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ISSUES

ONLINE EDUCATION in PALESTINE: ELT TEACHERS DOING ERT (AGAIN)

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The frequency of disruptions to the function of Palestine's education systems highlights the need for Palestinian educational institutions to implement online delivery of institutional services and course content in order to ensure reliable access for teachers and students. This qualitative case study explored the beliefs and perceptions of five teachers of English as a foreign language who worked at a Palestinian university that transitioned to online emergency remote teaching during the 16-month-long halt to face-to-face instruction forced by the COVID-19 pandemic. Semi-structured interviews were used to collect data throughout the school closure period, and findings derived by thematic analysis showed that the teachers, including three with no experience teaching online, faced challenges but eventually adapted to the situation. The data revealed agreement and divergence among the teachers regarding the benefits and downsides of moving their courses online. An overarching theme of uncertainty emerged as a characteristic of the teachers' practices and work lives during the study period, with the shock transition to e-learning, labour intensive teaching conditions, inadequate e-learning infrastructures, and four types of classroom impacts identified as primary contributing factors. By the conclusion of the study, all teachers agreed that e-learning will play an increasingly important role in the future of education in Palestine, and four were willing to continue teaching online. By identifying associated benefits and challenges and highlighting influences that physical and cultural contexts can have on the transition to online education, this study contributes to the literature regarding the adoption of e-learning at universities in developing countries.

1. Introduction

This article discusses a qualitative case study that explored the experiences, perceptions, and beliefs of five Palestinian EFL teachers who worked at a West Bank university throughout the 16-month COVID-19 pandemic emergency school closure period. These teachers experienced a sudden transition to emergency remote teaching (ERT) via complete reliance on online course delivery at an institution with no history of offering such courses or any other type of e-learning. A specific focus of the research was gathering information that would be of use to distance CALL (DCALL, Blake, 2009), teachers and teacher educators, institutional technology support staff, and other stakeholders with an interest in the process of adopting online distance education and other e-learning methodologies at higher education institutions (HEIs) in developing countries, and in delivering online EFL/ESL courses in particular.

The study described here was guided by the following research questions: (1) How do these 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 (F2F) 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 the Palestinian educational context? (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 university ELT programme appear as viewed through the lens of pandemic ERT? (5) How can theories regarding effective e-learning pedagogy contribute to the development of a model for transitioning from the ERT model into ongoing e-learning adoption and use in the university ELT programme?

The findings from the study have implications for evaluating possibilities and improving processes associated with the design and implementation of online education programmes at HEIs and other schools located in developing countries. Therefore, the study contributes to the existing literature on e-learning, ELT, and CALL by providing longitudinal insights into the adoption of online e-learning methodology for teaching EFL in a higher education setting in an overall context characterised by under-development, inequity in access, and frequent disruption of traditional education delivery modalities. These insights can be extended to inform future research on, and practical implementations of, e-learning-based higher education pedagogies in any situation where the adoption of digitally-mediated education is in the early stages, and specifically in developing countries.

2. Background

The study was carried out at a higher education institution in Palestine, an impoverished developing country where the education system struggles to adequately meet the challenges and demands of the modern socio-economic and political situation, and the standard teaching methods commonly employed fail to enhance the critical thinking skills and overall capacity of students (Ramahi, 2015).

In October 2023, The World Bank reported that an estimated 26.1% of Palestinians were living below the upper-middle income poverty line ($6.85 per day as measured in 2017 dollar purchasing power parity). In addition to facing economic disadvantage, Palestinians must live, work, and study in a context marked by frequent episodes of lethal violence. These often occur in the form of organised armed conflict between the Israeli Defense Forces (IDF); Izz ad-Din al-Qassam Brigades, the military wing of the Islamic Resistance Movement, Hamas; and other Palestinian militants.

The ongoing Israeli–Palestinian conflict has significant effects on education in Palestine, and students and teachers alike struggle with many disruptions in access to education and training opportunities. Frequent mobility restrictions and school closures are facts of life in the OPT (Kayed, 2013). In October

2023, war overwhelmed Palestine and its people once again as conflict obliterated the normal functioning of daily life in the country, and disruption and violence were reintroduced to the school curriculum.

With the Israeli declaration of a state of war on October 7, the imposition of stringent security measures, initiation of road closures, and launch of military raids made travel nearly impossible and potentially deadly. By November 7, the Palestine Ministry of Higher Education and Scientific Research was reporting the deaths of 437 students and 12 faculty and staff, with 85% of the deaths in the Gaza Strip (Sawahel, 2023). The Ministry reported that educational processes have been completely disrupted at 19 HEIs in the Gaza Strip, affecting 88,000 students, and the cancellation of F2F classes in the 34 West Bank Institutions have forced 138,800 students to attend their classes online.

Palestinian educators have long called for the adoption of online education as a response to conflict-related disruptions. Shraim and Khlaif (2010) described e-learning as "a necessity rather than a luxury to improve access to quality education for all Palestinian students" (p. 160). However, in the education sector to date, progress in the development and deployment of online learning has been slow and inconsistent across institutions (Alzeer & Albadawi, 2021; Obaid et al., 2020).

This study supports the call for adoption of online education in Palestine by contributing to the body of literature that evidences the usability and usefulness of e-learning in Palestine's HEIs. It provides research-based support for the idea that Palestinian educational institutions should deploy properly-developed online modes for delivering their services and enabling student access to learning resources regardless of any disruptions occurring beyond the classroom walls.

