

“Online Teaching in Times of COVID-19 in India and Palestinian Universities: Challenges and Antidotes”

Dr. Soni Sharma

Associate Professor, Jaipuria School of Business, India
Dr Bilal Ibrahim, Ajman University, UAE.

Abstract

Purpose

Covid-19 pandemic has influenced universities across the world to make an abrupt shift from face-to-face teaching to digital/online teaching. The present paper investigates challenges experienced by Indian and Palestinian universities while teaching online in times of Covid-19 pandemic.

Design/methodology/approach

Data was collected from instructors of four Palestinian and Indian universities using a semi-tailored electronic questionnaire and analyzed using SPSS.

Findings

Results showed that unique challenges experienced by four Palestinian and four Indian universities' instructors when teaching online during the Covid-19 pandemic include difficulty in receiving feedback from students in online classes compared to traditional face-to-face classes; difficulty in categorizing students into sub-groups to facilitate group working; and unfavorable online environment at home because of the presence of other family members and children. On the basis of this study's findings, universities should prepare for future crises by ensuring instructors are competent and have knowledge in information communication technologies (ICT) as well as take into consideration the development and enhancement of the quality of online (virtual) courses delivered during emergencies.

Originality

This paper aims to research the implications involved in online teaching and online learning. Through data collection, this research paper was able to measure the impact and suggest recommendations.

Practical implications

Study in the research will contribute to overcome the challenges of stakeholders involved in education profession. Online teaching and learning, both had its own challenge and discomfort whilst implementing it.

Social implications

This research will help to strengthen the bond between educators and learners. Online teaching and learning created an unsaid interest and dilution in education world. This research can pave the way to develop better understanding between stakeholders.

Key words: Technology integration, Online teaching, Covid-19 pandemic, Digital learning, Teaching Method, Technical infrastructure, Digital classroom, Traditional teaching

Introduction

Prior to the outbreak of the Covid-19 pandemic higher education institutions have reported a lot of positive developments in online/digital teaching and learning. Evidence in basic research existed that highlighted the benefits and advantages of using targeted online teaching (Kyaw et al., 2019; Fontaine et al., 2019). In several institutions, new teaching methods and technologies and well-founded explanatory teaching models (e.g., e-activities and ICAP model and blended learning concepts) had been relatively developed and experimented as the tool of enrichment in the process of teaching (Chen, Lui, & Martinelli, 2017; Salmon, 2013; Tolks et al., 2016). However, these innovations in teaching were being adopted in digital teaching slowly because of hurdles such as lack of experienced teachers, legal framework, and lack of transparency in digital teaching. These challenges meant that institutions could only develop digital teaching in a step-wise manner (Müller, Fünfinger, & Tolks, 2018). Then the Covid-19 pandemic erupted creating the need for educational institutions to hurriedly jump into converting face-to-face to pure online teaching. Schools and universities everywhere had to launch digital concepts in a one-off action. This short-term nature of the process forced education institutions to create multiple forms of online examinations and teaching. Unlike early development, these new developments were largely driven by a lack of alternatives and the de facto necessity rather than be driven by institutional strategies. This also meant that the development and designing of teaching methodology should be made to depend on existing digital skills, resources, the available technical infrastructure, and the time frame. However, all these requirements were not homogenous at various higher education institutions. These and other factors have influenced researchers to speculate that a great number of higher education institutions have faced a lot of challenges with online teaching during the Covid-19 pandemic. India and Palestine like other countries are believed to have encountered challenges associated with the Covid-19 pandemic in their higher education and were forced to shift from traditional face-to-face learning to virtual (online learning). In view of the present study, this abrupt shift of courses and teaching from face-to-face to online platforms may have introduced unique challenges that warrant investigation. On this account, the present study examined the challenges and antidotes of online teaching in times of COVID-19 in Indian and Palestinian Universities.

Research Objectives

The key objective of this study was to investigate the challenges and antidotes of online teaching in times of COVID-19 in Indian and Palestinian Universities

Research question

What challenges did the instructors in Indian and Palestinian universities experience in times of COVID-19?

