

The Unanticipated Educational Challenges of Developing Countries in Covid-19 Crisis: A Brief Report

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ABSTRACT

The purpose of the current paper is to explore the challenges associated with the emergency remote teaching (ERT) in developing countries including Palestine, Libya, and Afghanistan, as reported by students, parents, and teachers. A qualitative approach was used for data collection and analysis. Semi-structured interviews and online class observation were used for data collection. The subjects in the interviews included 60 participants from different countries and 60 online classes were observed. Each class lasted around 40 minutes. Thematic analysis was used to categorize the findings into themes. The findings of the study revealed various challenges in the emergency remote teaching in COVID-19 crisis. These challenges included the learning environment, quality of digital content, digital inequity, and the violation/invasion of digital privacy. The participants reported that COVID-19 has broadened the digital gap among students and their families, depriving them of attending online classes. Another emerging challenge in emergency remote teaching was the violation of students' and parents' digital privacy. Moreover, the findings confirmed that these challenges were the main factors that negatively influenced students' attendance and engagement in online classes.

Further research with larger samples is required to better understand the challenges of ERT in developing countries

Keywords: COVID-19, Online learning, Emergency remote teaching, Remote teaching, Remote learning

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Please cite this paper as:
Khlaif ZN, Salha S. The
Unanticipated Educational
Challenges of Developing
Countries in Covid-19 Crisis:
A Brief Report. *Interdiscip
J Virtual Learn Med Sci.*
2020;11(2):130-134.[doi:10.30476/
ijvls.2020.86119.1034](https://doi.org/10.30476/ijvls.2020.86119.1034).

Received: 18-04-2020
Revised: 14-06-2020
Accepted: 14-06-2020

Introduction

Different countries have switched to technology and online teaching for a limited time in response to crises and shutdown of schools and universities (1-3). According to a recent report by UNESCO (2020), more than 1.9 billion students from 190 countries have been forced to shift from face-to-face education to online learning to address the requirements of Emergency Remote Teaching (ERT) (4).

ERT is an unplanned and sudden shift from traditional education to remote learning in response to the emergency situations like the outbreak of the Coronavirus. In terms of course design and evaluation tools, this approach is completely different from distance education/online learning (5). Any factors contribute to the effectiveness of e-learning, including educational materials, digital equity and digital privacy. However, ERT is completely different from e-Learning since the latter is a planned and systematic procedure based on long-term reform, and the online courses take around 3-6 months to design, develop and deliver to the students. On the other hand, ERT materials or lectures are originally designed for in-person mode and their quality is low (5).

The other factor is digital equity, which is conceptualized in terms of resource distribution, technical knowledge and skills, and the impact of ICT use (6, 7). In the wake of COVID-19 outbreak, students are struggling for digital equity and accessibility of educational resources delivered in the ERT initiative. Resta et al. highlight the five components of digital equity including hardware and software connectivity to the Internet, high-quality digital content in local languages, ability to create and share digital content, educators who are familiar with technology, and high-quality research and applications (8).

Digital privacy is another factor for success in e-Learning. It refers to the protection of an individual's information and communications while using the Internet on a computer or a personal device (9). It

is worth noting that the concept of digital privacy encompasses the knowledge and the technical practices of online security and institutional privacy procedures and the skill to conduct several processes for protecting online data (10). Ahmed and Booth indicated that digital privacy is an individual right, and must be respected and secured even when people have different objectives and desires (11).

Children as young learners might feel disappointed by inequality in the availability of digital opportunities and the implementation of adequate policies (12, 13). Some studies have been conducted in various countries to explore the challenges of online learning in higher education under normal distance-learning circumstances.

To the best of our knowledge, there is a lack of research on emergency remote teaching at high-school level in developing countries, hence the rationale for the present study. In states of emergency, the high school students are usually compelled to learn online. The findings of this study could be different from previous studies since ERT is a totally different concept compared to e-learning (5, 14). Therefore, the aim of this study is to explore the challenges facing ERT programs in developing countries. The present study seeks to answer the following questions:

- What are the ERT challenges associated with COVID-19 crisis in the developing countries?
- How do these challenges influence the implementation and continuity of online classes in emergency situations in developing countries?

Methods

Research Design

A descriptive case study approach was used for this study. This approach is used to describe an intervention or phenomenon in the real-life context in which it occurs (15). The study was carried out after two months of implementing emergency remote teaching in three developing countries, namely Libya, Palestine, and Afghanistan.

Table 1: Demographic information about the participants

Participants	Palestine	Libya	Afghanistan
Teachers	5	5	5
Parents	5	5	5
High school students	10	10	10

Participants

A total of 60 participants were interviewed (20 participants from each country). Furthermore, 60 online classes were observed with purposeful sampling method (20 classes in each country). Table 1 represents the participants from each country.

