

MEDIATING EDUCATIONAL CHALLENGES AMIDST COVID-19 PANDEMIC

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Abstract

Indisputably, COVID-19 pandemic has an unprecedented impact on the education system on a global scale. Against the backdrop of this pandemic, various policy initiatives are launched by governments and educational institutions across the world to cater for students' learning. Similarly, Fiji closed its doors to face-to-face classes on 20th March, 2020 with a projection to reopen on 16th June, 2020. During this phase, learning continued with parent's engagement overseeing home based learning that teachers and the Ministry of Education supported mostly via online. Hence, this study was conducted to establish how teachers were coping with online teaching and learning due to the closure of schools nationwide. Subsequently, telephone interviews were held, proving to be the most feasible method at this time of lock down and social distancing. Irrefutably, the inclusion of interviews to obtain data for academic inquiry has a long history in many scientific disciplines including education. A meta-synthesis methodology was also adopted for this study and pertinent literature cited to capture the essence of continued learning during these unprecedented times. Findings reveal that teachers were slowly adopting aspects of moving towards online learning or E-Learning. It further discloses that apart from resources, staff readiness, staff capacity, confidence, student accessibility and appropriate online learning platform play crucial function in ICT integrated learning. This exploratory paper proposes that facilitators should be equipped with technology and technological gadgets in order to enhance learning especially during these exceptional times. This study further proposes online and remote learning as necessity tools in times of lock downs and social distancing due to COVID-19 pandemic. This study also paves a strong platform for future research so that preparedness and adaptation to such calamity is mapped out.

Keywords: Technology, Digital Generation, Learning Platforms, Internet, Pedagogy, COVID-19 and Online Teaching.

1. Introduction

In light of the escalating concerns pertaining to the spread of COVID-19, with an urgency to contain the coronavirus, many education providers have shut down face-to-face classes globally. Undoubtedly, coronavirus revealed emerging vulnerabilities in education systems around the world. What the society needs today is flexible and resilient education systems as we face unpredictable futures (Zhang at al., 2020). Large-scale, national efforts to utilize technology in support of remote learning, distance education and online learning during the COVID-19 pandemic are emerging and evolving quickly. However, literature depicts certain deficiencies such as the weakness of online teaching infrastructure, the inexperience of teachers, the information gap, the complex environment at home, and so forth (Murgatrot, 2020). Despite certain limitations, current situation demands action so that the education of the students is not affected in any way. For example, China initiated a *Suspending Classes Without Stopping Learning* policy to see that learning was not compromised at any time during COVID-19 pandemic lockdown (Zhang et al., 2020).

Similarly, to tackle online learning challenges, Huang et al.,(2020) suggests that governments and education providers need to promote the construction of educational information, considering equipping teachers/facilitators and learners with standardized home-based teaching and learning materials, conduct online teacher training and support academic research focussing on online education, especially with strategies to assist learners with online learning challenges. According to UNESCO Report, by the end of 2019 COVID-19 started spreading rapidly worldwide, causing 3000 deaths. Subsequently, several countries initiated relevant strategies to contain this virus, including school closures. Subsequently, as of 12th March, 2020 forty six countries in five different continents announced school and university closures in their efforts to contain the spread of COVID-19 (R. H. Huang et al., 2020). As the virus strengthened, some 500 million children and youth are threatened with a daunting reality of school closures due to national lock downs. Thus, International organizations started paying particular attention to the document *Education Response in Crises and Emergencies*. UNESCO stated in the *Education 2030 Incheon Declaration and Framework for Action* that countries should:

Provide alternative modes of learning and education for children and adolescents who are not in education institutions, and put in place equivalency and bridging programmes, recognized and accredited by the state, to ensure flexible learning in both formal and non-formal settings, including in emergency situations(R. H. Huang et al., 2020, p. 1).

Subsequently, to contain COVID-19, the Chinese government has banned most-face-to-face learning, including teaching. The Chinese Ministry of Education launched an initiative entitled *Disrupted Classes, Undisrupted Learning* to provide flexible online learning to hundreds of millions students from their homes(R. H. Huang et al., 2020). The rapid evolution of Information Communication and Technology (ICT) and the increasing complexity that comes with its exploding potential explains why integration of technology in education continues to receive special attention particularly, in wake of COVID-19 pandemic. These conspicuous perceptions and the massive lockdown in the midst of current COVID-19 pandemic provided intrinsic motivation for this study.

2. Aim of the Study

The Novel coronavirus and the resulting COVID-19 pandemic resulted in more schools faced with the challenge of how to maintain continuity of teaching and learning while facing the threat of extended closures. Subsequently, this study intends to examine how teaching and learning can still continue during such unprecedented times.

Thus, this study was guided by the following research questions:

1. What strategies are you implementing to see that learners' education is not affected during this lockdown?
2. What are some of the challenges you face in seeing that learners' learning is not affected?
3. How do you intend to address these challenges if the situation is prolonged?

The aforementioned questions assisted in addressing the aim of the study and in revealing how teachers were trying to cope up with online/distance education during COVID-19 pandemic and nationwide closure of all schools.

3. Significance of the Study

The findings of this study are crucial to various stakeholders for myriad reasons. Foremost, there is a paucity of prior research in this area as this is the first time there is global school closures due to a virus. Hence, this study will assist uncover critical areas and swiftly contribute to local literature on the subject, aimed to be utilised by relevant authorities to harness their education initiatives. Also, for the first time teachers/facilitators of the learning process have begun to realize the urgency to undertake studies in information technology

and online modes as a means of up-skilling their teaching abilities, seeing how the demand for online learning has surpassed traditional teaching/learning methods. Further, the findings will endow educational institutions with vital insights into ICT integrated teaching, aimed at strengthening their programs for teacher preparedness and equipping them with the diverse exigencies of COVID-19 pandemic.

