

Perceptions of Special Educators about Online Learning

Wedad Albahussain

*Special Education Department, College of Education, Faculty of Education,
King Saud University, Saudi Arabia
E-mail: walbahusain@ksu.edu.sa*

KEYWORDS COVID-19. Perceptions. Special Educator. Open Learning. King Saud University. Pre-Service Teachers

ABSTRACT This study aims to identify the challenges of implementing online learning during the COVID-19 pandemic from the perspectives of faculty members of pre-service teachers affiliated with the special education program at King Saud University (KSU). Four challenges have been investigated: those related to students, faculty members, technology, and administration. The study adopted the descriptive approach and used a survey as a data collection tool. The sample consisted of 55 faculty members working at the pre-service teachers' programs affiliated with the special education department at KSU. Findings revealed challenges that hinder implementing online learning, as follows: challenges related to students was first, followed by those related to technology, faculty members and administration. The study concludes that such challenges should be sorted out to help achieve the objectives of online learning.

INTRODUCTION

Educational institutions have devoted themselves to developing online learning (OL) to keep abreast of new technological advancements, which transferred education from a conventional approach to new diversified patterns that cope with requirements of the modern age and involve huge numbers of learners. Such new technology has contributed to creating new environments for learning, enabling learners to interact with educational curricula and transforming learning into a student-centred paradigm, leaving instructors to act as guides and monitors for learning (Chang and Smith 2008; Ganapathi 2021).

The term OL was officially coined in 1982 when UNESCO attempted to interpret the title of International Council for Coaching Excellence into the International Council for Coaching Distance Education. Several definitions have been proposed but a consensus was never reached. However, they all focus on the distance between learner and instructor and on using modern technological media in education, teaching strategies and self-learning. The author followed the definition provided by the U.S. Department of Education's Office of Educational Research and Improvement, cited in Bruder (1989), as "the application of telecommunications and electronic devices which enable students and learners to receive instruction that originates from some distant location." Theoretically, OL is a teaching method in which

the learner is far from the teacher in space and time, and the distance is addressed by technological resources. Thus, OL has a highly important position at the beginning of the third millennium due to its potential to teach a huge number of individuals using devices and techniques provided by the information and communication technology (ICT) revolution (Means et al. 2010). Thus, OL provides an almost unlimited number of benefits such as facilitating learning and having a wide capacity to include a tremendous number of learners simultaneously regardless of their location. OL also provides increasing opportunities for updating, training and personal growth. OL has the potential to facilitate communication among participants, keeping learners' identities anonymous, ensuring equality in participation and reducing bias. Another benefit of OL is the ability to include students with different capabilities and background information. OL is also capable of addressing debatable issues. The flexibility of OL enables OL moderators to give opportunities for learners to take part in learning whenever they wish individually. OL is often low-cost and free to use (Avnet et al. 2016). Psychologically, OL provides motivation to learn, allows flexibility in the learning environment, presents learning to cater to learners' patterns, increases opportunities for self-learning and accomplishes individualised instruction to cater for learning differences (Kaleta et al. 2005; Means et al. 2010; Oliveira et al. 2021).

Despite these merits, many challenges to implementing OL were found, as demonstrated by previous studies findings (that is, Koleman 2011; O'Quinn and Corry 2002; Rasheed et al. 2020). These challenges include financial challenges, represented by the low budget assigned to carry out e-learning and purchase the required materials, the absence of rewards and the lack of hardware and software, directly affecting the OL process. Human challenges include faculty members' weaknesses in using e-learning software and their lack of experience in computer use. Additional human challenges are faculty members' limited time and administrative burdens and the lack of training for faculty members and students. The lack of qualified personnel to deal with the digital age is a constraint for institutions and the lack of technical support is a constraint to using technology (Jessup and Valacich 2006). Concerning learners' challenges, Al-Mubaireek (2002) argued that some challenges are faced by learners, such as owning a desktop or a laptop computer, poor training and low mastery of computer skills. Othman (2016) added that the poor basics of technical and scientific skills and students' resistance to using e-learning was one of the major challenges for students. Examples of technical challenges that have been mostly dealt with in the literature (Rasheed et al. 2020; Gil-Jaurena and Dominguez 2018) include insufficient informatics infrastructure, absence of network and communication, low availability of e-educational technology and the fear of hacking content and examinations. Kendall and Tarman (2016) suggested that clerks should be trained to be oriented on how to deal with disability, challenging issues include the lack of awareness for clerks of the students with disabilities and the lack of interest in conducting reasonable mitigation.

The Individuals with Disabilities Education Act (IDEA 2004), promulgated in the United States, has ensured that students with disabilities have the right to receive equality of opportunities and receive education for free. In case learning is delivered online, the learning environment should be less restricted (Erickson and Larwin 2016). The World Health Organisation emphasises that appropriate action must be made by educational institutions during COVID-19 to "ensure continued education for students with disability who may be required to study from home for long-

er periods". However, Rice and Dykman (2018) argued that OL would create a fair environment for learners with disabilities provided that legislation that ensured free education and appropriate learning for them is adhered to regardless of the type of environments in which learning is delivered. Therefore, instructors must strive to establish rules in this environment to ensure the rights of that group of learners. Heindel (2014) interviewed a number of students with disabilities and found that they opted to not pursue postgraduate learning because they viewed that their needs would not be met and the learning environment (traditional + OL) did not fit their needs.

