

Online Education: Understanding Technological, Socio-Economic and Emotional Challenges

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Abstract

This paper looks at the challenges faced by teachers and students across the globe and Saudi Arabia in particular due to the sudden transition from face-to-face classes to online classes. The pandemic due to Covid 19 brings out the already existing digital/social divide in societies across the world. Amidst such a situation, schools and colleges grappled with new ed-technology, traversing with its non-video or voice only features due to cultural issues and data-cost and network related issues. Since most courses were partly completed by the time the lockdowns happened, students and teachers were exposed to the new methods of assessment. Teachers were not prepared for presenting lectures on a virtual platform which requires different strategies and preparation.

All of a sudden LMSes, like Blackboard experienced tremendous load and the experience was bad due to poor net connection, low quality data packs and phone incompatibility. As every cloud has a silver lining, the teachers found solutions to improve learning and teaching, and engage students inspite of the digital/social divide becoming wider due to the pandemic. The prediction that E-Learning is going to be the future mode of learning and teaching came true with all hiccups. Teachers are forced to re-look at their teaching strategies, re-write lessons plans. Unfortunately, it was a period of burn out – emotional and mental.

Keywords: online teaching, socio-economic challenges, digital divide, COVID-19, teachers' challenges, pandemic, online learning, online assessment, experience

Introduction

"I measure the progress of a community by the degree of progress which women have achieved." ~ Dr. B. R. Ambedkar

The author of this paper is a female, teaching female students in one of the remote location colleges in Saudi Arabia. The Covid 19 pandemic has brought into light the advantage and disadvantage of online education affecting students and particularly female students. In this pandemic, it has been found nations with women leadership did their best in fighting the pandemic (Garikipati et.al 2020). The Prime Minister of New Zealand even Parliament and meetings with her small baby. So, is it really for young mothers to attend online classes? The outbreak of Covid-19 caused by a Corona Virus (SARS-CoV-2) led the World Health Organization to declare it as a pandemic. This declaration shook the education system globally and “forced educators to shift to an online mode of teaching overnight” (Dhawan, 2020). Since the mid of March, 2020 it was a shift from face to face class to online classes across the globe. In Saudi Arabia, distance learning was already there. So, with some training on how to use Blackboard, classes started. Blackboard “is a common teaching and learning platform at many Saudi universities and at many international universities.” (Al-Nofaie, 2020)

With Online classes, there was a hope that this was just the beginning of a new inclusive education system but soon we realized that socioeconomic and geographical location matters a lot whether it is online or face to face classroom. According to Trading Economics, Saudi Arabia is the 36th most competitive nation in the world out of 140 countries ranked in the 2018 edition of the Global Competitiveness Report published by the World Economic Forum. Even with such a robust economy, individual households fail to benefit from modern technology.

A majority of the teachers had been educated in formal educational institutions with the belief that the best quality education is imparted in classrooms. Although some formal training about Blackboard was given to students and teachers before the pandemic, nobody expected that there was an immediate need for change in teaching and learning strategies. In all Saudi universities, “tutorial videos were posted for teaching staff on how to use BB effectively (including information on

preparing BB lectures, administering exams and assessment tools). These tutorials were published and made public over social media” (Al-Nofaie, 2020). Though the administrators expected teachers to jumpstart education online, but what they overlooked was implementing teaching strategies takes time and not overnight.

This discussion paper is based on the experiences and challenges faced by the female teachers and female students during the online classes. The major challenges were experienced in maintaining attendance, delivering and listening to lectures in a smooth manner and participation in online classes without technical interruptions.

TECHNOLOGICAL CHALLENGES

Technical Deficiency

In the Jazan area, during online classes, we observed that 50 percent students were present during the class sessions. Some students disappeared totally by citing their residential areas are away from the network coverage area. Some students did not own laptops even though they had smart phones. Some did not have phones good enough for online classes. Due to low bandwidth and unavailability of signals in many areas, it brought to light the digital divide among different classes and geographical locations. In Taif University, students were supported with data SIM cards and laptops (Al-Nofaie, 2020).

In Kerala, India, a state with highest literacy also witnessed barriers in rolling out online classes. According to Huffington news, “However, [Manorama](#) quoted a study by General Education Department which found that more than 2.6 lakh students had no facilities for online classes. The data was collected from over 43.76 lakh students in the state’s government schools.” In some places

in India, there are television channels which are used to air the course. In Kerala, “classes have been scheduled through the KITE Victers (educational channel) to ensure that students do not miss out” (onmanorama). In the author’s college, the students who were seen less in real classrooms disappeared totally in online classes. On enquiry, it was found that they lived in areas where internet was bad so they were not ready for virtual classes.