Furthermore, the study makes considerable contributions through its findings by revealing that the learner needs of various groups and their attitudes towards the integration of ICT in teaching and learning. Notably, the findings will benefit the teachers/facilitators as they are in constant touch with students, and be in a position to gauge their learning needs, thus address online management challenges amicably. In a similar vein, it will map out vital information to educational authorities on the importance of ICT integrated learning enabling them to include aspects as pedagogical reforms in education. In particular, they may have to revisit their curriculum ensuring that ICT knowledge is integrated in their text at various levels of teaching. This adaptation would better prepare the students for ICT integrated pedagogy at higher education institutions. Subsequently, the recommendations of the study, if implemented, will allow education institutes to create an interactive and enjoyable learning milieu for all learners amidst the nationwide lockdown due to COVID-19 pandemic.

4. Literature Review

COVID-19 has created stress on our educational systems from primary to higher education settings. During this crisis, both primary and higher education learners are shifting from traditional classrooms to online learning from the comforts of their homes. These novel settings and contexts are diverse and noticeably dissimilar from each other, which has significantly changed the way in which learners engage and learn (Xie et al., 2019). Likewise, there is substantial literature available on the integration of ICT in classrooms. In a global context, both developed as well as resource constraint economies recognize the value of integrating ICT tools for economic advancement. Developed nations, like The United States, for instance, spends more than US\$10 billion annually in educational technology in public schools, while Australia invests approximately AUD\$8 billion in ICT integrated related activities in schools (Albugarni & Ahmed, 2015). Similarly, numerous developing countries like India and Uganda adopted programs aimed at implementing ICT integrated pedagogies to reinforce their teaching and learning process (Ssewanyana & Busler, 2007). The reason these nations have invested heavily in ICT is that ICT tools act as sufficient drivers to boost the country's education towards creating economy based development.

Previous research also signify that the sheer presence of ICT does not directly influence teaching, but instead it should be effectively integrated with teaching contents and pedagogies (Earle, 2002). Likewise, Chen (2010) supports the views of Russell et al, (2003) that teachers/facilitators can use ICT for improving the productivity of conducting daily tasks such as preparing and delivering lessons, keeping student records and communicating with parents/guardians. Not only ICT integration benefits students, it also provides a learning platform for the teachers by enabling them to take ownership and practice knowledge renewal on their own (Li et al, 2018). Given the relentless advent of ICT in education arena, its use in enhancing classroom based instruction to support student-centred education is widely discussed. American Psychological Association, as one of its recommendations encouraged teachers to consider implementing appropriate technological and instructional practices to facilitate student-centred learning (Li et al., 2018).

Equally, teachers/facilitators are encouraged to integrate technology into their instructional practices, as ICT is believed to have the potential to revolutionize an outmoded educational system (Aczel et al, 2008). Similar views were held by Hew and Brush (2007) who assert that integration of ICT in the field of education is inevitable, as technology becomes a 'need' and not just a 'want' in our lives. ICT induced pedagogy favours our learners as they prefer to discover and create unique solutions to learning challenges (Wheeler et al, 2008). Hence, learners do not only view the teacher/facilitator as the one who has all the answers, rather they view them as a resource person, model and a support system that promote explorations

(Cheta, 2014). Subsequently, this generation has a special affinity to mobile devices such as smart phones as they want to be connected with a special appetite for digital media (Kurkovsky & Syta, 2010). The preceding views are supported by a study undertaken by the Government of Canada where they found that millennia's like to be connected 24/7 and they prefer using mobile phones over land lines and texting over talking using the phones (Tanner, 2010).

Indeed digital environments have infiltrated and changed the lives of young people the world over and this alteration needs to be appreciated by all. Ultimately, integrating ICT in classroom instruction is one way of making learning meaningful and interesting for our young minds and successfully contributes towards creating knowledge based economies.

5. Methodology

Methodology demystifies the research process and the belief systems that are constructed on ontological, epistemological, and methodological assumptions. Subsequently, this study was conducted from within an interpretive paradigm, and this action has implications for the selection of an appropriate research design. Accordingly, an exploratory research design was found to be most appropriate to unveil the salient intricacies associated with online learning especially in wake of COVID-19, the worldwide lockdown and social distancing. Exploratory studies are a valuable means of asking questions to establish baseline information that could be later used as a launch pad for further research. The sample size was small but each participant did provide a considerable body of data in response to the interview questions, giving each participant ample opportunities to revisit ideas and report their own experiences in detail.

Subsequently, telephone interviews were held and meta-synthesis of pertinent literature on how teachers/facilitators monitored students' education is not affected during this lockdown. The use of telephones as a conduit for interviews is becoming an increasingly popular data collection technique. Lately, interviewing has transformed in response to the proliferation of technology as researchers seek alternative methods to minimise costs and increase the reach of their data collection. One way that researchers approached this is through entailing telephones in the collection of interview data as the pandemic left no other feasible option. The popularity of the telephone interview as a research method may be a reflection of broader social change and technological advances, with increased use and acceptability of telephone communication. Research has revealed that telephone interviewing is comparable to face-to-face interviewing (Carr & Worth, 2001). In this case, five teachers noted as T1-T5 were interviewed and the findings are presented in a thematic approach.

