Meditating a new pedagogical approach in Early Childhood Education post COVID-19 in the United Arab Emirates

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ABSTRACT

Many learning institutions across the globe are currently operating under emergency-response mode because of the global pandemic of COVID-19 which has affected the education sector. COVID-19 has forced academics to meditate education for young children and project how it could be like when the pandemic is over. The purpose of this study is to explore meditated thoughts of internship students and faculty supervisors about the implementation of early childhood education programmes in the United Arab Emirates post COVID-19. The study was guided by the question: Would you recommend incorporating online teaching as part of early childhood program after COVID-19, and why? Five faculty supervisors and twelve internship students were purposively selected to complete an open-ended questionnaire. Results show that participants advocated for a new pedagogical approach which involves blended learning where face-to-face strategy pre-dominates online learning.

Keywords: Blended learning, Online learning, Pedagogy, ECE, Teaching

Introduction

The global pandemic of COVID-19 has resulted in the closure of many learning institutions across the globe as a way of containing the spread of the virus. The current situation sees many education systems across the globe operating in emergencyresponse mode, understandably so, because of COVID-19 which suddenly hit the world (World Bank 2020, 7). Despite devastating effects that the global pandemic has had in the education sector, the current situation has led to the rise of new opportunities which need further exploration. Academics in different countries have conceptualized and contextualised the current situation and projected possible opportunities out of the pandemic. It is possible to turn the current global pandemic into an opportunity as the World Bank (2020, 6) states: "use the crisis as an opportunity to build more inclusive, efficient, and resilient education systems" which are stronger than before and more accessible and equitable. Despite the fact that COVID-19 possess a great risk of further deteriorating the provision of inclusive, equal and

equitable education, it is projected that the pandemic may bring some new opportunities in the sector. Jandrić (2020) states that there are opportunities which can be explored to further develop education after the current pandemic. Similarly, United Nations (2020, 4) argues that "we should seize the opportunity to find new ways to address the learning crisis and bring about a set of solutions previously considered difficult or impossible to implement." Arnove (2020, 43) argues that "COVID-19 crisis offers a unique chance to imagine more equitable societies and education systems. It is also a call to action, to take meaningful action to bring about that desired future."

The question that arises, is it possible to turn the COVID-19 pandemic into an opportunity that improves access and quality of education? This will be hard to attain considering the fact that education was in a crisis mode prior to COVID-19 as many countries were reported to be off track in achieving Sustainable Development Goal (SDG) 4 of attaining inclusive, accessible and equitable education for all by 2030 (UNESCO,

2019). United Nations (2020, 5) reported that "before the pandemic, the world was already facing formidable challenges in fulfilling the promise of education as a basic human right." The world was far from achieving SDG 4 and the COVID-19 global pandemic which World Bank (2020, 5) describes as "the largest simultaneous shock to all education systems in our lifetimes" has deteriorated the situation in the education sector.

The emergency remote learning strategies which have been put in place by different countries to keep learning going on has led different stakeholders to meditate the implementation of education programmes post COVID-19. The purpose of this study is to explore meditated thoughts of internship students and faculty supervisors about the implementation of early childhood education (ECE) programmes in the United Arab Emirates (UAE) post COVID-19. The study was guided by the question: Would you recommend incorporating online teaching as part of ECE program after COVID-19, and why? The paper begins by presenting literature that focuses on projections of education after the global pandemic and online learning in ECE. This is followed by context of the study, theoretical framework and design research and methodology. Results and discussion follow afterwards, and the paper ends with a succinct conclusion.

Projections of Education After COVID-19

The International Commission on the Futures of Education (2020, 3) argues that when COVID-19 is over, "we cannot return to the world as it was before." This has implications in education as significant changes are projected in terms of curriculum development, implementation and students' assessment of learning. The International Commission on the Futures of Education (2020) projects that following the current global pandemic, education is going to change profoundly. A new pedagogical approach is likely to occur. This is consistent with United Nations' (2020) view that there is a need to reimagine education post COVID-19 in order to accelerate positive change in the whole teaching and learning process. World Bank (2020, 7) concurs that "after the pandemic, parents, teachers, mass media, the government, and others will have changed their views and perceptions about their role in the education process."

Cahapay (2020) postulates that post COVID-19, education is likely to change where the adoption of online learning modalities takes center stage. Sintema (2020) concurs that digitized virtual classrooms are likely to occur in Zambian schools post the current global pandemic. This is so, because "many schools are headed towards complete online modality or blended learning modality in instruction" after COVID-19 (Cahapay, 2020, 3). One wonders how feasible the projected changes of education post COVID-19 will playout in ECE where some academics doubt the effectiveness of online learning strategies on young children.