Theoretical Background

Covid-19 has had a huge impact on the education sector and in particular how teaching is performed (Lapada et al., 2020). As observed by Lapada et al. (2020), the Covid-19 pandemic forced many academic institutions, including schools, colleges, and universities to turn to online teaching as an alternative to the traditional face-to-face methods of learning. This was largely informed by the need to adhere to the Covid-19 containment measures of physical distancing. These unplanned essential issues in embracing online teaching have presented multiple challenges to educational institutions globally. Key challenges were documented in the extant literature which included problems and difficulties associated with online technologies, personal attention, difficulties in understanding instructional goals, and unpreparedness of education institutions in transition from physical classes to online classes and assessment challenges. Other challenges have been identified by researchers in different contexts, include difficulties in grading, difficulties associated with teaching practical course work, inadequate computer labs, unstable internet connectivity, technical problems, inadequate computers/laptops, and challenges associated with the provision of task differentiation, the introduction of new learning content (Lapada et al., 2020; Tolks, Kuhn, & Kaap-Frohlich, 2020; Chen, Lui, & Martinelli, 2017; Zalat, Hamed, & Bolbol, 2021).

For example, Tolks, Kuhn, and Kaap-Frohlich (2020) investigated the challenges of teaching during the Covid-19 times within the U.S. context and observed that challenges included inadequate technical infrastructure, lack of experience in using online teaching by teachers, varied not standardized conditions at different levels of education and health policy, and lack of

transparency in creditability of online/digital teaching. Opportunities presented by online teaching as highlighted by Tolks, Kuhn, and Kaap-Frohlich (2020) and identified by others (Chen, Lui, & Martinelli, 2017) included positive developments in online teaching and learning, targeted use of online teaching, the further iterative development and representation of new teaching methods and technologies and well-founded explanatory models (e.g., e-activities and ICAP model) as selective enrichment of learning and teaching offer. Other opportunities presented by online teaching during the Covid-19 times were identified by Tolks, Kuhn, and Kaap-Frohlich (2020) as the use of the Inverted Classroom Model or blended learning in learning institutions, and the development of the varied forms of digital examinations and teaching.

For Stiopca, Cobb, and Faulkner (2020), the challenge of online teaching that emerged during the Covid-19 crisis as reported by teachers within the European Union was the lack of stable internet connections during classroom lessons. Another empirical study by Zalat, Hamed, and Bolbol (2021) used an electronic questionnaire to collect data from university staff members regarding factors and barriers/challenges of using e-learning too to teach higher education during the Covid-19 crisis. Results showed that unstable/insufficient internet connectivity, lack of laptops/computers, inadequate computer labs, and technical problems.

In a similar qualitative study, Rosalina, Nasrullah, and Elyani (2020) used sought to empirically identify challenges experienced by teaching when using the online system of teaching and learning during the Covid-19 pandemic. Rosalina, Nasrullah, and Elyani (2020) also investigated the strengths and shortcomings of using online teaching and learning platform from the perspective of South Kalimantan teachers. Challenges of online teachers were highlighted by teachers as internet connectivity challenges, home environment interferences during online learning/teaching, and technological challenges on the part of learners and teachers. Other challenges were identified as inadequacies of teachers in designing interactive and interesting online learning material, inadequate teacher-learner interactions, ineffective and poor online learning environment, and poor communication. The key strength of online learning was identified as the flexibility of place and time and the key shortcoming of online learning as an inefficient pedagogical process.

A literature review by Dhawan (2020) on online learning as a solution to social distancing during the Covid-19 crisis found challenges associated with online learning and teaching as difficulties in using online education technologies, students finding online teaching to be unengaging and boring, and too much flexibility afforded by online learning. Technology-related challenges were noted as login problems, issues associated with installation, problems with video and audio, and downloading errors. Other challenges identified in this study, included lack of personal attention by teachers towards learners, lack of two-way teacher-student interactions, challenges in practicing what is learned, mediocre course content, and lack of community, difficulties in understanding instructional goals, and technical problems. In addition, the researcher found students to be poorly prepared in using Learning Management Systems in online classes and to be insufficiently prepared to balance their family, work, and social lives when learning via online platforms. A similar study by Saxena (2020) found online teaching as challenging on the following basis: lack of physical/personal attention, time management, technical difficulties, frustration, distractions, confusion and anxiety among learners, and poor learner's confidence level and capability. Saxena (2020) also observed that online teaching compromises the quality of education, and it is associated with challenges namely digital divide, digital illiteracy, unequal distribution of ICT infrastructure, and technology obsolescence and cost.