3. Literature

Digitally-mediated learning, CALL, DCALL, and related topics including e-learning, online distance education, and newer offshoots such as blended learning, hybrid learning, and HyFlex (see Table 1) have been topics of research for years now, and the associated body of literature is expansive. However, the number of studies emerging from developing countries is smaller, and up-to-date literature focused on e-learning programmes in Palestine is relatively rare. The overview presented here will be confined to a brief survey of some of the relevant literature coming from the developing world, and a review of some of the recent research emerging from the MENA region and Palestine in particular.

3.1. Online learning in the developing world

In wealthy, fully-developed regions, the emergence of a global knowledge economy has motivated governments to increase investment in the technology infrastructure components that underpin widespread access to high-speed internet. A corresponding capability for delivering web-based education and

Table 1. Modes of content delivery and learning

Traditional in-person	Web-enhanced	Blended/Hybrid	HyFlex
• Deliver all course content and learning experiences in an F2F format using traditional course materials and learning activities. • No online technology used.	• Include all the elements of a traditional course but use online technology to facilitate learning. • E.g. posting course materials on a learning management system (Blackboard, Canvas, Moodle etc.).	• Blend in-person and online learning experiences. • Online learning is integrated into the course and replaces a portion of class time. • Online technologies used to deliver content and maximise learning through online activities.	• Use hybrid classes to provide flexible learning paths through a course: F2F, online, synchronous, or asynchronous. • Students decide which learning path to choose on a daily or weekly basis. • Online technologies used to provide students flexibility and choice of educational experience.

Note: Adapted from Allen et al., 2007; Allen & Seaman, 2007; Beatty, 2019; Columbia Centre for Teaching and Learning, 2023; Mayadas et al., 2015

training has developed and attracted ever-increasing levels of attention and investment (Hamdan, 2014). Virtual classes mounted on a school learning management system (LMS) and accessed by students with personal tablet computers are now common in the education systems of wealthy countries (Tam & El-Azar, 2020).

In developing countries, if teachers and students are to fully realise the benefits of web-based learning, many practical obstacles must be overcome. A World Bank report on the use of remote learning during the COVID-19 school closures notes that learning outcomes were generally worse with remote learning than with pre-pandemic in-person learning even in high-income countries, and that "Poorer countries lag far behind richer ones in the scale and scope of their remote learning measures" (Munoz-Najar et al., 2021, p. 4). Other authors have pointed out how suddenly demanding teachers and students were to rely on technology exposed layers of digital inequality arising from differential access to technology resources along with differences in digital literacy tied to social, economic and cultural contexts (Beaunoyer et al., 2020; Carrillo & Flores, 2020).

This is the digital divide, the gap between individuals, households, and businesses from different socio-economic levels and geographic areas in terms of access to ICTs and internet connectivity and in regard to opportunities to gain the technological literary necessary to leverage the advantages of ICTs (Buschmaas et al., 2019; International Telecommunication Union, 2022). Digital divide can occur in settings of relative affluence that are also marked by inequity (Carrillo & Flores, 2020). However, it must be acknowledged in any consideration of online learning in developing countries, where typical challenges to the effective adoption of e-learning include economic, political, technical, and pedagogical obstacles (B. Kim & Park, 2018; Qashou, 2022).

Many researchers from developing countries describe would-be online educators and students forced to deal with challenges arising from remote locations, underdeveloped infrastructure, power outages, low bandwidth Internet, high data fees, poor quality personal devices, limited access to

support, and other issues (Barrot et al., 2021; Bashitialshaaer et al., 2021; Kebritchi et al., 2017; Nambiar, 2020; Tafazoli, 2021a, 2021b). The effects of unreliable electrical power on both teachers and students were revealed by the present study, and Moghli and Shuayb (2020), studying schools in Lebanon during the pandemic, noted that teachers there and in Palestine endured long periods with no electricity and internet speeds described as "snail-like" (p. 1).

In addition to encountering unreliable infrastructure, in the developing world it is common to find schools, administrators, ICT departments, teachers, and students unprepared to undertake online learning. Moghli and Shuayb (2020) found that teachers struggling to transition online during the pandemic lockdown had limited access to technical support, with 44% of teachers in Palestine reporting having to self-learn and do their own research and practice as they worked to transition to ERT. Tafazoli (2021b) encountered a similar phenomenon in a study of 28 Iranian EFL teachers during the pandemic. A majority of the teachers (23) were forced to rely on self-education and help from experienced CALL teachers. Only three teachers reported receiving help from their institutions. Tafazoli also reported unreliable in-school network infrastructure, students faced with poor-quality or insufficient numbers of computers, and administrators resistant to adopting technology.

Culture itself may constitute an obstacle in settings where online teaching and learning are new features of the education system. Unfamiliarity leads to mistrust of the security and reliability of e-learning systems; this can hamper teacher and student uptake of and success with online learning (Almaiah et al., 2020). Dron (2007) proposes that leveraging the potential of e-learning involves accepting new roles for and definitions of *teacher* and *teaching*. Online teachers must be prepared to move away from the role of keepers of knowledge and consciously relinquish control of the class, particularly in fully-online environments (Dron, 2007; Hanson, 2009). This departure from educational tradition can generate resistance or outright refusal in many cultural settings, and particularly in Arab countries (Hamamra et al., 2021).