Online learning in ECE

It is important to note that online learning in general should be viewed according to different contexts. In some contexts, online learning is reported to be highly effective, whereas in others, it exacerbates inequalities. This is why the International Commission on the Futures of Education (2020, 8) argues that "it is an illusion to think that online learning is the way forward for all." Online learning in ECE needs to be looked at differently from the way it is looked at in secondary and higher education sectors. Scholars have different views concerning online learning of young children. The World Bank has a view that online learning is not suitable for young children - "Early childhood education and foundational learning in early primary school, in particular, are likely to be negatively impacted...because children at this age (0-8 years) are less able to independently take advantage of remote learning programs and tools" (World Bank 2020, 12). In this regard, Fedynich (2013) emphasises that through the tactile / kinaesthetic approach, young children understand instruction better when they move, do, and touch as opposed to online learning. Online learning for young children is not the best option as learners will be restricted to twodimensional screen via abstract symbols. That makes their learning experiences hard online as there will be limited hands-on activities. Kim (2020) asserts that early childhood learners need

more hands-on activities in order to enhance their learning experiences and understand concepts better. Kim (2020) acknowledges that although online learning has advantages, such as flexibility of physical location, cost effectiveness, and ease of communication between teachers and children, it is not the best form of teaching youngsters as it requires adult supervision which might be an issue with working parents.

In the Indonesian context, Safitri et al. (2020) argue that online learning which was implemented by teachers in ECE was unsuccessful. This was mainly because of some teaching strategies (simply giving students assignments) which were used by teachers during the time of COVID-19. Interaction among learners and with teachers was limited which compromised the whole teaching and learning process. Similarly, Setiawan and Iasha (2020) reported that some ECE teachers in Indonesia taught children using WhatsApp which was not very effective. Some parents and guardians were reported not to have devices needed for their young children to participate in online learning (Safitri et al., 2020). Another research from Indonesia related to online teaching during COVID-19 lockdown aimed at understanding early childhood teachers' perceptions of their experiences. Fauzi and Khusuma (2020) used quantitative method to elicit 45 teachers' opinions. Their findings indicated that the teachers had a good understanding of online learning but found it difficult to implement it with young children. The implementation phase faced several challenges which include inaccess to facilities, poor provision of internet, limited teaching and learning experiences, and poor parental involvement. This led to 80% of teachers feeling dissatisfied with online learning in ECE.

Dong, Cao, and Li (2020) surveyed 3275 Chinese parents' views about their early childhood children in online schools during the pandemic lockdown. The findings indicated that they had a negative experience and they prefered face-toface settings. Their rejection came from "the shortcomings of online learning, young children's inadequate self-regulation, and their lack of time and professional knowledge in supporting children's online learning" (Dong 2020 et al., 1).

A study by Szent (2020) from Florida in the United States of America (USA) reflected on 50 online lessons given to early childhood students during COVID-19 lockdown. Her reflection highlighted findings in the area of instructional activities in online settings, establishing engagement through online learning, and ensuring parental involvement in online learning. She suggested early childhood education programs should prepare pre-service teachers for teaching and learning in an online environment.

Scholars emphasize the importance of teacher education programs in "fostering technological competencies and confidence of the next generation of early childhood educators" (Luo, Berson, Berson, and Li, 2021, 1). As noted by Luo et al. (2021, 2) "If early childhood educators' attitudes towards digital resources are positive, they are more likely to incorporate it into their teaching practices". Finally, Rasmitadila et al. (2020, 90) state that Indonesia's success in adopting online learning during the pandemic is due to "the readiness of technology in line with the national humanist curriculum, support and collaboration from all stakeholders, including government, schools, teachers, parents and the community".

Context of the Study

The study was conducted at a Federal University in the UAE. The university has a College of Education which aspires to be the leader in the of innovative development bilingual professionals dedicated to the advancement of national and international communities. The college has a field experience model which has four levels – Practicums 1, 2, 3, and Internship. In practicum 1, trainee teachers visit schools or early childhood centers and observe teachers teaching. During the pandemic lockdown, trainee teachers attended online lessons and took notes on an observation form provided by the college. Practicum 2 provides gradual progression as students complete several full day placements in an early years' classroom setting where they observe, assist mentor teacher, teach mini

lessons, and conduct a read-aloud. During the pandemic, mentor teachers gave the trainee teachers several opportunities to read aloud using interactive videos and/or PowerPoint presentations. They were also given the chance to teach some parts of the lessons. In practicum 3, trainee teachers progress into teaching full lessons that consist of 45 minutes with warmup, activities in the middle and wrap up. Pre-service teachers complete ten full day placements in an early years' classroom. Finally, internship mandates trainee teachers to teach as many lessons as possible during the ten weeks of placement in schools. Internship students assume an increasingly significant teaching role and conduct an impact study in a classroom over an extended number of consecutive weeks, demonstrating their readiness to graduate and join the teaching profession. All field experience was conducted in ECE online during the time when this study was conducted. This study comprised of students who were doing internship.