A comparative mixed-method study by Thaheem, Abidin, Mirza and Pathan (2021) investigated the benefits and challenges of online teaching during the Covid-19 pandemic within the Pakistan and Indonesian context. Using data obtained from 102 Indonesian university lecturers and 66 teachers in Mehran UAT Pakistan and analyzed descriptively revealed that online teaching presents certain challenges: hampering communication between the educator and the learner by minimizing human touch and direct communication, and multiple technical difficulties by users that hinders and slows-down the teaching process.

According to other researchers (e.g., Favale et al., 2020), while online teaching can afford the learner and the instructor's location and time flexibility, but these aspects create problems too because of their fragility. On this point, Favale et al. (2020) opined that the non-serious behavior of students when it comes to flexibility and time can cause problems during

online learning. Learners are also thought to vary in the extent of confidence levels and capabilities and that while some learners may feel comfortable learning online others can feel uncomfortable and get confused and frustrated. In addition, Favale et al. (2020) observed that inadequate capability between the element of psychology required in online learning platforms and the design of the technology associated with online teaching may create an imbalance by obstructing the teaching process.

Other challenges of online teaching identified by Hassan (2021) through a literature review-based study, include practical course work problems, assessment and grading challenges, and technological challenges from the student and faculty perspective,

As observed herein, while researchers have identified challenges of online teaching, there is hardly a study that focused on challenges experienced by teachers of online classes with the Indian or Palestinian university context.

Methodology

Data Collection Tool

In this study, quantitative data was collected using a semi-tailored electronic questionnaire encompassing three sections. Section one contained questions on occupational and socio-demographic information of study respondents, including gender, age, residence, current employment status, marital status, work sector, years of experience, and experience in teaching via an online platform. Part 2 of the questionnaire covered the perception of the university staff and their experiences with online courses. The last part (part 3) had questions covering challenges/barriers to online learning. Respondents rated questions on a five-point Likert scale ranging from 1 denoting strongly disagree to 5 denoting strongly agree.

Data Collection Procedure

The data collection procedure was as follows. First, the researcher designed an electronic questionnaire on Google forms. Next, the invitation link that allowed research participants to participate in the survey questionnaire was shared by the researcher on social media and via email. Third, the response rate was increased by the researcher sending two reminders to participants every 10 days. A cover letter was further shared appearing on the first page of the electronic survey. The letter explained the study purpose, emphasized its significance and importance, and encouraged cooperation on the part of the study participants.

Pilot Study

The survey questionnaire was pilot-tested on 10 participants from two universities in India and two universities in Palestinian universities. Necessary changes, corrections, and modifications were undertaken to ensure the clarification and ease of understanding of all questions contained in the questionnaire. A Cronbach's alpha test was performed to assess the reliability of the questionnaire. It was found to be exceeding 0.7 (>.7) for most questionnaire items.

Data Analysis/Management

Data analysis was done using version 20.0 of SPSS and data distribution normality was assessed using the Shapiro-Wilk test. Descriptive analysis was undertaken revealing the standard deviations and mean of the quantitative data and percentages and frequencies of the determined accordingly.

Results

As can be inferred from table 1, a total of 346 universities academic staff participated in this study. The majority of the study participants were males with a mean of – years with the majority (73.98%) being married. More than half (52.89%) of study participants were Indian and Palestinians and taught in Indian and Palestinian universities and 81.79% lived in the city they worked. the participants had a teaching experience of 18.46 years (Mean: 18.46, SD: 9.234). In addition, about half (55.20% of the study respondents were from the English department with the majority as professors (40.46%), associate professors (18.21%) and assistant professors (10.98%). Only a few (14.74%) of the participants had reliable high-speed internet. Those who had taught online classes/courses before constituted 27.46% of participants and of these 18.79% taught both the practical and theoretical sessions constituted and for a period exceeding 2 years (see table 1).

