



Exploring Crucial Challenges, Instructors' And Students' Perception Of E-Learning: A Scrutiny Of Learning Environmental Changes

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ABSTRACT

The investigation aims to comprehend how institutions were able to disseminate information mostly during corona viral breakout, when they were forced to modify existing academic practises to rely only on online learning and teaching. Under this aspect, using 2 questionnaires to examine the efficacy, challenges, and benefits of online curriculum, we assessed how instructors and students perceived E-learning (EL). One survey was given to 50 faculty staff, while other was given to 280 students who have been chosen at random. The survey revealed that prominent EL platforms included WhatsApp for communicating with students beyond the classroom, Microsoft Teams (MT), and Zoom (Z) for interacting web classrooms. The outcome of study inferred that both academics staff and students felt that EL is beneficial during a pandemic catastrophe. Nevertheless, it is not more efficient than learning and instructing in reality. EL issues, according to instructors and students include adjusting to digital curriculum, particularly for disabled students, an absence of inspiration and connection, technological and web problems, information confidentiality concerns, and safety. Respondents also concurred on the benefits of EL. Self-learning, cheap expense, comfort, and adaptability were the key advantages. Pursuant to corona-pandemic, EL can serve as a partial fix, but it cannot take the place of in-person instruction. Study suggests that using multicultural education can create a demanding learning atmosphere.

Keywords: E-learning platforms, online learning, students' perception, instructors' perception

1. INTRODUCTION

The instruction - knowledge technique in several academic domains has transformed significantly since the COVID outbreak began, which has affected how students and lecturers engage. Web education is regarded as a possibility, a substitute for formal classes, and throughout the pandemic, it was becoming crucial for preserving the operation of schools as well as colleges [1]. Learners' opinions of such a method of instruction have changed as a result of the radical shift, which could vary out of those reported in research conducted before the outbreak.

Earlier research demonstrates whether e-learning (EL) does have several advantages for learners since it emphasises student-as a centre of focus, seems to be highly adaptable [2], or might enhance students' engagement by supplying asynchronism and synchronic services including e-mail, blogs, conversations, teleconferencing etc. [3]. Additionally, website techniques enable it to distribute content simultaneously to a lot of consumers. EL systems provide students with several benefits, including regulation over the content as well as time expended learning, allowing the procedure to be customised to meet their demands and academic needs [4]. Despite certain problems involved put upon by this critical moment, it may assist in better communicating with learners, and EL may improve the educational practice.

Nevertheless, there are certain factors which might be viewed as hurdles in the educational system for learners whilst utilising EL portals, including lowered academic inspiration, postponed responses or assist because teachers aren't always available when students need it, or experiences of loneliness because colleagues aren't physically present [5]. Nevertheless, such challenges could be solved with the aid of instructors who really should modify existing pedagogical approaches in accordance with the demands of individual pupils. Skill and expertise with training in an online context are required for this. Therefore, researchers think that these difficulties and drawbacks might be greatly pronounced if all of academic performances are done electronically. This can occur as a result of the experts' inadequate expertise with utilising EL and little timeframe that would have to modify their instructional techniques to the changing circumstances. The findings of an experiment done by Schooling Gate just at start of the epidemic, revealed that 66.89percent of participants confirmed about online platforms usage for educating as a first instance [6], seem pertinent in this regard. It could be concluded that neither the learners nor the educators were prepared for a totally internet service.

As a result, both faculty and students faced numerous difficulties. The association for economic founder and innovation stated that among the obstacles academic institutions have had to confront are maintaining a balance among distance learning, which might influence pupils' wellbeing because they expend a lot of time looking at screens, as well as quasi events, analysing and concentrating on students' mental wellbeing those to endorse all across the method of learning— In order to effectively work with them, one should offer them assistance all across the classroom activities, consider the fact that not every student possess internet connectivity, manage and control their accessibility to gadgets [7]. Institutions often suffer in maintaining the consistency and relevance of the course material, effectively interacting with the school setting, also with attracting and retaining learners [7]. On the contrary side, pupils also needed to deal with difficulties, and a study that looked into students' perspectives on distance courses found that some of biggest difficulties they faced seemed to be ease of access, connection speed, a shortage of suitable gadgets, and societal problems symbolised by a lack of conversation and interaction among classmates and instructors [8]. Deficiency of EL system

utilization hinders the implementation of advantages because the effectiveness of an EL approach relies on students' desire as well as readiness to utilise them [9–11]. This represents a waste of funds for colleges, leading to a flawed idea [12]. The study of educational opinions remains in its early stages, according to evidence on this subject [13]. Organizations may construct an effective EL system by greater understanding the demands of their pupils by researching EL uptake [14]. Towards the greatest of present knowledge, EL has been adopted in several institutions about a decade ago, but there hasn't been a full assessment of difficulties and variables impacting their use.