Theoretical Framework

A theoretical framework guiding this study is the Technology Acceptance Model (TAM) which was developed by Davis (1985) and is an extension of the originally known Theory of Reasoned Action (TRA) (Ajzen and Fishbein 1977). TAM is a well-known model which debates the behavioural assessment of the end user or adopters of technology. Mohebi (2018, 24) claims that "in case of education, teachers are an integral part of the equation which would pave way for the technology adoption".

TAM argues that the technology acceptance is directly linked to perceived ease of use and perceived usefulness. Malhotra and Galletta (1999) explain the model by stating that perceived usefulness is built on the users' subjective probability while using a specific application system, and to what extent it increases his/her job performance. On another hand, perceived ease of use is mainly related to the degree in which the user expects the system to be free of effort. Mohebi (2018, 24) asserts that "there are, however, many intrinsic and extrinsic factors that might influence the individual in exhibiting these elements. These factors can be the cultural barriers, linguistics, social factors and the political framework of a country or an organization."

Numerous studies have used the TAM as their theoretical background for explaining technology use and adoption (Al-Emran, Mezhuyev, and Kamaludin, 2018, Salloum, Alhamad, Al-Emran, Monem, and Shaalan, 2019, Binyamin, Rutter, and Smith, 2019). These studies have found and confirmed that perceived usefulness affects attitudes and approval toward technology practice. For instance, Kusumadewi, Lubis, and Prastivo (2021, 1) conducted a study during the COVID-19 lockdown when the Indonesian schools went online. The researchers used TAM to determine parents' acceptance of online learning. Their findings indicated "There is no significant difference between Perceived Ease of Use and Attitude Toward Using". TAM can be used as a theoretical framework to guide studies about online learning. This makes it ideal for this study as participants had to focus on the model's two elements of perceived usefulness and perceived easiness.

Methods

The study was done using a qualitative approach and its paradigmatic position was interpretive. A qualitative approach was chosen as researchers wanted to collect detailed information from faculty supervisors and internship students about their thoughts regarding ECE after the current global pandemic of COVID-19. Creswell (2012) states that a qualitative approach is suitable for a study that seeks to obtain rich textual data about a particular phenomenon. An interpretive paradigm was chosen as it is compatible with a qualitative approach and the two (interpretive and qualitative) allow researchers to interact extensively with participants in order to collect textual data (Creswell and Poth 2018; Creswell and Creswell 2018). Lapan, Quartaroli and Riemer (2012) state that almost every qualitative research has an interpretive perspective which focuses on uncovering participants' views. The study was conducted using an exploratory case study design. It was a case of a federal university in Dubai. A case study was chosen as it enabled researchers to make an in-depth investigation of

the phenomenon (Yin, 2018). A case study was also chosen because it is very specific in terms of identifying a group of participants, the setting and situation or event (Creswell 2012; Creswell and Poth, 2018). In this case, a group of participants were internship students and their university supervisors, the setting was ECE and situation was meditated thoughts of participants.

The study comprised of five faculty supervisors and 12 internship students who were selected using purposive sampling. Purposive sampling was selected as it enabled the researchers to select information rich participants (Fraenkel, Wallen and Hyun 2015). Internship students were selected to participate in this study as they were on the point of completing their study and graduate. They had completed practicums 1-3 and were more knowledgeable about field experience compared to students who were still doing any of the practicums. Faculty supervisors were selected as they evaluated internship students who were teaching ECE programmes online. Data was analysed using content analysis. Ethical issues were observed by obtaining ethical clearance for the research project. The purpose of the study was explained to all participants and they were informed that their participation was voluntary. All participats were accorded the freedom to withdraw from the study at any point. Pseudonyms were used and confidentiality was maintained throughout the study. Consent forms were signed by all participants prior to data collection.

Results

Among all 17 participants (12 internship students and five faculty supervisors) who participated in this study, only one intern disagreed that online learning should be incorporated into the ECE programme in the UAE post the current global pandemic of COVID-19. The student said,

I do not like online education and I hope that things will return as before and better. This is because I am not good at using technology and I prefer face-toface education as I will be able to know the level of the student with full credibility without the intervention of parents. In addition to the tangible activities, it has more effect on the student's education.