Data collection

The current study adopted two methods for data collection. Semi-structured interviews were used as the primary source of data collection. Individual interviews were conducted via Zoom for 20-30 minutes. A consent form was signed by all participants before the interviews were recorded. The second source of data collection included online course observations. The researchers observed 60 online classes in the aforementioned countries lasting around 50 hours in total.

Criteria for Selecting the Participants

The selection criteria in this study included participants who have experience in online learning before COVID-19, teach online during COVID-19 crisis, agree to have their online classes observed, and live in one of the selected countries suffering from crisis, namely Libya, Palestine, and Afghanistan.

Data Analysis

A thematic analysis was used for data analysis. It is defined as a qualitative analytic method for categorizing, analyzing, and reporting patterns (themes) within data (16). After constructing the themes that emerged in the analysis of interviews, the researchers used these themes to analyze the observations of online classes. The level of agreement among researchers in coding stood at 83%.

Results and Discussion

All participants from the three countries

reported similar challenges and considered it a priority to continue online learning. In fact, the findings of the study revealed many challenges associated with emergency remote teaching. These challenges were related to the learning environment of both students and teachers, the quality of the digital content, digital inequity, and concern over digital privacy. The obtained results are compatible with those of Traxler et al. (3), Affounh et al. (5), and Resta et al. (8), in terms of digital equity, infrastructure, and digital privacy.

Learning environment

All participants noted that the learning environment was a major challenge in the emergency remote teaching. A question was presented to the participants about their definition of the learning environment. All participants reported described their home environment including availability of devices, the Internet, and the learning space.

Quality of the Digital Content

Teachers and students reported that the quality of the content in the ERT was lower than the quality of face-to-face and normal online learning. The teachers' justification was that they do not have sufficient time to design high-quality content for their classes. One female participant said: "We suddenly switched to online learning and it [course design] needs more time to design the activities and evaluation tools".

The Digital Privacy

All the participants reported that their digital privacy was violated while learning in the emergency remote learning environment. Families expressed that sharing devices such as smartphones, laptops, or desktops are considered as a violation of individual privacy. Few females reported that their teachers asked

them to use webcams which they considered as an invasion of their digital privacy. These females informed their families about the matter. Other families did not allow their girls to attend online classes because the teacher asked them to share personal information such as their social media accounts and to share their laptop screen.

It is difficult for families from these countries to allow their kids to share their photos and videos or even to appear in video recordings, especially in some districts in Afghanistan, Libya, and Palestine. Local culture and religion controlled the lives of people in these areas. However, some families from these countries consider themselves open-minded and allow their kids to share videos and photos, as well as to use a webcam over the Internet; but these families are generally in minority in these societies.

Digital Inequity

It appears that COVID-19 has widened the digital inequity in developing countries, since it forces them to switch to emergency remote teaching suddenly and without preparing students in all levels. All students reported that inequity in the new learning paradigm adversely affects their engagement in online courses.

One female student from Afghanistan stated “I cannot attend synchronous classes because at, my sister uses my device [Laptop] during the class time”. Another female student from Palestine mentioned that “before this crisis, I usually used my mom’s iPhone to finish my assignments, but now I cannot, because she uses it for teaching her students”.

Impact of the Challenges on ERT

Most of the participants in the study reported that these challenges negatively influenced students’ engagement in online classes. One male student argued: “It is difficult for me to do the tasks on Google Classroom because the Internet connectivity is weak”. Students’ engagement is important to build new knowledge and pursue their classes. A study conducted by Khalif,

Nadiruzzaman, and Kwon (17) revealed three types of students’ interaction in online discussion forums including one-way, two-ways, and complicated interaction.

Based on the participants’ reports, it appears that the COVID-19 crisis has a negative impact on students’ engagement in ERT due to the emerging new challenges in the learning process. The challenges reported by students, teachers and parents, deprived the learners of attending and engaging in ERT during the COVID-19 crisis.

Conclusion

The purpose of this study was to explore the ERT challenges during COVID-19 pandemic in three developing countries including Libya, Palestine, and Afghanistan. The findings highlighted different challenges including the learning environment, quality of digital content, digital inequity and violation of digital privacy. Digital inequity and violation of digital privacy are still limited, underrated and unclear in developing countries like Palestine, Afghanistan, and Libya, and both concepts are educationally harmful in coronavirus emergency settings. All the aforementioned challenges had a negative influence on students’ engagement in online classes. Infrastructure and resources were not available to all students, which resulted in digital inequity. Also, many students had no access to the Internet while others struggled with quality and speed. Moreover, there was no prepared, well-designed and secure online system or platform for teaching and learning. Learners’ digital privacy was equally violated. It should be noted COVID-19 highlights the necessity to secure digital equity and privacy even in ordinary circumstances. It is evident that the absence of the concept and processes of instructional design among teachers in ERT settings deepens the digital inequity and threatens digital privacy.

Conflict of interests

The author declares that they have no conflict of interests.

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