Chapter 16
Developing Approaches to CALL Teacher Education in Palestine: Problems, Possibilities, and Paradigm Shifts

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Abstract This chapter offers research-based information on developing Computer-Assisted Language Learning (CALL) teacher education programs in settings characterized by disruption, inequity, and disadvantage. It presents findings from a qualitative exploration of the emergency transition to fully-online curriculum delivery during the pandemic-induced halt to in-person instruction at a university ELT program in Palestine. Valuable lessons for CALL teacher educators emerged from this study of the perceptions and beliefs of five EFL teachers moving from a context featuring minimal technology implementation to teaching entirely online for over one academic year. Key findings indicate that the design and delivery of effective CALL teacher education programs in developing countries commonly require strategies for overcoming practical, political, and socio-cultural obstacles. Teachers must train to face disruption with equanimity and seek creative solutions to challenges uncommon in privileged settings. Particularly in tradition-bound societies, digitally-mediated learning must be validated and normalized, and prospective CALL teachers equipped to move beyond reconfiguring practice into reconsidering and restructuring their customary roles within teaching spaces and relationships.

Keywords Computer-Assisted Language Learning (CALL) · Technology-Enhanced Language Learning (TELL) · CALL teacher education · CALL professional development · Online education

1 Introduction: Life and Learning in a Context of Conflict

The Occupied Palestinian Territories (OPT) and Palestinian people have been subject to a century-long settler-colonial project that has left Palestine "torn by multifaceted political divisions, socioeconomic inequalities, and geographical fragmentation" (Seidel et al., 2021, p. 2). A degraded economic status affecting nearly all sectors

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of society has resulted from violent colonial domination and economic pacification designed to produce social fragmentation and economic inequalities, thereby strengthening overall colonial control over the population (Dana, 2021).

According to the April 2022 World Bank *Macro poverty outlook for the Middle East and North Africa: Palestinian Territories*, 2021 poverty rates reflect 29.7% of Palestinians living below the upper-middle income poverty line ($5.5 per day as measured in 2011 dollar purchasing power parity). Beyond the difficulties of daily life in a country marked by structural oppression imposed in a condition of deteriorating political and economic conditions, teachers and students in Palestine struggle with the disruptive effects of the Israeli-Palestinian conflict. Frequent mobility restrictions and school closures are the status quo in the OPT (Kayed, 2013). More than 700 road obstacles and checkpoints hinder the movement of school staff and students (Haddad, 2021). The 700 km Israeli-constructed separation wall cuts through cities and villages, creating a barrier to movement and separating teachers and students from their education institutions (Haddad, 2021). The ever-present specter of violent conflict between Israeli Defense Forces and Hamas militants threatens and limits the education and training opportunities available to Palestinian students and teachers.

2 E-learning in Palestine: A Tentative Embrace

Palestinian educators have long called for the adoption of e-learning as a response to conflict-related disruptions (Kayed, 2013; Shraim & Khlaif, 2010). Founded in 1985 in Amman, Jordan, and established in the OPT in 1991, Al-Quds Open University (QOU) is the Arab World's first open and distance learning university. QOU seeks to "spread open learning and E-learning in particular, not only in Palestine, but also in the entire Arab world" (Al-Quds Open University, 2022b, para. 5). This focus on e-learning positioned QOU as a regional pioneer in Computer-Assisted Language Learning (CALL), and the QOU Faculty of Arts now offers blended and fully-online courses leading to bachelor degrees in Arabic, English, and Hebrew language and literature; French is available as a minor (Al-Quds Open University, 2022a).

Both blended and fully-online CALL models are potentially very useful in the Palestinian context, and QOU offers a commendable example of a regional initiative. Unfortunately, political and conflict-related problems, in addition to financial challenges and other factors, present frequent disruptions to the development and delivery of CALL and related teacher education and professional development opportunities at most other Palestinian higher education institutions. Viewed within this overall context, the COVID pandemic emergency was merely another disruption, but it served to highlight implications for any CALL-related efforts in the region.

When the pandemic struck in March 2020, Palestinian authorities declared an emergency lockdown and the Ministry of Education immediately launched a National Response Plan based on distance education (United Nations Educational, Scientific and Cultural Organization, 2020). In a model known as 'emergency remote teaching'

(ERT)—the process of transforming classes to a virtual mode without changing curriculum and methodology or addressing teacher preparation needs (Bozkurt & Sharma, 2020)—the pandemic emergency forced all Palestinian EFL teachers to become CALL teachers.