In light of the aforementioned factors, researchers assume that the move to only EL may have a significant impact on the academic activity including students' perceptions of the usage of the online context throughout the instructional and learning procedure. Such concepts serve as the foundation of this work. With this view, the current study is taken with an objective –

- To determine the viewpoint of the student regarding their EL practice for developing and optimizing EL scheme.
- To evaluate how well the EL system affects academics.
- To explore more about students' as well as experts' perceptions of EL platforms and how they affected their comprehension in addition to data absorption.
- To identify key challenges that students and teachers faced when studying online and the setting wherein they wish to see institutions continue to employ EL services.

2. RELATED WORKS

2.1. EL in higher academics

Institutions today must adapt to necessities, aspirations, and expectations of learners while the high educational strategy undergoes a constant state of transition. With academics spending greatly in online services and gadgets, technological innovations and EL structures are therefore viewed as crucial components in completing their tasks [15]. Nonetheless, integrating cutting-edge EL technologies to strengthen and assist overall learning and instruction is among the major difficulties facing universities in digital realm. EL can be defined as simply creating and designing educational experience utilising information, computing technology and systems [16]. Parallel to this, Engelbrecht (2005) defines EL as a notion that makes utilisation digital network, such as website, Discs, cell phones, and perhaps even TVs, to deliver remote teaching and learning [17].

According to Raheem and Khan (2020), EL offers some elements that support and foster the educational method by allowing a variety of options for exchanging ideas and submitting materials in various configurations. Since it is a network approach, no extra software needs to be installed, so once posted, the contents are always accessible to customers [18]. EL portals, material, consumers, as well as participants are just a few of the components that make up the complex task which is EL. As per Oye et al., EL

varies from conventional or other methods of education since it focuses not solely on training but also upon learning which is tailored to each person [19]. In those other aspects, whereas traditional schooling is highly teacher-focused, a move forward into a student-focused schooling could be witnessed with growth of EL. According to an experiment by Vitoria et al., (2018) who focused on students' perceptions of the implementation and incorporation of EL systems while employing the Technologies acceptancy model (TAM) as a basic concept, all participants agreed that the EL course they perceived was helpful and simple for usage, saying that they easily comprehended data, managed to navigate and accessed paperwork [20]. Similar research conducted at the Jordan University utilising TAM strategy demonstrated that perceived utility and simplicity of utilisation have a clear impact on students' attitudes regarding utilising EL [21].

2.2. EL networks in higher education

High academics uses a variety of digital portals to facilitate EL. Several terms, including software learning, digitally teaching, EL solutions, and learning management systems (LMS), have been employed to define online courses across ages [22]. Irrespective of their names, such platforms all utilise the Internet as well as share a few characteristics that enable enrolment, evaluation of pupils' and instructors' actions, as well as facilitation of web - based instruction and communication between students, their peers, and teaching staff. Cacheiro-Gonzalez et al., (2019) stated that net conferencing which permits video, audio, including writing skills, chatting, wherein participants may post texts and obtain answers in real-time, including boards which permit pupil cooperation and communication asynchronously are some of the broad crucial features of digital learning systems [23]. According to Ouadoud et al., (2017) LMS is viewed as a piece of software that encapsulates a variety of functions designed to help educators understand their own lessons and coursework. They were developed in order to assess and monitor pupils, assign test scores, keep track of curriculum attendees, and perform other admin duties that may be required by academic institutions [24]. Such solutions could be split into two groups: private or commercialized, which includes networks like Blackboard, and open - sourced platform. Moodle is regarded as an internet flexible study that promotes user participation and was created to provide learners, professors, and admins with a platform that may assist them in creating an upgraded and personalised environment for learning. Through these portals, professors may post and give students exposure to materials and data that previously might not have had in-person instruction, and students can quickly exchange intelligence, describe their challenges, and get response [25].

2.3. EL challenges

Eltahir (2019) stated that despite progress, the digital divide between developed and developing nations continues to make it difficult for emerging nations to implement EL systems [26]. According to a report by Mulhanga and Lima (2017), insufficient technical

assistance, a shortage of IT expertise, as well as poor intuitive interfaces are the main obstacles preventing the effective execution of current EL initiatives. Authors claimed that major causes of failure of EL projects are sociocultural, legislative, and economic restraints [27]. Similarly, managerial obstacles, technology challenges, interpretation issues, and cultural issues were the 4 types used by Kenan et al., (2013) to categorise the issues that influence the real utilisation of EL. Regardless of their best attempts, neither of these investigations has looked into the genuine difficulties which consumers of EL systems actually encounter [28].

2.4. Efficiency, advantages, and drawbacks of EL

Babu and Sridevi, (2018) assert that EL is crucial to learning procedure because it can boost quality by allowing instructors to tailor lessons towards the requirements of each student. Because of its adaptability, EL removes timing and location constraints, enabling users to perceive a broad variety of data, encourages collaboration, enables students to progress at their own pace, which inspires learners to engage with one another, debate, or share thoughts with their classmates [29]. According to research, the advantages of digital learning include its speed, time and expense it preserves by requiring no travels. UAE was utilized as a case analysis for a quantitative examination by Salloum et al., (2019). The findings showed that four elements—innovativeness, reliability, trustworthiness, and information sharing—were seen to increase student acceptancy of EL systems [30]. Al-Gahtani, (2016) looked at the TAM3-based elements that affect students' adoption of EL. He discovered that play, self-efficacy, anxiousness, beliefs of external influence, normative beliefs, and perceived benefits were among the most important drivers of EL adoption. Social impact, observability, and subjective pleasure weren't really, nevertheless, linked to the acceptability of EL systems [31].