A number of studies have addressed how to teach students with disabilities in both face to face (F2F) and OL mode modes. A meta-analysis of 1,000 empirical studies spanning 1996–2008 was conducted by Means et al. (2010). Results showed that students who received OL significantly outscored those who received F2F learning. Roberts et al. (2011) argued that students with disabilities felt that their disability hindered them from attaining success in online training courses, and they still experienced difficulties in joining these online courses. The study indicated that ICT companies' providers are devoted to cater the needs of students with disabilities based on special standards, considering the quality of designing these courses. Means et al. (2010) pointed out that the majority of studies that compared F2F and OL demonstrated the superiority of OL over F2F, and learners better appraised OL as they saved more time and controlled their learning process better in their undergraduate and postgraduate stages.

Myriad studies in recent years have investigated the feasibility of OL on students' achievement. These studies have examined different aspects of OL to elicit students and academics' perceptions towards OL and the challenges they encountered. Rowaili (2018) investigated the challenges to learners at the Faculty of Education, King Saud University (KSU), about using a learning management system. The students responded that the major challenges they encountered could be summarised as low training and poor experience in ICT, low Internet speed, lack of devices and absence of motivation and the inability of faculty members to train students in learning management systems due to the high academic load imposed on them. Similarly, Oraini (2015) ex-

explored the technical and administrative challenges of using e-learning from the perspectives of faculty members and students at Islamic University in Saudi Arabia. The challenges were as follows: challenges related to students were ranked first, followed by those related to faculty members and those related to technical and administrative aspects.

Hawamedda (2009) found that faculty members of Applied Balgaa University viewed technical and administrative challenges as the major challenges, followed by those related to the e-learning system and those to faculty members and students. Additionally, Al-Ghateeb (2012) examined the perceptions of faculty members in Jordan towards challenges and opportunities. Availability of training workshops was the major opportunity identified, and minimal training for students was the major challenge. Yassin and Melhem (2011) also examined the challenges of using e-learning facing teachers in the Directorate of Education for the Irbid region in Jordan. They found a set of technical and human challenges, including a lack of hardware, high cost of software, weak infrastructure, lack of technical support and sufficient experience to implement OL, lack of sufficient experience to implement e-learning and low training in hardware and software use. Dayel (2013) investigated e-learning at the Teachers College at KSU. Results indicated inadequate infrastructure for e-learning, weak skills in dealing with computers and the Internet, lack of awareness of the importance of using e-learning in education and the lack of human cadres to use e-learning. These results could be ascribed to low use of financial resources and poor skills of e-learning use from the faculty members.

Othman (2016) found, as perceived by faculty members and leaders, that meeting financial requirements to manage learning management systems was the best practice to achieve quality in learning management systems. They also viewed many challenges such as workload, low experience with e-learning tools, a dearth of rewards and the inability to join training workshops. As regards teachers' perceptions about students, they observed poor technical and scientific basic skills in e-learning and their resistance to using e-learning. Mohaisin (2000) explored faculty members' awareness of computer use at colleges of education in Saudi universities, and the results

indicated a lack of computer services provided to faculty members and weak use of computer skills. The results also showed an absence of training for faculty members and a lack of computer technicians to assist when needed.

In an empirical study, Abdulwahab and Ali (2012) examined the difficulties in learning management system use in some Egyptian universities and found that the major continuous difficulties were system outages, poor handling of learning management systems, a lack of periodic maintenance of devices, the rarity of updating software and low Internet speed.

Rodny (2002) pointed out that major challenges of e-learning included the absence of effective administration, lack of training, lack of devices and tools and lack of technical support of e-learning. In a qualitative exploratory study, Irvin et al. (2009) identified challenges in rural schooling areas and indicated that approximately 66 percent of faculty members required extensive training in using e-learning. Mashhour and Saleh (2012) studied e-learning in Jordan educational institutions and revealed a number of challenges related to infrastructure such as the inability of students to access the network and the lack of computers.

Rockwell (1999) examined the opportunities and challenges of OL which affected faculty members and personnel at the University of Nebraska. The study found that faculty members suffered from the time consumed by e-learning preparation, low research productivity due to lack of time and low computer skills. Stevenson (2007) studied challenges and opportunities of faculty members' participation in e-learning. The challenges were teaching overload, low technical support and low financial support for e-learning participants. The opportunities that motivated faculty members were salary increments, financial rewards and work condition improvements. Schifter (2000) found that low financial, technological and administrative support for faculty members and lack of training were the major factors for faculty members' dissatisfaction with OL involvement. Cahill (2008) found that many challenges hindered faculty members in adopting e-learning to prepare pre-service teachers of a special education program in St. Thomas University. Some of these changes were the considerable time consumed by e-learning that was not considered for tenure and promotion, no corresponding fi-

nancial bonus for being involved in e-learning and the high workloads given to faculty members. Similarly, Mills et al. (2009) explored faculty members' views towards OL and e-learning in the Faculty of Education in a South Texas university. The results of the study revealed that the faculty members were worried about consuming considerable time to implement an e-learning system, the probability of taking more office hours, additional time for developing and designing e-courses, the skills in which faculty members need to apply this type of learning, low confidence in administrative support for e-learning programs and the lack of technical support. Some of them expressed their lack of confidence in the integrity of the tests in the e-learning environment. They were worried about how to verify that the student who enrolled in e-learning in a course would be the same person who appeared in the exam. Another problem with which they were concerned was the low technological competencies for some of the faculty members.