This could be viewed as an opportunity to explore CALL pedagogy and associated teacher professional development possibilities. However, even without a global pandemic, challenges abound in Palestine. Electricity brownouts and outages are common, particularly in the Gaza Strip where an electricity crisis has been ongoing for years (Al-Gherbawi, 2022; Moghli & Shuayb, 2020). Internet penetration was 64.8% in the West Bank and Gaza as of June 2021 (Miniwatts Marketing Group, 2021), and homes in remote villages often lack internet connectivity (Dweikat & Raba, 2019). Moreover, a survey of 27 academics and administrators at leading Palestinian universities revealed that IT departments are not well-equipped to support any sort of digital initiatives (Obaid et al., 2020). Taken as a whole, conditions in Palestine are generally not conducive to the effective delivery of any form of CALL or related teacher training activities.

3 Voices Already Heard

Wilson and Acheampong (2014) investigated teachers studying at 4 African teacher education institutions where CALL teacher training consisted of 3 mandatory ICT courses. Trainees had low levels of technological literacy and were not exploring tools available to support their personal and professional development. The majority merely wanted to pass the required courses and believed that knowing how to use a computer comprised the integration of technology into language teaching.

A study of Iranian EFL teacher trainers' experiences delivering CALL teacher education in undergraduate TEFL qualification programs (Meihami, 2021) revealed inertia, ignorance of training strategies, insufficient time to address CALL as a curriculum component, insufficient infrastructure, and lack of established training standards and methodology. The EFL teachers were also not motivated to participate in CALL training programs.

Tafazoli (2021b) studied Iranian EFL teachers undergoing the transition to pandemic ERT. They viewed it as a shock, had limited pre-pandemic experience with technology-enhanced teaching, were not prepared to transform their practices, and lacked knowledge of tools and strategies to help them move their practices online. With limited access to professional development resources, most teachers worked independently to develop the skills needed to handle online teaching. Infrastructure deficiencies also posed a problem.

In Palestine, action research by Fassetta et al. (2017) involved designing and delivering online teacher training for newly-graduated teachers of Arabic to speakers of other languages. Immobilized by Israeli restrictions on Gaza Strip residents and preparing to search for online work, participants found that commitment to sustaining

communication and investment in building human relationships in a learning community enabled them to overcome technological and linguistic challenges and move from a teacher-centered didactic model into a more equitable exchange between trainers and trainees.

Few studies focus on strategies for preparing and empowering CALL teachers in disadvantaged settings and particularly in the challenging context of the Middle East and North Africa (MENA) region. This study contributes to filling that gap by providing longitudinal insights into teachers' perceptions of and adaptations to the implementation of e-learning-style CALL at a Palestinian higher education institution.

The study aimed to (a) investigate the beliefs, understandings, and experiences of Palestinian EFL teachers involved in the implementation of online ERT methodologies, (b) identify and describe factors that affected the teachers' adoption and use of e-learning under ERT conditions, and (c) contribute to an ongoing institutional initiative of expanding the use of educational technology. The study's significance lies in its detailed examination of the rapid integration of CALL methodologies in a context where overall adoption of digitally-mediated education is at a very early stage.

The following questions guided the research:

1. How do Al Istiqlal University ELT teachers view the adoption and use of e-learning as a pedagogical tool under the conditions of ERT?
2. How did the rapid transition from traditional face-to-face teaching to the use of e-learning methodologies impact the professional practices and personal lives of the teachers?
3. How did the experience of ERT affect the teachers' beliefs about the use of e-learning in Palestinian education?
4. How does the landscape of challenges and possibilities in the adoption and use of digitally-mediated teaching methodologies as pedagogical and professional-development tools for the Al Istiqlal University ELT program appear viewed through the lens of pandemic ERT?

4 Methods

The study reported here was framed by a constructivist epistemology. From this perspective, qualitative research outcomes are not truth claims or descriptions of the way things really are or work "but instead represent meaningful constructions that individual actors or groups of actors form to 'make sense' of the situations in which they find themselves" (Guba & Lincoln, 1989; p. 8). In this case, I was interested in new realities the research participants constructed while working to make sense of their sudden transformation into fully-online CALL teachers.

The researcher accepted the perspective of Guba and Lincoln (1989), who view positivist claims and efforts related to validity, reliability, and objectivity as axiomatically incongruent with the constructivist paradigm. Recognizing that "The ultimate

test of the validity of any inquiry findings is that they should describe reality exactly" (Guba & Lincoln, 1989; p. 86), the researcher relied on prolonged engagement with the topic of inquiry while working to achieve data saturation, verifying credibility and authenticity of findings by reviewing relevant literature and conducting member checks of the data and findings with the research participants, providing rich description to support transferability of the findings, and maintaining a reflexive stance at all times (Creswell & Poth, 2018; Guba & Lincoln, 1989).