Likewise, qualitative meta-synthesis is an intentional and coherent approach to analysing data across qualitative studies. It is a process that enables researchers to identify a specific research question and then search for, select, appraise, summarize, and combine qualitative evidence to address the research question. This process uses rigorous qualitative methods to synthesize existing qualitative studies to construct greater meaning through an interpretative process. The purpose of this study is to describe qualitative meta-synthesis as an innovative research approach in light of COVID-19 and the associated lockdowns and social distancing regulations. Although this is not a new research approach in other fields, it offers a promising practice in the fields of online and remote learning interventions. For the purpose of this study, it explores how qualitative meta-synthesis can be a practical and effective approach of inquiry, focussing on online and distance learning in the midst of COVID-19 and associated lockdowns.

6. Findings and Discussion

The ensuing sections present the findings in collaboration with pertinent literature on the influence of technology in conceptualizing pedagogy and practice at higher education level. It also contains discussions derived from the interviews conducted primarily for this study.

6.1. Fijian Context

In response to the global spread of the virus and advice from World Health Organisation, (WHO), the Fijian government heightened its level of preparedness in anticipation of an outbreak. On 19th March, 2020 the Prime Minister of Fiji, Voreqe Bainimarama officially announced Fiji's first confirmed case of COVID-19 through a press conference. Immediately, lockdown was declared for greater Lautoka area, where the first confirmed COVID-19 case emerged, leading to the closure of schools across Fiji from 20th March, 2020. The Fijian Ministry of Education moved its scheduled two weeks holiday forward and later extended till June 12th, 2020 (Moeini, 2008). Subsequently, MoE directed teachers/facilitators to work from home and assigned the preparation of worksheets, slowly transiting into online learning. A week later a ban was placed on inter-island travel dampening the spirits of many learners wishing to travel to and from outer islands. Quickly, the wider Fijian public fathomed the reason behind the lockdown as the government ensured to contain the spread of COVID-19 to maritime regions. Till this study, Fiji has 18 confirmed cases of COVID-19, of which 14 recovered, fortunately no COVID-19 related deaths in the country. The different arms of the government of Fiji collaborated in containing the virus and at the same time addressing the needs of the people.

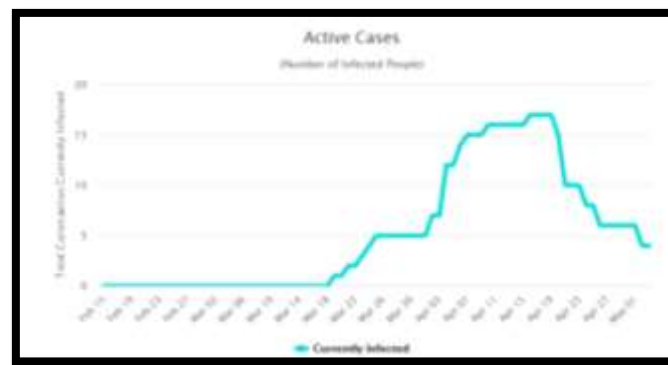


Figure 1 COVID-19 Cases in Fiji (<https://www.worldometers.info/coronavirus/country/fiji/>)

Fiji was not only affected by COVID-19, but was also brushed by tropical cyclone Harold in the month of March. The deadly Cyclone Harold caused colossal damage in different part of Fiji, tearing off roofs and flooding towns as it caused mass devastation across the country. This catastrophe occurred amidst COVID-19 pandemic but the Fijian government responded expediently to both the calamities. Close to 60 schools forecasted to have sustained severe or partial damages from Severe Tropical Cyclone Harold. MoE is utilising this school closure period to see that schools are repaired when the lockdown ends and all its schools in Fiji begin offering face-to-face classes in due course.

6.2. World Context

As of 12 April, 2020 the World Health Organization reports 1 699 595 confirmed COVID-19 cases in the world, with 106 138 confirmed deaths and the virus affecting 213 countries.



Figure 2. (<https://en.unesco.org/covid19/educationresponse>)

In the emerging and ever-changing COVID-19 context (See Figure 2), many countries are affected by COVID-19. According to UNESCO some 190 countries across the globe have closed their schools and universities to stop the spread of corona virus. This forced an estimated 1.5 billion learners to stay at home. UNESCO further recommends an investment in remote learning should assist mitigate the immediate disruption caused by COVID-19 and establish approaches to develop more open and flexible education systems for the future. Since closing schools to contain the COVID-19 pandemic, governments began deploying distance learning solutions and grappling with the complexity of provisioning education remotely, from delivering content and supporting teachers/facilitators to providing guidance to families and addressing connectivity challenges. Equity is paramount as closures disproportionately hurt vulnerable and disadvantaged learners who rely on schools for a range of social services, including health and nutrition.

Figure 3 depicts the number of learners affected on a global scale.