EL undoubtedly has a lot of advantages, but there are also some drawbacks. According to Sadeghi, (2019), digital training is reliant on technology, including the web and computers, that some pupils might not have connection. Additionally, disruptions or other equipment failure might occur within classes [32]. According to Dhull, K., & Dhull, (2017), in regarding to students, flexibility to plan their studying as well as the length of time expended while learning could occasionally lead to diminished enthusiasm, absence of physical connection and the existence of peers could cause students to experience lonely. EL has disadvantages that extend to one's physical well-being as well. Online students and instructors might just get vision or spinal issues due to spending so much time in sitting, and staring at screen, in which, their outside exercise may indeed be restricted [33].

2.5. EL practice during corona-viral outbreak

The influence of the outbreak on academia, institutions, professors, and students had become a topic of significant importance to scientists as just a result of exceptional circumstances caused by coronavirus (Co. V) crisis. According to Allo's (2020) investigation of students' perceptions, students used to have a favourable attitude

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regarding digital training, believing it to be valuable and beneficial amid the catastrophe brought on by Co. V [34]. In an experiment by Suresh et al., (2018) comprising 424 universities worldwide, found that entities have been impacted by disease outbreak in the areas of research, conventions, globalisation, and distribution of curriculum. The majority of universities reported having to embrace web - based learning, wherein, to overcome numerous obstacles, the far more significant of which were teachers' technical accessibility and their capability to offer online courses [35]. According to Rosell (2020), digital learning has evolved into practical teaching tools in the face of pandemics, allowing users to perceive educational platforms whenever it's convenient for them. Along with giving students access to queries with open solutions, it even provides flexibility and guidance on the taught study materials [36].

2.6. Research questions

Current study examines how both educators and students view EL in an attempt to address the disparity that has unexposed in existing literature. It specifically prompts the following inquiries:

1. How do academic staff think and perceive in respect of;
 - a. Digital platform utilised, including teaching skill.
 - b. Computational skills perspectives and online course planning.
 - c. Perception of EL value.
2. What is the student's opinion and perceptions on effectiveness of online teaching and learning during covid-crisis?
3. What are the challenges of online teaching & learning faced in outbreak situation?
4. What are the advantages, challenges, and disadvantages of EL?

3. METHODOLOGY

3.1. Sample

Tutors and students from undergraduate and post-graduate courses made up the study's populace. Out of this sample, 280 students and 50 faculty staff have been chosen at random, that is considered essential to get information on how both groups view EL.

3.2. Data collecting process

Two online questionnaires which were made using free programme Google Forms were utilized in the investigation. Students and instructors received links to the questionnaires via mails, FB messenger, WhatsApp chatting, as well as LinkedIn. The Ethical Committee approved the experiment and before commencing the online survey, experiment subjects were given details regarding study's objectives and asked to give their written consent.

3.2. Instrument

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Google Docs was used to develop 2 surveys online. The instructor questionnaire was divided into three sections: social demographic, online educational training, and professional opinions on the efficiency of online instruction. The student questionnaire, in contrast side, was divided into 4 sections: social demographic, students' perceptions of EL's efficacy, benefits, and problems. Survey was created with assertions to be rated on a Likert - type scale. Prior distributing the 2 respondent surveys, 2 academic experts assessed the included questionnaires and performed the necessary corrections. Personal details were not collected, and taking part in the research remained entirely optional. SPSS version 25 software was employed to examine the data.

3.2.1. Validation

To verify the survey's structure, 2 panellists looked at two trans questionnaires. Their suggestions are taken into consideration when deciding which survey questions to eliminate because they are irrelevant. Cronbach's alpha being employed as a reliable indicator to show how strongly associated the items are by measuring logical consistency. The experiment's findings demonstrated the consistency of items in the 2 polls. The teaching survey's 26 components have had an alpha coefficient of .889 for the instructor survey and .896 for the students' survey, which indicates that items get a fair amount of internal coherence. Several research in social sciences circumstances regard a reliability index of .70 or above to be "appropriate" [37].

4. RESULTS

4.1. Socio-demographics of participants

The instructor's average age ranged from 31-50 years, with a std. deviation of 1.0022. Among instructors, 3 of them are college professors, whereas 47 of them do teaching at universities. There were 280 learners, including 88 boys and 192 girls, whose ages ranged from 18 to 26 years. 43 of them reside in rural areas, while 237 are located in cities. 149 study participants claimed to have obtain training on how to use the online programmes, as compared to 131 who did not. Table 1 displays the study sample's specifics.