3.2. E-learning in Palestine: A tentative embrace

A number of schools in Palestine have made efforts to take advantage of the affordances of e-learning. Birzeit University in the West Bank was the first institution in the region to connect to the Internet (Shraim, 2012). By 2005, The Unit for Learning and Innovation at Birzeit was collaborating with a consortium of European universities to develop a series of online courses, and by 2012 all Birzeit courses were being delivered F2F and online via the Moodle LMS. Al-Quds Open University (QOU), with multiple branches distributed all over the West Bank and Gaza, embraced online education as a key strategy when it transitioned from correspondence-based distance learning to e-learning with the 2008 founding of the QOU Open Learning Centre (Al-Quds Open University, 2021; Mikki & Jondi, 2010).

Table 2. Key e-learning initiatives of the Palestinian Ministry of Education and Higher Education (MOEHE)

MOEHE Initiative	Features
Seed (2012)	Supported by Japan International Cooperation Agency, Seed aims to provide training in the use of ICT to science teachers.
Leadership and Teacher Development programme (2012)	AMIDEAST-administered initiative aims at building the capacity of elementary- and secondary-school teachers to deliver learner-centred education.
NetKetabi (2012)	Multi-dimensional opportunity for the children and youth of Palestine to acquire 21st-century skills. Primary aim is providing over 280,000 netbook computers to Palestinian children and youth.
AbjadNet (2013)	Supported by the Palestinian telecom company PALTEL, the programme aims to provide necessary ICT infrastructure including computers and Internet access for all public schools.
Digitalization of Education (2016)	Supported by AMIDEAST, Coca-Cola, PALTEL and local governments, this programme seeks to enhance teachers' technological capabilities.
Smart Learning (2017)	Primary objective is to replace traditional classroom teaching and learning practices with technology-enhanced practices.
Injaz (2018)	Programme to incorporate technical and vocational curricula in public education.

Note: Adapted from MOEHE (2017).

However, despite a few success stories and two decades of efforts and aid from various international organizations (see Table 2), financial challenges along with political and conflict-related events have presented ongoing and frequent disruptions to e-learning projects in Palestine (Mikki & Jondi, 2010). To date, investments in technology and strategy at most HEIs in Palestine have not yielded effective outcomes (Alzeer & Albadawi, 2021; Obaid et al., 2020).

In Arab cultures, online education is generally not viewed as an effective approach to learning (Shraim & Crompton, 2020). The selection of fully online degrees available in the MENA region is limited, suggesting reluctance to invest in online education on the part of most universities and governments, and qualifications earned via online courses, even those from Western institutions, are in many cases not recognised by governments or accepted by employers (Abdulla Al Ghurair Foundation for Education, 2020).

Online learning is also perceived as more vulnerable to fraud and cheating than traditional education (Hijjawi, 2013; Muhammad et al., 2020). This opinion of assessment in online learning was also prevalent among the participants in the present study. In fact, studying the administration of online exams at HEIs in Gaza during the pandemic, Bashitialshaaer et al. (2021) found both professors and students reporting no effective use of invigilation and widespread fraud and cheating, problems that were also revealed by the present study.

In general, Palestine is plagued by all of the developing country problems discussed in Section 3.1. Even when HEIs are connected to the web and reasonably equipped, Obaid et al. (2020) found that faculty members identify inflexible policies, aging infrastructure, and inexperience working with digital agencies as obstacles. Academics, staff, and students who attempt to use technology in new and innovative ways risk being shut down by IT departments dominated by fear of losing control or concern about issues of risk

and compliance. When institutions have learning management systems (LMS) like Moodle, they are often used only as document storage repositories (Obaid et al., 2020).

Across the Arab world and in Palestine, educational systems are biased toward traditional F2F teaching methods (Faek, 2020; Hamamra et al., 2021). Arab faculty members are often reluctant to incorporate digitally-mediated methods and materials into their pedagogical approaches (Al Senaidi et al., 2009; Raygan & Moradkhani, 2020). Instead of seeing opportunity for exploration and development when institutions in Palestine shifted to online teaching during the pandemic, some Palestinian university administrators went on record with the opinion that distance learning was appropriate only as a temporary solution adopted solely for dealing with the situation at hand (Jawabreh, 2020).

There are clearly obstacles to the expansion of online education into a universal feature of Palestinian HEIs, but there is hope for progress. Paradoxically, the curse of the COVID-19 pandemic has also been a blessing for the country, because the emergency school closures served to force the adoption of modern educational technology and delivery modalities and acted as a lever to pry open minds that had been closed to the e-learning paradigm (Affouneh et al., 2021; Jawabreh, 2020).

When the current IDF/Hamas war began, West Bank universities immediately returned to strategies learned during the pandemic to continue the delivery of education. If more academics, researchers, students, and other stakeholders join the movement that has now gathered momentum in Palestinian HEIs, teachers and students in the country can finally enjoy the benefits of a mode of learning that offers the possibility of liberation from a system that many Western-trained academics like Hamamra et al. (2021) describe as not only failing to produce creative critical learners but also as perpetuating colonial practices and oppressing students.