Gil-Jaurena and Dominguez (2018) surveyed 24 Spanish faculty members about the challenges they encountered using massive open online courses (MOOCs). Results indicated that the sample suffered from technological constraints such as insufficiency of virtual class programs, weaknesses in managing interactive forums and a lack of software that relate to design audio-visual interactive materials. As regards challenges related to faculty members and students, awareness of how to use MOOCs was low due to minimal training and practice.

Concerning the challenges of e-assessment, Kearns (2012) investigated the challenges of students' assignments that were delivered via a learning management system. The results of interviews with eight faculty members and the analysis of assignments revealed that their difficulties in assessing a vast number of students, leading to failure to follow up the progress of their students. An internet outage also caused anxiety for students.

Borup and Evmenova (2019) found that faculty members could overcome the challenges of using OL tools if they were involved in professional training. They recommended that based on their study findings, universities should not only concern about "what" students learn but should also focus on "how" they learn. The results of a recent study by Rasheed et al. (2020)

revealed five challenges encountered by students in an OL environment plus hybrid learning: (1) self-organisation, (2) technology use competency, (3) student's isolation, (4) sufficiency of technology and (5) complexity of technology.

The literature clearly shows challenges that differ in nature, types and levels according to the university and the region. The differences might be due to the degree of readiness (material and human), the vision to activate these systems in the teaching and learning process and the level of follow-up measures taken by universities to monitor the process of use. Familiarity and the competency of OL systems could be affected by their perceptions (technicians, students, or faculty members). This view has been demonstrated by literature about the existence of technological and financial challenges. This issue is being investigated in the current study, which addresses the challenges related to the faculty member, student, technology and administrative issues from the faculty members' perspectives who are working in pre-service teachers at special education programs. Our aim is to provide suggestions and pedagogical implications that could contribute to addressing these challenges and improve appropriate OL use in future.

The Present Study

In response to the COVID-19 pandemic, the Ministry of Education in Saudi Arabia has temporarily suspended teaching and learning in all educational institutions. As a result, universities in Saudi Arabia have transitioned to virtual classes and OL during the suspension period for undergraduate and postgraduate students (Ministry of Education 2020). The College of Education at KSU, as well as other colleges, are dedicated to fully transforming education to OL by instructing their faculty members to continue delivering their classes during the pandemic as per directions from the Ministry of Education. A number of faculty members have experienced many challenges during implementing OL. These challenges have been recorded by carrying out a pilot study by the author of this present study for a number of faculty members of the pre-service teachers' program at the special education department. These challenges could be categorised as follows technological issues, reflected by high

pressure in the Blackboard system, resulting in slowing the OL functions. Other challenges were related to faculty members. Some of them experienced difficulty in using e-learning due to either poor proficiency in using e-learning systems or e-learning being incompatible with some course specifications (that is, practicum). Furthermore, the sample stated that no alternatives existed for students with disabilities despite the American Federal Law (Section 504) which emphasised that students with disabilities have the right to enrol in open learning environments delivered online (Rice and Dykman 2018).

The literature has focused on challenges faced by faculty members, students and administrators when implementing distance learning in an online education setting. However, studies related to challenges faced by faculty members when applying OL to students with disabilities are scarce; Cahill (2008) is one exception. The outbreak of COVID-19 has mandated educational institutions to apply the social distancing and staying-at-home paradigm to provide OL. This application extends to students with disabilities as well. They need to receive learning that fits their special needs. Therefore, the present study aims to identify the major challenges faced by faculty members of pre-service teachers of special education programs during COVID-19 that are related to faculty, student, technology and administrative issues. The findings of this study are hoped to contribute to the field of educational technology by addressing the major challenges encountered in higher educational institutions and by focusing on the special case of students with disabilities. The findings will aid in giving suggestions to top administration so that they can make informed decisions to enhance the quality of OL.

Objectives of the Study

The current study aims is to elicit the pre-service teachers of special education views about the challenges they face when implementing online learning during COVID-19. These challenges are related to faculty members, students, technological devices, and administrative issues. Identification such challenges will provide insights into the possible action that could be done to facilitate online learning environment.

METHODOLOGY

Design

The appropriate design approach is the descriptive survey approach because it best fits the objectives of the study. To collect the perceptions of the current study participants, a questionnaire was constructed and administered.

Population and Sample

The population of the study consisted of all current faculty members of pre-service teachers of special education in KSU. Owing to the small number of the population (N=101), they were all been selected to form the study sample. The study tool was circulated to all of them. Only 55 participants responded to the questionnaire and returned their answers, for a response rate of 54.45 percent.

Sample Demographic Data

Demographic data of the study participants were crucial for the current study. Three factors were examined in the current study to understand whether these demographic data could positively or negatively affect the study findings. The author was interested to examine the differences of the participants' differences in terms of gender, academic position and the number of training workshops they received.