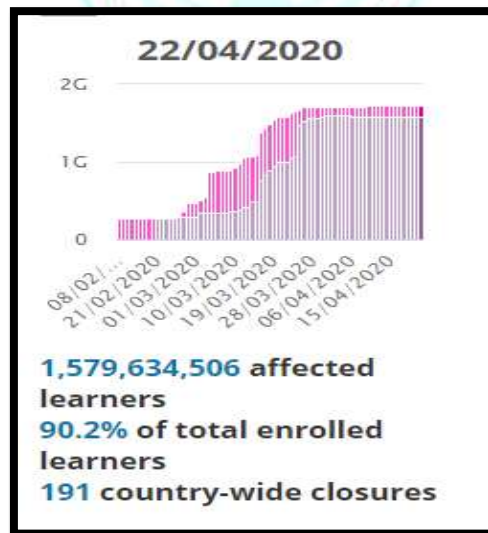


Figure 3. (<https://en.unesco.org/covid19/educationresponse>)

School closures, even when temporary, are challenging for copious reasons. Foremost is a reduction in instructional time, which impacts learning achievement. When schools close, educational performance suffers. Disrupting schooling also leads to other immeasurable losses, such as inconveniences to families, decreased economic productivity as parents struggle to balance work obligations with childcare. The closures also compound educational inequities: economically advantaged families tend to have higher levels of education and

more resources to fill learning gaps and provide enrichment activities to children who cannot attend school.

Likewise, many schools are either closed or on the verge of closing physically and are moving towards online and remote learning. For example, schools in New York offer examples of successful adaptation and rapid deployment of e-learning platforms such as, video-conferencing platform, Zoom and use of MOODLE. Significantly, some schools had existing experience with these technologies that they were able to expand; they did not start from scratch with new and untested tech solutions(Czerniewicz, 2020). Likewise, some schools in Australia struggled with accommodating the rapid switch to online learning. Similarly, institutions have rapidly innovated and implemented online learning, due in part to established familiarity with the necessary tools, teaching approaches and considerations with online learning. This resulted in less disruption for many learners unable to return to face-to-face classes. Literature further entails that teaching online is not a solo sport. Teachers/facilitators and parents/guardians require training in how to involve learners in online discussions and facilitate their deeper understanding of taught material. According to Czerniewicz(2020), instructional designers or educational technologists can assist teachers/facilitators figure out how to best teach with technology and make the most of online learning.

There is no doubt that institutions lack preparation and planning measures, to avoid the excessive demands and tensions that come from adopting things quickly. There is a clear need for online learning expertise in this crisis and it should serve as a reminder that institutions need to cultivate this competency. Institutions may like to outsource online learning so that they are able to benefit from the expertise of expert professionals. The mass closure of schools in the EU was executed to minimise the spread of COVID-19, the respiratory infection that killed more than 106 138 people worldwide. Governments' world over are in search for measures that will ensure learners safety, while finding ways to continue providing courses online. Literature illustrates that education administrators are urging teachers/facilitators to cooperate and share 'know-how' and digital infrastructures for teaching online in the quarantined and locked down areas (Czerniewicz, 2020). Countries most affected by coronavirus are doing their best to continue teaching. For example, Italy was the first EU member state to close its schools and transit to online learning before the country was placed under quarantine.

Similar precautions is also taken outside the EU in neighbouring Ukraine and Moldova, where governments have decided to suspend face-to-face courses in schools and banned large gatherings. Educational institutions want to ensure that students are not disadvantaged by this unprecedented global situation. They encourage universities to continue offering classes in virtual mode to avoid the likelihood of being exposed to the coronavirus. In order to complete the academic year, senior decision makers announced that blended learning or remote learning strategies that could be used to enable students to complete their courses. This action has caught many academics and professionals supporting teaching and learning off guard, especially to those who are doing it for the first time. However, according to Czerniewicz(2020), this change is inevitable as the current COVID-19 situation demands it for the safety of students and the teaching staff.

6.3. The Emergency Transition

The emergency transition to online and blended learning in light of COVID- 19 brings along with it, its own share of challenges and complications. In contrast to experiences that are well planned from the beginning and designed to be online, emergency remote teaching (ERT) is a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances(Hodges et al, 2020) as in this case it is due to COVID-19. It involves the use of remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended mode and that would return to that format once the crisis or emergency is abated. Moreover, Hodges et al.,(2020) are assertive that the primary objective in these circumstances is not to re-create a robust educational ecosystem but rather to

provide temporary access to instruction and instructional supports in a manner that is quick to set up and is reliably available during an emergency or crisis. In this case, COVID-19 did not give the opportunity to pre plan but to take immediate action. It must be established that teachers and students were not prepared and caught off guard for this sudden change, especially those in developing countries(CoSN, 2020).

Likewise, in many cases neither the learners nor the teachers/facilitators have the necessary technologies, resources, and strategies needed to engage and succeed in emergency online courses. Interview findings reveal that majority of the teachers /facilitators interviewed were in acquiesce that they were not prepared for the sudden transition but were trying their best to adjust to the current given situation. Teacher 1 stated that although, he had ample ICT knowledge, he did not use it previously as it was not needed in the schools he taught. Now, he was trying to contact his parents and learners to create Viber groups. However, it must be established that emergency remote teaching or rapid online learning may be different from systematic online learning which requires a lot of pre-planning (Hodges et al., 2020). In this instance the schools were shut suddenly to avoid the spread of COVID-19 and not much time was given for the preparation for the online delivery of the lessons. This is why the speed with which this move to online instruction is unprecedented and staggering. Conclusively, the global lockdown of education institutions has caused major interruption in students' learning and evoked disruptions in internal assessments.

However, findings reveal that despite the challenging times teachers/facilitators were trying to mitigate the negative impacts to the best of their abilities. They are doing this by trying to update themselves with ICT knowledge and skills informally. Teacher 5 revealed that:

I am not very good with computer skills and online learning. I find it very challenging. However, my daughter who is a second university student is a great asset to me as she helps me a lot. She guided me to create a Facebook account which I am utilising to post all the task sheets on it so that my students can download and do them (personal communication, 11 April, 2020).