4. Methodology

4.1. Research design

This research project was designed as a qualitative case study, specifically, what Yin (2018) terms a qualitative single-site case study, with the unit of analysis being a single case as in the within-site study model described by Creswell and Poth (2018). Yin (2018) notes that case study research methods are relevant for research questions that call for extensive, in-depth description in the investigation of a contemporary social phenomenon. As Yin explains, case study design may be particularly appropriate when the main research questions ask "how" or "why" about something in an attempt to explain some social phenomenon or contemporary circumstance.

Table 3. Participant demographic information

Participant	Gender	Total teaching experience	ELT teaching experience	Higher education teaching experience	Pre-2020 online teaching experience
T1	M	14	14	14 years	No
T2	M	22	22	14 years	Yes 13 yrs
T3	M	21	21	11 years	Yes 10 yrs
T4	M	11	11	5 years	no
T5	F	3	3	3 years	no

Yin (2018) describes three basic types of case study method: (a) exploratory, (b) descriptive, and (c) explanatory, with some overlap between them. The present study draws on the exploratory and descriptive strains of case study research as, in line with Yin's definitions, the objective was description of the situation leading to the development of propositions and hypotheses that could drive further inquiry. This attempt to develop a data-grounded hypothesis places this case study within the overarching framework of the grounded theory model first proposed by Glaser and Strauss (1967) and later discussed by Corbin and Strauss (2015).

A theory regarding the processes undergone by the participant teachers when tasked with carrying out the implementation of digitally-mediated learning at their university could help guide practice or serve as a framework for further research (Creswell & Poth, 2018). In addition, because the researcher hoped to understand, evaluate, and possibly help effect change in strategies for delivering online learning at the research site, the influence of Bassey's (1999) action research model of educational case study research is also acknowledged here.

4.2. The participants

The research site was a newer West Bank university focused on military and security studies. Experienced higher education EFL teachers from the university ELT programme (see Table 3) comprised the research sample (*N*=5). The participants were colleagues of the researcher; existing working relationships along with pre-established personal rapport and willingness to contribute to the study facilitated their recruitment in a strategy drawing on both purposive and convenience sampling (Etikan et al., 2016). To preserve anonymity, participants were assigned identifiers as Teacher 1 (T1), Teacher 2 (T2), etc., with additional notation as in (T2, I3) indicating which interview quotes were drawn from.

4.3. Data collection

Data collection began in early October 2020, well into the period of pandemic school closures initiated in March 2020. The primary collection instrument was a set of four interview protocols used to guide four sets of in-depth semi-structured interviews (*N*=18) with the five teacher participants. Each protocol included an introduction to the interview topic (to be read aloud by the researcher) followed by a set of open-ended guide questions, with each

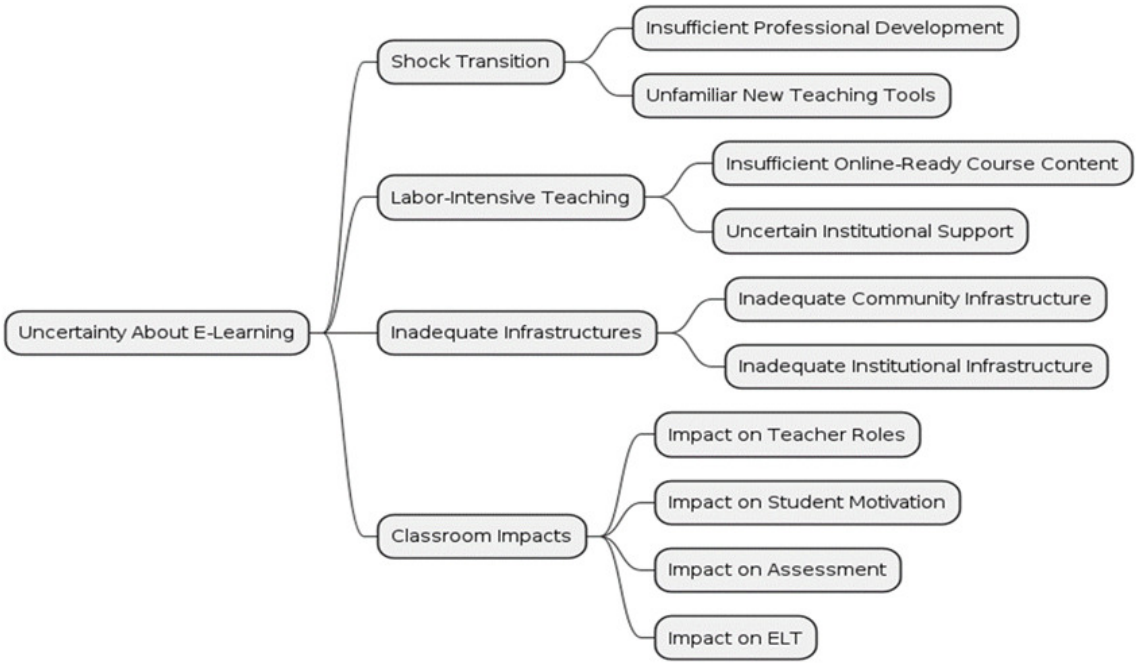

Figure 1. Emergent thematic structure

question accompanied by two or three suggested prompts. Additional data was collected via two online questionnaires administered to students in classes taught by the researcher. The interview protocols and questionnaires were developed by the researcher, a typical practice in qualitative research (Creswell & Poth, 2018).

