

## **CALL Teachers' Professional Development Amid the COVID-19 Outbreak: A Qualitative Study**

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### **Abstract**

To enable language teachers to rethink their teaching practices and involve them in evaluating, planning, and applying technology in online education due to the COVID-19 outbreak, scholars suggested appropriate CALL professional development (CALL PD) courses. However, the literature review on CALL PD shows that little has been focused on teachers' expectations. Thus, this short paper aims to determine Iranian teachers' expectations of a CALL PD course during the COVID-19 outbreak. Thus, I undertook a small-scale qualitative case study of 12 pre- and in-service English language teachers who attended a CALL course at an Iranian university. The findings affirmed that online education needs to be accompanied by ample training. Irrespective of how much professional development accompanies online education if decisions about teachers' professional development are taken without proper consultation and disregarding teachers' preferences and concerns, the tool in question is likely to fail to deliver the expected outcomes. Unless teachers feel reassured that they are in charge of their professional development, there might be the risk that the technology will be resisted to such an extent that it never manages to fulfil its potential.

**Keywords:** CALL professional development, TPACK framework, Iranian language teachers, qualitative study, COVID-19 outbreak

### **Introduction**

In response to the coronavirus emergency first reported in Wuhan, China, in 2019, governments worldwide announced the shutdown of services, including schools and higher education to limit the disease's spread. The situation is most challenging for developing countries. The governments in these countries have taken some extreme lockdown measures, necessitating fully online learning. However, a lack of resources makes equitable access challenging. Iran is an example of a highly impacted developing country with a high rate of confirmed cases (more than 1,431,000) and deaths (58,110) in the world as of February 3, 2021. In response to the emergency, in February 2020, the Iranian government announced the shutdown of the educational sector to limit the spread of COVID-19. At that time, the government also decided to move from traditional education to a fully online mode.

However, this rapid move to online teaching caused significant challenges. A report by the Statistical Centre of Iran in 2017 showed that 28% of Iranians have limited or no access to the Internet. Moreover, Iran's Parliamentary Research Centre affirmed that

between 40% and 55% of Iranians live under the poverty line (Deutsche Welle, 2019), making the purchase of Internet-enabled devices in response to the crises unattainable. Poverty and the lack of Internet access are significant barriers to coping with the COVID-19 crisis (Alijani, 2020).

Irrespective of whether the learning modality is ‘fully online teaching’, or some level of ‘blended learning’ with essential practical subjects still taught face to face, the schools and universities in Iran have needed to use what is termed ‘Emergency Remote Teaching’ (ERT). This term was first used to describe education institutions’ response to the H1N1 crisis back in Fall 2009 when face-to-face instruction was rapidly moved online. ERT or a ‘pandemic pedagogy’ is a temporary shift from the ‘normal’ modes of teaching due to crises like natural disasters (e.g., hurricanes), the H1N1, and Corona viruses. Although teachers in ERT utilize several online tools, it would be wrong to call it online teaching and learning. As ERT is a provisional situation and a conditional reaction to challenging circumstances, it is not a pre-planned and appropriate instructional design and curriculum (Hodges et al., 2020). Given that the pandemic impacts are likely to extend into the future with at least some teaching remaining online, it is essential for education providers worldwide to move beyond ERT to developing a better quality of online learning to meet their students’ learning needs.

When a traditional educational system (e.g., Iran) wants to transit to the technology-based (online) education and achieve more than just ERT, several challenges need to be addressed. We need staff who feel confident in teaching and students who feel confident in learning in online environments. However, Alexander et al.’s (2019) report tells us, this is problematic since there is a vast achievement gap between staff and students who can operate in a digital environment and those who lack the skills. In addition, digital equity is a significant issue since access to resources and technology is extremely variable even in developed countries. Teachers also grapple with rethinking teaching practice, which is necessary to enhance learning in online and blended contexts beyond just ERT. Effective online learning requires the ability to use the affordances of a digitally rich environment and design pedagogically sound learning experiences within this environment. Teachers need to know how to create resources and activities and apply appropriate technology-based content and tools to teach and evaluate the teaching to feed into further better practice.

One fundamental way of moving away from ERT and enabling teachers to rethink their teaching practices and involve them in evaluating, planning, and applying educational technologies is through professional development courses. The literature shows that an appropriate professional development course is an ideal tool for changing and/or forming the teachers’ beliefs (Dixon et al., 2014). Thus, technology-based teacher professional development can bring about changes to teachers’ teaching philosophy suitable for the current situation (Hur et al., 2016), motivating them to apply technology into teaching practices.