Table 1: Responders' social demographic profile

Variables	Category	Total	Percentage
Faculties			
Gender	Male	35	70.0%
	Female	15	30.0%
Age-group	31-42yrs.	24	48.0%
	43-50yrs.	26	52.0%
Teaching	University	47	94.0%
	College	3	6.0%
Students			

Gender	Male	88	31.4%
	Female	192	68.5%
Age	18–22yrs.	175	62.5%
	23–26yrs.	105	37.5%
Resident surroundings	Urban	237	84.6%
	Rural	43	15.3%
Online training	Received	149	53.2%
	Not received	131	46.7%

Figure 1: Social demographic profile of Instructors

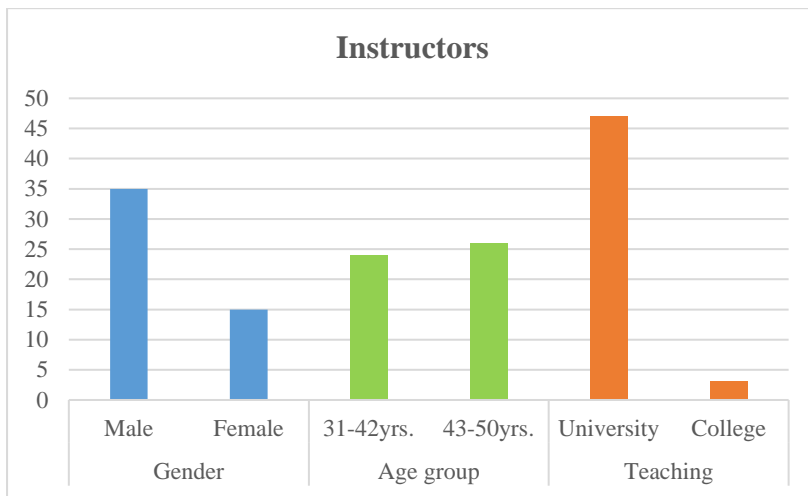
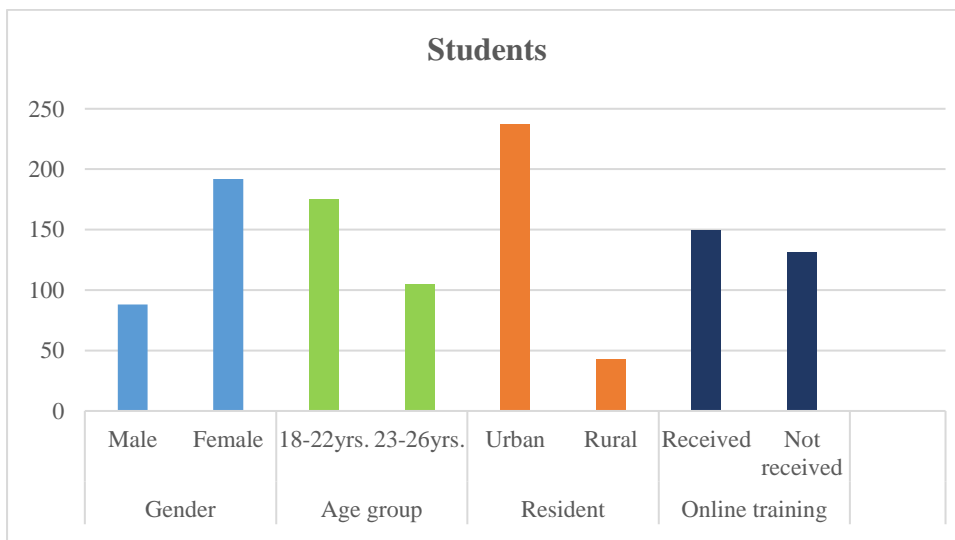


Figure 2: Social demographic profile of Students



4.2. Findings of survey

4.2.1. Survey of Instructors

a) Digital instructional experience

The investigation revealed that, with a percentile of 60%, majority of teachers have previously taught digitally prior outbreak. In contrary, 40percent of faculty members who participated in the poll had no previous knowledge of teaching electronically. In comparison to 34percent who didn't have any ability to conduct web – based learning classes, those with prior knowledge demonstrated that they were obtained instruction to educate digitally with a ratio of 66%. Instructors demonstrated that they employed Microsoft Teams (MT) and Zoom (Z) in conducting EL classes, with 60percent of them using MT and 40percent using Z. Lastly, majority of respondents revealed that 70percent of them utilized WhatsApp as a method of interacting with the lecturer's students beyond EL class period. Having 28percent of users, Z and MT chatting as well as textual choices are the second most common platform. Additionally, FB came in third place with 14percent of respondents' usage, whereas phone conversations have been utilised by 8percent of them [Table 2].

Table 2: Known internet teaching tools and platforms.