4.4. Data analysis

The recorded interview data were transcribed, then processed via thematic analysis, a technique used to identify and interpret patterns of explicit or implicit meaning within a body of qualitative data (Braun & Clarke, 2012; Creswell & Poth, 2018). Both the NVivo 12 Mac qualitative analysis software application and manual analytic techniques were applied throughout the processes of data analysis, which was carried out in iterative stages as described in the Braun and Clarke model.

5. Findings

As proposed in standard models of applied qualitative thematic analysis (Braun & Clarke, 2012; Creswell & Poth, 2018), findings took the form of conceptual themes: well-developed categories identified in qualitative data (Braun & Clarke, 2012; Corbin & Strauss, 2015). These included an overarching theme of general teacher uncertainty regarding the effectiveness of e-learning as a mode of instruction. This theme was supported and further developed by the discovery of four major sub-theme strands along with associated contributing factors (see Figure 1).

In the full dissertation-level research report, as is customary for qualitative research, each theme emerging from the analysis is presented in detail and supported by rich description and nuance; in this case, in the form of participant voices captured in direct quotes drawn from the interview data. As a result of length limitations for publication of this article, findings are presented in condensed summary form, with use of participant quotes minimised and presentation of student survey data omitted.

5.1. Overarching theme: Uncertainty regarding the effectiveness of e-learning

Throughout the data, direct and indirect evidence supported an impression that the teacher participants, whether previously experienced or completely inexperienced with online learning, were to varying degrees uncertain about the effectiveness of both the e-learning model and themselves as online teachers delivering. For example, here T5 (I4) evidences uncertainty regarding the effectiveness of her efforts to reach and teach her students across a perceived gap imposed by an online-only connection: *When I contact with my students, I prefer to have eye contact and I can let's say identify who is really understanding who is really focusing with me, who really does not understand and so on.*

The three new online teachers in the study (T1, T4, T5) tended to express such misgivings over the loss of F2F communicative connections, while the two experienced online educators (T2, T3) were comfortable with their teacher-student connections in virtual classroom spaces. Considering T5's misgivings, and making comparison with the teachers who have over a decade of experience with e-learning, points towards what the data revealed as a primary source of uncertainty arising from the human side of the pandemic online ERT equation at this university and many others around the world: lack of teacher preparation for online teaching.

This is an easy observation to make, because it is simple to note that teachers need specialised knowledge and proficiencies to deliver effective online education (Koehler & Mishra, 2009). As Koehler and Mishra state, the development of TPACK—technology, pedagogy, and content knowledge—by teachers "is critical to effective teaching with technology" (2009, p. 60). However, looking past the relatively superficial matter of practical technical competency and into the realm of full digital fluency, it is worthwhile to consider comments Warschauer (2002, 2006) makes regarding humanware, or "a body of teachers with the knowledge, skills, and attitude for innovatively designing, adapting, and applying technology in the classroom, appropriate to local context" (Warschauer, 2002, p. 472).

Writing specifically about teaching ESL, Warschauer (2002) expresses the view that access to hardware and software means little without the human capability and motivation to innovate in the effort to confidently and productively integrate digital technologies into education. More importantly, teachers *must*

master the use of technology not only as an instructional tool but also as a medium of communication, and be able to help students do the same (Warschauer, 2002).

In the Palestinian context, researchers noted long before the pandemic the uneven blend of challenge and opportunity that characterises efforts to implement e-learning in local HEIs (Affouneh & Raba, 2017; Shraim, 2012). With a global pandemic and the responses to it instilling fear, uncertainty, and doubt while driving often chaotic changes in many aspects of people's lives, it was not the time and place for untrained teachers to undertake an experiment in online teaching and succeed at being certain and confident while doing so.

This is to say that, during the period documented in this thesis study, the teacher participants worked in an atmosphere of uncertainty that at some times and in some cases may have deepened to confusion and even fear (Al-Maroof et al., 2020). The stories emergent from the thematic data analysis processes of this qualitative case study revealed some of the root causes of uncertainty among the Al-Istiqlal ELT faculty as they moved into and through an unprecedented period in their professional lives.

5.2. Subtheme: A shock transition to ERT

In education, appropriate and effective change management is a critical consideration when implementing innovations, or even alterations as minor as adjustments to daily schedules (Lamie, 2005). It is a particularly important factor when an institution is moving from a traditional educational model to an e-learning paradigm (Affouneh & Raba, 2017; Almaiah et al., 2020). Therefore, it is no surprise that the teachers in this study viewed the sudden shift to online instruction under the conditions of pandemic ERT to be a shocking transition.

Pandemic-era reports and other literature commonly describe teachers, particularly those with no experience in online teaching, as finding the initial move online challenging and difficult (Hartshorn & McMurry, 2020; Tafazoli, 2021b). *When I am first using technology or using computer, I found a lot of problems and a lot of difficulties* (T1, I2). Teachers do not receive effective technology training during teacher education programmes or later professional development efforts and so lack the technological fluency and other skills necessary to properly use online tools, or use them well enough to be effective in delivering educational content (Eachempati & Ramnarayan, 2020). In this case, even a 13-year veteran of online teaching noted the ongoing value of training regimes: *I need some trainings here and there, precisely speaking when using the different applications or different LMSs* (T2, I1).