It must be recognized that COVID-19 pandemic is first and foremost a health crisis and schools are closed to prevent the spread of coronavirus. Bearing the previous statement in mind, teachers and parents have accepted that online and distance learning is appropriate and good for all and in combating the spread of COVID 19 (R. H. Huang et al., 2020).It is wise to understand ERT in this manner, so that we can divorce it from planned online learning. There are many examples of other countries responding to school closures in a time of crisis by implementing models such as mobile learning, radio, blended learning, or other solutions that are contextually more feasible (Murgatroid, 2020). For example, findings in this study reveal that the teachers are very well supported by the Ministry of Education as well the Government of Fiji. Some of the initiatives and strategies implemented in Fiji are discussed in the subsequent section.

6.4. Strategies Implemented

The current crisis crystallises the dilemma policymakers' are facing in going online in the interim closure of schools to reduce the spread of COVID-19. On similar note, Moorhouse(2020) stresses that whenever educational planning is done in times of crises, requires quick and creative solutions. Literature entails that during times of crisis one needs to think outside the box to generate various possible solutions that help meet the new needs for our learners and communities(Hodges et al., 2020). Findings reveal that the severe short-term disruption is felt by many families in Fiji as this home schooling is not only a massive shock to parents' productivity, but also to children's social life and learning. While responding to the first question majority (80%) of the teachers stated that their parents were quite concerned about their children's' education and were very cooperative in assisting them during these difficult times. Accordingly, T5 stated that:

My students' parents are very much concerned about the education of their children and often call me and discuss about updates. After taking approval from my Head

Teacher and the consent of my parents/guardians, I am able to create a MOOLDE page for my students. So far it is going very well. I am enjoying this new mode of teaching and reaching out to my children(personal communication, 11 April, 2020).

Moreover, T5 stated that 29 out of 35 students had logged in their accounts giving a log in rate of 83%. Hard copies are printed for those learners who are not able to log in and their parents/guardians will be given time to collect the worksheets for their children from the school. According to T3, he never utilised online strategies previously but has now made Viber groups to post worksheets. T5 further stated:

I have created a Facebook page in my schools name and posted all worksheets on it. Parents are able to download the worksheets and print them for their children. However, it is not easy as they have to travel to town and access the worksheets printed. This turns out to be a costly affair for the parents. As such we also have the hard copies that parents can pick from the school without any cost (personal communication, 18 April, 2020).

On similar note, the added stress of the virus pandemic has caused some students' disengagement in overall academic activities. In addition, when rapidly moving from face-to-face to online, both learners and instructors get physically separated leading to a sense of isolation and detached. Even UNESCO (2020) agrees that in many instances students, may not be ready for emergency online learning; therefore, engaging them is a major challenge.

Likewise, governments as well as educational bodies globally are looking at opportunities to launch rapid online learning strategies and the Fijian government is pro-active in this regard. To keep learners occupied and engaged, the Ministry of Education in Fiji is thankful to all teachers/facilitators for preparing supplementary resource materials that are accessible online. Parents/guardians who cannot access online materials are provided alternate options such as collecting the printed materials from their respective schools from 4 May 2020 (Akbar, 2020). The Minister for Education, Heritage and Arts, Rosy Sofia Akbar further mentioned that schools, school heads, teachers/facilitators will do all it can in their bid to provide learners with the needed materials (Akbar, 2020). The MoE website also mentions other alternative ways in which learners can be occupied at home during this extended school closure. The MoE website stipulates initiatives such as radio and television programmes viewed on air primarily for Fijian children across the country. It is heartening to note that Fijian children are encouraged to stay tuned to Radio Fiji One and Radio Fiji Two for the daily radio programmes and an educational program has been launched on free to air channel on WALESI Platform. The website also provides dates/times and duration of the programme which learners can tune into to enjoy a different way of learning from the comfort of their homes. No doubt, television has tremendous reach and enjoys the advantage of being a familiar and engaging visual medium. There is a long tradition of television as a distance education medium in many countries and covers a large geographical expanse (Burns, 2011). For it is intricate to predict the trajectory of this pandemic, but assuming it continues over the next several months, education systems may have to include Interactive Radio and Television Instruction.

The Fijian government is concerned and committed with the education of the children during this time of lockdown and social distancing. According to Waqairadovu (2020), the Minister for Communications, AiyazSayed-Khaiyum is keen on government's goal of keeping Fiji up-to-date with global technological advances and has ensured the infrastructure and technological capacity to deploy this program and keep children educated during COVID-19 when schools are closed for the safety of all children. With relentless support from the government and the subsequent agencies, teachers/facilitators are working tirelessly with parents/guardians in ensuring that children's education is not compromised during COVID-19 pandemic.

Moreover, the Ministry of Education Heritage & Arts has played a supportive role in this regard. It has made use of print as well as visual media in getting the message across to the

masses in regards to how they can make the best use of digital curriculum. They have placed the entire curriculum with associated task sheets on the Google Drive and provided relevant links that can be assessed by students and parents from home. They have also created an education website that consists of all supplementary resources and radio programs that students can make use of from the vicinity of their homes. With the limited resources that Fiji has in terms of making a transition from the so-called traditional face-to-face mode of delivery of education to this 'new normal' mode of online learning, the country and its education ministry is doing fairly well. While this new initiative that is slowly emerging and reaching out to Fijian children, the fact that it is emerging and a shift is evident in the teaching pedagogy is a milestone achievement for a country as Fiji. It is also significant to note that the current pandemic has forced the whole world to explore avenues that we all knew existed. Online learning has been available for quite some time but the urgency to shift to it was not necessary as teachers/facilitators were widely and readily available at the disposal of their learners. Now that the dynamics of learning and its needs have changed due to coronavirus, the need to make a switch is more than necessary.