Ethical guidelines from the British Educational Research Association 2018 publication *Ethical Guidelines for Educational Research* (4th ed.) were adhered to at all times. All appropriate institutional permissions and clearances were obtained. The participants were all experienced professional teachers recruited on a completely voluntary basis after giving fully-informed consent to be included in all aspects, aims, and objectives of the research activities and reporting. All data were kept confidential, and participants are herein referred to pseudonymously.

4.1 Research Design

The study was designed as a qualitative case study per Yin's (2018) definition: "an empirical method that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context" (p. 56). The primary data collection instrument was a set of four interview protocols (see Appendix) used to guide semi-structured interviews ($N = 18$) conducted during the pandemic lockdown period in Palestine. This type of interview affords the researcher some control while avoiding restriction of the interviewee or predetermination of results (Cook, 2008).

4.2 Context and Participants

At the research site, Al Istiqlal University, computer technology was integrated into curriculum delivery in 2017 as an initial aspect of an effort to expand existing ICT facilities and apply them in support of creating, then facilitating the use of, digital libraries and e-learning curricula. Due to conflict-related disruptions and pandemic restrictions, the university entered 2020 without reaching program objectives, leaving Google Meet, Google Classroom, and institutional email as primary online teaching tools during the pandemic lockdown.

EFL teachers from the Al Istiqlal ELT program comprised the research sample ($N = 5$); all had 3−14 years of service in higher education institutions (see Table 1). Participants were selected based on their positions as colleagues of the researcher and their willingness to contribute to the study. Therefore, the sampling method is categorized as purposive and convenience sampling.

Table 1 Participants' demographic information

Participant	Gender	Total teaching experience	ELT teaching experience	Higher education teaching experience	Pre-2020 online teaching experience
Omar	M	14	14	14	No
Ahmed	M	22	22	14	Yes
Mohammed	M	21	21	11	Yes
Abdullah	M	11	11	5	No
Sara	F	3	3	3	No

Note Experience is listed in years

4.3 Data Analysis

I applied standard qualitative thematic analysis procedures as outlined by Braun and Clarke (2012), Creswell and Poth (2018), and Yin (2018) in an effort to extrapolate meaningful patterns in the data and thereby identify themes relevant to the research questions and objectives. Analysis began after each interview as manual "pawing" through the data (Ryan & Bernard, 2003, p. 2) during the processes of review and transcription of the audio-recorded interviews. During this initial work, I used word analysis in the form of looking for word repetitions and key-words-in context (Ryan & Bernard) to drive physical manipulation of the data. This took the form of noting and extracting pieces of data that appeared relevant to the research questions and/or suggested commonalities between the participants' experiences and placing this data in rough storage categories created in an MS Excel spreadsheet. Analysis continued via NVivo 12 Mac qualitative analysis software in an effort to further develop the initial categories identified and create additional categories (nodes).

Moving from computer analysis to repetitive manual data reviews, I searched for emergent themes, coding and sorting data into various categories, creating, discarding, and merging codes and categories, visualizing the data in new ways, returning to the literature for insight and direction, and checking with the participants for clarification and correction. This continued until I achieved data saturation and no longer found new information that added to an understanding of the research topic (Creswell & Poth, 2018). The results took the form of meaning-based themes representing relationships between the data and the research questions as per Braun & Clarke's (2012) model of thematic analysis.

5 Lessons Learned

The findings of this study represent answers to the research questions and make implications regarding the processes of becoming a CALL teacher and delivering digitally-mediated curricula in the Al Istiqlal University ELT program and the Palestinian context in general. This fulfilled the research objectives, including making a contribution to the Al Istiqlal University educational technology initiative. This overview focuses on six primary themes.

5.1 Lack of Adequate Basic Digital Literacy

A majority of the participants (3 out of 5) in the present study were engaging with the intensive use of educational technology and digitally-mediated course delivery for the first time. "*We are not accustomed to this system of teaching previously. And most of the teachers did not take sessions or training courses*" (Abdullah). Beyond specific CALL training, some lacked the general technological literacy needed to execute their e-learning objectives with ease.

> We need some training I think, especially those who are old aged or more than 50 years old, need to know how to teach E-learning, I mean how to use computers, how to use books from the Internet, how to download books. (Omar)

Sara indicated a lack of even the most basic skills often taken for granted in privileged settings: "Well, if anyone can type instead of me, that would be appreciated. This is the thing. Yeah, that's it. I can handle everything with no assistance needed but only in typing." Sara also noted that "The preparation takes more time in eLearning."