The main demographic data specified for the participants were gender, scientific degree and number of e-learning training. These data are significant indicators for the study findings and reflected the respondents' scientific background and helped to build bases for different data analyses related to the study. Table 1 shows how the participants were divided based on the demographic data.

The Study Tool

The researcher used a questionnaire to collect data because it fits the study objectives, approach and population. The questionnaire was constructed based on previous literature related to the study objectives and questions. The questionnaire covered three sections. The construc-

tion of the tool and the procedures followed to verify reliability and validity are detailed as follows.

Section 1 provides an introduction to participants. Section 2 includes demographic data. Section 3 consisted of 22 statements, covering one basic section. Table 2 explains the number of statements and how they were divided. It also included two open questions: one about other challenges that were not mentioned in the questionnaire and another for proposing solutions for these challenges.

A five-point Likert scale was adopted to obtain the respondents' views, with 1 meaning "strongly agree" and 5 meaning "strongly disagree".

Validity of the Study Tool

The researcher validated the questionnaire as follows.

Face validity of the first draft was validated by specialist referees (N=7). They commented on several indicators including the ability to measure what the tool was prepared to measure and to judge appropriateness for the study objectives, clarity of the statements and relation to section title, their significance and their correct language use. All the referees' modifications were addressed, and then the final draft of the tool was formed. Results indicated a positive significant correlation ($p < 0.01$), indicating internal consistency among the questionnaire statements and that it was suitable for the intended measurement.

Reliability of the Study Tool

The questionnaire was checked for reliability by calculating Cronbach's alpha (α). Results indicate that reliability was high ($\alpha = 0.88$).

Procedures

After validating the questionnaire, the researcher posted the questionnaire to the participants' emails after ethical consideration was approved.

Data Analysis

A number of statistical methods have been used to answer the research questions using SPSS. First, weighted mean was used to under-

stand the means of respondents' answers to every statement of the questionnaire. Ranking the statements based on the achieved weighted mean is also useful. Second, it means to recognise high/low responses towards the main sections, and ranking the statements based on the achieved weighted mean is useful. Third, standard deviation (SD) was used to recognise how responses were biased for every statement and every section from the mean. SD clarifies the dispersion in the responses of the respondents for every statement, in addition to the main sections. The closer the SD value is to zero, the more concentrated the responses and the lower the dispersion.

RESULTS AND DISCUSSION

This section details the findings obtained by this study by presenting answers to the research questions as per appropriate statistical methods. Then, findings are discussed in light of the theoretical framework and previous studies.

Table 1: Demographic data of the study participants

Variable	Levels	Frequency	Percentage
Gender	Male	24	70.8
	Female	31	29.2
Academic Degree	Full professor	8	14
	Associate professor	10	18
	Assistant professor	16	29
Number of e-Learning Training	Lecturer	21	38
	N/A	12	21
	1-3 training	24	43
	4-6 training	10	18
	7-10 training	9	16

Q1. What are the challenges faced by faculty members of pre-service teachers of special education at KSU when involved in implementing OL during COVID-19 in relation to faculty member, student, technology and administrative issues?

To identify the challenges faced by faculty members of pre-service teachers of special education at KSU when involved in implementing OL during COVID-19, means were calculated for these domains. Table 3 summarises the findings for this section.

The respondents agreed on the challenges they faced and scored ($M = 3.29/5$). The major changes they viewed were in order as follows:

Table 2: The questionnaire statements and sections

<i>Section</i>	<i>Domain</i>	<i>Number of statement</i>	<i>Total</i>
The challenges that face faculty members of pre-service teachers of special education at KSU when involved in implementing OL during COVID-19.	Challenges related to a faculty member	6	22 Statements Questionnaire 22 Statements
	Challenges related to a student	6	
	Challenges related to technology	5	
	Challenges related to administrative issues	5	

the challenges related to students was ranked first ($M=3.55$), followed by challenges related to technology ($M=3.23$), challenges related to faculty members ($M=3.21$) and challenges related to the administration ($M=3.12$).

These results align with Oraini’s findings (2015) that the challenges related to a student were the most significant in implementing OL. However, our results contradict Hawamede’s findings (2009) that the challenges related to a student were ranked third. These findings also contradict previous studies (Rowaili 2018; Rasheed et al. 2020; Yaseen and Melham 2011) as regards the challenges related to technology such as infrastructure and technical support, which were found to be the top challenges. A possible explanation for this contradiction is that KSU has a strong

infrastructure for ICT. Thus, faculty members and students did not face many challenges.

Challenges Related to Faculty Members

To identify the challenges that are related to faculty members, frequencies, percentages, means, standard deviation and ranks were computed. The results are depicted in Table 4.