Queries	Cataloging	Frequency	%
Prior to pandemic issue, did you have such previous online expertise?	Yes	34	68
	No	16	32
Do you possess any training for teaching digitally?	Yes	33	36
	No	17	34
Which internet services do you use?	Z	20	40
	MT	30	60
How would you interact with your learners when you're not teaching them electronically?	WhatsApp	35	70
	Digital sites including phone and chatting features.	15	30

b) Computing skill perceptions and digital course preparedness

As illustrated in Table 3, the survey's second division sought to determine computer knowledge and online course preparedness as indicators of computing and IT talents. Bulk of responders concurred that they possess necessary IT expertise to lead courses online. Furthermore, compared to in-person coaching, taking courses digitally requires more work. Online education is becoming tool for navigating all catalytic eras, like corona viral crisis.

Table 3: IT approach and online course preparedness.

Items	Testing value = 2
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	Mean	St. D	Df	Significance (2-tailed)	95% CI of difference	
					Lesser	Higher
	I am capable enough to take classes online.	4.569	.612	48	.000	2.389
Comparing online teaching to in-person teaching, more work is required.	4.633	.635	48	.000	2.450	2.815
To get the most out of their in-person encounters with students, mentors must turn on their camera.	4.5102	.581	48	.000	2.343	2.68
Digital learning platforms include resources to support online teaching.	3.24	1.392	48	.000	.84	1.64
Online courses are less efficient than conventional ones.	3.3469	1.362	48	.000	2.956	3.74

c) Viewpoint on efficiency of online educational instruction

The average score of instructors' statements ($M = 3.12$, $SD = 1.379$, $p .001$) represent how the educators felt about the potential of taking online classes with no immediate communication between professors and their students. The 2nd, 3rd, 4th, as well as 5th items received neutral impressions from teaching staff as well. Aside from the 7th item, that was given the choice among neutral and agreement, subsequent things all got agreement grade. Following Bonferroni correction, these results remained statistically relevant ($p < .001$) [Table 4].

Table 4: Efficiency of online education from perspective of faculty.

Items	Testing value = 2					
	Mean	St. D	Df	Significance (2-tailed)	95% CI of difference	
					Lesser	Higher

With no genuine interaction among instructors and students, theory-based and practical courses might be given.	3.12	1.38	48	.000	.73	1.51
Minimal achievement is caused by a lack of communication between students and respective professors.	3.79	1.18	48	.000	1.45	2.14
In digital class, students have the option to openly ask queries.	3.75	.9	48	.000	1.5	2.01
Online lecture assist instructors in achieving the learning objectives outlined in the subject syllabuses.	3.79	.84	48	.000	1.55	2.03
Students who take classes online function better than those who learn in person.	2.94	1.1	48	.000	.62	1.25
Students who learn in person function better than those who learn digitally.	3.83	1.028	48	.000	1.54	2.13
Taking online classes by students is a reflection of their productivity and expertise.	3.61	.99	48	.000	1.33	1.9
You encourage your students to complete their homework and give them suggestions.	4.06	.77	48	.000	1.84	2.3
You may properly evaluate your learners and understand their specific differences.	3.92	.88	48	.000	1.66	2.17

4.2.2. Survey of Students

a) Utility of EL in outbreak scenarios

The efficiency of EL in COVID-19 was the study’s first focus [Table 5]. With an SD between 0.67 and 3.54, the efficiency of digital training varies when it comes to providing it in times of catastrophe. This indicates that the following factors are why study’s respondents thought EL was beneficial: Students initially demonstrated that their universities had given them equally effective online venues for attending courses. The large bulk of study participants indicated using MT in their EL practice. Secondly, participants in study demonstrated that they possess technical knowledge and training required to participate in web – based learning. Online service training would enable students to understand the objectives of online courses.

Table 5: Students' perceptions about EL

Question	M	SD	Comment
You have the necessary tools and resources (desktop, Network, and program) to take part in EL.	4.09	.92	Agree (A)
You possess the IT skills and expertise necessary to handle online study.	3.93	.94	A
Prior beginning courses online, your professor will deliver instructions (for ex: ‘How to use key digital sources?’).	3.68	1.00	A
The utilise of web - based tool is simple.	3.89	.99	A
Acquired knowledge about how to study in a brand-new digital context	3.69	1.07	A
Adaptability when it comes to attending online courses	3.54	1.15	A
Participation in EL is highly motivated.	3.30	1.21	Neither
You are pleased with quality of student-teacher dialogue amid online instruction.	3.47	1.13	A
In online courses, you get the option of asking queries or get clarification.	3.73	1.02	A
Home setting is appropriate for taking part in digital sessions.	3.39	1.33	Neither
Potential for family members' interruptions in online courses	3.72	1.15	A

Additionally, they demonstrated that pursuing EL courses allowed them to acquire novel skills. Thirdly, students underline how user-friendly EL environments seem. This implies that although institutions of higher learning might communicate application guidelines with their learners, students have trained extensively to participate in EL courses. Additionally, EL gives student’s flexibility to engage in lectures at any timing, either they join synchronous (just at precise moment of session) or asynchronous (course

records). Lastly, students made a point of expressing their satisfaction with student-teacher dialogue which took place throughout digital learning. All through online classes, respondents similarly demonstrated their understanding of communicating and answered queries to clarify any confusion. In contrast side, when asked if students are highly motivated to participate in EL lectures, survey respondents indicated neutral response i.e., neither agree nor disagree. In a similar manner, assessment of survey showed that they were unable to determine whether their residence is appropriate for attending EL classes. This indicates that when taking courses online, some students might well have experienced outside interruptions via respective members of family.