5.2 Shortcomings in Institutional Support

Mohammed, experienced with online teaching at QOU, described enduring an enhanced workload with insufficient institutional support. For example, lack of any pre-developed content:

> How can I teach without preparation? So, this takes time and effort from the teacher to prepare himself. I have to prepare to set some PowerPoint slides to support the idea with some videos from YouTube to download it to prepare things. In case there is some trouble here and there, I have to manage it all.

Ahmed, the other experienced online teacher, supported these observations:

> I pay much effort and spend a lot of time to search for videos, recordings, images, and so on to involve and motivate my students. But if I have technical support in this area, it will be much easier for me.

It is clear that launching a fully-online curriculum without prepared curricula and appropriate content inventories places high demands on even experienced CALL instructors.

These experienced teachers found the institutional support that was available to be of little use. Mohammed expressed frustration with administrators' directives:

> They give us a lot of instructions that also trouble us, definitely they trouble us and these instructions are really not in its place, ok? Because it is repeatedly, they are asking for the same things and this irritates the professor in general.

Mohammed reported a lack of proficiency on the part of university ICT support team members: "*My first problem when I started to use Google Classroom was that the technical staff or academic advisors do not know how to include or use applications such as Google Meet and Google Classroom proficiently." Mohammed observed,* "*The university is not experienced enough in e-learning. This is a very important point, compared with other universities such as QOU*". Such observations of institutional shortcomings were not confined to the veteran e-learning CALL instructors. Omar was very direct in stating, "*They don't support, they don't pay more, they don't look at I think, this is very difficult task, using Internet, especially for those who are old age*."

5.3 Pedagogy Shock and Forced to Go Beyond Reconfiguring Their Practices to Reconsidering and Restructuring Their Roles

As in Tafazoli (2021b), these teachers viewed the switch to ERT as a shocking transition. "*We have started using the online courses in the middle of the semester. And that was a huge confusion for me at least and of course, I think most of us have been confused*" (Sara). They were unprepared to easily take on the challenge of implementing an e-learning-based CALL pedagogy. "*I have known some of my colleagues who really suffer from using technology in teaching, so long they got used to the traditional ways in teaching*" (Abdullah). Even Mohammed noted that "*Teachers are overloaded with the 12 credit hours so the department should focus on shortening or decreasing the amount of hours that every faculty member should teach.*"

In the Palestinian context, online learning still represents a break with tradition:

> In Palestinian education context, the villages were so traditional where the students are passive and the majority of the time was allotted to professors. Online learning was integrated as a kind of breaking this routine and I think it was a big shift. (Mohammed)

This impacted the professional practices of the Al Istiqlal University ELT teachers as they were forced to reconsider and restructure their roles within the teaching space and teacher/student relationship.

> There has been a tremendous change. My role as a professor inside the classes and now delivering lectures online is quite changed. At the very beginning, it was a professor who speaks all of the time in traditional classes. The professor is the store of knowledge that has to give every aspect himself present to students, the audience. And I can say that it was a kind of spoon-feeding method, but now there's a shift in the techniques I use in delivering my sessions. Moreover, there's a change in the way I address the students. (Abdullah)

This teacher role-shift was accompanied by a movement toward greater student autonomy: "*I think the main difference between e-learning pedagogy and traditional face-to-face teaching is that e-learning is more flexible. Students can learn, can study by themselves at home or even on their way to work*" (Mohammed). There was general recognition among participants of the benefits of student autonomy and self-directed learning: "*With the help of online teaching and learning, the students discuss projects with groups and I can say that they are learning by discussing or by doing*" (Abdullah). But Sara expressed frustration with a perceived inability to control and monitor students in the virtual environment. "*Students are more controllable when we have face-to-face instruction, but in e-learning, there is no guarantee that students are focusing or concentrating, or that they can get what actually we are explaining or debating*" (Sara). This matter of control over students was significant to the participants, and each at some point referred to frustration with the sense of lacking hands-on influence on events. "*I have some comment about using the e-learning that maybe you are not able to control the students inside the virtual classroom because you need to control them and some people might be cheating*" (Omar).

The teachers' personal lives were impacted in various ways by the rapid transition from traditional F2F teaching to the use of e-learning methodologies. As Mohammed exclaimed, "*First of all, we have family, ok? Like, as a professor, it's sometimes your kids come across a problem and you need to do something. This is one issue [with online teaching].*" Sara was comfortable enough with me to discuss her personal financial situation:

> I have a problem with my laptop keyboard. There are some keys that are not working. So, I'm trying to do something about that and that takes time for me. And due to the economic situation and financial issues, I can't buy a new one.