Results from Table 4 indicate that the respondents were neutral in their views towards the challenges they face ($M=3.21$). The top challenge they encountered when involved in implementing OL was represented by statement 3, namely, “Much administrative and teaching workload done by a faculty member” ($M=3.51$). The second was statement 4, namely, “Poor awareness of faculty members to OL assessment” ($M=3.27$). This result is consis-

Table 3: responses to the challenges that face faculty members of pre-service teachers of special education at KSU when involved in implementing OL during COVID-19

<i>No.</i>	<i>Domain</i>	<i>Means</i>	<i>SD</i>	<i>Rank</i>
1	Challenges related to a faculty member	3.21	0.791	3
2	Challenges related to a student	3.55	0.901	1
3	Challenges related to technology	3.23	1.037	2
4	Challenges related to administrative issues	3.12	0.880	4
	The challenges that face faculty members of pre-service teachers of special education at KSU when involved in implementing OL during COVID-19	3.29	0.659	-

Table 4: Sample responses to challenges related to faculty members

<i>No.</i>	<i>Statements</i>	<i>Means</i>	<i>SD</i>	<i>Rank</i>
3	Much administrative and teaching workload done by a faculty member	3.51	1.345	1
4	Poor awareness of faculty members to OL assessment	3.27	1.130	2
2	Poor awareness of software used in e-learning by faculty members	3.24	1.018	3
5	Majority of faculty members perceive that OL assessment is not objective	3.16	1.167	4
1	Poor skills of implementing OL by faculty members	3.09	1.127	5
6	There exist negative attitudes towards OL as they view it not feasible in many contents	3.00	1.106	6
	Total means	3.23	1.037	

tent with that of (Othman 2016; Borup and Evmenova 2019; Cahill 2008; Gil-Jaurena and Dominguez 2018; Kearns 2012; Mill et al. 2009; Rockwell 1999; Schifter 2000; Stevenson 2007) emphasising that administrative overload imposed by faculty members along with their poor knowledge about the OL assessment were the main reasons behind implementing OL. Statement 6, namely, “Negative attitudes exist towards OL because they view it not feasible in many contents” obtained a low means score ($M=3.00$), suggesting that faculty members had positive attitudes towards OL. However, they struggled to implement OL in some educational content and some courses as well.

Challenges Related to Students

To identify the challenges that are related to students, frequencies, percentages, means, standard deviation and ranks were computed. The results are depicted in Table 5.

Results from Table 5 indicate that the respondents agreed in their views towards the challenges they face that are related to students ($M=3.55$). The top challenge they encountered when implementing OL was represented by statement 3, namely, “Low

Internet network in some Saudi Arabia regions” ($M=3.89$). The second was statement 1, namely, “The concept of OL is still weak for some students” ($M=3.058$). These results agreed with those obtained by previous studies (that is, Abdulwahab and Ali 2012; Othman 2016; Hawameda 2009; Mashhour and Saleh 2010).

Statement 2, “there were negative attitudes towards OL by students” obtained the lowest score ($M=3.24$). This result suggests students’ satisfaction and aspiration to receive OL irrespective of the potential difficulties. This result contradicts Hwamida’s findings concerning poor competency of students’ use of e-learning (2009). This contradiction could be attributed to the competency of the KSU students in using technology because all academic transactions, such as enrolment, adding, removing courses and accessing courses scores, were done online by students.

Challenges Related to Technology

To identify the challenges that are related to students, frequencies, percentages, means, standard deviation and ranks were computed. The results are depicted in Table 6.

Table 5: Sample responses to challenges related to students

No.	Statements	Means	SD	Rank
3	Low Internet network in some Saudi Arabia regions	3.89	1.286	1
1	The concept of OL is still weak for some students	3.58	1.197	2
4	A student does not own e-devices such as: Tablet, desktop computers, headphones....etc) to operate OL	3.58	1.272	3
5	A students may rely on someone else to do assignments on behalf of him/her	3.56	1.167	4
6	Students may login websites that do not serve learning.	3.44	1.259	5
2	There were negative attitudes students have towards OL	3.24	1.170	6
	Total means	3.55	0.901	

Table 6: Sample responses to challenges related to technology

No.	Statements	Means	SD	Rank
2	Limited capacity of learning management system due to a huge number of users that made it down and negatively impacted teaching	3.62	1.326	1
3	E-learning is not easy to use for some faculty members or students	3.33	1.187	2
1	Low technical support from e-transaction and communication deanship	3.20	1.297	3
5	Difficulty in following e-training platforms to create e-assignments and tests	3.07	1.345	4
4	Manuals to use OL systems were not clear for faculty members and students	2.93	1.372	5
	Total means	3.23	1.037	

Results from Table 6 indicate that the respondents were neutral in their views towards the challenges they face in relation to technology ($M=3.23$).

The top challenge respondents encountered when involved in implementing OL was expressed in statement 2, namely, "Limited capacity of learning management system due to a huge number of users that made it down and negatively impact teaching" ($M=3.62$). The second was statement 3, namely, "E-learning is not easy to use for some faculty members or students" ($M=3.33$), consistent with past findings (Abdulwahab and ALi 2012; Mohaisen 2000; Dayel 2013; Oraini 2015; Mashhour and Saleh, 2010; Rasheed et al., 2020; Rodny, 2002; Schifter, 2000; Yassen and Mulhim, 2011). These studies indicate that the learning management system seems to be a prominent challenge particularly with the huge pressure caused by students and faculty members when logging in simultaneously.

