Online EFL Emergency Remote Teaching during COVID 19, Challenges and Innovative Practices: A Case of Oman

Samia Naqvi
Center for Foundation Studies
Middle East College
Sultanate of Oman, Muscat
Corresponding Author: snaqvi@mec.edu.om

Insiya Zehra
Department of Electronics and Communication
Middle East College
Sultanate of Oman, Muscat

Abstract
The emergent situation brought about by COVID 19 has led to an unprecedented change in the educational sector worldwide, including the Sultanate of Oman. Most of the educational institutions here have responded swiftly to fulfill the requirements of academia by switching to an online emergency remote teaching mode overnight. To get adjusted to the 'new normal,' teachers across all academic disciplines, including the English language, have had to adapt to new teaching approaches and learn new skills and competencies to confront this challenge. This empirical cross-sectional research study explores the teacher technology self-efficacy, the challenges faced, and the innovative practices adopted by the EFL teachers during the crisis. A mixed-methods approach was used here, including an online survey and in-depth, semi-structured interviews with six teachers. The survey was administered to 100 EFL teachers from fourteen higher-education institutions, whereas the interviews were held with six survey participants. The study found that majority of the teachers had a strong sense of self-efficacy in using technology as well as considerably positive learning experiences and novel innovations, which all resulted in the various ways they faced pandemic-related challenges. The paper gives, in particular, an account of the innovative techniques adopted by the interviewed teachers during the Pandemic crisis. This investigation hopefully adds to the field of knowledge by sharing effective, innovative techniques that have relevance to EFL teaching in Oman and beyond.
 Keywords: COVID 19, Emergency Remote teaching (ERT), Teacher Technology Self-efficacy (TTS), innovative techniques

17

Introduction

The first human victim of coronavirus COVID-19 was recorded in Wuhan City, China, in December 2019 (WHO, 2020). Governments around the world have constantly been working to control the spread of COVID-19 ever since. WHO and other organizations have provided detailed guidelines on preventive measures, social distancing protocols, and details of required protective equipment for safety. The spread of the virus has led to an immense metamorphosis in the socio-educational landscape (Murphy, 2020). A common non-pharmaceutical intervention adopted by most countries to mitigate the transmission rates in the absence of vaccine was the declaration of partial or full lockdown (Ferguson et al., 2020; Pei, Kandula & Shaman, 2020). This also led to the closure of educational institutions in the quasi-totality of countries.

The closures imposed an urgent need for online teaching, which resulted in a multitude of challenges for teachers, policy-makers, and students (Flores, 2020). Educational institutions around the world began to deliver their courses online. Students of all ages and levels started employing technological resources to partake in the online classes. Other organizations also played their part in the contribution of combating the pandemic. UNESCO developed a forum with educational applications to assist students during their learning. Massive Open Online Courses (MOOC) platforms such as Coursera, Udemy, Amazon, and others also provided services and courses free of charge (Draycott, 2020).

Looking at the situation in the Middle East and North Africa (MENA), Audah, Capek, and Patil (2020) estimate that more than 103 million students have been unable to go to school in the said region since the outbreak of the pandemic. As was seen during previous crises in the region, being unable to attend school has detrimental impacts on student communities. Accordingly, the countries of the MENA region have taken prompt measures to handle and contain the situation. Jordan, for example, dedicated open education channels and an online portal to deliver lectures on various curricula. The UAE further diversified the services offered through its online learning institute, iCademy Middle East, established 13 years ago (Euronews 2020). In Saudi Arabia, most educational institutions developed e-learning programs to aid students in continuing their learning. Several measures were taken by the Saudi Research and Innovation Network (Maeen) in collaboration with the Integrated Telecom Company to improve the quality of virtual classrooms and online resources (Draycott, 2020). The Sultanate of Oman also observed the rapid shift to online learning modes. Schools and universities at all levels of education employed various online platforms like Google Classrooms, Schoology, Seesaw, Blackboard, and Moodle to allow students to continue learning from home. The country's Ministry of Education and Ministry of Higher Education prescribed guidelines concerning teaching and assessments to be strictly adhered to by all the academic institutions across the Sultanate (Osman, 2020).

Rasmitadila et al. (2020) define two modes of online learning: Synchronous and Asynchronous. In the Synchronous mode, students and teachers are together in a virtual place and interact via video conferencing applications and chatting tools at the same time. In the Asynchronous mode, learning happens indirectly; there is no live interaction between the students and teachers as a group simultaneously; i.e., the teacher provides materials through an online platform, and students are provided the flexibility to learn at their pace. Institutions in Oman did

not take a single, unified approach. Some opted for the asynchronous mode, some chose to teach synchronously, and some decided to use both.

The process of switching over to the online mode adopted during the pandemic was quite hasty, and most of the institutions were in somewhat of a trial and error phase. Typical online learning has well-established principles and guidelines. Therefore, the term better suited to this form of instruction is 'Emergency Remote Teaching (ERT)' (Hodges, Moore, Lockee, Trust, & Bond, 2020).

The practices adopted as a result of an emergent situation are certainly not a result of trial and testing. Therefore, this form of teaching has its own challenges. Several challenges have been reported by teachers and students alike. They range from inequitable technological resources (Morgan, 2020), lack of motivation among students, absence of dialogue, and limited teacher technology self-efficacy. The situation gets even more severe when it comes to EFL teaching, where transmission of content not only depends not only on words but also on a range of other features and factors including, body language, facial expressions, context, to name a few (Granados, 2020).

At the same time, the pandemic has made it essential for teachers specifically to be 'technologically skilled' (World Bank 2020). They have been urged to explore technology and come up with unique innovative practices. The pandemic has resulted in technological advancement in the field of education (Zhu & Liu, 2020). Blumenstyk (2020) believes that the pandemic could very well prove to be a 'black swan' moment for the educational landscape. It can prove to be a catalyst for the widespread acceptance of online education, a consideration that has, in the past, faced much opposition.

However, there is very limited research evidence with respect to EFL teaching and learning during ERT. A few studies in Indonesia, Malaysia, and the United States have been conducted at the school level. None of them can be categorized as a comprehensive nationwide, cross-sectional study that looked at the challenges faced from the teachers' lenses at the tertiary level. Moreover, the topic remains unexplored in the context of the Middle Eastern and Arab regions except for Osman's (2020) study, which provides a background on the steps adopted by the government and Ministries of Education in Oman but it is conducted in the context of teacher education at one HEI.