6.5. Emerging Challenges

Needless to say, moving online, on an untested and unprecedented scale brings along with it many challenges and dilemmas. This is because moving school systems to a remote learning environment is not just a technical issue. It is a pedagogical and instructional challenge. Likewise, CoSN(2020) is assertive that a successful effort to move school outside of traditional classroom and building structure requires a close cross-collaboration between instructional, content, and technology teams. Before pulling the trigger on technology initiatives, there are a number of issues that should be taken into consideration. Taking learners and teachers/facilitators out of the classroom is a pedagogical transformation that requires rapid mobilization across the different stakeholders for effective delivery of online learning. Some of the issues that need to be cautiously considered are as follows:

6.6. Infrastructure Support

The World Bank is sentient that few education systems, even the most high performing, may be not be that well equipped to offer online learning for all students at such a large scale. Technological advances often outpace the ability of decision makers to keep up considering the cost and infrastructure support (World Bank, 2020). It must be established that to deliver effective both, the online and blended learning there needs to be appropriate ICT support in way of infrastructure and tools as well as hardware and software support system. There is no doubt that the integration of the ICT as an instructional device in academic courses has escalated at a rapid rate. Subsequently, universities and colleges have started implementing applications like MOODLE and educational Blogs to supplement existing pedagogy and practice (Becker, 2000). Likewise, Ruzgar(2005) agrees with (Becker, 2000) that it is common in universities and colleges to provide online resources to supplement traditional teaching methods. In a study undertaken by Laird and Kuh(2001), it was confirmed that students' responses to the technology related items imply that majority of them use information technology. As such, going online is not seen as a big change for many universities in the world.

However, it must be acknowledged that majority of the schools in resource constraint countries neither have the infrastructure nor the 'know-how' about how to go online and Fiji is no exception. To go truly online, one needs to have the necessary software as well as the hardware infrastructure system. In other words, schools will need a department/section that can handle all ICT related activities. During the interviews conducted, all the five respondents stated that none of their schools had existing online environment at their schools. However, they are all quickly adapting to online dissemination of information using other platforms such as social media and emails. However, literature entails that in order to deliver an effective classroom experience, there are key systems that need to be in place including a Learning Management System and Student Information System for effective delivery of online lessons (CoSN, 2020). In addition to having access to online learning

environment, learners and teachers/facilitators need devices laptops, tablets and Smartphone with which to access online learning. Ensuring access to systems and devices only provides limited options for taking teaching and learning into a virtual environment. The success of this approach is also heavily dependent on internet connectivity and speed. The online experience can be extremely frustrating if learners and teachers/facilitators find systems slow and unresponsive due to bandwidth challenges. Maybe the COVID-19 has provided a launch-pad for further discussion and adoption of online softwares and hardwares at school level for fully fledged delivery of online classes. Subsequently, COVID-19 pandemic has provided a solid reason for those who were thinking of going online to make the move.

6.7. Staff Readiness

Willingness to embrace change is a major requirement for successful integration of technology as it provides learners opportunities to learn and apply the required 21st century skills. Given the relentless advent of ICT in education arena, its use in enhancing lesson delivery has been widely discussed and adopted in many HE institutions globally. American Psychological Association, as one of its recommendations has encouraged lecturers' to reckon implementing ICT integrated learning environment for students (Li et al., 2018). In this regard, Vrasidas (2015) is quite skeptical as institutions may have necessary ICT facilities, but there may be other shortfalls such as lack of time for lesson preparation and unsupportive curriculum design. He reiterates that just having the resources does not imply that ICT can be easily implemented, but there needs to be the presence of other supportive factors and one such factor is staff readiness (Vrasidas, 2015). That is why Yunus (2007) is assertive that before ICT can be effectively integrated teachers should be provided adequate training and support in ICT and pedagogy. There is no doubt why staff readiness and motivation needs to be considered as important factors for the successful assimilation of technology in schools. This lack of confidence could be due to the administration of the different tools and learning platforms.

On similar note, Huang & Liaw(2005) are assertive that staff members' attitude and their willingness to implement ICT makes a big difference in the lives of their students. Similar sentiments are shared by Yuen and Ma (2002) who strongly recommend the need to empower teaching staff and build their confidence so that they are able to implement ICT integrated teaching. Previous studies reveal that teaching staff have difference of opinion in regards to implementing technology in teaching (Agvei & Voogt, 2011; Albugarni & Ahmed, 2015; Lim & Khine, 2006). Likewise, Lim and Khine (Hogan) have gone a step further and reiterated that one of the main determiners of either success or failure of any ICT initiative in education is the teacher. Similar views are being shared by Martin (2000) who strongly advocates the important role played by teachers' as he labels them as gatekeepers of the classroom and similar understanding is also shared by Yunus (2007). On similar note, Coll, Mauri, & Onrubia,(2009) agree that despite there have been certain levels of ICT integration and compliance in education sectors globally, the teaching style and strategies have remained the same.