5.4 Socio-Cultural Impacts

For three teachers with no prior e-learning or CALL experience, this foray into ERT was formative in shaping their beliefs about the use of e-learning in the Palestinian context. Sara expressed a simple belief: "*Honestly, honestly, I hate it. I hate it. Really, I don't like it at all.*" Omar reflected that "*My experience of teaching and using e-learning through the last year, to some extent, is not so good. Face to face is better than e-learning.*" Along with such immediate reactions, the data also revealed more contextualized teacher beliefs about e-learning; these stemmed from viewing various socio-cultural factors as a source of challenge to the implementation of online CALL in Palestine.

Mohammed noted, "*Students are accustomed to a teacher-centered class. I think they are used to not being the center of the class in my face-to-face or traditional way of delivering the content or pedagogy.*" Students apparently had difficulty taking responsibility for their own learning, having only experienced the role of the passive learner in traditional teacher-centered classrooms. Sara reported instances where students seemed to appear for online class sessions but were not attending to the work:

> I might see that they are online, they access Google Meet or Zoom or whatever, but they are not there, I can see that. I have faced a situation many times that, whenever I call a certain student, they are not there.

In Palestine, monitoring such situations is complicated by Islamic culture:

> Due to cultural restrictions or the norms here in Palestine, if you ask the students to open their cams in order to contact them face-to-face, they are reluctant to do that. They don't automate cameras and so you don't know what the students are doing while you're giving the lecture. (Abdullah)

Another cultural factor was evidenced by Sara's observation of online education as vulnerable to disruption when teaching and learning must be carried out in small, non-private home spaces. **"***Are they [students] focusing or not? Are their environments helping them? Can they participate or not? Do they have their individual room or are they sharing the same room, for example, for five or three sisters?"* Sara also felt that the nature of Palestinian family relationships and the demands of life in the impoverished country comprised a barrier: "*There are families who really do not cooperate with their sons or daughters that they have to attend the courses, attend lectures.*" Sara went on to note that students' parents were, in some cases, resistant to the adoption of e-learning to the point of questioning the validity of attending online courses:

> I can see that the parents disagree with e-learning and they say that it is not useful, so they are using their kids or their family members all of them whether they are students and they are asking them to do some stuff, anything they require in the home, rather than giving them the opportunity to take lessons or participate in the lessons.

Similar to the situation observed by Tafazoli (2021b) during the shift to pandemic ERT in Iran, where "parents did not trust online teaching" (p. 401), some Palestinian parents did not see value in online education. Sara reported that male students might be encouraged by parents to help support the family rather than spend time in online studies. Moghli & Shuayb (2020) validated this impression: "Male students were most reluctant or unwilling to join or commit to distance learning, perhaps drawn to paid work" (p. 2).

5.5 E-learning Effects on Students' Motivation

Participants believed the lack of traditional teacher-centered class structure may influence student motivation to participate in e-learning. Some appeared to enjoy

online learning: "*Actually, there are the students who are really motivated to use the internet and they are motivated to participate. They are not reluctant to take part in the activities*" (Abdullah). However, motivation was lacking in many other cases: "*I think not all students are highly motivated to participate in online learning. A number of them are de-motivated because they don't know how to engage in the [student-centered] classroom*" (Mohammed). Sara consistently indicated the necessity for strong teacher presence and control in the class space: "*Even face-to-face, when you are in the class, in the lecture they are watching the time and when the lecture is going to end. If students lose motivation during face-to-face learning, how can they be motivated when e-learning?*".

5.6 Community and Institutional Infrastructures

Pandemic ERT served to illuminate challenges and possibilities regarding the use of digitally-mediated teaching methodologies as pedagogical and professional-development tools for the Al Istiqlal University ELT program. Basic practical challenges related to community infrastructure were ever-present. Sara frequently mentioned how "*Many students lost connectivity and lost electricity. Power is cut off, and so on.*" Mohmmed reported that this problem can be an ongoing issue rather than a temporary outage: "*Some of the students, they don't have electricity in their areas*." Disruptions in course delivery were frequent:

> Some of the students say 'Ok, we have some problems with receiving the material.' Maybe they ask can we send them once again. 'What's the problem?' I ask them, and they say 'Oh I didn't receive this material.' or 'The internet is the problem.' (Mohammed)

Internet connectivity problems in the OPT are random and can be localized or widespread, but all of the teachers in this study noted this as an issue: "*Sometimes the Internet is off. So, this is a problem here. I think you cannot avoid this problem because sometimes you find your electric current or you find the Internet lines are off*" (Omar).