## **CALL Teachers’ Professional Development**

To breakdown teachers’ resistance to moving to online learning, education systems should not only provide them with the necessary equipment but also support them to update their skills and knowledge due to the rapid evolution of technologies. However,

some scholars argue that teachers' lack of time and effective professional development have been among the most significant obstacles to implementing technology in classrooms (Anderson, 2012). Along with the necessity of teacher's knowledge in technology, researchers argue the significance of content-area knowledge: how much preparation teachers need and what type of content teachers need to learn (Ball et al., 2008). In other words, the focus of teachers' professional development courses should be not only on basic computer skills but also on the integration of content, pedagogical, and technological knowledge.

The framework of Technological Pedagogical Content Knowledge (TPACK) (Mishra & Koehler, 2006) focuses on some types of teachers' knowledge that are often not acknowledged in teacher education and professional development programs. Some researchers have suggested that teachers receive enough training and professional development programs and possess enough professional experiences to develop their PCK (Pedagogical Content Knowledge) (Janssen & Lazonder, 2016); thus, the more holistic TPACK is a suitable model to envision appropriate professional development of teachers. In contrast, some scholars have asserted that the ability to teach with technology should be viewed as another kind of 'pedagogy' and should be considered an essential kind of knowledge (Howland et al., 2012). Based on the TPACK framework, teachers should integrate educational technology as the basis of teaching content knowledge. Although many scholars and administrators highlight the importance of TPACK, in reality, teachers gain insufficient professional development on what and how to integrate technology into their teachings.

The successful integration of technology in the classroom would be impossible without appropriate professional development. However, professional development programs are notoriously unsuccessful. For example, Frontline Education's report in 2016 showed that 80% or more of the teachers' professional development programs in the US did not meet the federal priorities, especially in using appropriate learning technologies (Frontline Education, 2016). In addition, most teacher training courses do not include in-depth technology-enhanced learning development (Lotherington et al., 2016).

A meaningful, effective, and appropriate professional development program should acknowledge teachers' need to confront new challenges such as technology integration in the classroom, which requires tactful planning, implementation, and feedback (Learning Forward, 2010). Also, as noted in the United States Department of Education report in 2016, "professional development should be job-embedded and available just in time" (McCusker, 2017, p. 19). This means that these programs should respond to the teachers' immediate needs based on educational settings changes, e.g., integrating educational technologies in classrooms.

Professional development has also been a key focus for research on overcoming technology integration barriers in language education (Bustamante, 2020). As noted above, TPACK provides a theoretical basis but does not provide teachers with specific guidelines for developing TPACK in professional development settings (Mouza, 2011).

Research on professional development in language teaching in higher education has mainly been in the field of what is dubbed 'Computer-Assisted Language Learning (CALL) teachers' professional development' (Son, 2018). As an approach to language learning and teaching, CALL is defined as any application of technology to language teaching and learning, which could be assumed as a paradigm shift to meet teachers' and students' needs in our digital world. There have been various internationally recognized

CALL professional development (henceforth known as the CALL PD) initiatives in developing countries. For example, in Turkey, the findings of Koçoğlu's (2009) and Kurt et al. (2013) studies confirmed that the CALL course was supportive in developing pre- and in-service English and Turkish language teachers' TPACK knowledge. However, the literature review on CALL PD shows that little has been focused on teachers' expectations of CALL PD courses. Thus, this short paper aims to answer the following question:

What are Iranian teachers' expectations of a professional development course during the COVID-19 outbreak?

## **Methodology**

To address the research question, I undertook a small-scale case study of 12 pre- and in-service English language teachers who attended a CALL course at an Iranian university. The participants were all aged between 18 to 30. All of them were female and prospective or current English language teachers. In this course, the participants were taught: a) the CALL concept, definitions, and terminology, b) Textbooks vs. CALL tools, c) CALL evaluation, d) Methodological frameworks, e) Technological features, procedure, approach, design of CALL tools, f) CALL implementation possibilities, g) Pedagogical features of CALL, h) Mobile-Assisted Language Learning (MALL), i) Using social media for teaching English, j) Virtual, augmented, and mixed realities in teaching English, k) Robot-Assisted Language Learning (RALL), and l) Overall evaluation of CALL. I employed a qualitative analysis of the participants' essays so that I could obtain their rich and detailed perspectives in their own words. During the CALL course, the participants had two weeks to write and complete their essays as part of their coursework. I received written consent from all the participants that their course works would be used as part of a research project. I used pseudonyms in all the research stages to ensure the participants' privacy. The collected data were analyzed thematically based on Murray's (2009) procedure: 1) reading and making sense of the total data set, 2) identifying the relevant and irrelevant data to the research purpose, 3) tagging through single words, phrases, or full sentences, 4) creating nodes for the data based on the similar meanings, and developing new nodes, and 5) categorizing the nodes. Categorization involved comparing all the codes and pulling together related codes to form categories. Finally, themes emerging from the categories were examined in light of the research questions.