Hence, this cross-sectional, expansive study, conducted on 100 EFL teachers from 14 HEIs in Oman, explored the Teacher Technology Self-efficacy (TTS), the way EFL teachers managed the situation brought about by the pandemic, their perceptions on ERT, challenges they faced, and some of the innovative practices they adopted during this period.

Research Questions

This study aims to answer the following three research questions:
- To what extent are the teacher participants satisfied with their technology self-efficacy in technology embedded teaching?
- How is ERT managed and perceived by EFL teachers under investigation?

- What challenges have EFL teachers faced during the online/remote teaching during the COVID 19 pandemic, if ever?
- What are the innovative practices adopted by the teachers during the COVID 19 pandemic?

Literature Review
Teacher Technology Self-efficacy (TTS)
Teacher self-efficacy is the perception or belief of a teacher in his or her ability to successfully achieve an educational task (Bandura, 1997). Research has confirmed the significance of a positive sense of efficacy on teacher effectiveness (Putman, 2012). According to Moersch (1995), "Individuals with high levels of self-efficacy are most inclined to accept change and choose the best option" (p. 40).

Teacher Technology Self-efficacy (TTS) is a teacher's belief in their ability to use technology in their lessons effectively. Teachers play a crucial role in developing and enhancing students' skills; therefore, it becomes vital for teachers to be equipped with 21st-century technological skills. If teachers lack the confidence to carry out instruction that targets technical skills, they will not be very likely to use such skills in their classrooms. Moreover, the potential of the technology can only be exploited in totality if teachers also participate enthusiastically (Naqvi, Khan & Mahrooqi, 2014). Research has proved that teachers with a high level of TTS are more likely to adopt innovative teaching approaches (Kao, Chin-Chung, & Shih, 2014; Wang, Hsu, Campbell, Coster, & Longhurst, 2014). The importance of TTS is aptly summarized in this statement, "Technology self-efficacy has come to play a crucial role in the preparation and implementation of educators who can successfully use educational technology to enhance student learning" (Brown, Holcomb, & Lima, 2010, p.121).

Teaching and Learning during COVID 19 Pandemic
Zhou, Wu, Zhou, & Lee (2020) have defined online learning as a process of 'content dissemination' through the resources available via the Internet, also called e-learning and distance education. They argue that online education was generally used in tandem with traditional classroom teaching, to supplement classroom activities. However, due to the critical health risks posed by the COVID-19 pandemic, it has become essential to convert all education to the online medium to prevent the gatherings of students. According to public health officials, social distancing protocols are the most effective measures in preventing an uncontrollable spread of COVID-19 (Murphy, 2020). To this effect, face-to-face classroom interactions needed to be limited and the implementation of 'Emergency E-learning' was required.

In order to protect students and teaching staff alike, educational institutions were instructed to suspend all on-campus teaching and shift to teaching students via a mix of online resources. An emergency policy initiative called "Suspending Classes Without Stopping Learning" was first launched by the Chinese government to continue teaching and learning activities as schools across the country were closed to control the spread of the Corona virus (Zhang, Wang, Yang, Wang, 2020). The same policy was later adopted by 156 countries (World Bank, 2020). To continue the process of teaching and learning, schools around the world employed the use of various online meeting tools and e-learning platforms. For instance, Jan (2020) has reported that Google

Classroom, Remind, Seesaw, and Zoom were used in Malaysia to shift to 'technology-based home-schooling.' Similarly, online resources were used to continue the peer-tutoring system among medical students at the University of Bristol, UK (Roberts et al., 2020). Zhu and Liu (2020) stated that Beijing Normal University shifted all of its courses online due to campus closure. Wechat discussion groups, school website, Zoom, Classin, and TronClass were used. In Georgia, a T.V. school by the name of Teleskola was launched to aid the learning process. In Oman, Moodle was popularly used for blended learning, Microsoft Teams was used for synchronous teaching, and "assistive technologies such as Nvda screen reader, Index Everest v5, Natiq Reader, Braille display, OCR software for PDF" were used for specially-abled students (Osman, 2020, p.4). Similar structures for ongoing learning were implemented in approximately 96 countries, with tools like online libraries, television broadcasts, video lectures, and online channels (Basilaia & Kvavzade, 2020).

Challenges Faced and Innovative Practices Adopted during ERT

Learning online during the pandemic has impacted students of all regions differently. It has increased the difficulty in learning for EFL students who are now studying at home. Teachers complain that teaching English language skills to non-native students is extremely difficult during the ERT phase since language is acquired through interaction (Atmojo & Nugroho, 2020). Teachers also state that non-verbal communication, body language, and interaction between students, which are key elements to effective language learning, are deeply missed during online classes (Granados, 2020).

Another major challenge faced by teachers from the students' end is that of inequitable technological resources. There are many households that do not have consistent internet access. While discussing the challenges of online education in Indonesia, Fansury, Januarty, and Rahman (2020), state "Many students live in areas without reliable internet access and/or struggle to get internet signal…"(p.5). A similar situation is revealed by Goldberg's (2018) study, which makes mention of a considerable number of households not having reliable sources to receive online education in the U.S. In 2017, 14% of U.S. children did not have Internet access at home. The school district of Philadelphia banned graded virtual instruction since this method could not guarantee equal access to technology (Mezzacappa & Wolfman-Arent, 2020). Students from low-income households are also less likely to have their own computers at home (Morgan, 2020). Such inadequate facilities make it extremely difficult for teachers to conduct engaging and interesting online sessions (Atmojo & Nugroho, 2020). However, the situation appears to be much better in Oman, considering the 2020 statistics. According to a survey conducted by the Ministry of Technology and Communications and the National Center for Statistics and Information, smartphone ownership in Oman is 95 percent and residential access to the Internet is 94 percent ("Omani residential internet access and smartphone ownership dip by 1% from 2019", 2020). It is important to note at this point that the survey did not delve deep into the strength and the speed of data connection being used by these households. The high-speed connections are relatively expensive in Oman. The institutional networks are usually strong, but a majority of students cannot afford to have a strong Internet connection, due to which continued online sessions with both audio and video features were not possible from their end. The reason for connectivity issues is not just

limited to the low data package being used but also the terrain since some students and teachers reside in hilly areas, which affects the network connectivity negatively.

Other challenges include learners' procrastination, the insufficient orientation of learners with the online mode, and lack of time for teachers to fully develop the course material (Nkonge & Gueldenzoph, 2006). Students who struggle with low English literacy also face added difficulty understanding the teachers' instruction online and may even skip the written instructions if they cannot understand them (Atmojo & Nugroho, 2020). The study conducted on EFL learners by Allo (2020) also reported the difficulties faced by them in understanding instructions during ERT. The learners requested the lecturers to send voice notes via WhatsApp whenever they upload assignments on the Learning Management System.