Technical and Digital Divide

In the Accessibility report submitted by ASA-TISS in India, it “shows issues like frequent power-cuts and poor internet connectivity”, and low internet data packs, poor network coverage by service providers increase “stress and anxieties among students.” (ASA, 2020). In a study by Cappel & Smart, among technical issues, five users said they experienced problems losing previously completed (saved) work. A few others experienced problems registering at the university website or complained about the slowness of screen loads (2006, p211). In the author’s classroom, students complained about defective devices, which fell off from hands and stopped working properly. Cracked screens with defective speakers, worn off earphones, and low end phones incapable of running heavy LMSes along with recurring data costs were the problems faced by the female students. There were instances when students expressed their inability to buy internet pack. Blackboard being a heavy platform, it needs strong internet, so a teacher has to keep back-ups on Google Drive, or forward clips and content through whatsapp in the form of pdf, jpeg or ppt. Links for the recorded sessions are available but due to bad internet, it is of little use. Back-to-back classes also drain off the phone battery forcing the student to drop off during live sessions.

TEACHING AND LEARNING CHALLENGES

Getting the Students to Start

Teachers are experts in their subjects but not technical experts. Online classes have limitations in teaching a language particularly writing and speaking which requires constant monitoring and interaction. Not all softwares are free and not all are used to the same software which requires constant updating. In online classes, students were reluctant to participate actively because they were afraid of making mistakes while typing. They did not use the microphone because they were afraid that their answers could be wrong. Though it is expected that students will interact with each other too but cutting the ice to start a conversation with the other people was a challenge in virtual classroom. Many of them just logged in but did not respond at all. Chat boxes allow learners a sort of invisibility but not anonymity. Some students did not have a room for themselves which led to a lot of background noise and they refused to use voice communication offered by the platform. As a result, the teacher has to use the chat facility to check the student's presence which is time consuming.

Changing Teaching Strategies to Tune with Technology and Learning Styles

Salih & Syahrin (2020) states "the majority of the higher education institutions in the U.S include different learning style inventories on their websites to encourage students to discover their own learning styles." As course instructors for ESL classrooms, we can pick and choose various technologies and teaching strategies. Being informed of students' learning styles teachers can design and deliver the online course effectively and improve classroom learning experience." When the class shifted to virtual mode, many had internet issues so recordings had to be made prior to the classroom sessions. To keep students engaged during classroom session with poor internet

facility, flipped classroom techniques worked well. Students enjoyed doing the task because they felt good in making themselves visible in an anonymous environment. Moreover, group learning or collaborative learning are important in helping students learn faster. “There is a significant difference between students’ learning styles and their college majors. According to the frequency of styles in some colleges such as “students of Paramedics college use adaptation style and students of other colleges use absorbtive style” (Sajedi, 2014). While “comparing asynchronous and synchronous environments, students preferred the asynchronous environment due to its flexibility.” (Al-Nofaie).

Individual learning attributes have always impacted classroom environment. “Carl Jung” argues that “Individual personality types influence various elements of human behavior, including learning” (Picciano, 2017). These varying learning styles, “1. Extroversion vs. Introversion 2. Sensation vs. Intuition 3. Thinking vs. Feeling 4. Judging vs. Perceiving.” (Picciano, 2017) make online teaching very challenging. There are students who are more comfortable in engaging with content than with face-to-face communication with teachers and fellow learners. The educator’s approach targets, captures and reuses effective person-centered learning patterns and makes them “widely available and easily applicable” (Derntl & Motschnig-Pitrik, 2003). Youtube, and discussion forums in the “process of knowledge construction in teams, discussion and other frequent interactions” (Derntl & Motschnig-Pitrik, 2003) were found useful. Vygotsky’s research also finds such contributions from the social environment” (Ivic, 2000) were real and needed.

Group dynamics play an important role in the success of a class and as learners don’t automatically build the same relationship, an online teacher needs to actively employ techniques to ensure that a group can bond with each other. The dynamics of an online group of learners are different from those of a face-to-face group because students are spread out across various locations. While delivering the course lessons, teachers assign group tasks of various levels of complexities and the results are not

always successful. To encourage students' participation a lot of praise had been used. Knowles in his essay draws upon Skinner (1974) to support that "learners will repeat the desired behavior if positive reinforcement is given." Knowles also suggests, "Giving immediate feedback, whether positive or negative, should enable your learners to behave in a certain way." (Knowles, et al. 2005).

We often make hasty moves without knowing whether the content was clear to the students or not. We need to give around a minute to the person on the other side to respond because of network issues. The message reaches at different times to different students because of internet bandwidth. Some softwares have break out room features but all students are not connected at the same time. In such a case we have to assign the task as a whole group and use chat box. According to Drischoll, (1998) "Strategies for learning with computers are most effective for group learning, as opposed to self-paced instruction." It is expected that students will work in group focusing on "analyzing, synthesizing, and evaluating information in order to construct knowledge" (Drischol, P355).