## **Findings**

The research reported in this article form part of a larger study in which an Iranian colleague and I were responsible for designing and implementing a teacher's professional development course for Iranian teachers who had to move from traditional teaching to online teaching. Guided by TPACK as the theoretical framework (Mishra & Koehler, 2006), the essay data were grouped into six categories: the 'technological knowledge' (TK), 'pedagogical knowledge' (PK), 'content knowledge' (CK), 'technological pedagogical knowledge' (TPK), 'technological content knowledge' (TCK), and 'pedagogical content knowledge' (PCK), which are presented in turns below. Before

going through the categories, many participants affirmed the necessity of CALL teachers' professional development courses amid the COVID-19 outbreak,

*'As a teacher, we know this course is essential for us to recognize how technology can be useful and ease the learning process for our students, so we ought to be familiar with and set it up in our lesson plan'* (Mona).

Also, they reported in terms of timing that they expected the CALL PD courses to be held in the first weeks of their teaching or before starting their teaching. In addition, in line with Iranian official and non-official reports (Alijani, 2020; Deutche Welle, 2019), many teachers expressed concern about the lack of digital tools and facilities for both teachers and students. One teacher, Eli, in particular, asserted that:

*'The authorities in the education department must consider all the students, especially those who are under the financial pressure. Some students cannot provide electronic tools such as smartphones, tablets, and laptops. Authorities in department education are responsible in this regard'*.

Mahsa confirmed the findings of previous studies about the challenges (e.g., resistance to change) and advantages (e.g., rethink the practices) of technology-based professional development (Alexander et al., 2009; Dixon et al., 2014; Hur et al., 2016). She clarified that:

*'Adoption or resistance of technology is a complex process. Teachers need time to change their practices'*.

Some teachers highlighted parents' role and their preparedness in accepting and coping with online teaching during the pandemic. Hedi believed that *'Family is such an inseparable part in students' education.'* This sentiment was acknowledged by another Neda who asserted:

*'I feel the necessity to help students' parents with technology as much as students themselves... so I want to be given the opportunity on how to communicate with parents and teach them to use different technologies'*.

### **Technological Knowledge (TK)**

TK refers to teachers' knowledge and ability to use different technological devices and resources. In the CALL literature, some scholars called TK 'digital literacy', 'computer literacy,' etc. Most of the participants in this study highlighted the critical role of technological knowledge in the successful integration of technology in language education. Sama assumed that:

*'as a matter of fact, a teacher needs to be familiarized with suitable applications, software, and social media that are designed for his/her own country'*. In line with Sama, Mona explained that *'the main part of teaching and learning depends on teachers' knowledge and skills and that specify the degree of success on this*

*purpose, so at first, teachers should strengthen their skills then utilize technology, apps, and their benefits, therefore, technology should help teachers to enhance their skills and knowledge thus the course should pursue teachers to their ability and use computer and technology to be updated... '.*

### **Pedagogical Knowledge (PK)**

Pedagogical knowledge has been assumed as one of the key factors in teachers' professional development courses. PK is concerned with teachers' knowledge of teaching best practices, teaching methodologies, and the process involved in teaching and learning. As the teachers in the study were accustomed to attending traditional PD courses, PK is among the most mentioned knowledge in the collected data. Moreover, some participants considered PK as the most important part of language teaching, *'We must get to the most important part which is the link between practical and theoretical part'* (Sara). Also, some colleagues (e.g., Dina) believed that learning teaching strategies and techniques would boost their practicality, *'They should increase the practicality of these classes by teaching more strategies and techniques and teaching skill.'*

### **Content Knowledge (CK)**

The teacher's knowledge of the subject matter is referred to as the teacher's content knowledge. Only a few participants referred to CK, which might root in their mastery of the content. However, among them, Sara tried to explain CK's necessity by saying that:

*'First, we need to know the fundamental basics. What I mean by that is actually the theories of this field... This helps us get to know the benefits, disadvantages, and how to make the whole thing work better. Knowing some techniques used in this field is necessary as well. So, reading some research and also the criticism related to those would let us know the results of each techniques'.*

Dina also stressed the need for up-to-date content:

*'The educational content of these courses should be based on current world theories and be updated. They should not present cliché or out of date contents. These contents should have authentic sources and the instructors should even present these sources and a strong reason for teaching them'.*

Sama pointed out the differences between the printed and electronic materials:

*'The content of a printed book which is designed for real classes may not be sufficient for an online class. We may not reach the same conclusion as we expect of the real situation'.*

The teachers' emphasis on PK and CK was in contrast to Janssen and Lazonder's (2016) study, where the authors expressed the view that teachers receive enough training and professional development programs and possess sufficient professional experience to develop their pedagogical and content knowledge.

