

English Instructors' Experiences of Emergency Remote Teaching in Medical Universities during the COVID-19 Pandemic: A Qualitative Study

Malihe Mousavi^{1*}, PhD;  Mavadat Saidi², PhD; Mahdi Mahmodi³, PhD

¹Department of English Language Teaching, Payame Noor University, Tehran, Iran

²Department of English, Shahid Rajaei Teacher Training University, Tehran, Iran

³Department of Educational Sciences and Psychology, Payame Noor University, Tehran, Iran

ABSTRACT

Background: English instructors have faced numerous challenges following the COVID-19 outbreak and the sudden shift from in-person to online instruction. This vogue of alternative teaching practices is presently open to rigorous scrutiny. The current study attempted to shed light on the challenges facing the instructors of English for Academic Purposes (EAP) at medical universities, and their strategies in handling emergency remote teaching during the pandemic.

Methods: A qualitative content analysis was conducted to gather data from self-reflections and semi-structured interviews with 52 EAP instructors working at different Iranian medical universities in the spring and summer of 2020. The contents of the reflections and interviews were coded by the researchers based on the procedures of sequential explanatory strategy, and the major themes were extracted and categorized.

Results: The findings point to the lack of required facilities and infrastructure, inadequate technological literacy, and poor internet quality as the major challenges facing the instructors. It was also revealed that the teachers viewed the enhancement of technological literacy and provision of required facilities as the main priorities in addressing the challenges.

Conclusion: It was found that the EAP instructors had different perceptions of emergency remote teaching and potential solutions to the associated challenges. The findings offer practical recommendations for enhancing English proficiency among medical students. The results also highlight the necessity of offering EAP teacher training courses focused on developing the technological literacy of the instructors. To continue this line of research, a more in-depth study of students' perceptions and experiences of online EAP classes is recommended.

Keywords: COVID-19, English teachers, Online instruction, Reflections, Challenges, Content analysis, Qualitative research

*Corresponding author:

Malihe Mousavi, PhD;
Department of English
Language Teaching, Payame
Noor University, Tehran, Iran
Tel: +98 9128368621

Email:

malihe.mousavi@gmail.com

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Introduction

The global education community has been exposed to significant challenges following the outbreak of the COVID-19 pandemic (1). Most educational institutions around the world were shut down to avoid the spread of the pandemic (2). Hence, the governments were compelled to rearrange their educational programs and substitute the traditional in-person learning with online platforms.

Teaching is, by itself, considered as one of the most demanding and stressful professions, and being a language teacher presents its own unique challenges. The conversion from in-person to online classes during the outbreak has multiplied these challenges, especially for the instructors of English as a Foreign Language (EFL) (1). In fact, EFL teachers assume more complex roles in online sessions compared to face-to-face classrooms. To handle such teaching environments, online EFL teachers are also required to develop their computer literacy (3), which “entails more than general computer literacy” and encompasses access, familiarity, and effortless use of technological devices for foreign language development (4).

With the outbreak of the coronavirus and the sudden shift to online learning, scholars' attention has been drawn to diverse teaching and learning experiences emerging from the new educational procedures. Atmojo and Nugroho (5) investigated EFL teachers' challenges drawing on “written reflections data” in Indonesia. Likewise, Khatoony and Nezhadmehr (6) utilized questionnaires and interviews to investigate EFL teachers' evaluation of the efficiency of online classrooms in language institutes during the coronavirus pandemic, and came up with challenges such as learner demotivation, insufficient materials, and limited funding and support.