Unprepared teachers, even if they are experienced, are likely to be resistant to accepting technology use (Conrad & Openo, 2018). In the case of pandemic ERT, enforced change was in effect and resistance was not an option, making frustration and distress the probable alternatives. Viewing the case of these

teachers through the framework of the technology acceptance model (Davis, 1989), their perceptions of ease of use for online teaching technologies were most likely low. In regard to the usefulness of online education and its associated technologies, usefulness may have been perceived as high because technology was the teachers' only link to keeping their jobs, but uncertainty surely overshadowed the entire undertaking.

5.3. Subtheme: E-Learning is labour intensive

All participants in the current project echoed findings from De Gagne and Walters' (2010) study of the lived experiences of online educators by referring at one point or another to increased workloads, more time spent in preparation, and more challenging teaching conditions. This finding aligned with much previous research that examined teacher perceptions of the workload associated with online teaching in general (Chiasson et al., 2015; Kebritchi et al., 2017), and the shift to pandemic ERT in particular (Hartshorn & McMurry, 2020; Todd, 2020).

Obaid et al. (2020) discovered that it is common for Palestinian universities to have limited inventories of material designed specifically for online use, and the teachers in this study had no access to any inventory of ready-made online course content. The transition to ERT was for the most part focused on adapting existing F2F classroom methods and materials to delivery on a virtual platform, a process that takes a significant amount of time (Chiasson et al., 2015). *We need what we call digital curriculum. It is not available from our side. How can I teach without preparation? So, this takes time and effort from the faculty members to prepare, then to share with your students* (T3, I4).

Transitioning courses online is labour-intensive, and as was also noted by teachers in the present study, typical preparation activities for individual classes take longer for online classes than for F2F classes (Kebritchi et al., 2017). Help from the institution or experienced teachers is essential when moving online, and it is an institutional responsibility to provide comprehensive technical support, support for course content development, and training for faculty and students in the strategies for effective online teaching and learning. Little to none of which were available to the participants in this study.

This study uncovered change over time in the experienced online instructors' views of the adequacy of institutional technical support services, and divergence between the perceptions of instructors regarding some aspects of the institutional support provided during the transition to e-learning. Research indicates that experience teaching online is an influential factor in teacher perceptions of various aspects of institutional support as well as overall teacher expectations in regard to online teaching (Walsh et al., 2021; Walters et al., 2017). Participant comments appeared to indicate that IT staff at the university, like the teachers, were adapting and gaining proficiency as their engagement with e-learning went on, and teacher complaints about support were largely absent in the fourth and final interview.

5.4. Subtheme: Inadequate e-learning infrastructure

The study revealed that inadequate community and institutional e-learning infrastructure posed challenges to participants. Two cross-cutting subthemes emerged as key contributors to the primary theme identified in this section: unreliable electric power supply and network connections, and inadequate institutional e-learning infrastructure. *As an instructor, or as a teacher, you need to focus on the material itself. Not on your tools, are they set in a good way? Do you have electricity? You'll have to make sure internet is not running out...Plus, many students lost connection and electricity* (T5, I4). Matters of power supply and community as well as institutional-level network connectivity are basic, common sensical, and were discussed and exemplified at length above, so discussion here will concern teacher perceptions of and interactions with another type of critical infrastructure: software platforms for e-learning.

Several studies reported these as lacking, inadequate, or unreliable during the period of pandemic ERT (Naveed et al., 2022; Tafazoli, 2021b). At the research site, with no LMS or other institutional e-learning infrastructure in place, the decision was made to use Google Meet (GM), Google Classroom (GC), and other publicly-available web-based resources to deliver online distance education. This was a common scenario during the shift to pandemic ERT in developing countries (Al-Maroof et al., 2020; Nambiar, 2020).

When the teachers in this study were asked for their impressions of GC and GM as e-learning platforms, only the experienced online teachers had any basis for comparison. They endorsed the platforms but also described the need for a properly-developed institutional online learning management infrastructure. *Google Meet and Google Classroom should be used for a while, to bridge a certain gap, for example at the beginning. I will understand that the university was not able to make platforms available for teachers and so on. But 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* (T2, I2).

T3 mentioned the control, subject-matter specialization, and privacy that a dedicated institutional learning management system can offer as compared to relying on web-based resources: *For the Department of English, our university should work on or adopt some platform which is particularly in our department. It should be also controlled by the department and the teacher, not public, more private* (T3, I3).

5.5. Subtheme: Classroom impact

The data collection and thematic analysis processes used in this qualitative case study served to narrow a fine-grained focus on some of the micro-level aspects of the participants' daily work at delivering their courses in virtual classroom spaces. This close-up view revealed several emergent phenomena representing various impacts that engagement in e-learning had on these individual teachers.

5.5.1. IMPACT ON TEACHER ROLES

The idea that teacher (and student) roles will change in the online classroom is the primary principle of online teaching and learning (Dron, 2007; Kebritchi et al., 2017). In the present study, the protocol for Interview 2 included a direct query exploring the participants' perspectives on any changes in their roles: "How has your role as a teacher changed since your courses have become part of the ICT integrated programme?" The answers offered a view of the teachers' conceptions of their changing roles in virtual classrooms and digitally-mediated teacher-student relationships.