	Number of study respondents: 346
Gender	
Female	46(13.29%)
Male	300(86.71%)
Age	Mean: 47.48, SD=8.902
Marital Status	
Married	256(73.98%)
Single	90(26.01%)
Country and university	
Indian universities	163(47.11%)
Palestinian universities	183(52.89%)
Residence	
In same workplace city	283(81.79%)
Away from workplace	63(18.21%)
Teaching experience in years	Mean: 18.46, SD: 9.234
Sector of work	
English department	191(55.20%)
Other departments	145(41.91%)
Position/rank	
Lecturer	54(15.61%)
Senior lecturer	51(14.40%)
Assistant professor	38(10.98%)

Associate professor	63(18.21%)
Professor	140(40.46%)
Do you have reliable and high-speed internet at home	
Yes	51(14.74%)
No	295(85.26%)
Have you taught an online course/class before Covid-19 pandemic	
Yes	95(27.46%)
No	251(72.54%)
If yes, in which part/area	
Theoretical session	66(19.08%)
Practical session	18(5.20%)
Both	65(18.79%)
If yes, for what duration?	
Less than 1 year (<1 year	37(10.69%)
Between 1-2 years	44(12.72%)
More than 2 years (<2 years)	74(21.39%)

Table 1: participant's socio-demographic information

As shown in table 2, key challenges facing online teaching in Palestinian and Indian universities from the instructor's perspective, include unstable/insufficient internet (agree-40%, strongly agree- 42%); technical challenges/problems (agree-33% and strongly agree-27%); lower/reduced student-teacher interactions in online teaching than traditional face-to-face (agree-37% and strongly agree-39%); difficulty in applying distance learning in practical courses and sessions (agree-47% and strongly agree-43%); taking longer to prepare online classes than traditional face-to-face classes (agree-38% and strongly agree-45%). Others were reported as non-repayment/lack of incentives for internet outside university/college (agree- and strongly agree-); difficulty in motivating learners in online teaching environment compared to traditional face-to-face classes (agree- and strongly agree-); takes longer to prepare online classes than traditional face-to-face classes (agree- and strongly agree-);

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
Unstable/insufficient internet connectivity	40%	42%	3%	7%	8%
Inadequate computer labs	20%	10%	4%	34%	32%
Limited technology skills among staff	30%	15%	2%	38%	15%

Inadequate laptops/computers	9%	20%	1%	15%	45%
Technical problems/challenges	33%	27%	4%	17%	19%
Lower/reduced student-teacher interactions in online teaching than traditional face-to-face	37%	39%	1%	13%	10%
Negative attitude and staff resistance towards e-learning	24%	12%	0.5%	45%	20.5%
Heavy workload in online classes/course	23%	15%	0.7%	21%	40.3%
Difficulty in applying distance learning in practical courses and sessions	47%	43%	2%	4%	4%
Takes longer to prepare online classes than traditional face-to-face classes	38%	45%	1%	10%	7%
Shortage of teaching staff	23%	16%	0.5%	22%	37.5%
Non-repayment/lack of incentives for internet outside university/college	34%	45%	0.8%	13%	7.2%
Lack of protection for the online/e-learning materials	12%	24%	2%	20%	42%
Difficulty in motivating learners in online teaching environment compared to traditional face-to-face classes	36%	37%	2%	7%	18%
Difficulty in receiving feedback from students in online classes compared to traditional face-to-face classes	34%	48%	0.9%	9%	8.1%
Difficult categorizing students into sub-groups to facilitate group working	47%	42%	0.5%	5%	5.5%
Unfavorable online environment at home because of presence of other family members and children	43%	46%	1%	2%	8%
Other challenges: difficulty for the institution to engage learners and influence them into participating in the teaching, challenging informal assessment, transition challenges and quality of e-learning, and complacency.					

Table 2: Challenges of online learning as experienced by university teaching staff during Covid-19 crisis

Instructor faced difficulty in receiving feedback from students in online classes compared to traditional face-to-face classes (agree-34% and strongly agree-48%); difficulty categorizing students into sub-groups to facilitate group working (agree-47% and strongly agree-42%); and unfavorable online environment at home because of the presence of other family members and children (agree-43% and strongly agree-46%). As can be inferred from table 2, while lacking protection for the online/e-learning materials, the shortage of teaching staff, heavy workload in online classes/courses, limited technology skills among staff, inadequate laptops/computers, inadequate computer labs, and negative attitude and staff resistance towards e-learning were widely cited elsewhere as challenges of online teaching in times of the Covid-19 pandemic in online; they were not approved as key challenges by instructors of Indian and Palestinian universities. Other challenges pointed out as unique to Indian and Palestinian universities, included the quality of e-learning, the challenge in transitioning between online and offline modes, and the challenge in creating content that engages learners and covers curriculum. Respondents also observed that they found it challenging to manage their time and change their teaching methodologies, and their institution found it challenging to engage learners and influence them into participating in the teaching. They also highlighted complacency among tutors who are stuck in traditional face-to-face modes of teaching. With regard to compromised quality of online learning, participants indicated that there was lacking a clear government stipulation in their education policies regarding online programs: no standards for quality, development of e-resources, quality control, and e-content delivery.