It must be established that the current situation came suddenly giving no time for teachers/facilitators training and development. However, teachers/facilitators presently are mostly computer literates and online savvy. However, it must be established that neither technology nor technological tools directly influence learning environment, it is the effective integration of it that makes the difference in learning (Earle, 2002). Literature further mentions that staff members' willingness and understanding of the importance of ICT are much needed components that contribute towards effective learning environment (Kamaruddin et al., 2017). As such, it can be established that staff readiness is one of the most important factors that contributes towards the effective implementation of ICT integrated learning and teaching environment. Considering COVID-19 pandemic, World Bank stresses that staff working online need to be trained and supported. They further warn that staff who do not have access to sufficient broadband and a connected device at home

will obviously not be able to support student learning online (World Bank, 2020). Subsequently, they urge that staff need to be supported technically, socially and morally so that they can effectively deliver online classes.

6.8. Learner Accessibility

Learners of today are known by many names, like digital natives (Prensky, 2001), millennial (Howe & Strauss, 2000), net generation (Tapscott, 1998) and digital generation (Ali, 2018). Their entry in the world was at a time when technological expansion was ubiquitous and widely adopted throughout the world. A previous research undertaken by the author has revealed that learners tend to have a strong bonding with ICT (Ali, 2018). Today's children are exposed to technological gadgets such as mobile phones and tablets from tender ages the world over (Shava, Chinyamurindi, & Somdya, 2016). An empirical study undertaken by Jesse (2015) confirms the aforementioned comment as his findings reveal that majority (99.8%) of the learners have access to have mobile phones and they use it for texting, visiting social media and applications apart from talking. Looking at the rate at which technology is integrated in the education system, it can be assumed that students' display a high degree of acceptance and receptiveness towards it (Willms & Corbett, 2003).

Despite students acceptance of technological tools in their lives, the reality of the situation depicts a different scenario altogether. Findings reveal that majority of the learners do not have access to mobile gadgets not even smart phones. They are able to use their parents' mobiles only when parents allow them to use them. Table 1 shows the details as per the teachers' comments/feedback.

Table 1: Frequency of learners' access to mobile gadgets

Teacher	Learners most common means of access to gadgets	Average Frequency of Access
T1	Smart phone	Daily in the afternoon
T2	Smart phone	Twice a week
T3	Desktop	Daily basis
T4	Smart phone	Depends on the availability of data
T5	Smart phone	Depends on the availability of data

Findings reveal that majority of the learners depend on their parents/guardians mobile phones and are only able to access them at given times. Moreover, a lot depends on the availability of data and internet connectivity and speed. Learners' access to quality internet connections is essential for connecting to online school resources. This is one of the biggest challenges learners face in rapidly ramping up of virtual alternatives. On similar note, World Bank has stressed that most online learners will experience unparalleled challenges if they are not assisted. Considering COVID-19 pandemic, World Bank further reiterates that most learners will have great difficulty accessing online learning, especially those stating that they have poor internet access and are subject to numerous other disadvantages along with just connectivity and accessibility issues at hand (World Bank, 2020).

6.9. Lasting Effect

The outbreak of coronavirus disease, COVID-19 in China in December 2019 has rapidly morphed into an unprecedented health, economic and geopolitical crisis globally. With over 2 million confirmed COVID-19 cases globally and over 150,000 deaths worldwide, the global pandemic is wreaking havoc in the global economy from sending shockwaves to stock markets to leaving millions jobless around the world. The situation may worsen and there is fear about severe economic downturn as a result of prolong presence of COVID-19 on the global scale. Although the Pacific Island Countries (PICs) have recorded a smaller number of cases of COVID-19, they have implemented travel restrictions and border closures to prevent imported cases of the COVID-19. Likewise, many countries have imposed public health

emergencies, lockdowns, curfews and social distancing to prevent the transmission of COVID-19. Moreover, the Pacific region is characterized by its high dependence on tourism has suffered immensely from border closures and lockdowns leading to the loss of tourism revenue, with negative effect on overall economic activity, and job losses.

Teachers/facilitators in the study were all concerned about the dampened economic activity and consumer spending. This Pandemic has also seriously affected the education of students and has serious repercussions on the developmental outcomes of PICs and their ability to achieve the Sustainable Development Goals (SDGs) warranting an immediate response in containing the spread of COVID-19 and stabilizing the regions' economies in a resilient and sustainable manner. It must be established that while this is an unprecedented global health crisis, its' consequences exacerbate the existing learning crisis and protection crisis. Teachers/facilitators are also concerned about the long term effect of the lockdown in regards to food security, and their overall physical and mental health. They are also concerned with long-term loss of access to education, increased school drop-out rates and increased violence against children at the home. Teacher 2 stated he has found his students to be stressed out at home and bored at times. As household finances become strained and needs increase, out-of-school children are more likely to be exposed to risks like child labour and exploitation. Likewise, Khan et al., (2020) are assertive the need may arise to evaluate and develop strategies to address psychological health and psychiatric aberrations caused by direct or indirect exposure to the situation.

6.10. Making it Happen

With the spread of the COVID-19, countries are implementing emergency plans to slow down and limit the spread of the virus and simultaneously prepare for a possible longer term disruption of school attendance. In the context of necessary closures, different forms of online education and distance education resources are being mobilised. Findings reveal that teachers in Fiji are going beyond their means to see that their students' education is least affected during COVID-19 pandemic. Despite limited resources, teachers/facilitators in the study are employing the following strategies:

- Utilising Facebook to disseminate information to parents/guardians and learners;
- Preparing relevant worksheets and posting on social media platforms for learners;
- Creating Viber groups and other chat groups for easy accessibility to learners;
- Viber groups are used to facilitate active discussions with parents and students;
- Communicating via Emails with parents/guardians about addressing learner needs;
- Accessing learners through Mobile phones;
- Preparing supplementary worksheets for home-based learning as stipulated by the MoE's directive in order to maintain safety and social distancing norms; and
- Adopting MOODLE and other online platforms as feasible options.