T2 indicated that the move into online ERT represented an enormous departure from traditional epistemologies of education for both teachers and students: *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. It was shocking to us as teachers. My role became changed bit by bit because I tried my best to involve my students, and I think we should all do this. We should ask students to be autonomous* (T2, I2).

Teachers in this study were forced to reconsider and restructure their roles within the teaching space and teacher/student relationship. This involved relinquishing control as the keepers of knowledge and moving toward learner autonomy in line with contentions researchers like Dron (2007) and Hanson (2009) have long made regarding teachers and online distance education. Online teachers should let go of their traditional roles as the source of structure and control over learning processes. Moore (1997) proposed this as necessary to support learner autonomy and decrease transactional distance, the perceived cognitive, psychological, and affective distance between learners and instructors in online learning environments.

5.5.2. IMPACT ON STUDENT MOTIVATION

Student motivation is an important factor in learning and fostering such motivation is a core principle of effective instruction (Hartnett, 2016; K.-J. Kim & Frick, 2011). The participants' discussions and comments around student motivation clearly indicated awareness of these two facts. There was also evidence that these teachers struggled at times to achieve the complex balance of teacher control and structure with student autonomy, engagement, and motivation described by Moore (1997), Dron (2007), Garrison (2003) and others as a central feature of quality online teaching. *Another important problem or barrier or a big challenge for us as teachers, I think, learners' motivation. Yes. Learners' motivation…* (T2, I1).

T2 noted that many students were at first shocked and somewhat dismayed by the transition to ERT, and their motivation was affected. Other students were observed to enjoy online learning and approach it with high motivation from the beginning: *Actually, there are the students who are really motivated*

to use the Internet and they are motivated to participate (T4, I1). In any case, supporting Knowles and Kerkman's (2007) observations that student attitudes towards online learning were more positive at the end of an 8-week online course than at the beginning, teachers in the present study observed motivation increasing as students adapted to their online classes: *I think they became more motivated than the beginning of the integration of e-learning process. But at the beginning it was shocking so students' motivation was decreasing. After that, it became increasing bit by bit because they became to be accustomed to e-learning* (T2, I2).

Note that the data shows the teachers attempting most of the standard moves to increase student engagement and support motivation online. They reached out to struggling students, located and used interesting multi-media materials, employed strategies to increase collaboration and interaction, made themselves available at any time by e-mail, text, and other communication modes—*They have the WhatsApp, they can catch me and I can immediately respond to them* (T3, I2)—and so forth.

5.5.3. IMPACT ON ASSESSMENT

What about assessment? Yes, what about assessment? How can we assess our students? This is a big question. How can we assess our students? (T2, I1) As this report and much of the other literature around pandemic-era education has documented, the sudden, rapid uptake of e-learning in places still firmly embedded in F2F education traditions introduced many uncertainties around altered teaching and learning processes. This was perhaps nowhere more apparent than in the realm of student assessment, a topic that in Arab countries arouses contention and uncertainty even in the best of times due to well-documented problems with validity, fairness, and academic dishonesty (Muhammad et al., 2020; Pacino, 2021).

Despite many guidelines, security checks, and restrictions in place, when the university where the study participants work attempted to design and administer online examinations during the pandemic, cheating was rampant—*Unfortunately, I cannot trust students in exams, they keep on cheating* (T5, I4)—and after two semesters and four online exams, the university required students to come on campus and sit for paper exams under proctored conditions beginning in the fall of 2020. For the ELT Department, guidelines from the Assessment and Curricula Centre required that these in-person speaking and listening exams also be given on paper. Masks and social distancing were required, two invigilators monitored every exam, and students were required to leave campus immediately upon completing their exam. Currently, with the war coinciding with midterm exam schedules, the University has returned to the online distance examination format in the same style previously attempted unsuccessfully.

On a positive note, during their ERT experience, all of the participants at some point referred to formative assessment as an embedded element of their online coursework. This reflected effective strategies for online assessment as outlined by Bakerson et al. (2015), Kearns (2012), Conrad and Openo (2018) and many others.

T2 from the beginning explicitly echoed the literature in discussing ongoing assessment, the use of varied instruments, and emphasis on critical analysis and student-directed learning: *I tried to change my way of assessment, how I planned different types of assessment. I tried video observation as a way of assessment. I tried reading responses. I provided students with e-books and asked them to read certain chapters and summarise what they have already read and tell me what they have understood* (T2, I2). T4 described moving to continuous formative assessment: *When there are certain activities at each stage of the class where students have to show what they have gathered from that and as a teacher you can see the outcome of the student, then it will be a great benefit for both the students and the teacher* (T4, I2).

Instead of adopting a model like that described by T4, the University instituted traditional in-person high-stakes summative assessments delivered on paper. The teachers also reported accommodation of students' preference for easy true/false exam items as opposed to the more challenging open-ended authentic items that are the preferred choice for online examinations in social sciences or humanities fields (Conrad & Openo, 2018). In summary, assessment administrators at the University contravened many leading scholars in the field of online assessment.

5.5.4. Impact on ELT

T5, I2: *...and yeah, let's say that most Arabs hate the English language, so I'm doing my best to make it easier for them. And that might be the biggest challenge for me. To keep motivating them, literally enforcing them to make it much easier, to make them at least accept learning the language.* For most people, learning a foreign language is a challenging task that takes time and determination; frustration, anxiety and fear are common side-effects of the process (Horwitz, 2010; Lamy, 2013). *To me, the problem is their fears and psychological issues about or towards any foreign language* (T5, I3).