The student thinks it is not a good idea to incorporate online learning modalities in ECE mainly because she does not feel competent enough to use technology. This is different from the rest of interns who participated in this study. The 11 students along with all five supervisors unanimously recommended that it is a good idea to provide young children with online learning experiences when the global pandemic of COVID-19 is over. When she was asked if she would recommend online learning after COVID-19, one intern said, "Yes, why not, I already have enough experience and knowledge to teach online classes." Interns recommended incorporating parts of online learning in ECE programme because of its flexibility and advantages that it has in contemporary education. An intern supported this view saving.

e-learning has become one of the basics of the developed society in modern education systems. It helps achieve great benefits such as mutual interaction. There are some advantages of distance learning, such as recording the lesson online which can be used after the class or at any other time. Through distance learning, I can gain many skills and experiences which will benefit me in my life.

A supervisor recommended incorporating online learning in ECE saying:

Yes, because students benefited from the online teaching and they acquired essential skills that enabled them to design learner centered approach for online learning and teaching. This is a new experience around the world and it is important to prepare pre-service teachers for similar situations that might occur.

Another supervisor concurs with the view that incorporating online learning is suitable for a new educational approach which the country is adopting:

The whole experience [of online teaching] showed where we are standing from the new revolutionary approach that

we are in and let us think about the next 50 years that are coming. I am so positive that we had everyone completed their field courses as was planned without any left behind students.

Similarly, another faculty supervisor commented on the success of virtual field experience and the need for adopting it in future: "online field experience which pre-service students had were necessary, successful and should be done in future as they help prepare students for a new pedagogical approach that has emerged."

Both interns and faculty staff reiterated that they were privileged and lucky to be among people who taught successfully online: A supervisor said, "I believe students are lucky to have an experience of teaching online. However, the instructors are the key to successfully guide students in the online teaching." Similarly, another supervisor echoed the same sentiments: "I found this cohort of our teacher candidates to be very lucky to experience the current challenges which are presented around the globe." An intern concurs that she and her other fellow interns were lucky to have online field experience:

My experience of teaching online made me gain a lot of teaching experiences. I think we are a lucky batch because we trained in the past with actual teaching in schools and now we trained in virtual teaching via the internet. From the experiences gained, I learned about time management when teaching online, because sometimes learners waste time on questions, so I learnt to manage time well for them to learn.

Another intern who felt lucky said,

It was a good experience to teach the children online, it allowed me to teach the students in different ways and increase participation rates among them. I am happy that I had the chance. Students can use different apps for participation in learning such as liveworksheet, wordwall and kahoot.

Some interns were satisfied with their virtual field experience and they felt motivated to become online instructors. This was supported by an intern who said, "I enjoyed teaching online, it was a good experience for me. I hope to have this opportunity to become an online instructor in ECE." Similarly, another intern said,

I have learned a lot, and if there is an opportunity to be an online teacher, I will agree to that and with time my skills will develop more in teaching online. Online teaching is a fun and beautiful thing that makes the teacher learn new things and come up with new ideas.

Another intern concurs, "Yes, the overall experience was so positive that I have considered finding an online teaching job several times. It is time-efficient and comfortable." Virtual field experiences which students had were viewed as an opportunity to diversify internship students' career paths. A supervisor who was asked if she recommends online learning in ECE supported the statement saying, "Yes, very much. It is as if we are preparing them for two career paths. One being conventional teacher, second being online teacher." Similarly, another supervisor said online field experience "prepared internship students to be online instructors, thus opening new career opportunities for them." This is why the new teaching pedagogical approach was recommended in ECE. A different supervisor supported this view by saying, "I highly recommend [online learning in ECE]. I also recommend more educational technology classes and make more available resources for them to use in e-learning/teaching."

It is important to note that recommendations made by internship students (along with their supervisors) to incorporate online learning in ECE does not mean teaching young children fully online. It is about blending both face-to-face and online teaching where the former (face-to-face teaching) will be more dominant than the later (online teaching). This is clarified by a supervisor who said:

> After COVID-19, I would recommend blended learning where three quarters of the time will be face-to-face and a quarter will be online. This is because we are in a digital era and all schools in the UAE are encouraged to implement technology. So, going 100% face-to-face will not

assist the country achieve its digital goals in education. It is good for children to develop their three domains (physical, cognitive and socio-emotional), but allowing blended learning will enable the face-to-face plans to be achieved and at the same time prepare children to have comprehensive digital knowledge which is needed.

