosravi and Nezami (2022), teachers established better and more intimate relationships with students and parents, reducing the distance between them and paying special attention to weak students. Teachers also had more interactions with parents to gain knowledge about students from different aspects, although cultural barriers sometimes hindered their involvement in teaching and learning. Moreover, teachers' cooperation with colleagues greatly expanded, and they discussed content, teaching methods, and evaluation methods in the English language curriculum countrywide, resolving the problems caused by virtual teaching and learning to a significant extent. This highlights the importance of fostering collaborative relationships among teachers, parents, and students in virtual teaching and learning contexts.

In conclusion, Iranian EFL teachers in virtual education have made valuable achievements despite the challenges and shortcomings they have faced. Virtual education represents a critical component of contemporary language teaching and has become an essential platform for fostering pedagogical flexibility and innovation. Under normal conditions, combining virtual education with face-to-face teaching and learning in a culturally, socially, educationally, and technologically appropriate platform can yield more meaningful outcomes for learners. The findings of this study may also be extended to other contexts, such as language institutes or university EFL classes, by considering variables such as teachers' academic degree, age, or gender in shaping their perceptions and reflections on virtual education. Overall, this study highlights the importance of sustained research and development in the field of virtual education in EFL contexts.

The novelty of the present study lies in its adoption of a multi-focal perspective, through which a multidimensional account of EFL teachers' experiences in implementing the English language curriculum in virtual learning environments has been constructed. By integrating three academic domains curriculum studies, educational technology, and English language teaching this research reflects an interdisciplinary orientation. Moreover, the data collection and interpretation processes were deliberately informed by a reflective and contemplative stance, aligning with a philosophical approach that values critical reflection.

Nevertheless, the study has certain limitations. It primarily focused on the lived experiences of relatively experienced teachers in urban public schools. The perspectives of novice teachers, part-time or contractual instructors, and those teaching in remote rural areas—who may

encounter greater challenges in terms of professional competencies and access to technological resources—were not examined. Future research should therefore include these groups to provide a more comprehensive understanding of the challenges and opportunities associated with virtual English language curriculum delivery.

Finally, it must be emphasized that the capacity of virtual education as a legitimate mode of education should be acknowledged and actively utilized not only in times of crisis but also as a complementary and sustainable approach under normal circumstances.

Conflict of Interest.

On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

Agustina, E., & Cahyono, B. Y. (2017). Perceptions of Indonesian teachers and students on the use of quipper school as an online platform for extended EFL learning. *Journal of Language Teaching and Research*, 8(4), 794-800. https://doi.org/10.17507/jltr.0804.20

Amin, F., & Sundari, H. (2020). EFL students' preferences on digital platforms during emergency remote teaching: video conference, LMS, or messenger application? *Studies in English Language and Education*, 7(2), 362-378. https://doi.org/10.24815/siele.v7i2.16929

Antwi-Boampong, A. (2020). Towards a faculty blended learning adoption model for higher education. *Education and Information Technologies*, 25(3), 1639-1662. https://doi.org/10.1007/s10639-019-10019-z

Badrkhani, P. (2021). How a catastrophic situation turns into an exceptional opportunity: Covid-19 pandemic in Iran and challenges of online education for new English language educators. *Interactive Learning Environments,* 1-19. https://doi.org/10.1080/10494820.2021.1956545

Berge, Z. L. (2008). Changing instructor's roles in virtual worlds. *Quarterly Review of Distance Education*, 9(4), 407-414.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Budianto, L., Arifani, Y., Wardhono, A., & Poedjiastutie, D. (2023). The TPACK level of in-service EFL teacher online professional training: The perspectives of teachers, students, and trainers. *Journal of Digital Learning in Teacher Education*, 39 (2), 87-101. https://doi.org/21532974.2023.2167024

Cai, Q. Y. (2021). Research on the effect of using online interactive learning resources on the learning outcomes of Chinese L2 adult learners in an intermediate class. *Chinese Language Teaching Methodology and Technology,* 4(2), 58-78. https://doi.org/10.22158/fet.v4n2p85

Cheng, L. (2021). The implications of EFL/ESL teachers' emotions in their professional identity Development. *Frontiers in Psychology*, 12, 1-7. https://doi.org/10.3389/fpsyg.2021.755592

Cheung, A. (2021). Synchronous online teaching, a blessing or a curse? Insights from EFL primary students' interaction during online English lessons. *System,* 100, 1-13. https://doi.org/10.1016/j.system.2021.102566

Chung, E., Subramaniam, G., & Dass, L. C. (2020). Online learning readiness among university students in Malaysia amidst COVID-19. *Asian Journal of University Education (AJUE), 16*(2), 46-58. https://doi.org/10.24191/ajue.v16i2.10294