Students also tend to be absent during the hours scheduled for the online session, and they have the misconception that online education is akin to a vacation, so they tend not to take it seriously. In addition to this, online teaching can convert students into passive listeners due to a lack of participation in online classes. This reduces their capability to apply their learning outside the classroom (Quevillon, 2020).

According to Gerlich (2005), teachers have, in the past, found online teaching to be more demanding than traditional teaching methods. Teachers have also complained that online teaching is considerably more laborious due to the amount of time spent in grading, feedback process, and responding to queries (Wegmann & McCauley, 2008; Atmojo & Nugroho, 2020).

Despite the challenges it entails, the ERT has, paradoxically, offered great learning experiences for teachers. The pandemic created an opportunity that made it essential for teachers to be 'technologically skilled' and not just see technology self-efficacy as an additional skill (World Bank, 2020). Technology is an integral aspect of this new normal, and to a certain extent, it is true that the pandemic could fuel a new wave of innovation in teaching and learning. A variety of applications and programs have been utilized during this time to continue education and home-based learning, like Artificial Intelligence, the Internet, cloud-based platform, online meeting platforms, and E-learning systems. To counter the challenge of providing feedback on student work, Google Classroom private comments feature and WhatsApp personal chat were used by teachers (Atmojo & Nugroho, 2020). All this combined has produced accelerated growth in the system of online education (Zhu & Liu, 2020).

The review of existing literature reveals that there are very limited studies that have investigated the EFL teaching situation in the higher education sector during the pandemic with a specific focus on the technology self-efficacy of EFL teachers, the challenges faced, and the innovative practices used. Therefore, this study aims to fill this gap in the literature and share the innovative practices adopted by teachers to overcome the hurdles.

Methodology
A mixed-methods approach was considered as the best option to seek a holistic picture of the ERT in Oman with respect to the EFL teachers' technology self-efficacy, their perceptions on

ERT, the challenges faced by them, their readiness to confront the challenges, and the efforts made by them to handle the situation. Both quantitative, as well as qualitative data, were collected to answer the research questions as Shorten and Smith (2017) rightly state, "Purposeful data integration enables researchers to seek a more panoramic view of their research landscape, viewing phenomena from different viewpoints and through diverse research lenses"(p. 74).

Context

This study was conducted with fourteen higher education institutions (HEIs) in Oman. The Sultanate of Oman, commonly known as Oman, is a Middle Eastern Arab nation that lies on the southeastern coast of the Arabian Peninsula. The medium of instruction in government schools, where education is imparted for free, is Arabic (Al-Farsi, 2007), while the tertiary level courses are offered in English medium. Though there are numerous private and international schools in the Sultanate where the medium of instruction is English, most of the local student population receives an education in government schools. Therefore, a large percentage of students entering higher education institutions need foundation English courses to cope with the requirements of tertiary level courses. Al-Mahrooqi and Denman (2018) state that "the transition from Arabic-medium government schools to English-medium tertiary institutions has been reported as posing a number of significant difficulties for Omani learners" (p. 3).

In response to the situation brought about by the COVID-19 pandemic and the distancing protocols suggested by WHO, the Ministry of Education and the Ministry of Higher Education Oman announced a complete lockdown of all educational institutions in the country on 15th March 2020. The ministries provided guidelines to educational institutions with respect to teaching, learning, and assessment (Osman, 2020). The teacher participants of this study belong to Omani HEIs, which include public and private colleges and universities. They either teach the foundation level courses or credit-bearing undergraduate level English for Special Purposes courses.

Instruments

Quantitative data were collected using an online survey questionnaire, and qualitative data were collected using semi-structured in-depth interviews.

Survey Questionnaire

An online questionnaire carrying five sections which included, demographic details, teacher technology self-efficacy, teaching, and learning during COVID 19 pandemic, challenges faced, and best practices adopted during ERT, was used. The questionnaire was administered using the online survey platform called Survey Monkey.

The purposive sampling method was used to decide the survey participant sample. A total of 100 English language teachers, 49% males and 51% females, from 14 Higher Education Institutions from Oman responded to the survey. The teachers belonged to the age group between 25 to 45 years and above. Their educational qualifications ranged from Bachelors to Ph.D. holders. The academic positions held by the teacher participants ranged from Assistant Lecturer to Associate Professor Level. However, they are referred to as teachers for the sake of consistency. With respect to the level of students taught, 51% of them taught at the Foundation program level while the rest taught the undergraduate level programs or at both levels. The survey participants

belonged to 27 different nationalities, some of whom were Omani nationals and the others are foreign nationals who belong to the expatriate population residing in Oman.

Semi-structured Interviews

Qualitative narrative data were collected through semi-structured interviews with six teachers from fourteen different higher education institutions. The purpose of these interviews was to gain deeper insights into the teachers' experiences during ERT, the challenges they faced, and the innovative practices adopted by them to cope with the situation. Diversity in terms of age, teaching experience, academic position, qualification, and the type of institution was considered while selecting interview participants. Thematic analysis of interview data was conducted to answer the research questions.

Table 1. *Interview participant demographics*

Teacher	Age range	Qualification	Teaching experience in years	Academic title
A	25-29	MA	6	Assistant Lecturer
B	41-45	PhD	17	Assistant Professor
C	41-45	MA	13	Senior Lecturer
D	30-35	MA	11	Senior Lecturer
E	41-45	PhD	16	Senior Lecturer
F	50+	PhD	23	Assistant Professor

Findings

Teacher Technology Self efficacy (TTS)

The section on teacher technology self-efficacy carried eight items. A five-point Likert agreement scale was used to assess the TTS of the survey participants. The section aimed at finding out the extent to which the survey respondents were satisfied with their technology self – efficacy in technology embedded teaching. As evident from the weighted averages shown in Table 2, most of the teachers showed a high level of TTS with a weighted average of 4 and above on most of the items. Most of them either strongly agreed or agreed that they could use technology confidently in teaching language skills; use correct terminology while directing students in computer use; provide online feedback to students; use Microsoft programs with ease; respond to student needs with respect to technology, and adopt creative ways to use technology. Two items received a slightly lower than four weighted average, which included the provision of online feedback (3.93) and designing and grading technology embedded assessments (3.86). Designing and grading assessments have also been reported as the most challenging aspect of online teaching as a response to the question on the same topic in the section on challenges faced during ERT.