With a M (mean) of 3.54 (agree) and an SD (std. deviation) of .65, sample size is in agreement with the efficiency of EL. You have enough resources and tools, with M of 4.09 and SD of .92; you have enough IT and computing skills to handle your EL, with a M of 3.93 and SD of .94; and digital tools are simple to utilise, with a M of 3.89 and SD of .99.

b) EL's challenges while in an outbreak crisis

Because of quick transition from in-person training to digital instruction, students underlined that they encountered a number of difficulties via EL [Table 5]. According to students' comments, they had trouble adjusting to EL because of technical problems namely absence of IT skills, getting sufficient connectivity to the internet for variety of reasons, regulating their schedule, and planning their coursework so they could turn this in. A few of the students have demonstrated that, when considering their development and dispositions, the absence of connection too is viewed as a barrier for learners. They also mentioned how difficult it is to modify EL for those with special needs who are deaf, hearing impaired, or have other limitations. Additionally, EL programs don't have enough instruments for learning outcomes. Online courses prevent teachers from instantly identifying each student's unique characteristics. However, more critically, the analysis of study revealed that learners were worried about security of their personal information because they used their computers or smart phones at residence, that exposed them to security risks.

Table 6: Challenges of EL in pandemic crisis

Question	M	SD	Comment
Difficulty in adapting	3.69	.91	Agree (A)
Internet and technology problems	3.78	.99	A
Time managing skills and workflow organisation	3.70	1.02	A
Minimal interactivity	3.66	.99	A
Inadequate equipment for learner analysis	3.63	1.01	A
Adapting EL classes for students who are deaf/less hearing ability/those with impairments	3.81	.99	A
Data confidentiality and safety	3.70	.98	A

As per Table 6, study population agreed with the difficulties of studying in EL courses, with a M of 3.70 (agree) and SD of .60. Most significant of such challenges were adapting EL for 5 students who were deaf or improper hearing and students having impairments, with M of 3.81 and SD of .99. The structure of work procedures and timekeeping came in third with M of 3.70 and SD of 1.02, while technological and Internet concerns came in second with M of 3.78 and SD of .996.

c) Benefits of EL during outbreak crisis

Students claimed that taking classes digitally, allowed them to understand newer skills as well as talents. Additionally, it decreased the price of travel to institutions and associated costs. Utilization of travel-related expenses and other costs as listed in Table 7.

Table 7: Benefits of EL in pandemic crisis

Question	M	SD	Comment
Whatever you wish to learn, you could get.	3.77	1.06	Agree (A)
Convenience	3.70	1.13	A
Self-directed education	3.78	.97	A
Novel, efficient teaching resources	3.65	1.01	A
Developing new skills online is beneficial.	3.70	1.07	A
Adaptability in interaction and scheduling	3.63	1.13	A
Lower expense	3.4	1.32	Neither

According to Table 7, the students' M score is 3.67 (agree), and their SD is .85, indicating that they agree on benefits of EL. With M of 3.78 and a SD of .97, self-paced education was the most significant characteristic, followed by, whatever you wish to learn, you could get with M of 3.77; SD of 1.06, and convenience benefit with M of 3.70, SD of 1.13.

5. DISCUSSION

According to the assessment of professional experience, 68percent of instructors received training, compared to 32percent who hadn't. Workout is a component of professional development programmes that colleges offer to give their personnel the skills they need. This factor emphasises the importance of Staff Academia Develop Centres having procedures in place to handle any sudden catastrophes, like a corona outbreak. The study discovered that questioned professors utilized Z and MT most frequently than other platforms to provide online courses. Additionally, WhatsApp is among the most widely used tool for teacher-student engagement outside of class. According to Li and Lee's (2016) assessment of academics' perceptions of computing knowledge and their readiness for digital lectures, bulk of sample possessed computer proficiency prior to the corona epidemic, thus made it easier for them to enrol in EL courses [38]. Nevertheless, survey found that staff favoured conventional methods of

instruction since they foster student participation and mirror well on students' academic standing [39].

The findings reveal that academics agreed on necessity of EL for the success of online instruction. As shown by the item's mean rating (M = 2.94), it is disputed if learners enrolled in EL programmes could surpass those who receive traditional teaching. Nonetheless, reality is that in order to succeed in EL, face-to-face pupils must have the knowledge (M = 3.83). It is made clear that poor outcome may be caused by absence of communication amongst students and their educators. Additionally, taking EL classes enabled them to meet the learning objectives outlined in respective curricula. The respondents believe that preparing for an EL environment takes longer duration than for a traditional course. In order to make sure that learners are practising effectively, distant teaching needs pupils to complete extra assignments than formal learning. Additionally, coursework could help students make up for a shortage of immediate interact with instructors.