The reason for having blended learning modality where there is more face-to-face than online is because young children need to do some real activities with the teacher which help them develop their fine and gross motor skills. The reason for not advocating for 100% face-to-face is because of the current digital environment we are living which require all children to learn technology at a young age.

Discussion

Majority of participants in this study had a positive attitude towards online teaching and that influenced them to recommended it as an acceptable pedagogical approach after COVID-19. The main reasons for recommending online teaching in ECE when things normalize is informed by the two critical elements of TAM's model - perceived usefulness and perceived ease of use. Participants in this study recommended online learning after the global pandemic because it was useful to them as it allowed them to enhance young children's learning experiences in a meaningful way. Mitchell, Hodgen, Meagher-Lundberg and Wells (2020) concur that there are distance learning opportunities for children which include access to some essential resources. Children in the Bahamas were supported during the time of COVID-19. They had access to resources, and they had meaningful online learning experiences (Nugroho, Lin, Borisova, Nieto and Ntekim, 2020). Thus, online learning in this context is perceived as useful as it enabled continuity of teaching and learning even after learning institutions were closed. Perceived usefulness is the extent to which a user feels implementing technology and online learning will allow continuity and will better performance (Davis, 1989).

It is important to note that recommendations made by internship students (along with their supervisors) to incorporate online learning in ECE does not mean teaching young children fully online. It is about blending both face-to-face and online teaching where the former (face-to-face teaching) will be more dominant than the later (online teaching). This emphasizes Jandrić (2020) statement that there are opportunities which can be explored to further develop education after the current pandemic. The usefulness of online perceived learning participants in this study to influenced recommend blended learning in ECE where much of face-to-face classes dominate online classes. Kim (2020) concurs with the recommendation made by participants in this study regarding incorporating online learning components in ECE post the global pandemic of COVID-19. The researcher said, "we should find new ways to improve distance education and online learning and its applications to early childhood education" (Kim 2020, 155). Some scholars refute the recommendation of online learning in ECE (Dong et al. 2020; Fedynich 2013; Szent 2020; Luo et al., 2021). Their argument acknowledges the fact that online teaching has some flexibilities, it is cost effective, and it makes communication easy (Kim 2020), but that is not good enough as a pedagogical approach suitable for ECE. In this case, people feel online learning is not perceived as useful mainly because of disadvantages that it has. In ECE, one of the greatest disadvantages of online learning is the fact that children may not engage in hands-on activities as much as they would in face-to-face classes (Nugroho et al., 2020). A study conducted with 3275 Chinese parents of ECE children found that most of the participants disliked online learning as there was inadequate self-regulation and limited hands-on activities for children (Dong et al., 2020).

This is why online learning is criticized in ECE and the reason why participants in this study advocated for blended learning instead. Blended learning which has more face-to-face classes allow children to practice self-directed learning at school and also learn technology which is useful in case another pandemic hits. It is important to note that online learning may be suitable in one context, but unsuitable in another. In the UAE context, the country envisions more technology integration across all levels of education. The country envisions that by 2021, the education sector will have been transformed along with the teaching methods. This is why supervisors in this study concur with the view that incorporating online learning is suitable for a new educational approach which the country is adopting. The closure of schools in the UAE gave teachers more opportunities to embed technology into the curriculum in preparation for the country's digital literacy agenda. This is consistent with the World Bank's statement, (2020, 6) "use the crisis as an opportunity to build more inclusive, efficient, and resilient education systems" which are stronger than before and more accessible and equitable. The perceived ease of use influenced participants in this study to advocate for a new pedagogical approach in ECE. This involves the use of blended learning modalities as a way of "fostering technological competencies and confidence of the next generation of early childhood educators" (Luo et al., 1).

Conclusion

The purpose of this study was to explore meditated thoughts of internship students and faculty supervisors about the implementation of ECE programmes in the UAE post COVID-19. The study was guided by the question: Would you recommend incorporating online teaching as part of early childhood program after COVID-19, and why? The study concludes that purely online teaching is not suitable for young children as there is a need to have them in a face-to-face class in order to engage them in ways which cannot be done online. For as long as there is a pressing need for young children to have developmentally appropriate practices which enable them to exercise their cognitive, physical and socioemotional domains and the need for a national goal of inculcating digital skills among citizens to be achieved, blended learning becomes the most suitable option. It is commendable to expose children at a young age to some technological skills as that resonates with the saying - catch them young and the possibilities will be endless. If children are to use technology at a young age, that provides a milestone of achievement in terms of preparing them to become active participants in a digitally equipped and knowledge-based economy where Science, Technology, Engineering and Mathematics (STEM) form the backbone of the curriculum.

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