Cong-Lem, N. (2018). Web-based language learning (WBLL) for enhancing L2 speaking performance: A review. *Advances in Language and Literary Studies, 9*(4), 143-152. https://doi.org/10.7575/aiac.alls.v.9n.4p.143

Deng, Q. (2022). Research on online education behavior and strategy in university. Frontiers *in Psychology*, 13, Article 832. https://doi.org/10.3389/fpsyg.2022.767925

Deperlioglu, O., & Kose, U. (2010). The effectiveness and experiences of blended learning approaches to computer programming education. *Computer Applications in Engineering Education, 21*(2), 328–342. https://doi.org/10.1002/cae.20476

Estaji, M., & Ghiasvand, F. (2022). Teacher assessment identity in motion: the representations in e-portfolios of novice and experienced EFL teachers. *Issues in Language Teaching, 11*(2), 33-66. https://doi.org/10.22054/ilt.2022.70302.741

Evans, C., O'Connor, C. J., Graves, T., Kemp, F., Kennedy, A., Allen, P., Bonnar, G., Reza, A., & Aya, U. (2020). Teaching under lockdown: The experiences of London English teachers. *Changing English: Studies in Culture and Education, 27*(3), 244–254. https://doi.org/10.1080/1358684X.2020.1806956

Fouche, N. V., & Moodley, M. (2022). School's out, but class's on': Experiences of foreign teachers teaching EFL online in China during the COVID-19 lockdown. *Journal of Language Teaching and Learning, Linguistics and Literature*, 10(1), 1–19. https://doi.org/10.24256/ideas.v10i1.2709

Gikandi, J., Morrow, D., & Davis, N. (2011). Online formative assessment in higher education: A review of the literature. *Computers & Education, 57*(4), 2333–2351. https://doi.org/10.1016/10.1016/j.compedu.2011.06.004

Gooran, M., Soleimani, H., Alavi, M., & Jafarigohar, M. (2022). EFL teachers' immunity: a case of online language teaching. *Journal of Multilingual and Multicultural Development*, 1-20. https://doi.org/10.1080/01434632.2022.2012391

Holmes, W., Nguyen, Q., Zhang, J., Mavrikis, M., & Rienties, B. (2019). Learning analytics for learning design in online distance learning. *Distance Education, 40*(3), 309-329. https://doi.org/10.1080/01587919.2019.1637716

Jiang, L. (2022). Factors influencing EFL teachers' implementation of SPOC-based blended learning in higher vocational colleges in China: A study based on grounded theory. *Interactive Learning Environments, 30* (1), 1-21. https://doi.org/10.1080/10494820.2022.2100428

Kamal, M. I., Zubanova, S., Isaeva, A., & Movchun, V. (2021). Distance learning impact on the English language teaching during COVID-19. *Education and Information Technologies, 26*(6), 7307-7319. https://doi.org/10.1007/s10639-021-10588-y

Khosravi, R., & Ghasemi, N. (2022). Student-Teachers' experiences of teaching and learning process during COVID-19 pandemic at Teacher Training University: A phenomenological study. *Journal of Curriculum Studies, 16*(63), 37-68. [In Persian] https://doi.org/20.1001.1.17354986.1400.16.63.2.9

Khosravi, R., & Nezami, M. (2022). Analyzing dimensions and quality of teaching-learning interactions by elementary teachers during the Covid-19 pandemic. *Iranian Journal of Educational Sociology, 5*(3), 1-19. https://doi.org/10.61186/ijes.5.3.95

Khreisat, M. (2022). English Language Learning Strategies during COVID-19 in the Middle East: A Systematic Review. *Arab World English Journal (AWEJ),13* (1), 56-71. https://dx.doi.org/10.24093/awej/vol13no1.4

Kohnke, L., & Moorhouse, B. L. (2022). Facilitating synchronous online language learning through Zoom. *RELC Journal, 53*(1), 296-301. https://doi.org/10.1177/0033688220937235

Kusuma, I. (2022). EFL teachers' online teaching in rural schools during the COVID-19 Pandemic: Stories from Indonesia. *Studies in English Language and Education, 9*(1), 203-221. https://doi.org/10.24815/siele.v9i1.21239

Li, B. (2022). Ready for Online? Exploring EFL Teachers' ICT acceptance and ICT literacy during COVID-19 in Mainland China. *Journal of Educational Computing Research, 60*(1), 196–219. https://doi.org/10.1177/07356331211028934