Managing Student Interaction in Virtual classroom

Though break-out room option is there on Blackboard, poor network prevents in utilizing this feature to its full potential. It takes a lot of time to lead students to do their activities online. So, feedback is a challenge in terms of time management as students copied and pasted materials from the internet. Even Gramsci says that the teaching body in particular would have to be increased to maintain a healthy teacher:student ratio for greater "efficiency of the school—and this presents other problems neither easy nor quick to solve." (Gramsci, 1999, Pg 171)

In an online setting, students have to be self-motivated, self-directed, and self-regulated for example like the "roof-top girl" in Kerala (Das, 2020). She has been able to draw the government's attention in gaining internet connectivity in her residential area. Activities in classroom play a vital role in

keeping the students engaged and interactive. Assignments provide them with choice and flexibility. The transfer of activities from a traditional face-to-face to an online environment can be carried out through platforms such as Microsoft teams, Zoom, etc. as an alternative to Blackboard.

Al-Nofaie (2020) says “the Saudi learners in the preparatory year enjoyed their online experiences, and they found that virtual classes could provide sufficient opportunities for interaction with their teachers and learning of new language skills.” However, the author has observed the behavioral pattern of students does not change online overnight because they are still conscious of being heard through microphone and being seen through their written chat response. The shy and disinterested ones remained mute. Taking student behavior into consideration, students were divided in groups so that absentee students could be guided by other learners. In this way, teachers could keep their students connected to each other.

Online Assessment to Measure Student’s Progress

Students in the online learning environment learn to act and measure their progress through “automated assessments of active learning and receive their grades and instructor feedback through a learning management system”. On examining various forms of applications and platforms, used in interaction, the author found that many of those can be substituted for each other “depending on costs, content, learning objectives, convenience, technology, and available time” (Anderson, 2008). The author disagrees with Anderson when it comes to the quality of the learning outcome. To help students accommodate and retain interest in online classes, the examination was kept at a moderate standard. As a result, such assessments were too easy for the good students and in their feedback about the course, they expressed their dissatisfaction stating they did not learn anything new.

It is noted that each batch of students has an active set of students who participate whether outside or inside the classroom. Sometimes students respond from open books or previously solved answers scripts. Ideally, there are different assessment tools to keep “Sufficient levels of deep and meaningful learning” intact through student-teacher, student-student and student-content interaction at very high levels (Anderson, 2008). To keep them engaged and sustain their interest, extra marks are awarded as rewards for participation. Scores keep the students’ participation in online classes intact. Students preferred online assessment because the exams were open for 24 hours and they had two attempts, so that was more like an open exam.

SOCIAL CHALLENGES

Younger generations in many countries need to support themselves and their studies. “E-learning” is like enacting “social justice”. Anderson and Simpson say “Distance education is grounded in commitment to social justice and equity.” Nevertheless, disadvantaged sections may find E-learning as a convenient way of getting educated. E-learning in Saudi Arabia is playing a significant role of educating “young and married women, with children in some cases, who cannot travel without a mahram (guardian), are benefiting with E-learning tremendously.” (Aljehani & Yamin, 2016).

Apart from availability of smart phones that can access blackboard or heavy learning management system, there is also a cultural factor with regard to usage of smart phones. There are over-crowded homes and it isn’t easy for all to get a secluded space for themselves. In Saudi Arabia, students are not supposed to take pictures or expose their face. So, videos are switched off during classroom sessions. It is primarily voice only mode, share screen, share documents, inbuilt whiteboard and chatbox. Some studies point out, “students believed that the asynchronous mode of BB does not

provide them with a space for active learning because of the lack of direct communication with peers and instructors and the time needed for participation”, (Al-Nofaie, 2020).

Learning is a complete process of touch, see, feel, express, and engage and experiential learning theory defines learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb 1984, p. 41). In Saudi Arabia, students and teachers don't see each other online and therefore a lot is lost in terms of visual communication which helps in learning better and faster.

According to India TV News Desk, in a village in Gujarat in India, “In a community meeting in Jalol village in Banaskantha, Gujarat, some "crucial" decisions were taken. The decisions involved banning the use of mobile phones by unmarried girls.” So young people cannot enjoy the benefits of online education fully from the comforts of home because of such moral policing.

EMOTIONAL CHALLENGES

Teacher Burn-out

The teachers are not only forced to learn a new technology but also spend time in dealing with teaching students to interact with each other leading to teacher burnout. This teacher burn-out has also been discussed by Hogan & McKnight in 2007 and then by Laura Polk and Ted Cross in 2018 in their writings. Similarly, time management and instructional strategies formed from years of face-to-face practice may fail in online classrooms. These factors, together with the common stress of change, can lead many faculty members to burn out and underperform in the online environment (Hogan & McKnight, 2007; Cross and Polk 2018).”