As Toquero (7) rightly asserted, this pandemic was a more challenging predicament for the developing countries as “they have rarely transitioned to distant education prior to the crisis” (p.185). A review of the existing literature in the EFL

contexts (8, 9) indicates that teachers had already faced numerous obstacles in using technology even before the emergence of the COVID-19 pandemic in such regions. This calls for specific teacher training courses to improve their computer literacy. This appears to be correspondingly important in EAP courses since the existing literature points to the considerable contribution of technology-based approaches in teaching English to the students of various disciplines (10, 11). On the other hand, the studies in EAP contexts have pointed to instructors' positive dispositions towards CALL while highlighting their inadequate knowledge about the efficient implementation of technology (12, 13). Hence, given the pivotal role of technology-integrated EAP instruction in fulfilling learners' major-specific needs (10), it is deemed necessary to investigate the challenges of EAP instructors in an emergency online teaching context in order to explore the status quo of online EAP teaching practices.

With regard to the upcoming challenges in online education, Iran as a developing country was no exception. The government officially announced the first case of COVID-19 in February 2020, and ordered the nationwide closure of schools and universities to stem the outbreak. Consequently, the teachers were inevitably pushed towards holding synchronous as well as asynchronous e-learning classes.

Evidence shows that Iranian EFL teachers have rushed into teaching online in synchronous mode via platforms such as LMS and Skyroom while using software applications like WhatsApp and Telegram in the asynchronous mode. In such environments, gearing the sources to the requirements of online teaching puts a heavy burden on teachers (8). Looking at the issue from a local perspective and prior to the emergence of this unknown disease, Dashtestani (9) recounted Iranian EFL teachers' low level of computer literacy, lack of methodological knowledge in Computer-Assisted Language Learning (CALL), and no intervention in producing CALL materials. He noted that despite EFL

teachers' positive attitudes, they made no use of CALL in their classes (9). Similarly, Atai and Dashtestani (8) referred to such barriers as slow internet speed, inadequate facilities, and technical problems in EAP contexts.

EAP courses are offered by the language and content instructors in medical disciplines. Research demonstrates that the EAP instructors' CALL-oriented approach is conceived as a paramount issue in medical universities (14, 15). Nowadays, medical education has confronted serious challenges following the emergence of the COVID-19 pandemic. Some educational institutions have even halted their teaching services due to inadequate technological infrastructure and lack of skilled workforce (16). Hence, the EAP instructors' challenges in universities of medical sciences during the pandemic deserve undivided attention. Prior studies eliciting language teachers' perceptions of merits and demerits of online teaching experiences failed to present a comprehensive view of individual traits as reflected in questionnaires (17).

Bearing this in mind, the present study attempted to bridge the existing gap by inviting EAP instructors in Iran's medical education to provide self-reflections on their experience of emergency remote teaching during the COVID-19 pandemic. Accordingly, this study elucidated their challenges and possible solutions within the pandemic period. To this end, the following research questions were addressed:

1. What are the challenges facing EAP instructors in Iran's medical universities during emergency remote teaching in pandemic times?

2. What strategies do the EAP instructors in Iran's medical universities employ to address the challenges they encounter during emergency remote teaching in pandemic times?

Methods

Study Design and Participants

The study adopted a qualitative content analysis approach and relied on qualitative methods of data collection and analysis. It was conducted in the context of the

EAP courses delivered in Iran's medical universities. In total, 80 EAP instructors were purposefully invited, of whom 52 responded to the invitation and volunteered to take part in the study. They all shared the experience of holding online classes via different digital platforms during the outbreak.

Data Collection and Analysis

In the spring and summer of 2020, the participating instructors were requested to write their reflections on their experiences of online EAP teaching during the coronavirus pandemic. They were asked to report the types of applications and platforms they used, modes of teaching, activities engaged in, assessment techniques, and the challenges encountered. In compliance with the social distancing protocols, a Google Form link was sent to the respondents via WhatsApp. Then, the semi-structured interview was conducted to cross-check the results of self-reflections. The questions of the interview explored the same issues as those in the self-reflections. The interviews were conducted one by one through video calls on WhatsApp. Finally, content analysis was performed and the entire data were coded by the three researchers based on sequential explanatory strategy (18). First, the content of self-reflections and semi-structured interviews were tabulated. Then, the themes were extracted and categorized according to the research questions. Following that, the data were coded, reviewed, and used for the final analysis. Afterwards, the researchers discussed the emerging themes, reached a consensus on the final results, and the inter-coder reliability was estimated as 0.88.