Discussion

The present study investigated challenges faced by Indian and Palestinian universities following their shifting from face-to-face teaching to online teaching during the Covid-19 pandemic. These challenges include difficulty in receiving feedback from students in online classes compared to traditional face-to-face classes; difficulty in categorizing students into sub-groups to facilitate group working; and an unfavorable online environment at home because of the presence of other family members and children. These challenges seem to be replicated elsewhere. For example, Rosalina, Nasrullah, and Elyani (2020) summarized implications, trends, and challenges of online teaching in Asia, South America, Asia-Pacific, Africa, Europe, and North America as of course quality concerns, telecommunication infrastructure-related challenges of high bandwidth, inaccessibility of content, inflexibility of online teaching, the limited interactions between the learner and instructor, and students' academic dishonesty.

The results of this study suggest that the abrupt rather than gradual transition of higher education institutions from face-to-face teaching to online teaching may have proved challenging and inconvenient to teachers and learners alike. As further observed by (), online or virtual learning and teaching altered many components, including the need for computers and the internet, and that these and other requirements may explain the technical challenges experienced by tutors of universities in India, Palestine and elsewhere.

The results of this study also reflect the view by Lapada et al. (2020) that challenges are bound to happen because redesigning a course to be delivered online requires time and planning and that the Covid-19 pandemic did not provide the necessary time and space for faculty members to transition and successfully deliver the content and ensure learners access the appropriate material and content. It is also worth noting that for some Indian and Palestinian universities, online teaching never constituted the regular teaching curriculum as no infrastructure existed prior to the emergence of the Covid-19 pandemic to support the transition from face-to-face to online teaching. Institutions were forced by Covid-19 circumstances to introduce the online methods to course material delivery and put emphasis on the use of learning management systems (LMS) for learning purposes. For the majority of these universities, MLS and instructional design services had not to be tested or used for delivery of course content, and their faculties experienced technological challenges in their effort to redesign their courses. It is reasonable to assume that universities and faculty members experienced these challenges because of being not ready and prepared to embrace the new normal as well as their unfamiliarity with online instructional design. For (), the faculty members of some universities may have experienced a steep learning curve in their attempt to catch up with the new normal as a result of the sudden transitioning to online teaching platforms. Reinforcing this view, Hassan (2021) argued that while some faculty members may have used communication tools and technologies like the internet and computers afforded by their institutions, the new normal introduced by the Covid-19 crisis meant that they had to work from home where they were required to rely on personal resources to design and deliver the teaching content. This proved challenging as such

resources are not always efficient or reliable as the online teaching requires more than a basic computer, including internet subscription, high-speed internet that supports video conferencing, tools such as video conferencing applications, cloud services, screen recording software, and other tools needed to facilitate online teaching.

Conclusion and recommendations:

Instructors of Indian and Palestinian universities are experiencing unique challenges associated with online teaching during this time of Covid-19, including difficulty in receiving feedback from students in online classes compared to traditional face-to-face classes; difficulty in categorizing students into sub-groups to facilitate group working; and unfavorable online environment at home because of the presence of other family members and children. These challenges can be minimized by ensuring digital equity by ensuring teachers and learners access the necessary digital devices, Wi-Fi and internet. Institutions can learn from these challenging situations presented by the Covid-19 pandemic to make step-by-step efforts in ensuring instructors and learners access and utilize various e-learning tools

In view of these results

- Universities and colleges should prepare for future crises by ensuring instructors are competent and have knowledge in information communication technologies (ICT)
- Education institutions should take into consideration the development and enhancement of quality of online (virtual) courses delivered during emergencies
- Education institutions should strive to achieve digital equity during this Covid-19 times by ensuring access to proper digital tools: Wi-Fi connectivity, and other digital resources
- Instructors and students in various Indian and Palestinian universities should practice e-learning

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