Table 2 *Teacher Technology Self -efficacy*

Item	SD	D	U	A	SA	WA
1. I can use technology confidently in teaching all the language skills.	5.15%	3.09%	3.09%	41.24%	47.42%	4.23
2. I can use correct terminology while directing my students in computer use.	3.09%	2.06%	5.15%	54.64%	35.05%	4.16
3. I can guide my students when they have difficulty handling computers.	3.09%	4.12%	13.40%	55.67%	23.71%	3.93
4. I can provide online feedback to students using technology.	5.15%	2.06%	2.06%	52.58%	38.14%	4.16
5. I feel confident about designing and grading technology-embedded assignments.	5.15%	4.12%	15.46%	50.52%	24.74%	3.86
6. I can use Microsoft Word, Excel, PowerPoint, and other such programs with ease.	4.12%	1.03%	3.09%	36.08%	55.67%	4.38
7. I can confidently respond to students' needs during computer use.	3.09%	0.00%	7.22%	61.86%	27.84%	4.11
8. I can adopt creative ways to use technology.	3.09%	0.00%	13.40%	43.30%	40.21%	4.18

SD-Strongly Disagree, D-Disagree, U-Undecided, SA-Strongly Agree, SA-Agree, WA-Weighted Average

ERT during COVID-19

As evident from Figure 1 below, most (71.28%) of the teachers reported that their institution adopted online teaching, 18.09% informed that their students had both options-online and remote teaching, and 9.57% relied entirely on remote teaching where students learned at their pace using materials on institutional Virtual Learning Platforms (VLEs). Regarding the use of online platforms for teaching and learning, Microsoft Teams (59.7%) appeared to be the most popular program used by HEIs, followed by Google Meet (18.09%), Zoom (9.57%), and others (12.77%), as shown in Figure two below.
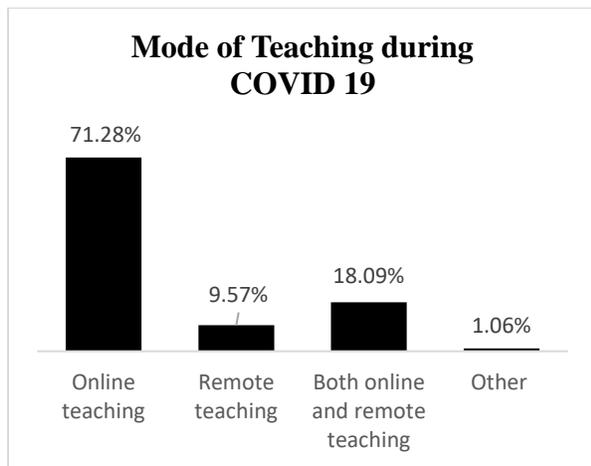
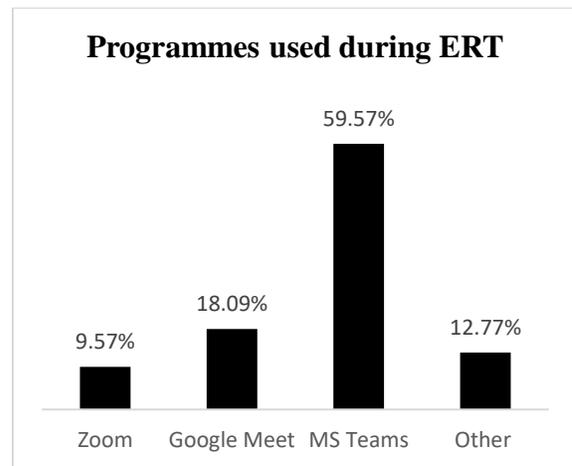*Figure 1*. Mode of teaching during COVID-19

Figure 2. Programs used during ERT

Overall, the attendance in the online EFL classes appears to be good, if not very high, in all the HEIs. As shown in Figure 3, 38.30% of teachers had 50-75% attendance, and 37.23% had 75-100% attendance in their classes. This can be related to the effectiveness of teachers in handling technology and their high level of TTS. However, some (19.15%) teachers had relatively lower attendance, and a few teachers (5.32%) appear to have very low (less than 24%) attendance in their classes. The reasons for low attendance are detailed in the interview analysis section.
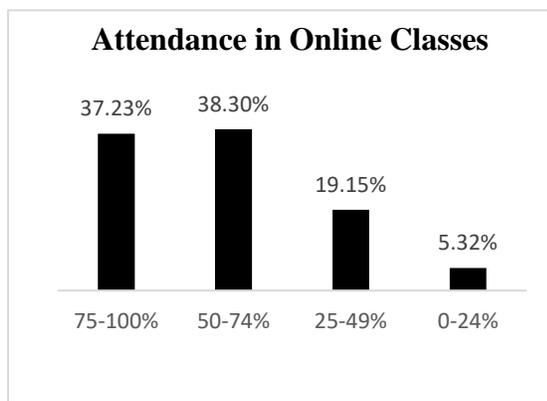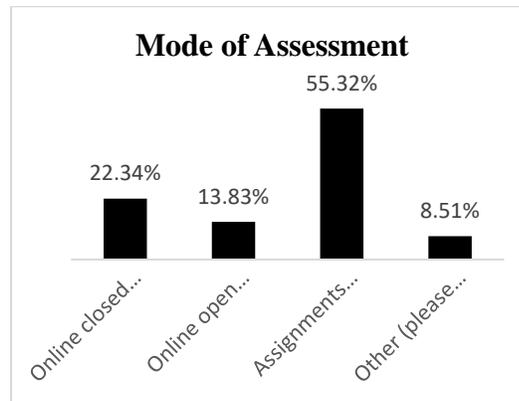

Figure 3. Attendance in online classes

Figure 4. Mode of assessment

The most popular mode of assessment among the HEIs was assignments, which the students were expected to complete within a stipulated time frame. More than half the respondents (55.32%) reported using assignments as the mode of assessment, followed by online closed-book tests (22.34%) and online open book tests (13.83%). There were other modes of assessment used by 8.51% of respondents, which included project-based assessments, in-class participation, timed 80-minute assignments, attendance, etc.