Statement 4, namely, "manuals to use OL systems were not clear to both faculty members and students" was least ranked ($M=2.93$). This finding is inconsistent with Rodny's results (2002), indicating that KSU exerted efforts in providing faculty members with manuals related to the use of Blackboard in teaching and students' e-assessment. KSU had also conducted many virtual training courses to advance faculty members and students during COVID-19. Moreover, KSU had mitigated pressure on its learning management system by posting booklets through Zoom and Webex. This finding is in line with Rasheed et al.'s results (2020) that technology should be enhanced to be sufficient for use and any technological challenges for users should be compromised.

Administrative Issues

To identify the challenges that are related to administration, frequencies, percentages, means, standard deviation and ranks were computed. The results are depicted in Table 7.

Results from Table 7 indicate that the respondents were neutral in their views towards the challenges they face ($M=3.21$). The participants showed agreement on a number of challenges related to administrative issues they faced with implementing OL during COVID-19.

The top challenges they encountered when involved in implementing OL was reflected in their answers to statement 3, namely, "Absence of faculty members' feedback about their performance in OL" ($M=3.46$). The response to statement 2, namely, "No administrative mechanism exists to follow up faculty members during OL assessment" was ranked second ($M=2.18$). This result agrees with those of previous studies (Cahill 2008; Schifter 2000; Stevenson 2007), affirming the importance of improving work conditions to address the weak administrative support, which seemed the major challenge that hindered faculty members' effective use of OL. Furthermore, one respondent added that she used other systems such as Zoom and Microsoft Teams when the learning management system was temporarily down, specifically at the beginning of transitioning to OL. Another respondent said that learning was mostly based on a trial and error strategy due to running out of time and the desire not to disrupt learning. She received help from other experienced colleagues to provide feedback about performance. Faculty members were heavily involved in training courses offered by the concerned deanship. There-

Table 7: Sample responses to challenges related to technology

<i>No.</i>	<i>Statements</i>	<i>Means</i>	<i>SD</i>	<i>Rank</i>
3	Absence of faculty members' feedback about their performance in OL.	3.46	1.152	1
2	There is no administrative mechanism to follow up with the faculty members during OL assessment	3.18	1.163	2
5	There is no unit to provide suggestion to improve OL	3.06	1.268	3
4	Technician is not asked for help during COVID-19.	3.02	1.254	4
1	The training workshops provided by the Deanship of developing skills do not meet the students and faculty members' actual needs	2.91	1.110	5
	Total means	3.12	0.880	

fore, their responses to the negative statement (3) that the training courses they received were out of their actual needs were not significant ($M=2.91$).

Other Challenges

At the end of the questionnaire, an open question was placed about any other challenges faced by participants when implementing OL during the COVID-19 pandemic. They mentioned the following challenges.

1. Diversity for Students with Disabilities is Needed

The pre-service teachers of the special education program at KSU teach many students with disabilities such as hearing and visual disabilities. The program has addressed this challenge by providing a sign-language interpreter for students with hearing disabilities to facilitate receiving information during simultaneous lectures. Students with visual disabilities have also been provided lectures and given devices that use Braille to facilitate reading classes materials. This result is inconsistent with that of Kendall and Tarman (2016) which revealed that the major challenge faced by students with disabilities when applying OL was that students' disabilities were not known by the concerned administrators, resulting in a lack of desire for appropriate alleviation that fit their needs. The family was involved in supporting students with a disability during OL. This result is consistent with Rice and Dykman (2018), stating that families believed that OL granted their children extra time and provided a better education than traditional learning. These results are in line with Kliman's findings (2001), which argue that major changes should be made in teaching strategies, classroom organisation, curricula and infrastructure to enable learners to leverage technology in education. These changes may occur not within weeks or months but rather years and require professional growth and continuous instructional and technical support for all involved in OL.

2. Instructional Materials and Practicum

Some respondents mentioned that they experienced some challenges as regards alterna-

tives for practicum and some practical courses and how to evaluate students' performance. These courses need major adaptations to be delivered by the learning management system that cope with students' needs and achieve the intended learning outcomes. KSU's College of Education has issued a proposed mechanism to follow up practicum online through diversified assignments for faculty members to opt-in the appropriate assignments for their students and the course delivered. Examples include case study, lesson planning based on intended learning outcomes, writing reflections about a class attended before the suspension of learning, suggestions to develop used strategies that had been already viewed and discussion reasons for failure to achieve short-term objectives and suggestions to modify them. The difficulties faced by students with disabilities align with those found by Roberts et al. (2011) that students with disabilities recognised that their disability negatively affects their success in online training.

3. Assessment Problems

One of the most significant challenges is to verify the identities of students in exams. This result is consistent with those of Mills (2009). Some respondents suggested that students' places should be videotaped and that live communication with students must take place to answer their concerns and verify their identities. Other options were given for faculty members to assess students. These options, such as oral examination, open-book exams and writing projects or reflections, may alleviate the faculty members' anxiety about students cheating in e-exams.