In order to cross-check the results, the participants' self-reflections on their challenges during the pandemic, semi-structured interviews were conducted. Thirty instructors were interviewed via WhatsApp.

Data Collection Tools

The present study took advantage of self-reflections and semi-structured interviews to collect the required data. To present their personal reflections, the instructors were

required to answer 8 questions ([Appendix](#)), which enabled them to ruminate over their perceptions about their online teaching practices, challenges, and suggestions during the global pandemic (19). Additionally, those who provided meticulous account of their experiences in their reflections were purposefully selected to be interviewed to enrich the results of the study. It is worth noting that the semi-structured interview questions ([Appendix](#)) were in line with the self-written reflection questions. As Harding (20) puts it, semi-structured interview leads to the emergence of new questions and insights during an inquiry.

Research Team

The first two researchers work as assistant professors majored in Teaching English as a Foreign Languages (TEFL). They collaboratively authored an ESP book for the students of biology and geology and at the same time they are both EAP, ESP specialists, and instructors. Considering that the first two researchers were well aware of the context of the study, they both took part in designing the research instruments, distributed the self-reflection essay questions, and interviewed the participants. Furthermore, the third researcher being a distance learning specialist provided guidelines about the theoretical concepts.

Ethical Considerations

The researchers elaborated on the objectives of the study and the participants expressed their consent to write self-reflection essays and answer the interview questions. They were assured that data collected would remain confidential and would be used anonymously.

Results

The participants included 52 Iranian EAP instructors (17 males and 35 females), from universities of medical sciences in different cities, namely Tehran, Isfahan, Tabriz, Yazd, and Zanjan, in Iran. The age range spanned from 35 to 54 years ($M=39$). Twenty-two

participants had a PhD in Teaching English as a Foreign Language (TEFL) and the rest (30) were physicians and have been teaching between 2-10 years ($M=7$).

The results of the analysis of self-reflection essays are presented in three categories, namely experiences, challenges, and solutions, followed by the extracted themes from the participants' responses to the interview questions.

Self-Written Reflections: Experiences

The first five questions elicited the instructors' experiences during the pandemic. Table 1 provides the summary of the extracted themes.

In the first question, the instructors were asked to describe their teaching condition during the coronavirus pandemic. All the teachers referred to the early days of shifting to online teaching as confusing, terrifying, and stressful.

It was a novel, scary, untested, and eccentric experience at the outset. (I11)

However, half of the participants believed that although the spread of the virus confronted them with a different situation, it granted them a new and different experience.

The outbreak of the coronavirus provided me with ample opportunities to develop my skills as an EAP instructor. (I14)

It's good to accept it and try to learn more about new things and enjoy the classes. (I26)

Thirty-seven EAP instructors also stated that despite being shocked and confused by the changing educational routines due to the unknown disease, they gradually got used to it and took up their job, albeit in a new way.

I panicked at first but everything was under my control after I actually started planning. (I27).

It appeared that medical sciences EAP instructors had perceived the new waves of educational practices as a challenging situation which entailed both threats and opportunities. There was a general consensus among most of the participants that the pandemic period stressed them out but led them to come up with innovative ideas for

Table 1. The themes extracted from the instructors' responses to the questions related to teaching experiences

Theme	Expressions from opinions	F	%
Teaching condition	Confusing and shocking	8	15.38
	Terrifying and stressful	7	13.46
	New and exciting	37	71.16
Applications and platforms	WhatsApp	15	28.84
	Skyroom	10	19.23
	Big Blue Button	9	17.30
	Adobe Connect	18	34.63
Mode of teaching	Synchronous	38	73.07
	Asynchronous	0	
	A combination of both synchronous and asynchronous	14	26.92
Teaching activities	Pamphlets	25	48.07
	Audio-visual files	21	40.38
	Recording voice and sending the file	6	11.55
Evaluation activities	Using video calls	14	26.92
	Written exams with a time limitation	14	26.92
	Asking questions orally in the classroom	9	17.32
	Using Google Form	15	28.84
Alignment of technological tools with the university mission	Being willing to adapt themselves	45	86.53
	Being forced to use technological tools	7	13.47

surviving in their career.