Teacher Perceptions on the New Mode of Teaching during ERT

It is interesting to note that almost a similar percentage of respondents found the shift to online mode easy (25.53%) and difficult (24.47%). A considerable percentage (38.30%) of respondents

neither found it easy nor difficult. Only 3.19% found it very difficult. This reflects that the task of switching over was not very intimidating for approximately three fourth of the teacher participants, which can once again be connected with the high level of TTS shown by teachers. However, 41.49% sometimes, 32.98 often, and 18.09% always missed the traditional classroom experience.
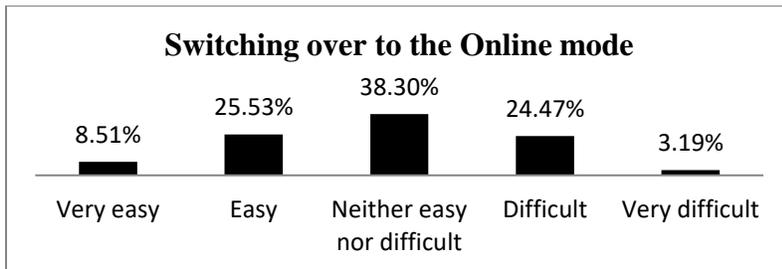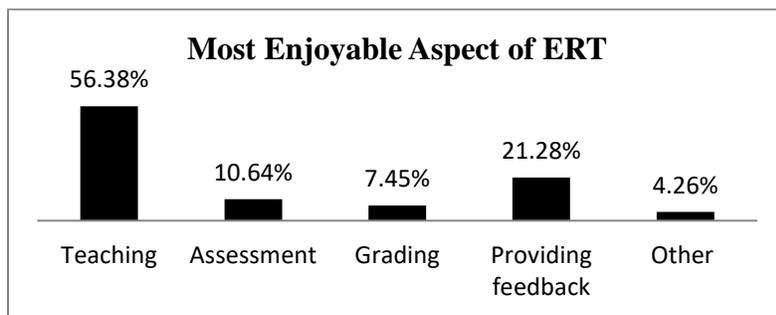

Figure 5. Switching over to the online mode

Figure 6. Most enjoyable aspect of ERT

Challenges Faced

Though the teachers did not find the task of moving to online teaching very difficult, they did face challenges in teaching and assessing students. The most challenging aspect of online teaching appeared to be the assessment design (40.43%), followed by teaching (29.79%), providing feedback(11.70%), grading(10.64%). Other challenges (7.45%) mentioned by teachers included technological hazards and timely submission of assignments by students. The other challenges stated in the option 'others', where teachers were asked to specify the challenge, included timely submission of assignments and handling of technicological hazards faced by students.
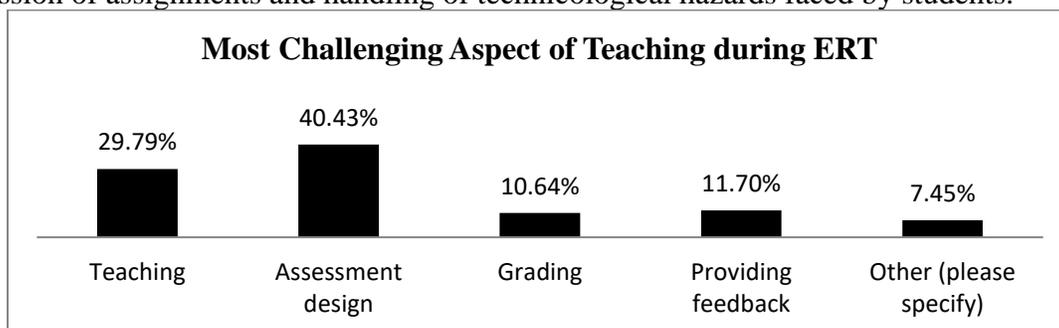

Figure 7. Most challenging aspect of teaching during ERT

Writing appeared to be the most challenging (39.36%) skills to teach, followed by Speaking (20.21%), Listening (13.83%), Reading (11.70%), and other challenges (14.89%).
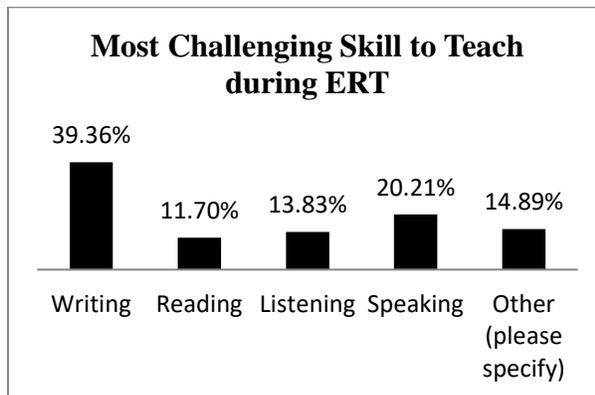

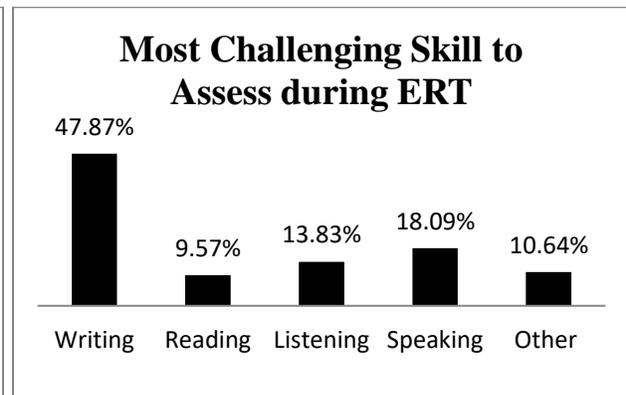*Figure 8.* Most challenging skill to teach   *Figure 9.* Most challenging skill to assess

A number of challenges came to the front through the last open-ended question of the survey and teacher interviews, which are listed below. Several challenges that teachers reported were common:

- Difficulty in giving feedback on student writing since many points need to be discussed; students couldn't understand the comments and did not apply the feedback
- Difficult to urge the students to work on the feedback
- Internet connectivity issues (especially in rural areas) and lack of necessary hardware
- Online teaching is missing the emotional element of teaching
- Lack of face to face and peer/group interaction
- Lack of motivation
- The infrastructure was meant for online meetings only, not for teaching.
- Provision of interactive class and peer/ group experience
- The students are not prepared in advance. It was a sudden move.
- Academic integrity violation
- Teaching blank screens and not being sure if students were actually listening
- Students were not very responsible, and they missed classes
- Students' response to assignments was slow, late submissions, and students who were not attending classes would find it very hard to comprehend how to do the assignments
- Feedback on students' writing compositions
- Issues with invigilating online classes, students found novel ways to cheat.
- Older, less technology-oriented teachers faced a lot more issues.

