RESEARCH ARTICLE

MENTAL STRESS DUE TO TECHNOLOGICAL DIFFICULTIES IN ONLINE EDUCATION– OBSERVATIONS FROM A SAUDI COLLEGE

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ABSTRACT

Covid 19 brings out the already existing digital gap in societies across the world. Schools and colleges were brought face-to-face with new ed-technologies and new methods of assessment. Teachers were not prepared for presenting lectures on a virtual platform which requires different strategies and preparation. Administrators expected teachers to jumpstart education online, overlooking the time required for change. All of a sudden LMSes, such as 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 engaged students successfully. The prediction that E-Learning is going to be the future mode of learning and teaching came true with all hiccups. Teachers were forced to re-look at their teaching strategies, re-write lessons plans. Unfortunately, it was a period of burn out – emotional and mental. 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. Teachers are experts in their subjects but not technical experts. Neither all softwares are free, nor all people are habituated with different softwares which require constant updating. This discussion paper is based on the experiences and technical challenges faced by the female teachers and female students during the online classes across different nations.

INTRODUCTION

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. Due to the spread of the novel coronavirus, academic institutions have been forced to shift online and "employed various clouds and platforms to deliver the required material" and to salvage the academic year (Fawaz& and Samaha, 2020). This sudden shift in the method of instruction "caused stressful loads of work which started to give rise to anxiety and depressive symptomatology among undergraduate students" (2020). 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).

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Since the mid of March, 2020, it was a global shift from face-to-face class to online classes. 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) 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).

TECHNOLOGICAL NEEDS: In the Jazan area, during online classes, we observed that 50 percent students were present during the live class sessions. Some students disappeared totally by stating that 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 suitable for online classes. 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. 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.

INFRASTRUCTURAL NEEDS: In the Accessibility report submitted by ASA-TISS in India, it mentions "issues like frequent power-cuts and poor internet connectivity", and low internet data packs, and 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). 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 network and slow speed, it was of little use. Back-to-back classes also drained off the phone battery forcing the students to drop off during live sessions. In such a case the author had to assign the task as a whole group and use chat box to elicit response which was time consuming. 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" (Drischoll, P355).

TEACHER BURNOUT: 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). 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 Vygotskly (1978) rightly emphasized 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 (Kong, 2018).

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. Existing materials were prepared using Microsoft Word, which cannot be shared on BB during live sessions. Constant update in terms of technical work is also a reason for teacher burn out. Feedback is a challenge in terms of time management as students copy and paste materials from the internet. Additional softwares are required to check for plagiarism and not all softwares are free. 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 a virtual classroom. 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 had to use the chat facility to check the student's presence which is time consuming.

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" (1997). To create a linkage between online school and life one requires skills for interaction, "the teacher becomes a facilitator" in online learning (Dewey, 1997). To encourage students' participation, a lot of activities like practice sheets in pdf were shared to boost the confidence of the student. Knowles (2005) believed that "learners will repeat the desired behavior if positive reinforcement is given." "Giving immediate feedback, whether positive or negative, should enable your learners to behave in a certain way" (Knowles, *et al.* 2005). Therefore, a lot of attempts for quizzes and assignments by students and corrections by teachers followed which took a strain on eyes, neck, shoulder and back of the teachers.

STUDENTS' 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 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 programs to help reduce the stress of students during distance learning (Al Ateeq *et al.*, 2020).

The other factors that caused stress among students are many. 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. This inability to participate in classroom caused a lot of stress to students as they felt it would affect their score and attendance. Salih & Syahrin (2020) state that many "higher education institutions in the U.S provide with different learning style inventories on their websites." They also pointed out that Course Instructors for ESL classrooms can pick and choose various technologies and teaching strategies to target, capture and reuse "effective person-centered learning patterns" and make them "widely available and easily applicable" (Salih & Syahrin, 2020; Derntl & Motschnig-Pitrik, 2003). Youtube, and discussion forums help students in the "process of knowledge construction in teams, discussion and other frequent interactions" (Derntl & Motschnig-Pitrik, 2003).

In Listening and Speaking classes, voice messages reached at different times to different students because of weak signals and concerns increased for not being heard and not being able to hear properly. Some of the students tried to upload their assignments but could not do so due to internet problems and weak signals. These problems act as "a stressor that puts students at risk of falling into depression" (Moawad, Ruba Abdelmatloub, 2020. To conduct speaking examinations online, strong and stable internet, good microphones on both the sides and a databank for the organizer to store data are needed. Some softwares had break out room features but all students were not connected at the same time due to network issues.

TECHNOLOGY AND STUDENT BEHAVIOR: 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). Activities in classroom play a vital role in keeping the students engaged and interactive. Assignments provide them with choice and flexibility. To create an in-class environment, various software applications such as Microsoft Teams, Zoom, etc., as an alternative to Blackboard, were used. King Saud University did not use Blackboard for one of the main problems and concerns in using Blackboard was the weakness of internet signals (Moawad, 2020). 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 here has observed the behavioral pattern of students do not change overnight. The shy ones did make any attempt to respond and the disinterested ones remained mute. 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 (Becker& Devine, 2007). 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).

In Saudi Arabia, female students and teachers don't see each other online and are not supposed to take pictures or expose their face. It is primarily voice only mode, share screen, share documents, inbuilt whiteboard and chatbox. Sometimes students respond from open books or previously solved answers scripts which cannot be monitored without camera. 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). 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).

CONCLUSION AND SUMMARY

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. Kassim1et.al (2020) 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.

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