Lie, A., Tamah, S. M., Gozali, I., Triwidayati, K. R., Utami, S. D., & Jemadi, F. (2020). Secondary school language teachers' online learning engagement during the COVID-I9 pandemic in lndonesia. *Journal of Information Technology Education: Research,* 19, 803-832. https://doi.org/10.28945/4621

Lin, C. H., Zhang, Y., & Zheng, B. (2017). The roles of learning strategies and motivation in online language learning: A structural equation modeling analysis. *Computers and Education,* 113, 75-85. https://doi.org/10.1016/j.compedu.2017.05.014

Lukas, B. A., & Yunus, M. M. (2021). ESL teachers' challenges in implementing E-learning during COVID-19. *International Journal of Learning, Teaching and Educational Research, 20*(2), 330–348. https://doi.org/10.26803/ijlter.20.2.18

Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *The International Journal of Educational Research Open,* 1, 1-8. https://doi.org/10.1016/j.ijedro.2020.100012

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-Learning, online learning, and distance learning environments: Are they the same? *The Internet and higher education, 14*(2), 129-135. https://doi.org/10.1016/j.iheduc.2010.10.001

Nazari, F., Ghanizadeh, A., & Mirzaee, S. (2023). EFL teachers' coping strategies amidst the COVID-19 virtual education and their association with work engagement and teacher apprehension. *Educational Research for Policy and Practice, 22*(1), 1-22. https://doi.org/10.1007/s10671-022-09317-0

Nikolopoulou, K., & Kousloglou, M. (2022). Online teaching in COVID-19 pandemic: secondary school teachers' beliefs on teaching presence and school support. *Education Sciences, 12*(3), 216-231. https://doi.org/10.3390/educsci12030216

Perveen, A. (2016). Synchronous and asynchronous e-language learning: A case study of virtual university of Pakistan. *Open Praxis, 8*(1), 21–39. https://doi.org/10.5944/openpraxis.8.1.212

Sangeeta, & Tandon, U. (2022). Factors influencing adoption of online teaching by school teachers: A study during COVID-19 pandemic. *Public Affairs, 21*(3), 1-11. https://doi.org/10.1002/pa.2503

Saputra, D., Ayudhia, H., & Muswari, R. (2022). Teachers' perceptions of challenges in online learning: Voices from secondary EFL teachers. *JOALL (Journal of Applied Linguistics and Literature), 7*(1), 104-119. https://doi.org/10.18196/jall.71121

Schunk, D.H. (2012). *Learning theories an educational perspective*. Pearson Education, Inc.

Shin, D., Kwon, S. K., & Lee, Y. (2021). The effect of using online language-support resources on L2 writing performance. *Language Testing in Asia, 11*(1), 1-23. https://doi.org/10.1186/s40468-021-00118-2

Shiu, W. H. C. (2024). Teacher learning in Hong Kong: Primary English language teachers' cognitions about online teaching to survive or thrive during COVID-19. *Teachers and Teaching,* 30(7–8), 1097–1125. https://doi.org/10.1080/13540602.2024.2328017

Tandon, U. (2021). Factors influencing adoption of online teaching by school teachers: A study during COVID-19 pandemic. *Public Affairs, 21*(4), 31-39. https://doi.org/10.1002/pa.2503

Tzivinikou, S., Charitaki, G., & Kagkara, D. (2021). Distance Education Attitudes (DEAS) during Covid-19 crisis: Factor structure, reliability and construct validity of the brief DEA scale in Greek-speaking SEND teachers. *Technology, Knowledge and Learning*, 26, 461-479. https://doi.org/10.1007/s10758-021-09518-5

Wang, S., & Lee, C. I. (2021). Multimedia gloss presentation: Learners' preference and the effects on EFL vocabulary learning and reading comprehension. *Frontiers in Psychology*, 11, 1-15. https://doi.org/10.3389/fpsyg.2020.620183

Wang, Y., Pan, Z., & Wang, M. (2023). The moderating effect of participation in online learning activities and perceived importance of online learning on EFL teachers' teaching ability. *Heliyon,* 3(9), 1-12. https://doi.org/10.1016/j.heliyon.2023.e05777

Wu, S. Y. (2021). How teachers conduct online teaching during the COVID-19 pandemic: A case study of Taiwan. *Frontiers in Education*, 6, 1-11. https://doi.org/10.3389/feduc.2021.813795

Yan, C., & Wang, L. (2022). Experienced EFL teachers switching to online teaching: A case study from China. *System,* 105, 1-13. https://doi.org/10.1016/j.system.2021.102575

Yang, S. C., & Chen, Y. J. (2007). Technology-enhanced language learning: A case study. *Computers in Human Behavior*, 23(1), 860-879. https://doi.org/10.1016/j.chb.2004.11.008