The aforementioned are some of the strategies implemented by the teacher/facilitators. However, findings specifically point out that:

- There is a lack of capacity to operationalise distance learning modalities, and a shortage of appropriate distance learning tools and materials;
- Teachers/facilitators need to work with Ministries of Education to develop catch-up programmes or condensed curricula to avoid loss of school year;
- Ramp up information dissemination and awareness-raising activities to inform students, and parents of the risks associated with COVID-19;
- Ensure that adequate information about the pandemic is provided, especially when it comes to reducing the risk of getting sick and infecting others;
- Offer psychosocial support to learners, parents and facilitators;
- Train teachers/facilitators and other school staff on signs of distress to enable them to identify and refer children who may have specific child protection needs; and

- Device measures to avoid stigmatisation of students, teachers and/or parents who may have been exposed to COVID-19.

Moreover, the World Bank has highlighted a number of concerns as education providers are rushing to go online so that education of the learners are least affected in times of social distancing amidst COVID-19 pandemic. Some of the issues raised by it are as follows:

- Transitioning to online learning at the current scale is challenging and highly complex undertaking for education systems, even in the best of circumstances;
- Moving to online learning at scale raises profound equity concerns;
- Highly motivated learners, especially those with previous experience in online learning, are the most likely to take the most advantage of online learning opportunities;
- When first going online, education systems and parents/guardians should expect dips in learners achievement in the short term;
- Organizing digital educational content to align with existing curricula can be critical in providing users and teachers with a way to ensure that the learning opportunities provided correspond to broader educational objectives within an education system;
- Making content available on a wide variety of devices and mobile friendly is critical;
- Supporting the use of low bandwidth including offline solutions is key to effective learning;
- Staff teaching online need to be supported;
- Universities need to negotiate with internet vendors to help provide access to online learning for learners for free or at a cheaper rate;
- Providing supplemental guidance and support on how to use and access remote and online learning content can be critical; and
- Some academic subjects are easier to move online than others (World Bank, 2020).

World Bank goes further and states that academic subjects that are largely lecture-based and lend themselves to self-study are easier to move online quickly. Subjects in which learning content has already been digitized, especially where it is explicitly aligned with official school curricula, offer better candidates for online learning in the short term than those that do not. World Bank also cautions all to be aware that much of what happens in classes cannot be easily transferred online. Instructional approaches, content, pacing, interaction models, and assessment may all need to be adapted when transitioning to online learning (World Bank, 2020). All these processes may be time consuming but a start needs to be made as it is not a matter of choice but a necessity in response to COVID-19 pandemic.

7. Limitations

Naturally, studies pose certain limitations and in this case, it was the single method used to collect data. The results in this study could not be verified by other means such as survey and other independent measures as only meta-analysis was utilised in the study. Consequently, these results should be viewed as a snapshot for online learning as an option in light of the drastic impacts of COVID-19 pandemic. Thus, the exploratory findings present a solid platform for debate and discussion and a sound scope for further in-depth research on the subject matter.

8. Implications and Conclusions

This lockdown is causing considerable challenges in terms of disruptions, financial loss, and psychological impacts everywhere and has really affected the education globally.

It is recommended that:

- Teacher/facilitator readiness is vital for the effective delivery of online teaching;
- Teachers/facilitators need to be up-skilled so that they are able to offer online teaching. Teaching online requires specialized skill sets including understanding of

how to conduct classes in a virtual environment, knowing when and how to use video conferencing, share content and respond to students' submissions;

- Teachers/facilitators need to have basic ICT tools and access to applications and learning platforms;
- Teachers/facilitators need to have the capacity to use ICT tools effectively to offer lessons in such a mode;
- Learners readiness needs to be acknowledged and supported accordingly;
- Learners should be supported with ICT technology and internet connectivity should be available;
- Administration has to see the availability of digital tools and have respective support structure in place as almost all ICT tools need electricity to operate and require high quality internet connection; and
- Parents/guardians need to take more proactive interest in their children's education and supply them the technological gadgets required by them.

Likewise, COVID-19 pandemic and social distancing requirement has presented undue challenges on all stakeholders to go online as they have to work in a time constraint and resource restraint situation. It must be established that adopting online learning environment isn't just a technical issue. It is a pedagogical and instructional challenge. Technology is the means for delivery and requires a close cross-collaboration between instructional, content, and technology teams. Closing universities and taking students and lecturers out of the classroom is a pedagogical transformation that requires rapid mobilization across university staff and resources (CoSN, 2020).

In essence, ICT has become a potent force in transforming the educational landscape the world over. However, preparing to shift education outside of traditional physical classrooms in response to COVID-19 requires thought, coordination and careful decision-making. This study is a starting point for planning and supporting a significant learning transformation. We need to be optimistic as literature entails a high level of learner satisfaction and interest in ICT immersed learning environment. There has obviously been a great influence of technology in the online lives of young people. This digitalised revolution can synergise the educational ambitions and interests of the students who have become digital addicts. Overall, COVID-19 has provided us with the opportunity to adopt online learning as education systems need to be abreast with the rapid emergence of new technologies, thus making online, blended and remote learning a necessity in schools not only in Fiji, but the world over.

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