The new pandemic condition has presented us with numerous problems, but at least I had to come up with different solutions, and that was good for me to think more critically of teaching EAP courses. (I31)

The second question requested the instructors to name and briefly explain the applications and platforms they used. They stated that they utilize one of the following applications including WhatsApp, Skyroom, Big Blue Button, Adobe Connect, as the ones which were faster and easily accessible.

We worked with WhatsApp since it was easily accessible. (I42)

I tried different platforms such as Skyroom, Adobe Connect, WhatsApp, Big Blue Button, but mostly I worked with Skyroom. (I9)

The third question explored the participants' mode of teaching to specify as to whether they presented their lessons synchronously or asynchronously. Thirty-eight participants asserted that they held their classes synchronously, and they thought it had various merits over asynchronous mode since the instructors and students were simultaneously involved in class procedures

and interaction among them was possible.

I used the asynchronous mode of teaching where I would provide my students with content and videos. (I20)

I teach in synchronous mode as students are more involved and learn more effectively. (I36)

However, fourteen instructors stated that they took advantage of a combination of synchronous and asynchronous modes due to some problems they confronted in holding online classes. Besides, they held that more pedagogical content was accessible through asynchronous mode.

In order to prevent the probable problems, I decided to use a blend of both synchronous and asynchronous formats. (T22)

The instructors appeared to have used a combination of synchronous and asynchronous modes in their work; they used each mode for a particular purpose, that is, asynchronous mode for providing the students with the educational content and resources, and synchronous mode for checking their understanding of the uploaded materials and their achievement, practicing the lessons, and doing activities.

As regards the next question, the participants were asked to elaborate on the activities they used in online EAP teaching to present and practice the lessons. The teachers stated that they provided their students with pamphlets or audio-visual files for presenting the new materials. Some instructors asserted that they recorded their voice and uploaded the files along with pictures or other files.

We present the reading material and the way it should be read by voice messages. I ask them to download the audio files and answer the questions in the given time. (I39)

Three instructors referred to the merits of technological tools in terms of allowing them to have various types of activities in their classes. The EAP instructors expounded on the activities they utilized for evaluating the students' performance and learning outcomes. They stated that they used their webcams or video calls, gave their students written exams with a time limitation, asked them questions in online classes, and used Google Form.

I usually ask them to turn on their webcam (I16).

I prepare tests on Google form. (I43)

Considering the alignment of the available technological tools with the universities' mission and vision, most EAP instructors believed that the unexpected crisis led them

to adapt themselves to the existing facilities and make the most out of the least in order to hold online EAP classes and deliver remote teaching.

Honestly, it was me that aligned myself with the current situation. (I25)

Self-Reflections: Challenges

The sixth question strived to elicit the Iranian medical sciences EAP instructors' perceptions of the challenges they faced during the COVID-19 pandemic (Table 2).