## Technological Pedagogical Knowledge (TPK)

TPK relates to teachers' understanding of how to implement technological tools and resources in the teaching and learning process and how technologies can be deployed together with pedagogy in appropriate ways to the subject and the development of the lesson at hand. In this category, almost all the participants referred to their needs to learn about technologies for testing and assessment that mitigated against cheating and plagiarism. Mona pointed out that:

*'Teachers should have a facility to assess how much learner was a success in the acquisition of a defined course since learning without assessment is pointless. The role of technology in learning English can help teachers to learn design tests and exams by technology'.*

Neda added,

*'I want to be introduced to some reliable platforms that enable me to assess my students justly and thoroughly'.*

Also, Nora confirmed that:

*'Assessment and testing of students are some of the most important issues in the educational environment. The teacher should be taught how and with what tools to inform students and their learning'.*

Hedi expressed her concern about cheating by saying,

*'Certainly teachers take exams to evaluate their students so that I want to learn how can I take the exam from them and do not let them cheat'.*

Another key expectation of the participating teachers was learning how to manage their online classes. Neda mentioned her key question in this course:

*'What is the required knowledge for management of technology-assisted classes?'*

She went on by saying that:

*'I am in desperate need to be educated on how to manage my classes virtually in order to have engaging therefore beneficial sessions than dull ones for both teachers and students, I need to be guided to a range of different ways (to be able to choose the proper one in case of unexpected situations and problems) that empower me to monitor my students' activities both inside and outside online classes.'*

In line with Neda, Sara also confirmed this need by saying that:

*‘it is necessary for us to be taught how to imply general class management rules on these tools. It will include time management, pairing, grouping, stuff related to homework (like receiving, correcting, etc.), techniques for teaching (this part will have a lot of changes compared to face-to-face classes.), when to give breaks and other rules related to the psychological aspect of keeping a class motivated and energetic’.*

Some colleagues also referred to the vital role of teacher-student and student-student relationships in online education. For example, Sama explained,

*‘It is important to make an efficient relation among the teacher and students via virtual space since it has a fundamental role in attracting students’ attention to the class.’*

### **Technological Content Knowledge (TCK)**

TCK refers to teachers’ understanding of which technological tools and resources might be well suited for specific content. In other words, it is related to how to apply a suitable technology for specific content. Although many students express their expectations of knowing more about content knowledge, only one teacher said that:

*‘The content also is significant to select the appropriate matters has the key role to access our aim of using the app to learn the language and in my opinion, it is better authorities supply the contents to be reliable and suit hence in the Application of computer in language teaching should have some plan to teach how to select proper apps to teach our students and which content implement is good.’*

### **Pedagogical Content Knowledge (PCK)**

PCK refers to the connections between the content and pedagogy, and a teacher should know how to develop his/her teaching practices by making this connection as strong as possible. Surprisingly, the same as TCK, only one teacher is interested in developing her PCK. Eli explained:

*‘I, as a teacher, must not be just a user of these tools. So, this is another responsibility of such courses to teach me how to produce learning content for my students. Sometimes, I need localized content to teach better in my classes. Maybe it is a good idea to give a certificate to the teachers who produce something at the end of the course’.*

## **Conclusion**

The findings accentuate the need for this study to be extended further. Due to its small-scale nature, this article is not meant to be representative of teachers’ views concerning CALL teachers’ professional development in the ELT sector in Iran and internationally. Nevertheless, the emergency challenges provoked by the COVID-19 in



educational sectors in general and language education, in particular, mean that language teachers' professional development courses in different international contexts might consider the implementation of CALL as an applicable way forward. Hence, the above findings might resonate with other CALL teachers' professional development courses in other countries where CALL is assumed as an expected form of teacher development.

The study affirmed that online education needs to be accompanied by copious training. This needs to be delivered by trainers who are themselves CALL experts. This training should be aimed at a variety of targets. Language teachers' effective TPACK knowledge in language education means that they should be able to effectively apply technology in the language teaching process. Thus, language teachers' technological, pedagogical, and content knowledge, separately, must not be taken for granted as including competency and ability in online teaching. In addition, language teachers' concerns about the lack of technological facilities and equipment are a key issue to be addressed by the authorities.

Irrespective of how much professional development accompanies online education, if decisions about language teachers' professional development are taken without proper consultation and disregarding teachers' preferences and concerns, then the training course in question is likely to be unsuccessful in meeting the language teachers' expectations. Unless language teachers feel reassured that they are supervising their professional development, there might be the risk that the teachers resist technology and such professional courses. That is why, ideally, the integration of technology in language education is a bottom-up process in which teachers should be in charge of conducting their professional development.

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