The experienced online teachers described the need for properly-developed institutional infrastructure. "*These days, there is no excuse for the university administration to say no, we don't have a platform. They should create their own platforms*" (Mohammed). Mohammed also noted shortcomings associated with the use of public web-based platforms: "*Google Classroom is not highly interactive, compared with platforms such as Moodle that are used* et al.*-Quds Open University and in the Turkish University we visited a year or so ago.*" As for institutional soft infrastructure, Ahmed recognized the need for institutional professional development resources: "*I think all the faculties should attend, obligatory I mean, a training session with the practical hours so that the academic affairs would guarantee the quality of their teaching*."

6 Discussion

This study revealed some obvious, commonsense findings; for example, the need for and frequent lack of a minimal level of appropriate community and institutional hard infrastructures to deliver any type of technology-enhanced learning in less-privileged settings has been well-documented (See, e.g., Tafazoli, 2021b). Also necessary is the soft infrastructure of human resources, stakeholder support, digital literacy, and associated teacher/student training and development opportunities, content, curricula, pedagogies, and more. In less-privileged settings, if challenges in the community context can be overcome, then individual institutional-level infrastructure, including complete hard and soft support systems for e-learning and CALL must be developed to the greatest extent possible (Muhammad et al., 2017). In all cases, trainers need to focus on preparing CALL teachers who are well-trained contingency planners, always ready to face changing circumstances calmly and creatively.

The tendency in Arab cultures to devalue online education and dismiss it as prone to fraud and cheating made an appearance in this study; it is a well-documented fact (Abdulla Al Ghurair Foundation for Education, 2020). Establishing and supporting the validity of digitally-mediated learning modes in traditional societies calls for careful consideration of cultural factors, including matters difficult to address in the contemporary environment of political correctness. It is important to establish program gravitas and reify appropriate teacher/student roles and identities in contexts where traditional paradigms hold sway. Teachers must also be prepared to embrace, develop, and value their new identities as facilitators of digitally-mediated learning. They must accept the need to consciously relinquish control, particularly in fully-online environments (Dron, 2007); for many such role-shift presents a threat because it involves a re-envisioning of the professional self in a way that appears to undermine the ontological security of their academic identity (Hanson, 2009). Teacher resistance to integrating technology in their practices is well-documented and, as Tafazoli (2021a) notes regarding CALL teacher training, teachers' preferences, and concerns must be accounted for—"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" (p. 12).

Related to this, obtaining stakeholder buy-in at all levels is essential to the success of any new education initiative and more so for innovative CALL strategies. Parental resistance had been described above, community acceptance—for example, among students' employers—must be earned, and it is a mistake to think even ongoing institutional support can be taken for granted. In the present study, even though online teaching appeared and mostly succeeded as a much-needed solution to a dire situation, Mohammed remarked that "Through my experience, the university where I teach and work, they will immediately go back to face-to-face teaching and they won't accept this online teaching I think." Addressing stakeholder resistance to the integration of digitally-mediated education and CALL is not a simple matter in any context; in developing countries, careful planning, perseverance, and a lot of patience may be required.

7 Conclusion

This research, though situated in the Palestinian context, served to highlight prerequisites, conditions, and demands associated with delivering CALL in any context where technology-enhanced education remains in a liminal state or fully unexplored because of a lack of development or other disadvantages. The findings have implications for the design and delivery of CALL teacher education and professional development programs in these settings.

The findings suggest that digitally-mediated education delivery of any type offers the maximum advantage only when a program is developed and launched within a complete support framework. Such a framework begins with reliable basic utility infrastructure and full stakeholder buy-in at the extra-institutional administrative level, extending through appropriate institutional infrastructure support both hard and soft, on to effective instructor and curriculum development practices, and finally to properly trained and equipped students supported by educated and aware family members and other concerned stakeholders.

COVID-19 forced teachers and students in Palestine and many other locations to rely on networked educational technology and digitally-mediated teaching and learning in an unplanned, often-chaotic experiment if any form of schooling was to be maintained. Doing so exposed layers of digital inequality arising from differential access to resources, and variations in digital literacy tied to social, economic, and cultural contexts (Beaunoyer et al., 2020; Carrillo & Flores, 2020). These matters should be starting points for reflection by CALL program developers and a source for critical lessons about combatting educational disadvantages generated by digital inequality. This learning should be baked into philosophies of CALL teacher education as a foundational layer every bit as important as technological fluency if we hope to offer the benefits of CALL to teachers and learners who have so far been unable to explore what Marc Prensky (2018) refers to as "a world of post-academic, empowerment, accomplishment-oriented education—the education of the future, now emerging around the world" (p. 1).

Appendix: Semi-structured Interview Protocols

Interview 1

Question 1: What are your views about using e-learning for ELT?

Question 2: To what degree do you feel confident using the Internet in your teaching?