Students' perspectives of EL as an adaptable and beneficial learning source during catastrophe and certain drawbacks were identified in an assessment of efficacy and obstacles during the pandemic disaster. Majority of participants concurred that EL enables learners to have accessibility for learning resources asynchronously across whole day. This result is consistent with assertion made by Gautam, (2020) whereby EL gives students access to EL resources whenever they choose [40]. Additionally, it promoted self-learning, in which the participant actively engages in learning process. When students remain at residence and are not charged for transport or other expenditures, EL lowers the expense of curriculum. Most critically, while studying, pupils gained new skills like self-discipline besides, managing timeframe.

The study found that students had issues with taking digital courses. According to results, such difficulties are related to students' difficulty adjusting to EL classes, their absence of direct interaction with professors, their disinterest in attending class, and their capacity to manage time. Course administrators and programme chairmen must take into account these set of problems by proposing alternatives. The transition from in-person to online training was perceived as difficult by the learners. Students likewise emphasised how difficult it is for those who are deaf, or have specific requirements to use internet platforms. They reportedly bemoaned the absence of conversation regarding each other's accomplishments and personality. Technical challenges with web access also impact studying through other learning approach. By increasing the bandwidth of internet services offered to students, such difficulty could be resolved. Authorities must provide inexpensive broadband services for students in this situation, wherein, telecommunications providers must support students. Similar to this, students became worried regarding personal data protection as they utilized laptop and desktops that they owned at house, that may subject to intrusions by other entities. Institutions must therefore teach students concerning data security. Additionally, they must offer students complimentary firewalls so that their information is safeguarded.

6. CONCLUSION

The study carefully examined how both instructors and students perceived EL education. According to investigation, online courses are more efficient than online schooling. Because of the difficulty in completing the adjustment to digital classes and absence of communication among students and their instructors, EL students confront a number of challenges. EL systems encourage student-centered training and are capable of adapting to sudden catastrophes like COVID-19. It is important to note that synchronized sessions for students with special requirements are preferable, so that these students' progress must be facilitated by professionals.

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Data Availability Statement

The database generated and /or analysed during the current study are not publicly available due to privacy, but are available from the corresponding author on reasonable request.

Declarations

Author declares that all works are original and this manuscript has not been published in any other journal.

REFERENCES

1. Abou El-Seoud, M. S., Taj-Eddin, I. A., Seddiek, N., El-Khouly, M. M., & Nosseir, A. (2014). E-learning and students' motivation: A research study on the effect of e-learning on higher education. *International journal of emerging technologies in learning (ijET)*, 9(4), 20-26.
2. Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems*, 49(1), 5-22.
3. Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Online Submission*, 2(1), 45-51.
4. Suresh, M., Vishnu Priya, V., & Gayathri, R. (2018). Effect of e-learning on academic performance of undergraduate students. *Drug Invention Today*, 10(9).
5. Yusuf, N., & Al-Banawi, N. (2013). The impact of changing technology: The case of e-learning. *Contemporary Issues in Education Research (CIER)*, 6(2), 173-180.
6. Survey on Online and Distance Learning—Results. Available online: <https://www.schooleducationgateway.eu/en/pub/viewpoints/surveys/survey-on-online-teaching.htm> (accessed on 10 October 2022).

7. Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. *Sustainability*, 12(24), 10367.
8. Aboagye, E., Yawson, J. A., & Appiah, K. N. (2021). COVID-19 and E-learning: The challenges of students in tertiary institutions. *Social Education Research*, 1-8.
9. Almaiah, M. A., & Alismaiel, O. A. (2019). Examination of factors influencing the use of mobile learning system: An empirical study. *Education and Information Technologies*, 24(1), 885-909.
10. Shawai, Y. G., & Almaiah, M. A. (2018). Malay language mobile learning system (MLMLS) using NFC technology. *International Journal of Education and Management Engineering*, 8(2), 1.
11. Almaiah, M. A., Alamri, M. M., & Al-Rahmi, W. (2019). Applying the UTAUT model to explain the students' acceptance of mobile learning system in higher education. *IEEE Access*, 7, 174673-174686.
12. Naveed, Q. N., Qureshi, M. R. N., Alsayed, A. O., Muhammad, A., Sanober, S. and Shah, A. (2017, November). Prioritizing barriers of E-learning for effective teaching-learning using fuzzy analytic hierarchy process (FAHP). In 2017 4th IEEE International Conference on Engineering Technologies and Applied Sciences (ICETAS) (pp. 1-8). IEEE.
13. Almaiah, M. A., & Alamri, M. M. (2018). Proposing a new technical quality requirement for mobile learning applications. *J. Theor. Appl. Inf. Technol*, 96(19), 6955-6968.
14. Alksasbeh, M., Abuhelaleh, M. and Almaiah, M. (2019). Towards a model of quality features for Mobile social networks apps in learning environments: An extended information system success model.
15. Popovici, A., & Mironov, C. (2015). Students' perception on using eLearning technologies. *Procedia-Social and Behavioral Sciences*, 180, 1514-1519.
16. Horton, W. (2011). *E-learning by design*. John Wiley & Sons.
17. Engelbrecht, E. (2005). Adapting to changing expectations: post-graduate students' experience of an e-learning tax program. *Computers & Education*, 45(2), 217-229.
18. Raheem, B., & Khan, M. A. (2020). The role of e-learning in COVID-19 crisis. *International Journal of Creative Research Thoughts*, 8(3), 3135-3138.
19. Oye, N. D., Salleh, M., & Iahad, N. A. (2012). E-learning methodologies and tools. *International Journal of Advanced Computer Science and Applications*, 3(2).
20. Vitoria, L., Mislinawati, M., & Nurmasiyah, N. (2018, September). Students' perceptions on the implementation of e-learning: Helpful or unhelpful? In *Journal of Physics: Conference Series* (Vol. 1088, No. 1, p. 012058). IOP Publishing.