Innovative Practices
A number of innovative practices were highlighted by the set of teachers interviewed. Some are being summarised here.

Teacher A used OBS Studio for screen recording of the laptop with voice over in the form of short lectures for flipped learning related to various genres of essays and grammar items. According to him,

> This enabled learners to refer back, download, and watch the lessons at their own pace. This practice also made it easier for the teacher to hold the students accountable if they deliberately ignored an important aspect of the class or complained that a particular point was not covered.

Teacher B used Google Docs 'Read and Write' extension to give feedback on writing exercises.

> There is an in-built in feature in Google Docs which allows you to give a voice note, which is very useful and then there is a feature in Chrome extension called 'Read and Write' which can be used to give longer comments.

Another feature used by Teacher B was live worksheets. "I used live worksheets which can be filled online, marked automatically, and scores can be recorded."

Teacher C invited an expert as a guest speaker in his online session on IELTS, which motivated students and helped them learn a number of aspects related to IELTS testing.

Teacher D was really excited to share his innovative practice, which was based on integrating audio clips in the Moodle-based Listening exam.

> I was successful in embedding audio to the Moodle-based exam, which helped my team in designing Listening exams. Otherwise, we had to play audio separately during the listening exam. It would not have happened if this emergency situation had not risen.

Teacher D also mentioned integrating e-rubrics for writing assessments on Moodle, which helped teachers in marking assignments and auto-generating the feedback to be given to students.

Teacher E informed about several online resources and websites which he used during ERT, which included Wordwall, Flipgrid, dreamreader.net, lingro.com, youglish.com, and esl-lab.com. Flipgrid can be used to develop Listening and Speaking skills. Students log in with their institutional ID. Teachers can check their submissions, grade and give feedback after which the students receive it through email. One can create a new grid, with topics. Students can record themselves speaking, with audio and video, or even just audio. It can also be used for assessment purposes. Students can choose a topic or can be assigned one by the teacher. This motivates students to speak.

Teacher F used the institutional e-learning platform for uploading assignment briefs, assignment submissions, and providing feedback. She also shared a number of quizzing apps such as Kahoot, Padlet, and Edmodo.

In addition to the specific innovative practices mentioned by the teacher participants, some common online platforms, websites, and gaming applications became popular during ERT. For online classes, Microsoft Teams, Google Meet, and GoToMeeting were used, while Microsoft Kaizala was used by a number of teachers to connect asynchronously.

Discussion of Findings

All the survey participants articulated a strong level of TTS with the weighted average ranging between 3.86 and 4.38 on a five-point Likert scale. Approximately three-fourths (72.34%) of the respondents did not find it difficult to switch over to the new mode of teaching, and 56.38% enjoyed teaching during ERT. The readiness shown by the survey participants in switching over to the online mode is quite contrastive to the findings of other studies, which reported a lack of preparedness among teachers to switch to the online mode (Atmojo & Nugroho, 2020). Hence, it can be safely assumed that there is a strong correlation between TTS and adopting online teaching practices with ease since most of the teachers appear to have a strong technology self-efficacy. The teachers with low TTS usually find it difficult to adopt technology embedded teaching, and the ones with high levels of self-efficacy are most likely to accept change (Moersch, 1995).

It emerged clearly that a large (71%) percentage of Omani HEIs adopted online, synchronous mode, and also kept the option of asynchronous mode open for students, which reflects the readiness of these HEIs and their robust infrastructure (Osman, 2020). A similar approach to continue learning was employed in approximately 96 countries through a range of online platforms (Basilaia & Kvavzade, 2020). Microsoft Teams and Google Meet appeared to be the most popular program for synchronous learning in Oman while Google Classroom, Seesaw, and Zoom were popularly used in Malaysian classrooms (Jan, 2020), and Beijing Normal University used WeChat discussion groups, Zoom, Classin, and TronClass (Zhu & Liu, 2020)

Despite the high level of preparedness shown by the HEIs in terms of infrastructure, only 37.23% of teachers reported having 75% and above attendance in their classes. This might be due to other factors such as a lack of student motivation and Internet connectivity issues. Lack of student motivation has been reported by other studies as well, where the teachers struggled to engage low motivated students in online classes (Atmojo & Nugroho, 2020).

Regarding the assessments, most (55.32%) of the HEIs used assignments that were to be completed within a specified duration as the primary mode of assessment. However, the most challenging aspect of the ERT during the pandemic appeared to be the assessment design. The institutions had to revise their assessment strategies and plans according to the nature of the courses during the pandemic. With the revised guidelines on assessment design, teachers found it challenging to design strategies that accommodate the demands of the ERT.

The most challenging skill to teach and assess was Writing. The same was reiterated by the interview participants as they found the process of giving feedback very taxing in the online classes. According to a survey respondent, "Students were not able to understand written feedback (due to limited English language skills), couldn't explain all details effectively over email (feedback can be given more effectively face-to-face)." However, the teachers did come up with various innovative practices to deal with this, as was reported by Teacher B, who used voice notes to give feedback via Google Chrome Read and Write extension. A similar suggestion on using voice notes is provided by Allo (2020) in his study on online learning for EFL learners during COVID 19.

Another interview participant briefed upon the tedious process of integrating writing rubrics into the Moodle and the follow-up feedback mechanism. Conducting online closed book Listening tests was also reported to be taxing since all the students were expected to be online at the same time with their cameras on, and this lead to an immense load on the institutional Virtual Learning Environment, which slowed the Internet speed.

Lack of emotional element was reported as another challenge, which is similar to the finding of Atmojo and Nugroho's (2020) study on Indonesian teachers who stated that it was hard to develop emotional bonding with students due to lack of interaction. Motivated interaction between the teacher and student is the key to EFL teaching. However, most of the study participants also reported the lack of interaction to be the main hindrance during ERT, as this slowed the acquisition of knowledge and skills. Students did not respond to them and, if forced, typed answers in chat windows. Similar concerns were raised by Sun and Chen (2016) and Quevillon (2020).

The situation brought about by the COVID-19 posed a number of challenges for higher education institutions and teachers. However, every challenge is an opportunity. The challenges forced the institutions and teachers to act, find solutions, create, and innovate. Most of the HEIs in Oman showed resilience in responding to the situation in the best way. The pandemic served "as an effective 'change agent' for promoting rapid adoption of e-learning in such classically change-resisting institutions" (Osman, 2020, p.8).