As Table 2 displays, the medical sciences EAP instructors mainly pointed to challenges such as the students' lack of access to technological devices required for online learning especially in remote areas, students' and instructors' disinterest in and resistance to technology-oriented teaching environments and virtual settings, dominance of traditional approaches prior to the pandemic and some instructors' unfamiliarity with technology-based teaching approaches and platforms, time-consuming and energy-consuming nature of online classes, students' financial problems in affording high internet expenses, students' unfamiliarity with and difficulty in working with the new educational applications and adapting to the new learning situation, poor internet connectivity and low speed of uploading and downloading educational

Table 2. The extracted themes from the medical sciences EAP instructors' responses to the questions related to challenges

Theme	Expressions from opinions	F	%
EAP instructors	Resistance to technology-oriented online classes	6	11.53
	Unfamiliarity with CALL-based teaching approaches	3	5.76
	Unfamiliarity with platforms	2	3.84
	Time-consuming nature of online classes	3	5.76
	Energy-consuming nature of online classes	2	3.84
	Difficulty in teaching in the family environment	1	1.92
EAP students	Lack of access to technological devices	6	11.53
	Disinterest in technology-oriented learning environments	5	9.61
	Financial problems in affording Internet expenses	8	15.47
	Unfamiliarity with new educational applications	4	7.69
	Difficulty in adapting to the new learning situation	3	5.76
Facilities and technological requirements	Poor Internet connectivity	4	7.69
	Slow speed of downloading and uploading files	3	5.76
	Infrastructure deficiency	2	3.84
	Total	52	100

Table 3. The extracted themes from the medical sciences EAP instructors' responses to the questions related to solutions

Theme	Expressions from opinions	F	%
EAP instructors	Motivating the instructors to hold online classes	28	53.84
	Providing training for the instructors	13	25
	Analyzing the technological needs	11	21.16
EAP students	Motivating the students to attend online classes	32	61.53
	Providing training for the students	20	38.47
Facilities and technological requirements	Improving technological deficiencies	39	75
	Providing access to technical support or IT experts	13	25
Solving technical problems	Searching the net	27	48.07
	Seeking help from technicians	14	26.92
	No answer	11	25.01

resources, infrastructure deficiency, and difficulty of teaching in domestic environments.

Many students do not have adequate gadgets like smartphones and tablets. (I19)

Some students might not even be able to afford the Internet expenses. (I29)

Sending and receiving messages consume a lot of time. (I15)

Poor Internet connectivity is frustrating for us. (I52)

Self-Reflections: Solutions

To overcome the abovementioned challenges, the EAP instructors suggested a wide range of solutions (Table 3).

The proposed solutions included encouraging the instructors and students to hold and attend online classes actively by providing them with proper tools and facilities, addressing the technological deficiencies, training students and instructors to integrate new technologies in education by providing interesting clips and audiovisual files, conducting a quick needs analysis project to clarify the technological needs in education during the pandemic, and seeking help from IT experts.

I suggest analyzing the demands of the instant teaching in the pandemic. (I17)

The educational administrators can consult with the IT experts and enhance the infrastructures. (I21)

Finally, the instructors were asked to elaborate on their strategies to solve the technical problems they encountered in their

online EAP classes. Many of them asserted that they referred to the Internet and searched for the problems and their underlying causes and possible solutions. They claimed that their technical literacy was sufficient for overcoming the technical difficulties in their online teaching experiences.

Whenever I encounter any technical problems, I ask Google for help. (I7)

As a new generation instructor, I am compatible with technology. (I29)

Some medical sciences EAP instructors said that they sought help from technicians. And eleven instructors provided no answer to this question. Regarding using the applications, they mostly asserted that they used the readily available applications such as WhatsApp and Skyroom till the universities provided them with the Adobe Connect Platform. Furthermore, time-consuming and energy-consuming nature of the emergent online classes, poor quality of internet connection and lack of technical support were considered as their most common complaints.

Discussion

The study attempted to investigate the challenges of EAP instructors in medical universities during the COVID-19 pandemic. The results indicated that they perceived the new condition as an opportunity for experiencing different EAP teaching practices. They expounded on various applications they used and pointed to numerous challenges, namely lack of facilities, inadequacy of technological literacy, and poor internet

connectivity as the major obstacles. They believed that both the instructors and students must be trained to take advantage of the available opportunities. Although they were unprepared at the beginning, they started to acclimatize themselves to the emergency remote teaching and gradually rose to the challenge.