CONCLUSION

The current study findings revealed that there were challenges that hinder implementing distance education and were in order as: challenges related to the student were the top, followed by the challenges related to technology, then the challenges related to the faculty member, and lastly the challenges related to administration. Results showed that the greatest challenge faced by students was low speed of the Internet in some areas of Saudi Arabia while the greatest challenge related to technology was limited capacity of learn-

ing management system adopted by KSU (that is, Blackboard), particularly for the huge number of students of users, resulting in Internet outage. Concerning the challenges related to the faculty member, the highest challenges were high load of teaching along with administrative work imposed on them. Regarding challenges related to administration, the most prominent challenge was lack of feedback for the faculty members of their online learning performance. OL is a new opportunity to implement new patterns of learning different from conventional learning, and time is needed by students and their teachers so that these challenges can be needed. The low use of e-learning is high when compared with devices and infrastructure provided by universities to implement OL. The participants have also highlighted other challenges such as: diversity of students with disability needs, materials used, practicum, and selecting assessment methods. The present study found that challenges related to technological, administrative and pedagogical issues could be managed and that the new experience of OL is enjoyable and interesting.

RECOMMENDATIONS

In light of the study findings, several recommendations are proposed. The first recommendation is a system or a document that ensures that OL works well, considering the requirements of the current situation, making technology representative of education in the 21st century. KSU University should overcome the challenges related to the poor network in some places to help students access the instructional materials posted on the blackboard. The university should also consider assigning the faculty members a fair teaching load and not to give them more extra loads as to help them pay attention to improve the students' learning outcomes. The administrative clerks must respond to the students' concern promptly as to help them sort out the network problems and to instruct them how to sign in the system and how to run other features of the blackboard such as doing assignments, responding to their instructors online, and accessing teachers' feedback. The final recommendation is to use other software and apps such as Zoom and Webex as an alternative solution in case there are some blackboard logging problems

to improve OL implementation and decrease pressure on the learning management system. Therefore, alternative technological devices should be in place in case of technical problems to maintain the flow of learning processes. The technological infrastructure needs to be further enhanced by KSU to ensure that classes are delivered efficiently.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study was conducted during COVID-19 to elicit the challenges faced by faculty members as regards challenges related to faculty members, students, technology and administration. The author used an online questionnaire to collect the data. Owing to COVID-19 conditions that necessitated social distancing, other data collection tools, such as interviews and focus groups, could not be carried out. Therefore, future studies are recommended to use these tools to reach more reliable and valid findings. This study collected data about the challenges of implementing OL from the perspectives of faculty members. Future studies are invited to collect data from students, technicians and ICT specialists to form a fine-grained picture of the challenges facing learning management system users. With advances in technology, challenges are expected to diminish. Therefore, studies should focus on how OL could provide optimal learning that avoids the negatives of traditional learning.

REFERENCES

- Abdelwahab S, Ali A 2012. The difficulties of using the e-learning management system Moodle in some Egyptian universities from the point of view of faculty members and their students, an evaluation study. *Journal of Education*, 2(78): 1415-154.
- Al-Ghateeb Z 2012. *The Degree of Application of E-Learning Quality Standards at the University of Hail from the Point of View of Faculty Members in the Light of Some Variables*. Master's Thesis, Unpublished. Jordan: Yarmouk University, College of Education.
- Al-Mubaireek H 2002. The difficulties facing the application of e-learning on the part of the learners. A working paper submitted to the seminar of the School of the Future, King Saud University, Riyadh, in the period 16-17/8/2002.
- Avnet M, Makara D, Larwin KH, Erickson M 2019. The impact of parental involvement and education on academic achievement in elementary school. *International Journal of Evaluation and Research in Education*, 8(3): 476-483.