Conclusion

This study attempted to unveil the perceptions and attitudes of 100 English language teachers from 14 HEIs of Oman concerning their TTS beliefs, the way they managed and perceived ERT during the COVID-19 pandemic, the challenges faced by them during ERT, and the measures adopted to overcome the challenges. The findings revealed that the survey participants showed a high level of TTS, which is further confirmed by how they managed the situation brought about by COVID-19 and adopted a range of innovative practices to overcome the challenges faced during ERT. The main challenges faced included inequitable technological resources, Internet connectivity issues, lack of interaction, lack of motivation among students, and the absence of physical presence. In terms of the difficulties faced in teaching, assessing, and providing feedback, Writing appeared to be the most difficult English language skill for EFL teachers. Despite the challenges faced by them, most of the teacher participants appeared to be happy with the new practices they adopted and satisfied with the way they handled the situation. Hence, it can safely be argued that the situation, to a certain extent, ignited sparks of creativity among teachers. However, it is essential to note that most of the study participants showed high levels of TTS, and this might be the reason for their positivity with respect to flexibility in adopting novel technology embedded approaches.

Limitations, Pedagogical Implications, and Direction for Future Research

A significant limitation of the study is that it does not cover the issues faced during ERT from the student's perspectives. In addition to that, all the innovative practices reported by teachers as part of the delivery were not observed and documented, except the ones adopted at the authors'

institution. Despite these limitations, the study has a number of merits. The study is expansive in nature as the data were collected from 14 HEIs from across the Sultanate of Oman, and the population sample comprised of participants with diverse characteristics. Moreover, it gives a comprehensive picture of the ERT across the world and provides insights into EFL teaching, learning, and assessment during the ERT. Innovative practices shared by teacher participants; approaches adopted for synchronous and asynchronous teaching, assessment, and feedback; and the adjustments made to the teaching pedagogies reported by teachers under investigation are the major contributions of this study. The innovative practices shared by the participants can be used by EFL teachers globally.

However, to get a 360-degree view of the entire spectrum, student perspectives on ERT also need to be explored. Besides this, it will be worthwhile to carry out an in-depth study on self-efficacy with respect to technology. Additionally, the correlation between TTS and variables such as age and gender needs to be explored, and accordingly, training programs can be designed to strengthen teachers' skills. Future teacher training must include the integration of technology in language learning. It is also advisable to carry out extensive research focusing on the switch over from traditional to online teaching (Moorhourse, 2020).

About the Authors
Dr. Samia Naqvi is presently working at the Middle East College, Muscat, Oman, as the Head of the Center for Foundation Studies (CFS). Alongside the administration of CFS, she is involved in teaching, design, development, delivery, and evaluation of Undergraduate and Foundation level English language courses. She has designed several ESP, EAP, and Business communication courses. She holds a Ph.D. in English Language teaching with specific reference to the use of ICTs for language learning. ORCiD ID: https://orcid.org/0000-0002-6033-9351

Insiya Zehra is a student of Middle East College, Muscat, Oman. She is majoring in Electronics and Instrumentation. She has strong communication skills and holds a strong interest in the field of language acquisition. She has written numerous articles and stories for the school magazine and newsletter. ORCiD ID: https://orcid.org/0000-0002-9897-6786

References
Al-Farsi, S. N. (2007). *Omani school head teachers views of effectiveness of school leadership of secondary schools in Oman,* . (Doctoral dissertation) University of Glasgow, Scotland. Retrieved from http://theses.gla.ac.uk/2611/

Al-Mahrooqi, R., & Denman, C. (eds.). (2018). *English education in Oman: Current scenarios and future trajectories*, Springer.

Allo, M. D. G. (2020). Is the online learning good in the midst of Covid-19 Pandemic? The case of EFL learners. *Jurnal Sinestesia*, *10*(1), 1-10.

Atmojo, A., & Nugroho, A. (2020). EFL Classes Must Go Online! Teaching Activities and Challenges during COVID-19 Pandemic in Indonesia. *Register Journal*, *13*(1), 49-76. https://doi.org/10.18326/rgt.v13i1.49-76

Audah, M., Capek, M., & Patil, A. (2020). *COVID-19 and digital learning preparedness in Jordan*. World Bank Blogs. Available at

https://blogs.worldbank.org/arabvoices/covid-19-and-digital-learning-preparedness-jordan.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman/Times Books/ Henry Holt & Co.

Basilaia, G., & Kvavadze, D. (2020). Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. *Pedagogical Research*, *5*(4), 1-9. https://doi.org/10.29333/pr/7937

Blumenstyk, G. (2020). Why Coronavirus Looks Like a 'Black Swan' Moment for Higher Ed. The Edge. Available at https://www.chronicle.com/newsletter/the-edge/2020-03-11.

Draycott, A. (2020). Coronavirus drives remote learning's acceptance in the Middle East and beyond. Available at https://arab.news/wrrm7.

Euronews. (2020). What do students in the Middle East and North Africa think about e-learning? Euronews. Available at https://www.euronews.com/2020/06/19/what-do-students-in-the-middle-east-north-africa-think-about-e-learning.

Fansury, A., Januarty, R., Rahman, A., & Syawal. (2020). Digital Content for Millenial Generations: Teaching the English Foreign Language Learner on COVID-19 Pandemic. *Journal of Southwest Jiaotong University, 55*(3), 1-12. https://doi.org/10.35741/issn.0258-2724.55.3.40

Ferguson, N. M. et al. (2020) Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. Retrieved from https://doi.org/10.25561/77482

Flores, M. (2020). Preparing teachers to teach in complex settings: opportunities for professional learning and development. *European Journal of Teacher Education, 43*(3), 297-300. https://doi.org/10.1080/02619768.2020.1771895

Gerlich, R. N. (2005). Faculty perception of distance learning. *Distance Education Report, 9*(17), 8. Available at http://www.magnapubs.com/pub/magnapubs_der/9_17/news/597900-1.html

Goldberg, R. (2018). Digital Divide among School-age Children Narrows, but Millions Still Lack Internet Connections. National Telecommunications and Information Administration. Available at https://www.ntia.doc.gov/blog/2018/digital-divide-among-school-age-children-narrows-millions-still-lack-internet-connections.

Granados, A. (2020). How is COVID-19 affecting ESL students? EducationN C. Available at https://www.ednc.org/how-is-covid-19-affecting-esl-students/.

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The Difference Between Emergency Remote Teaching and Online Learning. EDUCAUSE Review. Available at https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning.