Motivation is critical to success in language learning (Dörnyei, 2003). It is dynamic and subject to change even within a single class session, and insufficiently motivated students are likely to abandon their efforts to learn the new language (Pawlak, 2012). As illustrated in the preceding section *Impact on student motivation*, going online had mixed effects on the motivation of students in the university EFL courses.

A well-designed DCALL course can enhance the possibility of maintaining or even increasing student motivation (Lamy, 2013). However, just as the online teaching and learning paradigm being engaged during the period of this study

was ERT and not proper online education (Carrillo & Flores, 2020), the University ELT Department offerings of the time were also not online DCALL as per the principles proposed by Lamy (2013). These include prioritising multi-modality in terms of distance learning channels, being flexibly responsive and supportive to a variety of learners, understanding language learner motivation, and attending to needs and possibilities for intercultural development in remote learning settings.

In the same way that other courses at the University did not draw on the full possibilities of online learning, by neglecting the characteristics many of effective DCALL design and delivery, these teachers and their department leveraged only a small fraction of the affordances offered when language study is taken online. Technical problems served to further decrease the benefits realised from this attempt at DCALL, and the teachers demonstrated awareness of this fact.

For example, T2, I3: *And until these days, we still find problems uploading and modifying some audio and video exercises that we urgently need. So, this will automatically reflect on the students' learning of language.* Struggles with technology do nothing to build confidence and reduce uncertainty among online language teachers and students but instead negatively influence motivation and engagement for everyone involved, and so affect learning outcomes in terms of language mastery for students and progress in technical skill development for teachers. As a last word on the question of the impact of ERT on ELT, although fully experienced and confident in dealing with technology and teaching online, T2 nonetheless observes: *But in teaching languages, I think we need meetings in face-to-face because we need that human element, that human interaction* (T2, I2).

6. Discussion

The data collected in the study was useful for providing insights into the development and deployment of e-learning programmes in Palestinian HEIs. It also yielded answers to the research questions that guided the study; these answers are offered in brief summary form following the research questions below.

(RQ1) *How do these university ELT teachers view the adoption and use of e-learning as a pedagogical tool under the conditions of ERT?*

It is no surprise that the teachers in this study viewed the sudden shift to online instruction under the pressure of ERT, and in a situation where general conditions are not ideal for online learning at the best of times, to be disruptive and stressful. The experience was marked by a climate of uncertainty for all participants, and most likely was not conducive to creating a favourable impression of e-learning among teachers new to online education.

(RQ2) *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?*

Teachers were forced to go beyond reconfiguring their practices to reconsidering and restructuring their roles within the teaching space and teacher–student relationship. They faced an increased workload and at times had difficulty handling their courses and associated work from home. The result was sacrificing more hours to work at a time when their family members undoubtedly needed extra attention and support.

(RQ3) *How did the experience of ERT affect the teachers' beliefs about the use of e-learning in the Palestinian educational context?*

The participants indicated that e-learning can be useful in the Palestinian educational context and will be an important feature of education there going forward. However, the effective use of e-learning is contingent on eliminating or remediating a variety of obstacles as described in this article.

(RQ4) *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 university ELT programme appear as viewed through the lens of pandemic ERT?*

The lens of pandemic ERT served to highlight practical challenges described in this article as common to many developing countries. It also served to emphasise the fact that ERT is not proper online distance education and the necessity, as pointed out by Lamy (2013), to develop a foundation of effective online distance learning delivery upon which true DCALL education and teacher-training programmes can be constructed. The struggles of ERT also drew attention to the possibilities offered by various approaches to leveraging the affordances of web-based tools for language learning, for example Blended/Hybrid learning, MALL, and HyFlex.

(5) *How can theories regarding effective e-learning pedagogy contribute to the development of a model for transitioning from the ERT model into ongoing e-learning adoption and use in the university ELT programme?*

The ERT model was implemented with little or no consideration of any theories regarding effective e-learning pedagogy or any aspect of digitally-mediated education, CALL or any other relevant matter or concept. The field is wide open for improvement, and current theories regarding design and construction of hard- and software infrastructure, development of materials and pedagogy, transformation to and support for new teacher and student roles, and assessment of online learners would all make essential contributions to an adoption of e-learning in the University ELT programme.

The findings of this study suggest that digitally-mediated education delivery should be viewed as a useful if not essential component of higher education and other education systems in Palestine. The research, though situated in the Palestinian context, served to highlight prerequisites, conditions, and demands associated with delivering online learning or DCALL in any context where technology-enhanced education remains in a liminal state or fully unexplored because of lack of development or other disadvantages. The findings have specific implications for the design and delivery of online learning and teacher professional development programmes in developing countries and may also be useful in other contexts.

Conclusion

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 context (Beaunoyer et al., 2020; Carrillo & Flores, 2020).

It is the contention of this research that these matters of inequity should be starting points for reflection by online education and DCALL programme developers, and a source of critical lessons and learning on strategies for remediating educational disadvantage generated by digital inequality. This learning must be baked into philosophies of teacher education as a foundational layer every bit as important as technological fluency if we hope to offer the benefits of online education 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).

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