The findings confirmed the instructors' inclination to implement technological advances in EAP classes. The pandemic period seemed to be an opportunity for them to unleash their potential for shifting to online instruction. In this regard, the results testified to those of Dashtestani's study (12) and were commensurate with the findings of Sepulveda-Escobar and Morrison (21) which revealed the English instructors' positive attitudes towards their career amidst the pandemic. However, the new pandemic condition led to a marked contrast between the previous studies which called attention to the ignorance of applying technologies in EFL learning and teaching contexts (8).

Emergency remote teaching prompted the EAP teachers to revisit their traditionally acknowledged instructional approaches and take on the role of a creator, a presenter, as well as a guide (21, 22). Such a drastic change in the existing face-to-face teaching paradigm and the sudden shift to e-learning platforms occurred while the educational settings lacked the essential infrastructures and many EAP instructors were either unskilled or unprepared to amalgamate all their teaching practices into online classes. Besides, the instructors were obliged to devote boundless energy and time to developing materials for online instruction (23). The medical sciences EAP instructors deemed that they needed an appropriate set of materials to develop and enhance their students' skills. To this end, they set a time limit and assigned their students relevant tasks and germane quizzes. As a result, they were confronted with another challenge, that is, giving the students feedback on their homework and tests (24).

On the other hand, notwithstanding the instructors' awareness and utilization of

technological advances within the global pandemic, their institutions seemed to suffer from deficient infrastructure. Poor internet connectivity and limited access to the necessary facilities due to the students' financial condition debilitated online instruction. In this sense, the findings of the present study corroborate the existing literature (4, 7, 9, 25).

Furthermore, the participants asserted that some of their colleagues lacked the required CALL methodological competency and thereby, were reluctant to provide online instruction. Being incompetent in virtual teaching is a barrier to online instruction (21) and hinders instructors from guiding students during emergency remote teaching. Hence, the EAP instructors highlighted the significance of holding workshops to develop their CALL-based perceptions and practices. This would enhance their skills in holding online EAP classes and subsequently, heighten the students' motivation (9, 16).

According to the findings, well-organized workshops and effective trainings are required to empower the EAP instructors and students in medical education and to raise their proficiency in using the available resources. This amplifies both groups' motivation and fosters fruitful EAP teaching and learning experiences (26). In addition, previous studies have attested to the valuable contribution of digital venues such as WhatsApp (27), Facebook (28), YouTube (29), and Instagram (30, 31) in boosting language learners' proficiency. Hence, the required hardware and software resources should be provided to ensure efficient online EAP instruction.

Limitations of the Study and Suggestions for Further Research

Access to the EAP instructors was impossible due to the university closures. Hence, they were virtually interviewed and in-person interviews were replaced by interviewing the participants via video calls on WhatsApp. Furthermore, given the relatively small sample size, caution is advised in generalizing the results of this study.

The present study can pave the way for new lines of research. Further studies may delve into the medical students' perceptions and experiences of online classes. Besides, such variables as the internet anxiety, computer literacy, and familiarity with CALL might be linked to the attitudes towards the emergency remote teaching among EAP instructors and learners.

Ethical Considerations

In this study, the following ethical issues were considered: upon informing the research committee of Payame Noor University (Shahriar branch), the researchers engaged cooperatively in designing the instruments of the present research. The participants were fully informed of the research procedure and objectives, and their participation was voluntary. Ethical considerations were taken into account by assuring them of the anonymity of the data collected. This study was approved by the Ethics Committee of Research, Payame Noor University, Shahriar Branch.

Authors' Contributions

M.M. devised the study concept. Then, M.M., M.S, and M.M. cooperated thoroughly to design the study, collect the data, analyze, and interpret it. All authors were actively involved in writing and critically revising the article.

Conflict of Interest

The authors declare no conflict of interest.

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