Jan, A. (2020). Online Teaching Practices during COVID-19: An Observation Case Study. *Social Sciences and Humanities, 17*. https://doi.org/10.2139/ssrn.3584409

Kao, C. P., Chin-Chung, T., & Shih, M. (2014). Development of a survey to measure self-efficacy and attitudes toward web-based professional development among elementary school teachers. *Journal of Educational Technology & Society, 17*(4), 302–315. Retrieved from http://www.ifets.info/

Mezzacappa, D., & Wolfman-Arent, A. (2020). Philly schools forbid graded 'remote instruction' during shutdown for equity concerns. WHYY. Available at https://whyy.org/articles/philly-schools-forbid-remote-instruction-during-shutdown-for-equity-concerns/.

Moersch, C. (1995). Levels of technology implementation (LoTi): A framework for measuring classroom technology use. *Learning & Leading with Technology, 23*(3), 40–42

Moorhouse, B. (2020). Adaptations to a face-to-face initial teacher education course 'forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching: International Research and Pedagogy*. https://doi.org/10.1080/02607476.2020.1755205

Morgan, H. (2020). Best Practices for Implementing Remote Learning during a Pandemic. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 93*(3), 135-141. https://doi.org/10.1080/00098655.2020.1751480

Murphy, M. (2020). COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. Contemporary Security Policy, *41*(3), 492-505. https://doi.org/10.1080/13523260.2020.1761749

Nkonge, B., & Gueldenzoph, L. (2006). Best Practices in Online Education: Implications for Policy and Practice. *Business Education Digest,* (15), 42-53.

Naqvi, S., Khan, A., & Mahrooqi, R. (2014). Teachers' Perceptions on ICT Use in a Tertiary English Program in Oman. *Proceedings of International Conference on Information and Communications Technology ICAICT*, Middle East College, Muscat, Oman (pp. 582-588). New Delhi: Elsevier.

Omani residential internet access and smartphone ownership dip by 1% from 2019. (2020). Available at
 https://www.telecompaper.com/news/omani-residential-internet-access-and-smartphone-ownership-dip-by-1-from-2019--1339428

Osman, M. (2020). Global impact of COVID-19 on education systems: the emergency remote teaching at Sultan Qaboos University. *Journal of Education for Teaching*. https://doi.org/10.1080/02607476.2020.1802583

Pei, S., Kandula, S., & Shaman, J. (2020) Differential effects of intervention timing on COVID-19 spread in the United States. Paper in collection COVID-19 SARS-CoV-2 preprints from medRxiv and bioRxiv. https://doi.org/10.1101/2020.05.15.20103655

Putman, S. M. (2012). Investigating teacher efficacy: Comparing preservice and in-service teachers with different levels of experience. *Action in Teacher Education, 34*(1), 26-40. https://doi.org/10.1080/01626620.2012.642285

Quevillon, K. (2020). Online Teaching: 3 Unique Challenges and How to Solve Them. Top Hat. Available at https://tophat.com/blog/online-teaching-challenges/.

Rasmitadila, R., Aliyyah, R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. (2020). The Perceptions of Primary School Teachers of Online Learning during the COVID-19 Pandemic Period: A Case Study in Indonesia. *Journal of Ethnic and Cultural Studies, 7(2), 90-109.* https://doi.org/10.29333/ejecs/388

Roberts, V., Malone, K., Russell-Webster, T., & Caulfield, R. (2020). Peer teaching medical students during a pandemic. *Medical Education Online, 25*(1). https://doi.org/10.1080/10872981.2020.1772014

Shorten, A., & Smith, J. (2017). Mixed method research: expanding the evidence base. *Evidence-Based Nursing, 20*(3), 74-75. https://doi.org/10.1136/eb-2017-102699

Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education: Research, 15,* 157-190

Telecompaper (2020) Omani residential internet access and smartphone ownership dip by 1% from 2019. telecompaper. (2020). Available at https://www.telecompaper.com/news/omani-residential-internet-access-and-smartphone-ownership-dip-by-1-from-2019--1339428.

Times News Service. (2020). Supreme Committee issues key decisions on school reopening. Times of Oman. Available at https://timesofoman.com/article/3018053/oman/education/supreme-committee-issues-key-decisions-on-school-opening.

Wang, S., Hsu, H., Campbell, T., Coster, D. C., & Longhurst, M. (2014). An investigation of middle school science teachers and students use of technology inside and outside of classrooms: Considering whether digital natives are more technology savvy than their teachers. *Educational Technology, Research and Development, 62*(6), 637–662. doi:10.1007/s11423-014-9355-4

Wegmann, S., & McCauley, J. (2008). Shouting through the fingertips: Computer-mediated discourse in an asynchronous environment. In K. McFerrin, R. Weber, R. Carlsen & D. Willis (Eds.), *Proceedings of SITE 2008--Society for Information Technology & Teacher Education International Conference* (pp. 805-808). Las Vegas, Nevada, USA; Association for the Advancement of Computing in Education (AACE). Retrieved 21 August 2020, from https://www.learntechlib.org/primary/p/27270/.

WHO (2020). Situation Report 94. World Health Organization. Available at https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200423-sitrep-94-covid-19.pdf?sfvrsn=b8304bf0_4

World Bank. (2020). Three Principles to Support Teacher Effectiveness during COVID-19 (pp. 1-8). World Bank Group Education. Available at http://documents1.worldbank.org/curated/en/331951589903056125/pdf/Three-Principles-to-Support-Teacher-Effectiveness-During-COVID-19.pdf

World Bank Group (2020). Available at http://documents1.worldbank.org/curated/en/511671585947801777/Educational-Policies-in-the-COVID-19-Pandemic-What-can-Brazil-Learn-from-the-Rest-of-the-World.pdf

Zhang, W.; Wang, Y.; Yang, L.; Wang, C. (2020) 'Suspending Classes without Stopping Learning: China's Education Emergency Management Policy in the COVID-19 Outbreak'. *Journal of Risk and Financial Management. 13*, 55.

Zhou, L., Wu, S., Zhou, M., & Li, F. (2020). 'School's Out, But Class' On', The Largest Online Education in the World Today: Taking China's Practical Exploration During The COVID-19 Epidemic Prevention and Control As an Example. *Best Evid Chin Edu, 4*(2), 501-519. https://doi.org/10.2139/ssrn.3555520

Zhu, X., & Liu, J. (2020). Education in and after COVID-19: Immediate Responses and Long-Term Visions. *Postdigital Science and Education,* 1-5. https://doi.org/10.1007/s42438-020-00126-3