21. Almarabeh, T. (2014). Students' Perceptions of E-Learning at the University of Jordan. *International Journal of Emerging Technologies in Learning*, 9(3).
22. Costa, C., Alvelos, H., & Teixeira, L. (2012). The use of Moodle e-learning platform: a study in a Portuguese University. *Procedia Technology*, 5, 334-343.
23. Cacheiro-Gonzalez, M. L., Medina-Rivilla, A., Dominguez-Garrido, M. C., & Medina-Dominguez, M. (2019). The learning platform in distance higher education: Student's perceptions. *Turkish Online Journal of Distance Education*, 20(1), 71-95.
24. Ouadoud, M., Nejjari, A., Chkouri, M. Y., & El-Kadiri, K. E. (2017, October). Learning management system and the underlying learning theories. In *Proceedings of the mediterranean symposium on smart city applications* (pp. 732-744). Springer, Cham.
25. Benta, D., Bologa, G., & Dzitac, I. (2014). E-learning platforms in higher education. Case study. *Procedia Computer Science*, 31, 1170-1176.
26. Eltahir, M. E. (2019). E-learning in developing countries: Is it a panacea? A case study of Sudan. *IEEE Access*, 7, 97784-97792.
27. Mulhanga, M. M. and Lima, S. R. (2017, December). Podcast as e-learning enabler for developing countries: Current initiatives, challenges and trends. In *Proceedings of the 2017 9th International Conference on Education Technology and Computers*
28. Kenan, T., Pislaru, C., Othman, A., & Elzawi, A. (2013). The social impact and cultural issues affecting the e-learning performance in Libyan higher education institutes. *International Journal of Information Technology & Computer Science*, 12(1), 50-56.
29. Babu, G. S., & Sridevi, K. (2018). Importance of E-learning in Higher Education: A study. *International Journal of Research Culture Society*, 2(5), 84-88.
30. Salloum, S. A., Al-Emran, M., Shaalan, K., & Tarhini, A. (2019). Factors affecting the E-learning acceptance: A case study from UAE. *Education and Information Technologies*, 24(1), 509-530.
31. Al-Gahtani, S. S. (2016). Empirical investigation of e-learning acceptance and assimilation: A structural equation model. *Applied Computing and Informatics*, 12(1), 27-50.
32. Sadeghi, M. (2019). A shift from classroom to distance learning: Advantages and limitations. *International Journal of Research in English Education*, 4(1), 80-88.
33. Dhull, K., & Dhull, E. H. (2017). Advantages and Disadvantages of Online Learning.
34. Allo, M. D. G. (2020). Is the online learning good in the midst of Covid-19 Pandemic? The case of EFL learners. *Jurnal Sinestesia*, 10(1), 1-10.
35. Suresh, M., Vishnu Priya, V., & Gayathri, R. (2018). Effect of e-learning on academic performance of undergraduate students. *Drug Invention Today*, 10(9).

36. Rosell, C. (2020). COVID-19 Virus: Changes in Education | CAE. Available online at: <https://www.cae.net/covid-19-virus-changes-in-education/> (accessed January 9, 2021).
37. Mockovak, W. (2016). Assessing the reliability of conversational interviewing. In Proceedings of the Joint Statistical Meetings, Washington, DC.
38. Li, L. Y., & Lee, L. Y. (2016). Computer Literacy and Online Learning Attitude toward GSOE Students in Distance Education Programs. *Higher Education Studies*, 6(3), 147-156.
39. Cooke, G. (2020). Online Learning vs Face to Face Learning Elucidat. Available online at: <https://www.elucidat.com/blog/online-learning-vs-face-to-face-learning/> (accessed October 11, 2022).
40. Gautam, P. (2020). Advantages and Disadvantages of Online Learning - eLearning Industry. Available online at: <https://elearningindustry.com/advantages-and-disadvantages-online-learning> (accessed October 11, 2022).