Question 3: What makes you feel more or less confident in your use of e-learning?

Question 4: How do you benchmark your level of confidence in using e-learning?

Question 5: What are the key issues that you face when using e-learning in ELT?

Question 6: Could you comment on the ability of your students to make use of e-learning?

Question 7: Do you feel that the university supports you in your use of e-learning?

Interview 2

Question 1: Please give a brief comparison from your viewpoint of online teaching or e-learning as compared to traditional face-to-face instruction

Question 2: What has been your biggest difficulty or challenge in relation to our sudden adoption of online course delivery?

Question 3: How has your role as a teacher changed since your courses have become part of the ICT integrated program?

Question 4: How do you think delivering English language classes online impacts student motivation?

Question 5: Has using online learning methodologies had any appreciable effect on student performance or brought about any improvement? Why or why not?

Question 6: What factors do you consider when planning an online lesson?

Question 7: What specific new pedagogical strategies have you applied in order to adapt your instruction to the online environment?

Question 8: What do you think about Google Meet and Google Classroom as platforms for our e-learning courses?

Question 9: Have you ever used Google Breakout Rooms in your online teaching? Why or why not?

Question 10: Now that have more experience in teaching with technology, why do you think the university decided to invest in a language lab?

Interview 3

Question 1: How would you define quality teaching in terms of teaching with e-learning tools in a digital age?

Question 2: How have your conceptions of what knowledge is and what students need to know changed since our transition to the e-learning mode?

Question 3: Can you comment on the relationship between subject-related content/knowledge and the development of necessary technical skills in your courses?

Question 4: How do you think students' relationship with technology specifically influences their views of studying and learning?

Question 5: What are your general impressions of your students' feelings about the new style of learning experience they have been engaged in since the change to online teaching and learning?

Question 6: Can you identify major differences in the way students react to and approach the online learning experience as compared to their reaction to the traditional face-to-face classroom experience?

Question 7: Please comment on any changes in your students' relationship with knowledge and the acquisition of knowledge that you have noted since transitioning to e-learning.

Question 8: How do you think the concept of student-directed learning or student generation of knowledge fits into a model of online English language teaching?

Question 9: Please offer a general summary comment on the effects this past year of e-learning has had on your students in terms of their views of knowledge and learning and their motivation to study and learn

Interview 4

Question 1: From your perspective, how has our recent intensive ICT use impacted institutional teaching standards?

Question 2: How would you rate the performance of ICT management within the university during this emergency transition to e-learning?

Question 3: What is your vision for ICT use within the university going forward?

Question 4: How do you balance the use of synchronous and asynchronous e-learning activities?

Question 5: Now that you know more about using Google Breakout Rooms, are you more willing to use them? Why or why not?

Question 6: What are some techniques or methods you use to increase student motivation and willingness to stay engaged with you, the course materials, and the other students?

Question 7: How do you deal with students' silence when you pose questions in an online format, either during voice interaction or in discussion/chat boards?

Question 8: How have your students been performing on collaborative tasks in particular during their online learning?

Question 9: What if any specific strategies have you used in your online teaching to stimulate and teach higher order/critical thinking skills among the students?

Question 10: In relation to language teaching specifically, when teaching online, how do you check students' performance in and mastery of the four language skills?

Question 11: What special strategies and methods are needed to teach and support EFL students in a setting where only online instruction is being used?

Question 12: What methods do you use to offer technology support to your students?

References

Abdulla Al Ghurair Foundation for Education. (March). *Online learning in the Arab world: An educational model that needs support* (Policy brief no. 1). https://tinyurl.com/fkvapncp

Al-Gherbawi, A. (2022). Power outage adds to 'unbearable' hardships for Palestinians in Gaza. *Al-Monitor*. https://tinyurl.com/5beeyn9h

Al-Quds Open University. (2022a). *Faculty of arts*. https://www.qou.edu/en/faculties/art/

Al-Quds Open University. (2022b). *The establishment of the university: A historical background*. https://www.qou.edu/en/aboutQOU/about.jsp

Beaunoyer, E., Dupéré, S., & Guitton, M. J. (2020). COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Computers in Human Behavior, 111*, 106424. https://doi.org/10.1016/j.chb.2020.106424

Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to Corona virus pandemic. *Asian Journal of Distance Education*, *15*(1), 1-6. http://www.asianjde.org

Braun, V. & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2: Research designs: quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association

Carrillo, C., & Flores, M. A. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. *European Journal of Teacher Education, 43*(4), 466–487. https://doi.org/10.1080/02619768.2020.1821184

Cook, K. E. (2008). In-depth interview. In P. J. Lavrakas (Ed.) *Encyclopedia of survey research methods* (pp. 535–526). SAGE. https://dx.doi.org/10.4135/9781412963947

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE

Dana, T. (2021). Dominate and pacify: Contextualizing the political economy of the Occupied Palestinian Territories since 1967. In A. Tartir, T. Dana, & T. Seidel (Eds.), *Political economy of Palestine: Critical, interdisciplinary, and decolonial perspectives* (pp. 25–47). Palgrave Macmillan.