“Course/learning management systems (CMS/LMS) such as Blackboard, Canvas, or Moodle” were already used for blended learning through a “variety of media including text, video, and audio” (Picciano, 2017). But this is based on the assumption that students have devices and good bandwidth. In remote locations people could be deprived of both devices and strong bandwidth, so it is difficult to enjoy the benefits of online classes. The author agrees with Jesse Kong, “However, technology should be considered a tool for instruction—a tool that cannot enhance learning and teaching based simply on its own merits.” If students are left with some links to go and access, there is every chance that the student will be caught up in clicking link after link because that is how materials surface online. Since a student may unnecessarily end up spending valuable time in collecting inauthentic information, and Vygotsky (1978) rightly emphasizes the importance of guided activities (Kong, 2018). As “an online instructor needs to provide immediate and consistent feedback, create a sense of engagement, and motivate group collaboration” a lot that is unseen is teacher over work.

However, with practice and use of various tools and resources, online teachers learn to create engaging content and classroom experiences “while not becoming overly taxed by teaching demands and repetitive tasks.” (Polk & Cross, 2018). Teachers are compelled to redesign lesson plans to ensure its suitability online although existing courses available both online and offline proved useful. Existing materials such as student guides, were prepared by Microsoft Word, which cannot be shared on BB during live session. Constant update in terms of technical work is also a reason for teacher burn out.

Learners’ Stress

Ismail Alrefaai (2019) summarizes students’ problems, “such as technical problems, the small size of the screen, distraction, the accuracy and authenticity of information, health problems, becoming

less patient, and getting tired.” (Alrefaai, 2019). For students who come from rural areas or rural backgrounds, having poor internet/bandwidth, absence of friends while learning, distractions at home from siblings around or an accident or illness of a member in the family which disrupts learning. A cross-sectional survey of a sample consisting of 367 students living in Saudi Arabia was done in Taibah University to assess the “Perceived Stress Scale (PSS) and their emotions and concerns during the outbreak. More than half of the participants showed moderate levels of stress (55%), while 30.2% registered high levels. There was a moderate to high level of stress among students in KSA at the start of the COVID-19 outbreak. This study found a significant correlation between a high level of stress and female university students. The study recommends integration of online counselling and stress management program to help reduce the stress of students during distance learning (Al Ateeq, et al 2020).

Students often complained of inaudibility and were seen disconnected due to bad internet, heavy rains etc. Inaudibility is a reason of discontentment for both learning and teaching experiences. Sometimes, if they unmuted themselves to respond to questions, they got logged off from the live sessions. Since students were using phones, it had further limitation in viewing the screen like ‘inbuilt whiteboard’ on BB.

CONCLUSION AND SUMMARY

The opportunities that are thrown by this pandemic are galore but as nations and societies we will need time to tap it. Teacher and students will need training to update themselves and engage with modern technology. To conduct a speaking examination online strong and stable internet, good microphones on both the sides and a databank for the organizer to store data are needed In absence of dedicated school administrators, a language teacher has to work overtime to explain administrative

rules to students and manage records. Even Dewey says that it is “much more difficult task to work out the kinds of materials, of methods, and of social relationships that are appropriate to the new education than is the case with traditional education” (Dewey. Pg 29). To create a linkage between online school and life which requires skills for interaction, “the teacher becomes a facilitator” in online learning (Dewey). To believe “education is a development within”, one should have clear conceptions of what experience means. Unless experience is so conceived that the result is a plan for deciding upon subject-matter, upon methods of instruction and discipline, and upon material equipment and social organization of the school, it is wholly in the air.” (Dewey, 1997, Pg. 30).

The pandemic has brought in a disconnect between learning and experience so much that the students are demotivated. It is the responsibility of the teacher to bridge the gap with the help of technology and students and administrators. Therefore, the teacher has to re-write the lessons through a combination of theories to cater to the various learning styles challenged and limited by online education. Kassimlet.al says “In MALL Mobile-Assisted Language Learning, motivation is an important issue” and instructional designers should be concerned about it more. Because of online education, traditional classroom teachers are now needed to act as instructional designers. The use of facilities such as free Messenger application in Online Learning System reduce the financial burden on both teachers and students.

In a book Review, Saul Carliner (2005) says that the new generations “will embrace and become natural users of the ubiquitous, pervasive telecommunications technologies.” He emphasizes that the publishing industry, will replace “the classroom professor as the source” (2005). Eastmond (2007), in a book review said, “Digital publication; Student proficiency with digital communication” and other factors are going to play a significant role in distant education. These predictions seem to have come true during the Covid times and translation softwares have been of immense help in online

communication. On looking back, we realized, we saved a lot of trees through online examinations and activities but we also developed eye, back and arm problems. We learnt that students developed a habit of searching information but their tech savviness is not an evidence of the achievement of higher skills such as synthesis and creativity.

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