- Borup J, Evmenova S 2019. The effectiveness of professional development in overcoming obstacles to effective online instruction in a College of Education. *Online Learning Journal*, 13(3): 1-20.
- Bruder I 1989. Distance learning: What's holding back this boundless delivery system? *Electronic Learning*, 8(6): 30-35.
- Cahill Rosann 2008. *What Motivates Faculty Participation in E-learning: A Case Study of Complex Factors?* PhD Dissertation. Publication No. AAT3340549. Minnesota: University of St. Thomas.
- Chang S-HH, Smith RA 2008. Effectiveness of personal interaction in a learner-centered paradigm distance education class based on student satisfaction. *Journal of Research on Technology in Education*, 40(4): 407-426. doi:10.1080/15391523.2008.10782514
- Dayel S 2013. The reality of using e-learning at the Teachers College at King Saud University from the students' point of view. *Reading and Knowledge Journal*, 140: 131-142.
- Erickson M, Larwin 2016. The potential impact of Online/Distance education for students with disabilities in higher education. *International Journal of Evaluation and Research in Education*, 5(1):76-81
- Ganapathi R 2021. A study on satisfaction of students for distance education courses in sivaganga district. *Jamshedpur Research Review*, 1(44): 51-57.
- Gil-Jaurena I, Domínguez D 2018. Teachers' roles in light of massive open online courses (MOOCs): Evolution and challenges in higher distance education. *Int Rev Educ*, 64: 197-219. <https://doi.org/10.1007/s11159-018-9715-0>
- Graf S, List B 2005. An Investigation of Open Source e-Learning Platforms Stressing Adaptation Issues. In: *Proceeding of the 5th IEEE International Conference on Advanced Learning Technologies*. IEEE Computer Society, USA, pp. 163-165.
- Hawamed M 2009. Reality of using e-learning from perspectives of faculty members of Al-Balaqa University. *Journal of Damsac University*, 27(1 and 2): 803-831.
- Heindel A 2014. *A Phenomenological Study of the Experiences of Higher Education Students with Disabilities*. Doctoral Dissertation. South Florida: University of South Florida.
- Irvin MJ, Hannum WH, Farmer TW, De la Varre C, Keane J 2009. Supporting online learning for Advanced Placement students in small rural schools: Conceptual foundations and intervention components of the Facilitator Preparation Program. *Rural Educator*, 31(1): 29-37.
- Kaletka R, Garnham C, Aycock A 2005. Hybrid Courses: Obstacles and Solutions for Faculty and Students. 19th Annual Conference of Distance Teaching and Learning. From <http://www.uwex.edu/disted/conference> (Retrieved on 5 July 2020).
- Kendall L, Tarman B 2016. Higher education and disability: Exploring student experiences. *Cogent Education*, 3: 1. DOI: 10.1080/2331186X.2016.1256142
- Koleman R 2011. *Assessing the Adaption of E-Learning in Ghanaian*. Master Thesis, Unpublished. Luleå, Kiruna, Sweden: Lulea University of Technology.
- Jessup L, Valacich J 2006. Effects of anonymity and evaluative tone on idea generation in computer-mediated groups. *Management Science*, 36(6): 689-703.
- Mashhour A, Saleh Z 2010. Evaluating e-learning in Jordanian Institutions: Why is it lagging? *Quarterly Review of Distance Education*, 11(4): 269-290.
- Means B, Toyama, Y, Murphy R, Bakia M, Jones K 2010. Evaluation of Evidence-Based Practices in Online Learning. A Meta-Analysis and Review of Online Learning Studies. *Report No. ED-4-CO-00400*. Washington, DC, US Department of Education.
- Mills SJ, Yanes MJ, Casebeer CM 2009. Perceptions of distance learning among faculty of a college of education. *MERLOT Journal of Online Learning and Teaching*, 5(1): 19-28.
- Ministry of Education 2020. A Proposal for Calendar Arrangements, Semester Work and Alternatives to Exams During the Suspension Period to Prevent the Corona Virus. From <https://bit.ly/2Mz3Y0Q> (Retrieved on 19 December 2020).
- Mohaisin I 2000. Waqe wamuweqat istekhdam alhasob fi kuliat a;terbia biljameat Alsuadia (Reality and obstacles of using computers in faculty of education at Saudi Universities). *Educational Journal*, 15(57): 356-366.
- Oliveira G, Grenha TJ, Torres A, Morais C 2021. An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID 19 pandemic. *British Journal of Educational Technology*. <https://doi.org/10.1111/bjet.13112>
- O'Quinn L, Corry M 2002. Factors that deter faculty from participating in distance education: *Online Journal of Distance Learning Administration*, 5(4): 1-16.
- Oraini A 2015. Challenges of using E-learning from the perspectives of faculty members at Islamic University-Madina. *Arabic Studies in Education and Psychology*, 65: 269-292.
- Othman M 2016. The extent of implementing quality standard in e-learning management in XXX from leaders and faculty members' perspectives. *Semat for Studies and Research*, 5(9): 167-189.
- Rasheed RA, Kamsin A, Abdullah NA 2020. Challenges in the online component of blended learning: A systematic review. *Computers and Education*. doi:10.1016/j.compedu.2019.103701
- Rice M, Dykman B 2018. The emerging research base for online learning and students with disabilities. In: Kathryn Kennedy, Richard E Ferdig (Eds.): *Handbook of Research on K-12 Online and Blended Learning*, Pittsburgh, PA: Carnegie Mellon University: ETC Press, pp. 189-206.
- Roberts J, Crittenden L, Crittenden J 2011. Students with disabilities and online learning: A cross-institutional study of perceived satisfaction with accessibility compliance and services. *The Internet and Higher Education*, 14(4): 242-250.
- Rockwell S, Kay S J, Fritz, S M, Marx D 1999. Incentives and Obstacles Influencing Higher Education Faculty and Administrators to Teach via Distance. *Online Journal of Distance Learning Administration*, 11(III). From <http://www.westga.edu/~distance/rockwell24.html> (Retrieved on 29 May 2011).
- Rodny S 2002. The integration of instructional technology into public education: Promises and challenges. *Educational Technology*, 1(42): 5-13.
- Rowaili A 2018. Challenges of using learning management system (Blackboard) from perspectives of students at Faculty of Education, XXX. *Journal of Faculty of Education*, 34(1): 475-512.

- Schifter CC 2000. Faculty participation in asynchronous learning networks, a case study of motivating and inhibiting factors. *Journal of Asynchronous Learning Networks*, 4(1): 15-22.
- Stevenson KN 2007. *Motivating and Inhibiting Factors Affecting Faculty Participation in Online Distance Education*. PhD Dissertation. Publication No2362302 AAT. Greenville, USA: East Carolina University.
- World Health Organization 2020. Disability Considerations During The COVID-19 Outbreak. From <https://www.who.int/publications/i/item/WHO-2019-nCoV-Disability-2020-1> (Retrieved on 31 November 2020).
- Yassin A, Melhem C 2011. Obstacles to using e-learning that teachers face in the Directorate of Education for Irbid First District. *Palestinian Journal of Open Education*, 3(5): 115-136.

Paper received for publication in May, 2021
Paper accepted for publication in August, 2021