Dron, J. (2007). *Control and constraint in e-learning: Choosing when to choose*. Idea Group Publishing

Dweikat, K. A. J., & Raba, A. A. (2019). English as a foreign language (EFL) teachers' perceptions of flipped classroom model in Palestine. *Islamic University-Gaza Journal of Educational and Psychological Sciences*, *27*(3), 29–47. https://tinyurl.com/4s8nrwsp

Fassetta, G., Imperiale, M. G., Frimberger, K., Attia, M., & Al-Masri, N. (2017). Online teacher training in a context of forced immobility: The case of Gaza, Palestine. *European Education*, *49*(2–3), 133–150. https://doi.org/10.1080/10564934.2017.1315538

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Sage.

Haddad, M. (2021). Mapping Israeli occupation. *AlJazeera*. https://tinyurl.com/yckv8xx9

Hanson, J. (2009). Displaced but not replaced: The impact of e-learning on academic identities in higher education. *Teaching in Higher Education, 14*(5), 553–564. https://doi.org/10.1080/13562510903186774

Kayed, R. N. (2013). Integrating e-learning into higher education. *Palestinian Journal of Open Education*, *4*(7), Article 6. https://tinyurl.com/24ctd6t2

Meihami, H. (2021). A narrative inquiry into Iranian EFL teacher educator's voice about challenges of CALL teacher education. *Teaching English with Technology*, *21*(2), 92–111. https://files.eric.ed.gov/fulltext/EJ1293554.pdf

Miniwatts Marketing Group. (2021). *Internet world stats: Usage and population statistics*. https://www.internetworldstats.com/asia.htm#links

Moghli, M.A., & Shuayb, M. (2020). *Education under Covid-19 lockdown: Reflections from teachers, students & parents*. Centre for Lebanese Studies. https://tinyurl.com/dt56usxs

Muhammad, G., Albejaidi, F. M., & Akhtar, R. (2017). Challenges in development of eLearning systems in higher education of the developing countries. *London Journal of Research in Humanities and Social Sciences*, *17*(2), 13–32. https://tinyurl.com/77jd8x34

Obaid, T., Abdaljawad, R., & Abumandil, M. (2020). Higher education under quarantine: What insights Palestinian institutes can share? *SSRN*. https://doi.org/10.2139/ssrn.3665685

Prensky, M. R. (2018). Do we really need dedicated Ed-tech? No we don't! *Edtech Digest*. https://tinyurl.com/4nuyf2s5

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes in qualitative data. *Field Methods*, *15*(1), 85–109. https://tinyurl.com/472pjak8

Seidel, T., Dana, T., & Tartir, A. (2021). Palestinian political economy: Enduring struggle against settler colonialism, racial capitalism, and neoliberalism. In A. Tartir, T. Dana, & T. Seidel (Eds.), *Political economy of Palestine: Critical, interdisciplinary, and decolonial perspectives* (pp. 1–22). Palgrave Macmillan.

Shraim, K., & Khlaif, Z. (2010). An e-learning approach to secondary education in Palestine: Opportunities and challenges. *Information Technology for Development, 16*(3), 159–173. https://doi.org/10.1080/02681102.2010.501782

Tafazoli, D. (2021a). CALL teachers' professional development amid the COVID-19 outbreak: A qualitative study. *Computer Assisted Language Learning Electronic Journal*, *22*(2), 4–13. http://callej.org/journal/22-2/Tafazoli2021a.pdf

Tafazoli, D. (2021b). Teachers' readiness for online language teaching: An ecological approach. *Journal of Foreign Language Research*, *11*(3), 393–411. http://dx.doi.org/10.22059/JFLR.2021b.331144.896

The World Bank. (2022, April 2). *Macro poverty outlook for Middle East and North Africa: Palestinian Territories*. https://tinyurl.com/2haxtaup

United Nations Educational, Scientific and Cultural Organization. (2020, December 4). *COVID-19 in Palestine: How distance learning will help students continue education*. https://tinyurl.com/yvm5sh3h

Wilson, K. B., & Acheampong, B. (2014). Implications of computer technology in language teaching: Accessing CALL in teacher education. *US-China Education Review A*, *4*(9), 651–661. https://tinyurl.com/4tavvcx8

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE