A STUDY OF CHALLENGES IN UTLIZATION OF E-LEARNING FACILITIES AT UNIVERSITY LEVEL

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Candidate of **Master of Philosophy** at National University of Modern Languages do hereby declare that the thesis **"A Study of Challenges in Utilization of E-learning facilities at University Level"** submitted by me in partial fulfillment of M. Phil Degree, is my original work, and has not been submitted by or published by me for obtaining earlier. I also solemnly declare that it should not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

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ABSTRACT

Title: A Study of Challenges in Utilization of e-learning Facilities at University Level

This research was aimed to analyze the challenges in utilization of e-learning facilities faced by the university students. The main objective of the study was to explore the challenges in utilization of e-learning facilities faced by the students of management and social science students of public and private universities. In this study theoretical framework of (Andersson & Grönlund, 2009) was used. Four challenges were mentioned in theoretical framework that was individual challenges, course challenges, contextual challenges and technological challenges. The population of the study was 16,788 0f public universities and 6,534 of private universities and target population of the study was based on under graduate students of management science and social science departments of public and private universities. A random sampling technique was used for collection of data. The sample of the present study was 736 from which 375 were public universities student and 361 were private universities students. The reliability of individual challenges was 0.637, course challenges 0.861, contextual challenges 0.782 and technological challenges 0.845. The finding of the study showed that there is a significant difference between the challenges faced by students of management sciences and social sciences of public and private universities students. It was concluded that students face more individual challenges. This study recommends that proper timetable may be made and properly followed by class teachers. Proper training may be provided to the students and teachers for the use of e-learning facilities. Proper guideline may be given to the family so they can provide learning environment at home. Process of assessment and evaluation may be revised according to e-learning classes. Course and curriculum designers may work on making new curriculum for only e-learning classes. Students may be allowed to do learning at their own pace. Universities may increase number of computer labs and make sure computer are virus free to overcome the challenges in utilization of e-learning facilities at university level.

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Dedication

From core of my heart I am thankful for Muhammad (S.A.W.W) and Ale Muhammad (A.S) for their blessings. I dedicate this research work to my family. To my father, Abdur Rahman, I thank you for encouraging me to work hard and to trust in Allah. To my Mother, Bushra latif, thank you for your prayers and support throughout my studies. To my Sister, Ghulam Fatima and to my brother, Ghulam Jaffar, thank you for all the help and moral support during my research work.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The rapid growth of information technology has made it possible and the need to learn to happen faster. Meeting new challenges and challenges requires new thinking in acquiring the necessary skills and knowledge as well as the ability to manage well within available resources. E-learning is the result of new information and learning that has been heavily influenced by the advent of the Internet and Information and Communication Technologies (Andoh, 2012).

A recent trend seen in higher education is the introduction of e-learning programs to provide students with online access to learning content. The great driving force behind this practice is the changing nature of student numbers, changing the delivery conditions of education and the technology itself. To keep pace with changing conditions, education programs around the world are on track to integrate Internet and Information and Communication Technologies to improve students' learning skills. While much of the focus is on promoting positive e-learning outcomes, there is a need for caution the frustration and dissatisfaction that can result from this shift in traditional ways (Qureshi et al, 2020).

Institutions of higher learning have embarked on a series of initiatives that promote the use of Internet and Information and Communication Technologies to effectively connect online teaching and learning and to build the cognitive skills needed to make social and economic contributions to the knowledge world. Experts prefer that new IT-based innovations (e.g. transform the competitive Institutions of

higher learning environment and show dramatic emergence from unexpected brick and mortar issues to rapid and unexpected change) Alhabeeb and Rowley (2017) .

According to Surry, Ensminger, (2005), integrating educational instructional technology can address a variety of issues, including technological infrastructure, student competency, technical satisfaction, and instructor motivation. Without adequate execution, no matter how effective the technology is, it will only serve a limited purpose. Because of poor strategic planning, many institutions of higher learning have failed, High technology costs, reluctance to change, competition, and low academic achievement (Elloumi, 2004; Saadé, 2003) are all factors that contribute to poor academic performance. These issues are exacerbated in developing countries like Pakistan, which have less resources and technological know-how in comparison to industrialized countries. However, the educational experience provided by e-learning extends beyond entertaining. (Garrison & Anderson, 2003).

E-learning is most likely one of the most significant developments in education, driven by the proliferation of innovation-enabled stages that provide expected understudies with a unique and imaginative learning environment in contrast to traditional learning and, as a result, address another IT in schooling. (Bates, 2007; Wang, 2009).

Pakistan's top universities face many challenges in the effective use of digital learning that is closely linked to infrastructure, teaching skills and technology. The challenges in developing countries are the lack of knowledge and attitudes towards Information Communication Technologies, inadequate human resource development and inadequate infrastructure, inadequate skilled labor and

lack of systematic development for Internet and Information and Communication Technologies implementation. Researchers also added that the inclusion of teaching tools in teaching can have many obstacles e.g. technical infrastructure, student strengths, technical approvals and the enthusiasm of the teachers who use them. Without proper startup technology it will not give anyone the highest benefits. In addition, previous studies in the years 2008, 2009 and 2010 reported that most academics and students do not have the basic skills to use the latest digital devices and some students have android and laptops; however, they do not have the ability to use them effectively (Almaiah et al. 2016).

Information Technology in developing countries like Pakistan is still in its infancy. The government is actively promoting and developing an IT culture in the country. Similarly, the government contributes significant funds, particularly for the creation of Virtual Universities and IT institutions in all public and private universities with high-speed internet access, which is a positive indicator, this demonstrates the government's interest in incorporating information technology into the organization's structures, particularly in its e-use Learning and Teaching at national higher education institutions Esterhuyse and Scholtz (2015).

Similarly, there are both positive and negative experiences in Pakistan with regard to the adoption and use of Internet and Information and Communication Technologies for educational purposes, as there are several social, political, cultural, human, and technological barriers to the adoption of this new technology in developing countries and Pakistan. as well as; moreover, teachers, students and developers see it differently because of the different contexts that play a major role in the success or otherwise the failure of Internet and Information and Communication Technologies used in e- Teaching and e-Learning Chang et al.

(2017) .

Some cities have raised enormously in terms of economics, technology, social and cultural development, with a slew of public and private colleges and graduate schools yet a low literacy rate. On the other side, in the public sector and at a few small private universities, lacking technical infrastructure and resources with a different economic, social and cultural history compared to other big cities Eltahir (2019).

Globally, information and communication technology has become a critical component of educational technique and curriculum delivery. ICT is critical for students' training to address the challenges of global innovation. (Ololube,2006). Learning through electronic resources is called e-learning. The major components are computer and internet. Presence of teacher is not necessary in e learning because it can be happened within or outside the class. Professionally the term e-learning is used by Elliott Masie in November 1999 (Gutierrez, 2014). Basically, the use of electronics is called e-learning which include not only computer about also television, multimedia, mobile, projectors, radio, compact disc etc. which fulfill the educational needs. But in 21st century e-learning cannot be properly defined without internet (Bates, 2016). Growth of information and communication technology ICT and innovation through internet has lead towards the advancement of virtual classrooms and web-based education. E-learning has become need of 21st century students, teachers, and curriculum developers (Qureshi et al, 2012).

The main user of e-learning programs is student. Developers of e-learning course trying to make it easy and user friendly. E-learning allow student to learn at their own pace and are responsible for their own learning. Learning for e-learners is not place and time bound. Learner motivation and satisfaction are important

components. These courses provide enough time for students to understand knowledge and do in-depth discussions with instructors. To succeed in online learning class basic computer and web browsing skills are required. For large class size e-learning program provide better options. The utilization of e-learning facilities is increasing with development of network and wireless technologies (Omidinia, Masrom, & Selamat, 2011).

But there are many challenging issues regarding to implementation of e-learning. Some challenges also occur with the increasing demand of e-learning. Some major issues are cost, motivation, self-awareness, and social support, negative attitude towards technology, basic computer skills, and access (Kumar, 2015). The four main challenges highlighted by (Andersson & Grönlund, 2009) are individual challenges, course challenges, contextual challenges and technological challenges.

1.2 Rationale of the Study

In today's world study through e-learning is getting high priority day by day in the developing counties but in developing countries e-learning facilities are not too easy to promoted due to lack of proper resources, economy and funding problems and lack of training of training . E-learning systems provide different facilities like knowledge management, assignment and evaluation, curriculum, course material, and subject content (Haghshenas 2019). The enthusiasm and approval of students and teachers to use this system show the success of e-learning (Almaiah and Alismaiel 2019).

But, students and research scholars are facing many difficulties in activating the e-learning facilities. Now a day's students were finding it difficult to blend traditional learning into e-learning (Prensky, 2015).

Nobody can deny the importance of e-learning with countless benefits but there are several challenging issues such as lack of access, not given dedicated time in the way they can do independent learning, adaptability, issues in handling technology, less experience with computers, time management, and lack of motivation . One of the major challenges could be a complete change in traditional curriculum and development of new pedagogical approach for e-leaning system (Mitra et al., 2015).

This facility is not available at some places but if available then students are not taking advantages due to individual challenges like lack of motivation, lack of support from homes along with economy and age problems, lack of competence, or having difficulties in using technology. Usually teachers leave it to students to learn new technology which decrees students motivation , participation in class and students productivity (Pitler et al., 2012)

There are more avenues available to strengthen the students with the modern techniques through providing the proper training and guidelines on how to use and take benefits from e-learning facilities. So the main aim of the study was to identity the individual, course, content, and technological challenges of students at university level. Due to these challenges researcher is conducting study on the challenges of utilization of e-learning facilities at university level.

1.3 Statement of the Problem

Due to the considerable benefits, many educational institutions started offering e-learning programs in different forms, and at different levels, but many of these programs have not been very successful. Problems which are generating e-learning challenges in universities are resistance to change, lack of awareness, physical health barriers, anxiety or stress related to technology, instability in energy and internet facilities along with network problems. The main issue of students and teachers is

that they need a face to face interaction which e-learning usually don't provide along with student motivation, social support and loafing. So the main aim of the study is to identify and categorize challenges to e-learning adoption, to assess their relative impact on learners and to understand their perceptions about challenges. Identify different types of challenges and their relative importance. This will enable instructors and e-learning developers to focus upon the most critical potential challenges to successful e-learning implementation. One of the major challenges of e-learning is that the learners are unaware of effectiveness of e-learning. They might feel that e-learning is not as effective as classroom learning and that the learners would miss the opportunity of face-to-face interaction. So researcher is studying challenges in utilization of e-learning facilities at university level.

1.4 Significance of the Study

This study will aid in determining what obstacles must be addressed in order for students to adopt new educational e-learning delivery mechanisms that have the potential to address the growing issue of cheap access to high-quality education. This research will be helpful to the students for understanding and dealing with the challenges in utilization of e-learning facilities. The study will help to enhance the motivation of students towards e-learning. It will provide guidelines for the management of time and improve technical skills which ultimately enrich students' self-possession. They will get awareness about technology, individual skills, pedagogy and enabling conditions. For teachers it will be helpful to motivate all level students about how to use e-learning facilities. Through this study students and teachers both will be able to know the influence of e-learning on academic performance. It will also help teachers to use appropriate pedagogical approaches through the use of e-learning techniques.. It will help curriculum designers to design

new content and redesign existing learning activities. It will be helpful for educational organization for provision of e-learning facilities to the teachers and students.

1.5 Objectives of the study

1. To assess challenges in utilization of e-learning facilities faced by students of public sector universities.
2. To assess challenges in utilization of e-learning facilities faced by students of private sector universities.
3. To compare challenges in utilization of e-learning facilities faced by students of public and private sector universities.
4. To compare challenges in utilization of e-learning facilities faced by students of social sciences and management sciences at university level.
5. To assess gender based difference regarding challenges in utilization of e-learning facilities faced by students at university level.

1.6 Hypotheses

H_{01} There is no significant difference between challenges in utilization of e-learning facilities faced by students of public and private sector universities.

H_{02} There is no significant difference between challenges in utilization of e-learning facilities faced by students of social sciences and management sciences at university level.

H_{03} There is no significant gender based difference regarding challenges in utilization of e-learning facilities faced by students at university level.

1.7 Theoretical Framework

In table given below theoretical framework of Andersson & Grönlund, (2009) is given in which four main challenges of e-learning that are Individual challenges,

Course challenges, Contextual challenges, and Technological challenges are given which are further divided into sub challenges. Individual challenges have following sub challenges Motivation, Conflicting priorities, Economy, Academic confidence, Technological confidence, Social support, Gender, Age. Course Challenges are as follow Curriculum, Pedagogical model, and Subject content, Teaching and Learning Activities, Localization, Flexibility. Contextual challenges are as follow Knowledge management, Economy and funding, Training of teachers and staff, Role of teacher and student, Attitudes on e-learning and IT, Rules and regulations. Technological challenges are as following Access, Cost, Software and interface design, and Localization.

E-learning Challenges

Individual challenges	Course challenges	Contextual challenges	Technological challenges
Student • Motivation • Conflicting priorities • Economy • Academic confidence • Technological confidence • Social support (support from home and employers) • Gender • Age **Teacher** • Technological confidence • Motivation and commitment • Qualification and competence • Time	**Course design** • Curriculum • Pedagogical model • Subject content • Teaching and Learning Activities • Localization • Flexibility **Support provided** • Support for students from faculty	**Organizational** • Knowledge management • Economy and funding • Training of teachers and staff **Societal/Cultural** • Role of teacher and student • Attitudes on e-learning and IT • Rules and regulations	• Access • Cost • Software and interface design • Localization

E-learning challenges by Andersson & Grönlund, (2009)

1.8 Methodology

The population, sample, sampling technique, research equipment, data collecting, data analysis, and delimitation are all covered in this section.

1.8.1 Research Approach. The concerns were identified using a quantitative technique, which generated numerical data or information that could be translated into meaningful statistics.

1.8.2 Population. For this study students of public and private universities were taken. Only from the departments of management sciences and social sciences.

1.8.3 Sample. For this study from public universities 375 and from private universities 761 students were taken for sample.

1.8.4 Research Instrument. On basis of theoretical framework research instrument was developed.

1.8.5 Data Collection. Data was gathered via a questionnaire. The researcher went to the universities herself.

1.8.6 Data Analysis. The researcher conducted many types of tests to assess the data during data analysis. SPSS was used to examine the data (Special Package for Social Sciences). Mean and independent t-test was used to evaluate the data.

1.8.7 Delimitation.

- Due to lack of time and resources this research work was delimited to students of management sciences and social sciences from public and private universities.

1.9 Operational Definitions

1.9.1 E-learning

The means to transfer knowledge and skills through internet, networked information and other digital tools to enhance teaching, learning and performance is called e-learning.

1.9.2 Individuals' Challenges

When discussing individual challenges then the motivation and satisfaction of individual learners is the main focus point in developing e-learning course content.

1.9.3 Course Challenges

Course challenges are defined as curriculum and pedagogical methods because in online learning systems students are solely responsible for their learning. .

1.9.4 Contextual Challenges

It is defined as that how will be the assessment and evaluation be done on the basis of e-learning content

1.9.5 Technological Challenges

Technological challenges are defined as access and price of technology and its use along with software and interface design of technologies.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Great achievements and benefits of Information and communication technology ICT had changed the world into global village so no one can deny the role of information technology IT in education as well. On its bright side ICT helps us to make teaching and learning process easy, more unindustrialized and encouraging. In developed and developing countries teachers and students are equipped with ICT facilities to make their job more better but they are also facing some challenging issues like lack of ICT skills, lack of motivation to use ICT facilities and unawareness of solving hardware and software issues (Andoh, 2012).

In educational societies ICT had very challenging character. The stakeholders restructure and modernize educational policies for teachers and students to provide them fundamental knowledge and skills for the use of ICT according to the demand of digital age. Consequently, most nations around the globe are concentrating on ways to deal with coordinate ICT in learning and instructing to improve the nature of training by underlining abilities, for example, basic reasoning, basic leadership, treatment of dynamic circumstances, filling in as an individual from a group, and compelling correspondence (Anderson & Weert, 2002). The addition of ICT in educational system had replaced the old ideas and principles of education and now the education system is modernized which is not only help the teachers and students but also the curriculum designers and stakeholders (Albrini, 2006).

Dummilland and Arslanagic (2006) defines information and communication technology ICT as digital media tools i.e. personal computers, printers, scanners, digital cameras, mobile phones, fax machines, and video conferencing equipment etc. that allow us to communicate and to recover, store, arrange, control, present, send material locally, nationally and globally. Many people produce and broadcast information by participating in the process of collaboration among specialists, students, peers and policy makers which is allowed by information and communication technology ICT (Leach, Ahmed, Makalima & Power, 2005). According to the (Verhoest & Cammaerts, 2001) the access to the information and communication technology depends on three main factors like quality of services, accessibility and affordability.

At homes of majority of the students computers are available. He also said that the majority of the male students show positive interest in spending time with information and communication technology rather than the female students. According to male students traditional learning styles should be transformed with the information and communication technologies. Schumacher and Morahan (2001) said that the female students don't show interest in usage of computers and other modes of information technology. Regarding to the use of ICT male students have more knowledge and skills then female students. There is also a large knowledge, skill and learning gap regarding to the information and communication technology between male and female students. (Withers, 2000) said that female students don't show interest in ICT courses and have less attention towards the career and leadership of ICT which proves that the gender effect the effectiveness of the information and communication technology.

2.1 E-learning

Horton (2001) describes in his book “E-learning is the use of internet and digital technologies to create experiences that educate our fellow human beings”. Both in traditional and electronic learning, learner are main focus point. In traditional learning the teacher or instructor tries to bring all the learners on the same page but in e-learning every learner may have a different point of view from the same learning materials. Traditional learning requires a specific learning environment but e-learning occurs where learner want it to be. According to Horton (2011) the motivation of learners is important element in designing e-learning course because due to no physical interaction with learner it is hard to interpret their thoughts about the course.

(Naidu, 2006) states that in training and learning the purposeful utilization of broadcasting and network data is known as online learning.E-learning incorporates frameworks, for example web, PCs, sight and sound compact discs so as to decrease the measure of costs and spare time Mohammadi, Ghorbani, and Hamidi, (2011). Within the speedily changing environments e-learning is progressive invention of information technology to transfer network information by means of system empowered frameworks (Manochehr, 2006). To provide a wide range of solutions, e-learning uses telecommunications to increase implementation of data and information (Liaw, Huang, & Chen, 2007).

E-learning identifies with the utilization of network frameworks and tends inside education arrangements. Between the motivated learner and experienced facilitator e-learning helps to build positive teamwork environment (Wang et al, 2009). Learning substances conveyed faraway by means of digital communication, for example web, satellite television, radio, Compact disc ROM and so forth (Bates, 2005). E-learning incorporates thought of digital based learning frameworks; for

example computerized cooperation and virtual study halls. Both for worldwide instruction and corporate preparing e-learning is giving new guide lines (Bell et al., 2004).

World changed into the global village due to the advancement in technology but it leaving behind developing and under developing nations. So it is the biggest challenge of developing and under developing nations to catch with developed countries by increasing their communication, trade and innovation in technology (Tinio, 2002). Most of the developing countries are still using their traditional teaching-learning styles but (Tubaishat et al, 2006) in there research on two middle east universities states that adoption of technology in developing countries are also resulted in increasing inspiration, communication, confidence, experience with computers, improve self-awareness and technological skills and reduces the language barrier. Along with technological barriers in many developing nations socio-economic challenges are causing hurdles and are not allowing the growth of technology in educational institutions. For effective implementation of e-learning, developing nations need to control cultural and social challenges along with other issues like training of staff, accessibility, experience with ICT and demographic factors.

The all-inclusive openness managed by e-adapting, particularly in creating nations, has increased a lot of consideration from scientists over a scope of various societies and settings (Lin, 2010); due to synchronous and progressive learning over conventional learning numerous specialists appreciating learning through electronic devices (Zengin et al., 2011). Dynamic requirements concerning e-learning's potential immense improvement had been made in the procedure of digital learning activities, (Bell et al., 2004).

2.2 Types of e-learning

E-learning has two main categories. One is Asynchronous and other one is Synchronous. When the participants are not available at the same time and learning can happen at any time and place then this type of learning is called Asynchronous education. Major feature of asynchronous online education is that participation facilitator and apprentice at the same time is not required (Hrastinski, 2007).

Other type of e-learning is Synchronous mode which allows the face to face interaction between the instructor and student through video conferencing and interactive interaction. It reduces the frustration which is caused by the sense of isolation as it is seen more in the Asynchronous mode. Synchronous is different from Asynchronous mode because Asynchronous mode lack of feedback and in Synchronous mode learner can immediately receive the feedback from the instructor (Hrastinski, 2008). In Synchronous learning participation of all learners and instructors are needed on same time regardless of their location, so if the learner and instructor are not available on same time they will miss the learning session.

According to Haythornthwaite (2002) the success of e-learning process depends upon content, planning of task, and support from societies which are the modes of communication. Sharing of information and ideas, freedom of asking questions, team work and support from society are indeed essential factors to make e-learning process successful. Content-related communication is more effective in asynchronous mode because it is not a time specific learning. So the learners take their time and interpret content according to their own understanding. It increases the ability of self-directed learning and self-examination (Robert & Dennis, 2005). Asynchronous e-learning can be used when all participants cannot participate on the same time and when the complex issues had to be discussed. Synchronous e-learning

is more favorable to the modes like planning of task and support from society. Synchronous e-learning is time bound and allow face to face interaction which increases motivation. Immediate response of learner and instructor is expected. Synchronous e-learning is used when all participants all available on same time and when the less complex issues had to be discussed. Haythornthwaite (2002) also said that synchronous e-learning is socially favorable because it promotes discussions other than course work and is useful when group works are assigned.

Learning through electronic media helps individuals to learn in an easy way and it overcomes the hurdles of traditional learning approaches. Internet and other digital devices make the learning convenient and flexible. With the availability of internet learning can occurs at any place and at any time. New technology is accurate or not can be decided by the cost concern. (Bartley & Golek, 2004). Web based learning supposedly is financially savvy as it very well may be conveyed to countless understudies simultaneously with no expansion in the individual expense and accomplishes good results. On the off chance that advanced education establishments can coordinate their consideration towards web based learning advantages and it's potential in the instructive division, at that point it could be financially savvy when contrasted with conventional instructive models.

Colleges are as yet utilizing innovation in training yet it is constrained. Courses must be structured in a way that are easy to use for students and generously these projects limit the expense of learner by utilization of innovation (Meyer, 2006). It's true that in start of distance education structure the prices are very high but as the learning process goes on it became manageable and class structure is not constrained by the population of students and classroom plans (Bartley and Golek, 2004).

On international level online learning situations have numerous favorable circumstances that are acknowledged too. In adoption of online learning courses, the most important factor is cost since it diminishes the pay rates, lease and journeying costs of instructor, construction and learner. Comparing with traditional learning, online learning is less expensive (Kruse, 2002). Online involvement of students in learning process is estimated by the time they spent on educational sites. High level of apparent learning is commonly showed by the pupils (Arbaugh, 2000). For human advancements and educational improvements, chances are provided by e-learning. After optional instruction, individuals search for increasingly instructive open doors that line up with their expert life. Be that as it may, because of constrained time, severe working hours, and cost, conventional learning doesn't ordinarily enable people to seek after the advanced information and knowledge (Kwofie and Henten, 2011). To solve these challenges for further human growth online education provides good opportunities. Instructor provides online management and support to learners in online classroom and unlike the traditional classroom it has more chances to transfer ideas and knowledge (Hiltz & Wellman, 1997; McCloskey, Antonucci, & Schug, 1998).

Pervasiveness is the great advantage of online education it remove the hurdles like time and place so avoiding the complex system of universities learners can attend class whenever they want. Different learning settings can be obliging by online learning actions (Koller, Harvey, and Magnotta, 2008). E-learning have very valuable facility fleeting adaptability which allows learners to learn when they have interne facility and whenever they want so learners shouldn’t be at the college on a specific time/date, or quest for instructors and study halls (Björk, Ottosson, and Thorsteinsdottir, 2008). To reduce the stress of learner various chances are provided

by e-learning programs like quick referencing so the learner complete their task at whatever place they are (Kruse, 2002).

In traditional teaching different instructors provide diverse learning material on same topic causes confusion but in online learning same material is available on same topics (Cantoni, Cellario, and Porta, 2004). Besides having a large class online, synchronous learning environment provide a variety of chances for instructors and leaners to interact more often and confidently (Kim, Liu, and Bonk, 2005). Web base learning lessens amount of student travelling through learning media which transfer information and restrain student to go to the institutions for gaining information and knowledge (Kaur, 2013). As indicated by the understudies, web based learning is extremely useful for the improvement of virtual joining as it is significant in the present worldwide business condition (Kim, Liu, & Bonk, 2005). Expertise in professional life can be increased by learning through technology which not only helps in teaching learning process (Kiani, 2010).

Adaptability of time is accessible to the students who are getting knowledge through e-learning facilities. Reach to the classroom at fix time is not relevant to e-learners. The harmony between personal life, study and work is accomplished by the adaptability factor (Radović &Marković, 2010). Same learning styles are not applicable to all the learners. Divergent approaches and trends provide diverse learning styles for different teaching activities (Banciu, Gordan, & Stanciu, 2012). Among learners and instructors significant level of intuitiveness is provided by e-learning (Radović & Marković, 2010). Education through online means getting down to business as an ease and high access elective for customary training. In any case, regardless of every one of these advantages of e-learning, it is out of line to consider it the best option for each college or nation, except if we examine and dissect the

possible instances of e-learning execution, whether as previously mentioned advantages are as effective or not.

Accessibility is the factor that allows learner to learn at any time without missing any lecture and it provides stress free environment (Roy & Raymond, 2005). Uploaded content on the e-learning sites can be access from anywhere in the world because it has no expiration date (Allen, 2011). It decreases the hole among hypothesis and practice the same number of associations have utilitarian sites giving help on the web (Johns, 2003). Students are required to fundamentally draw in with the packs of data accessible online which incites dynamic and profound adapting instead of surface teaching (Johns, 2003). E-learning lifts shared learning by permitting communication among students from assorted foundations. From learners point of view online learning provides deep learning and it allows discussion between students, teachers and online classmates (Sweeney, O'Donoghue, & Whitehead, 2004).

2.3 Challenges of e-learning

Specialized challenges are a critical part of execution and incorporation of e-learning innovations in instruction framework. They incorporate establishment, accessibility of most recent innovation, quick Web association, and continuous stockpile of power, upkeep, organization, security and nonappearance of specialized help. Bakari, Tarimo, Yngstrom, and Magnusson (2005) stated that for management and development of e-learning experts are needed which developing countries don’t have. Inside the college hours it alludes to the accessibility of PCs for understudies at unsurpassed. Computer labs with peaceful environment and sufficient amount of processors are required for equivalent access. For people in creating nations availability of PCs at homes is habitually not a reality. Subsequently, for understudies

genuine test to their acknowledgment of innovation is lack of access to PCs. Another challenge for developing countries is equal distribution of computers in labs infect presence of computer labs is itself a challenge. Usually learners of developing countries don't have personal computers at home. So the access to technology is also a major challenge. Access to web based learning shows imbalance among the created and immature nations, yet additionally disparity among the financial gatherings inside a general public (Curran, 2001).

Language is also a barrier, for example in many countries of the world English is not a first language so it generates challenges for non-English talkers which prevent form advancing in e-learning. Due to the English material available online students are having difficulty in understanding and are unable to utilize e-learning facilities at its fullest. The examination did by Shraim and Khalif (2010) in Palestine found that a large portion of the respondents felt language was an obstruction to e-learning. This finding is predictable with ponders in other creating nations. The need of understudies to have individual commitment with educators is a noteworthy factor in understudy fulfillment. In any case, e-adapting frequently comes up short on this sort of association, which understudies can have in customary training frameworks. Along these lines, a reasonable methodology ought to be received which involves online sessions just as up close and personal learning.

Sweeney, O'Donoghue, and Whitehead (2004) found comparative emotions from their understudies with critical inclination for up close and personal learning. Notwithstanding, e-learning ends up supportive in learning and sharing of information and assorted abilities crosswise over various geological closeness. With regards to data frameworks, level of mindfulness is the information of the presence and centrality of PC innovation. Information and comprehension of the e-learning

advantages rouse the understudies to partake. Klamma et al (2007) recommended that client's fulfillment is firmly identified with dynamic support and duty. Without understanding the significance of a specific innovation and its commitment to the accomplishment of objectives, fruitful incorporation of innovation is troublesome.

As indicated by Croxall and Cummings (2000), the level of capability in PC innovation is a significant factor in effective selection of innovation. The trust in aptitudes and capacity to utilize e-learning will contribute fundamentally towards utilization of innovation. No doubt the more experience the clients have in utilizing the Web and PC, the almost certain they will acknowledge and utilize e-learning (Picciano and Sailor, 2007). Understudy obstruction shows the level of negative mentalities towards the utilization of innovation. Many research shows that new things become the means obstruction, dismissal and are formidable (Jager & Lokman, 1999). Understudies concentrating in a framework where they are accustomed to being "coddled" are probably going to show negative dispositions or even reject e-learning. This reliance on the instructors' quality is probably going to actuate disappointment and disappointment with e-learning. In such cases, understudies see the study hall as the most fitting spot for educating and learning (Andersson & Gronlund, 2009). In this way learners will feel awkward in one of e-learning types called asynchronous approach.

E-learning demand is increasing day by day which is making the resources of university useless. Confidence, inspiration and positive behaviors can motivate students to become a part of e-learning projects but will only help when if the learners have skills, knowledge and experience with technology (Selim, 2007). With many other issues stated above, it is critical to have specialized staff accessible all the ideal opportunity for the understudies. The development in web applications, such as

learning the executives framework, wikis, gateway and web journals, requires progressively proficient methods for giving security to personality the board (Alves & Uhomoibhi, 2010). Besides, it is significant that the PCs have the most recent working frameworks and programming to counter infection assaults. Understudies are not prone to utilize tainted PCs as they will have a trust issue in utilizing applications that require client confirmation among different reasons. At institutional level online learning is only limited to identifying the goals of e-learning (Tayar, 2013).

Challenges and barriers of e-learning should be evaluated on the basis of student perception (Tao, 2012). The achievement of e-learning depends on the learner perception and satisfaction because they are the main users. In like manner, understudy recognition concerning the instruction framework will decide its fortunate or unfortunate quality. Innovation hindrances can be overwhelmed by either expanding speculation or additionally viable administration. Anyway until the understudy is inspired, has an uplifting disposition towards utilizing the innovation, and is eager to utilize the innovation for instructive purposes, e-learning achievement cannot be accomplished. Understudy desire and fulfillment ought to be overseen cautiously in light of the fact that an e-learning understudy works generally in segregation from the instructor, different understudies and the instructive foundation, so these factors increase the chance of dropout because learners moves towards the dissatisfaction from e-learning (Anagnostopoulou, Mavroidis, Giossos, & Koutsouba, 2015). Understudy understanding, identifying with the utilization of a particular innovation, is a solid indicator of understudy recognition and the utilization of that innovation.

In e-learning class the students who are more active usually have better technology skills then others (Wan, Fan, & Neufeld, 2007). Students who have less

skill in usage of technology show dissatisfaction towards the e-learning as compared to the students who have more technology skills (Arbaguh & Duray, 2002). The students who show difficulty and dissatisfaction in handling e-learning process usually have poor skills and low experience with technology (Belanger & Jordan, 2000). PC education is the information of the different fundamental parts of PC and aptitudes required to work an innovation for the motivation behind learning. This obstruction discloses the understudies' incapability to utilize numerous innovative facilities for e-learning. In education major barrier is low literacy rate and lack of experience with technology (Bingimlas, 2009). These two major issues lead the learners towards the disappointment and dropout from the online course.

The expense in utilizing innovation is increasingly conspicuous in creating countries, as understudies are less ready to get to advances (for example PCs, innovative framework, web availability, and so forth.) inside the establishments. At the point when understudies are required to purchase innovation gadgets for themselves it can, for a few, become a significant issue because of asset confinements. In developing countries the main issue in failure of meeting the goals of e-learning implementation is that they can't afford the cost of technology (Nor & Mohamad, 2013). In the event that the understudy accepts that at a specific cost, the expense of innovation is justified, despite all the trouble. The cost barrier can be taken care of if the learner have full believed on his/her performance and can bring great outcome (Andersson & Grönlund, 2009).

In any university when implementing e-learning process for the very first time the main challenge which mostly occur is phobia of technology which generates barriers like resistance to technology from its use, where clients don't have the earlier information about the recently created innovation. On international level development

of technology increasing day by day so as the phobia of technology is also increasing and it creates challenges (Juutinen, Huovinen, & Yalaho, 2011). Since people don't comprehend the advantages of the innovation in learning results (Chigona, 2015). The main step for the rapid growth of e-learning is to make the program easy to use and learner friendly. In the majority of situation, while utilizing online learning frameworks understudies are confronting difficulties (Yang, 2013).

Uplifting stress for the mindfulness of understudies towards the innovation is a significant variable prompting fulfillment and the absolute first factor to get a handle on the enthusiasm of the understudy. The negative behaviors of learners towards technology will automatically effect the growth of technology procedure and practices (Elias, Smith, & Barney, 2012). Motivation to the use of technology, experience with technology, awareness and mindfulness can help to change the thinking of learners and instructors towards the use of technology. Seen convenience in usability, is key determinants of innovation acknowledgment. Seen convenience is how much one accepts that utilizing an e-learning framework will build his/her exhibition. Simple of utilization identifies with the exertion that must be contributed to make the innovation work viably.

Much of the time understudies' hesitance to utilize innovation is because of a diminished seen value and convenience (Wong, Nguyen, Chang, & Jayaratna, 2003), for example learner thinks that use of technology will be hard because they are not aware from the advantages of technology. The awkwardness of understudies with PCs can be seen clearly by their e-learning results Fuller et al (2006). Uneasiness with PC was short lived condition, which changes after some time. Sexual orientation, age and scholastic capability are other statistic factors which affect the learners, learning outcomes. The accomplishment of e-learning relies upon enlightening, efficient

substance, and high caliber of plan. In any case, knowing imminent student's necessities before offering the course would be useful to meet the desires for the students. A portion of the key regions on which the student should be broke down are learning targets, earlier information, anticipated results, specialized prerequisites or impediments, and learning inclinations. Despite the fact that the student can be broke down during the real procedure of learning through his/her criticism and execution on the learning the executives framework, it might devour generous measure of time and assets to reason the individual learning attributes of every student as the client needs to spend huge span on the e-adapting course to empower the framework to consequently gather this data dependent on the use and execution.

The most highlighted barriers of technology are resistance to change, lack of support from family and society, untrained staff, and the major challenge is cost which demotivates learners to use technology Brzycki and Dudt (2005). Many new issues are generating which are not have been considered before so the result of researches insist on taking measures which are necessary to take care of these issues. As the technology is growing rapidly so learners as well instructors need to be ready to adopt new innovation at any time. Baldwin and Lin (2002) also suggested that how to adopt new innovation and what will be there possible challenges, they had the option to recognize five gatherings of obstacles specifically cost-, foundation, work, association, and data related. The conclusion of their study showed that the challenges of new technology are more easily taken care off by technology designers rather than its users. The beginners who accepted new technology face more challenges and they can also predict further possible challenges. This statement can be clearly justified by the research finding of Baldwin and Lin (2002). So this study gives brief information that with the development of technology and with the acknowledgement of learners

and instructors role, what will be the possible challenges in using new technology and its implementation in e-learning.

While using telecommunication there are two extreme groups on opposite sides one who love to use computers and others network facilities and other group is not interested. In developed countries universities focus on teaching as a means to transfer knowledge and on research as a means to enhance knowledge (Mehra & Mital, 2007). Both at local and international level the behavior of teachers towards use of computer, internet facilities in education is almost the same. They don't use it as a tool to make learning more practical and innovative but use it as an extra tool to teaching-learning process (Mokhtar, Alias, & Rahman, 2007). In education system the effective result of ICT is difficult to obtain because it is not only related to technology but also with subject content, access to technology, teaching-learning activities, cost and socio/culture attitudes towards technology (Tinio, 2011). While developing online learning projects a developer needs to consider various factors like attitude of learner and instructor's telecommunication, content of projects, qualification and competence of participants, project cost and interface design (Marcella, & Knox, 2004).

A survey conducted in England (2005) show that the face to face learner have more confidence in what they had learned on the other hand e-learners have doubt regarding to their learning achievements. This survey also stated that online learning not only helps students in understanding and learning of their course but also help them to enhance various technical skills (Nawaz, & Kundi, 2010). Since the outcomes and achievements of online learning are unlimited but some researches show that online learning is nothing then the delivery of lectures through internet and other electronical devices rather than the books and it might eliminate teachers one day (Wood, Lewis, and Goodison, 2004).

The term e-learning refers to the use of technology (e.g., PCs, tablets, printers, computerised cameras, advanced recordings, scanners, overhead projectors; OHP, and OHP screen), programming (working frameworks, cloud advancements, (applications), composing, altering, MS Office), and (CD reading material that falls under the classification of coursewa) to enable discovery.

The strong development of data innovation has made it's anything but a prerequisite for figuring out how to happen rapidly. Meeting new issues and difficulties requires creative contemplating obtaining vital abilities and information just as the capacity to oversee proficiently inside the accessible assets. E-learning is the result of the imaginative exchange of information and realizing which has been extraordinarily impacted with the approach of the Internet and Information and Communication Technologies (ICT). A new pattern saw in advanced education is the acquaintance of e-learning frameworks with furnishes understudies with online admittance to learning substance. The significant main impetuses behind this pattern are the changing segment components of the understudies, changing conditions for instruction conveyance, and the advancement in innovation itself (Concannon, Flynn, and Campbell, 2009). To stay up with the evolving patterns, instructive frameworks from one side of the planet to the other are currently incorporating ICTs to upgrade the learning experience of understudies. Albeit a ton of center has been coordinated towards featuring the constructive outcomes of e-learning, there is a should be wary about the disappointment and disappointment that might be caused because of this shift away from customary ways.

The rise of data and correspondence advances and the universal availability in organizations improve man's creativity and openings have given that social orders deliberately rely upon ongoing data to be proactive and to limit the impacts of natural

changes (Zhang et al., 2010; Bates and Jenkins, 2007; Al-Gahtani, 2016; Eze and Chinedu-Eze, 2018). Elements endeavor to adapt to troublesome advancements; they make immense interest in the cutting edge ICT stages inferable from the need to fabricate upper hand amid diminishing expense of innovations in the contemporary data frameworks (IS) market (Chuang et al. 2009; Bhuasiri et al., 2012; Maldonado et al., 2011; Eze et al., 2013; Awa et al., 2011). ICT is a specialist of financial changes (Al-Gahtani, 2016) and a power for innovative annihilation in human life (Wang, 2009; Kotler, 1984), particularly in the instructive milieu, where the scholarly community and experts advanced from giving straightforward instructing helps to intelligent learning conditions. Advanced education foundations (HEIs) have left on thorough projects that advance the utilization of ICTs for powerful contact and web-based instructing and mastering and for creating related abilities expected to make financial commitments in the information world. Researchers (Hu and Hui, 2012; Bhuasiri et al., 2012; Naqvi, 2007) think that the IT-based advancements (e.g., internet business, e-learning, e-installment, e-administration, or e-obtainment) alter the HEIs' serious scene and mirror the sensational development from genuinely unsurprising physical undertakings to quickly changing and frequently more capricious climate. E-learning is perhaps the main instructive development driven by the growing exhibit of innovation empowered stages that offer potential students another option and creative learning climate contrasted and conventional learning and, along these lines, addresses IT-based advancement in training (Bates, 2007; Wang, 2009). Richmond (1997) takes note that there is an association between the instructive projects and ICT and that there are three different ways innovation can affect learning:

- Presentation, presentation, and the execution of data using effectiveness gadgets;
- Use of instructive modules – specific applications, for instance, enlightening games, penetrates and practice, reenactments, informative activities, virtual lab insights and delineations, portrayals of interesting thoughts, melodic piece, and expert systems; and
- Use of data and resources on CD-ROM, online reference book, instinctive guides and graph books, electronic journals, and various references.

In any case, the financial possibilities of the showing procedure of e-learning hasten its quick appropriation particularly in the western world, where numerous HEIs see e-learning programs as treasure trove adventure. Moreover, as the training scene is changing quickly due to the ascent in innovation in the twenty-initial century and the combination of advancements into the general public combined with admittance to the web, how educating is completed in HEIs has changed particularly in the western world. A mixed learning method (the blend of now and again eLearning and conventional up close and personal learning) has been received in HEIs. This methodology ensures that the student is associated with driving their individual learning experience. This strategy helps and caters to singular necessities of the student than the conventional study hall showing experience because most understudies have one-of-a-kind learning styles. Be that as it may, this methodology is yet to be transcendent in Pakistan.

Notwithstanding every one of the obstructions looked at by e-learning in Pakistan, the Ministry of Higher Education has laid the reason for e-learning projects through improvement in ICT framework, data Technology frameworks, and data

administrations in the state-funded colleges. Lately, the ICT region has gotten an incredible consideration in Pakistan. It's anything but a grouping of formative and groundbreaking stages pointed toward making a data-rich society. Pakistan is capable to accomplish various achievements in the framework part, creating projects, improving freedoms for the progression of data, electronic applications, the option to get to data, and advancing new abilities and capacities. The survey of the current settings and evaluating the basics and indicators of advancement towards the data society. The data region in Pakistan was dispatched to show science and math through the web science in auxiliary training. The undertaking was executed in 20 schools. Moreover, various ICT universities furnished understudies with the Internet. Pakistan affirmed a public methodology for Primary Education (2003-2015), the public procedure for advanced education improvement (2006-2010), and the public system for Technical Education and Vocational Training (2005-2014). A large portion of these methodologies is anticipating satisfy the fundamental goals of the combination of IT in the diverse instructive stages.

Nonetheless, with little government spending on instruction and low proficiency rates, Pakistan faces the test of adequately coordinating e-learning frameworks into the training framework. As per Ndubisi's (2004) interest in foundation, preparing IT staff and substance advancement isn't sufficient for an effective appropriation of e-learning. Simply offering courses on the web and endeavoring to duplicate the study hall experience may cause unforeseen challenges. Tireless disappointment and disappointment of understudies towards the utilization of electronic learning is regularly because of postponed criticism. This requires more exploration zeroed in on understudies to distinguish their inclinations and perspectives as far as eLearning.

Consequently, this paper means to recognize the issues and difficulties looked at by Pakistani public and private colleges in setting up e-learning as a fruitful mechanism of giving schooling. This examination helps the instructive establishments in resolving the recognized issues through suggested systems so that squandering of assets, time, and abilities could be forestalled.

As Information Technology has gotten strong and simpler to use with time, it has incredibly saturated scholarly exercises in advanced education. The learning techniques have incredibly been upheld by the utilization of the Internet and online discussions. Writing upholds e-learning as an effective method of drawing in understudies with learning and sharing of information (Lewis and Allan 2005; McConnell, 2006). Because of the writing survey, a portion of the advantages of e-learning are recorded beneath:

2.3.1Availability

It permits students to get to the material when required and learn at their favored speed without the pressure of missing significant data (Roy and Raymond, 2005).

2.3.2 Low conveyance cost

When the material is created and transferred online it has no expiry date and could be used anyplace on the planet (Allen, 2011).

2.3.3 Bridging the Difference

It diminishes the hole among hypothesis and practice as numerous associations have utilitarian sites offering support on the web (Johns, 2003) Profound learning Learners are needed to fundamentally draw in with the heaps of data accessible online which instigates dynamic and profound adapting instead of surface learning (Johns, 2003).

2.3.4 Shared learning

E-learning supports divided learning by permitting cooperation between students from assorted foundations.

2.3.5 Right to Speak Freely

In an investigation, a portion of the understudies saw e-learning as a facilitator of the right to speak freely of discourse with center around profound learning (Sweeney, O'Donoghue, and Whitehead, 2004).

Be that as it may, innovations bring difficulties too and just the presence of innovation doesn't ensure effective execution. Consequently, understanding the impression of clients with regards to innovation prerequisites of their workplace is profoundly significant as the innovation considered valuable in one climate may not be viewed as something very similar in other. It is essential to oblige the worries of the understudies to improve the instructive viewpoints of e-learning (Al-Mahmood and McLoughlin, 2004). Consequently, Esichaikul, Lamnoi, and Bechter (2011) proposed the utilization of versatile e-learning frameworks, which permit the transformation of data as per the information and conduct level of the individual client. In any case disregarding appropriate issues may bring about specialized challenges, understudies' disappointment, and protection from the utilization of e-realizing which may restrain compelling learning.

2.3.6 Factor affecting success in Learning

Students

- Motivation
- Conflicting Priorities
- Innovative Certainty
- Learning Style

- Sexual orientation

Mentor

- Technological Confidence
- New Learning Style Confidence
- Motivation Commitment
- Qualification Competence
- Time

Innovation

- Access
- Software and Interface Design
- Expenses
- Localization

Courses

- Educational program plan

Academic Model

- Subject Content
- Instructing and Learning Activities
- Adaptability in Delivery Mode
- Confinement
- The openness of Educational Resources

Institutions

- Information Management
- Preparing of Teacher and Staff
- **Cost**
- Technology

- Access rate
- Tuition Course fee
- Books
- Institution's Economy and funding

Support

- Support of Students from faculty
- Social Support for Students
- Support from Employer
- Support for Faculty

Society

- Role of Teacher and Students
- Attitudes on E-Learning and IT
- Rules and Regulations

2.3.7Accessibility of e-learning offices

The accessibility and ampleness of e-learning offices are one of the fundamental necessities of its reception in Universities. It was found that there are different kinds of e-learning offices accessible in M University; they incorporate projectors, PCs, e-library, etc. Likewise, the larger part of the speakers noticed that the e-learning offices in Universities are satisfactory and the offices ought to be consistently refreshed and kept up. Colleges have a few offices that are utilized in conveying instructors and evaluating understudies. A few members distinguished force focuses, projectors, and the e-learning stage made by the University's Center for System and Information Services (CSIS) which gave bases for collaborations understudies by transferring course compacts on the web. Such stage is utilized to transfer tests, tasks, etc.

"It is anticipated from each instructor in NUML-University to convey their talks through the force point… then, at that point, you realize we have the e-learning stage on the Universities entrance… "

At last, one of the speakers referenced that Departments across schools in Universities have their sites where understudies can become acquainted with what the division relies on as far as their way of thinking, fundamental beliefs, and principles. Understudies can similarly download the departmental handbook which contains the course codes and course diagrams, and the instructors' scholarly subtleties. For instance: "web offices especially the intranet and afterward every office has its site… they likewise have a stage for the e-learning… we additionally have PCs to help our composing, planning power point and utilization of projector". These propose that e-learning offices in Universities are satisfactory and no other office ought to be presented right now rather the offices ought to be consistently refreshed and kept up, and this is the motivation behind why most speakers are embracing them in conveying their talks. These discoveries concur with those who expressed that for a foundation to have the option to receive e-learning, it should give sufficient and dependable specialized frameworks.

2.4 Usage of e-learning facilities

Our prior discoveries showed that Universities have sufficient offices and ought to consistently improve and refresh them. As demonstrated by certain speakers; "Indeed, very well sir… New offices shouldn't be presented right now aside from the consistency of the web and afterward getting to of the digital-book… Once we can consummate the difficulties of what we have on the ground then we can consider presenting new offices yet when we have not then I don't see the need". As shown by a speaker; "satisfactory, nothing ought to be added because we have not used

completely the ones that we have". what's more, upheld by members. The discoveries show that Universities have adequate e-learning offices that are accessible for use as this would improve the degree of appropriation of e-learning offices. Nonetheless, these offices have not been completely used as shown by certain speakers. Likewise, these offices ought to be reviewed routinely. Then again, in as much as there are a lot of e-learning offices accessible in Universities as demonstrated by the speakers, the use of e-learning offices is by and large.

It was found that a larger part of instructors in Universities demonstrated that e-learning offices are not completely used. This might be accordingly a few factors like the demeanor of the clients, 'not practical' e-learning offices, helpless web access, and individuals not having any desire to change. The discoveries show that Universities are as yet learning and improving in the use of e-learning offices. This was following a portion of the remarks made by respondents: "I would say normal usage". "Well Universities is attempting however yet we have not arrived at this point". The comparative explanation was repeated by the member. For Universities to accomplish full use of e-learning offices they need to guarantee that the offices are working, and the speakers are prepared on the best way to use e-learning offices. The finding affirms that e-learning isn't completely used. This may be because of the absence of specialized ability and mentalities of the staff. This is following the discoveries of Seiden (2000) and Uhaegbu (2001) which credited this to low even out of the use of ICT gear and offices in college grounds.

2.5 Key components restraining the reception of e-learning offices

2.5.1 Perspective of Users

The demeanor of clients arose as a central point that upsets the appropriation of e-learning offices in Universities. Mentalities are the conduct of the staff towards receiving e-learning. The discoveries uncovered that a few teachers don't utilize innovation while others feel lethargic to plan power focuses in the wake of getting ready far-reaching noticed that can be transferred online for understudies to get to. "A few speakers are hard to change just as understudies; materials that are regularly shipped off them utilizing email are not gotten to by them." "the 'I don't mind demeanor displayed by some personnel are not empowering" (Some accomplished teacher's absence of premium combined with the flight reasoning likewise upsets the selection of e-learning offices. For instance, "experienced scholastics don't see motivations to transform from the simple age to the advanced age". "The flight reasoning just to explore new territory is disappointing". This proposes that changing the attitude of the teachers for experimenting is required. These discoveries affirm Ilechukwu (2013), which uncovered that the best difficulties for viable use of e-learning by educators incorporate the reluctance to change to the new strategy for PC proficiency among teachers and understudies.

2.5.2 Lacking Web Facilities

The discoveries demonstrated that the web office given by CSIS is of bad quality; the network either vacillates, not available, or is restricted in access. A few teachers attest that "occasionally, the web access is helplessly making it hard to get to some e-learning stages"; "infrequent organization disappointment"; Similar proclamations were repeated by the member. These elements essentially influence the appropriation of e-learning offices and should be adjusted by giving open and quality internet

offices. At the point when the offices are lacking, the megabyte expected to get to the web is restricted and the organization relentlessly changes. It implies that the speakers can't effectively get to the web. Anene et al. (2014) disclosed a portion of the difficulties to incorporate the absence of foundations like PC equipment and programming and data transmission/access important for sending successful ICT stages. There are intense deficiencies of prepared staff who can perform utilization of programming, working frameworks, web access, and organization. In any case, it is proposed that Universities ought to enhance their web offices by making them open and limitless.

2.5.3 Lack of Training

Lacking preparation implies inadequate advancement of clients for e-learning selection. The discoveries uncover that university clients of e-learning offices are not enough prepared which thusly influences the reception of e-learning offices; "absence of ability and we are still new to a few". "Absence of satisfactory preparing". This was upheld by members. It is clear from the discovering which is 46.7% of the respondents' insights that the speakers are deficiently prepared; subsequently, consistent preparation ought to be done to address this restraining factor. This finding proposes that the motivation behind why most teachers don't use e-learning offices is a direct result of the restricted information on the best way to utilize the offices. In their examination, Nbina et al. (2011) tracked down that a few speakers have no information on ICT offices and along these lines, avoid using them for educating exercises. Likewise, Asogwa (2011) tracked down that the significant difficulties for enhancing e-acquiring are the absence of imperative abilities, the educators are not as talented and intensive in the arrangement, activity, and uses of the bundles as they should be. Numerous instructors are as yet bad at driving PCs their PCs, making and

sending messages, getting to sends, joining records, and those other fringe issues. Thusly, Universities should attempt to lead periodical pieces of training for their staff. Currently, almost all universities, educational institutions, and schools are using different online learning management systems. Universities are also using the LMS platform.

As we see now on the planet, the COVID-19 pandemic is driving instructive establishments like colleges to move quickly to remove and web-based learning. Coronavirus has constrained colleges throughout the planet to embrace internet learning. We are presently in a highly sensitive situation and should respond with various and accessible methods of learning, for example, e-learning frameworks and versatile learning applications. Web-based learning isn't new to students, nor is distance learning. Be that as it may, COVID-19 is restoring the need to investigate internet instructing and learning openings.

2.6 Characteristics of LMS

The LMS platform has three levels of use, with features of differential use and access. The concept is an administrator (the manager of the platform), teacher (who may also have other designations, for example, coordinator, facilitator, promoter), and the student (learner, participant, among others). These roles and their features are represented in the following table.

Table 2.1

Role	**Functions**
Administration	Manages the whole environment
Teacher	Generate classes, courses, or subjects according to the thematic areas defined.

	Generate classes or events which are designated
Students	Accesses and interacts with a specific event and participates in the subjects they are enrolled in.

Since the achievement of e-learning framework relies upon understudies' eagerness and acknowledgment to utilize this framework (Almaiah and Jalil 2014; Almaiah and Alismaiel 2019; Shawai and Almaiah 2018) an absence of e-learning framework use hampers the acknowledgment of advantages (Almaiah et al. 2019a; Almaiah et al. 2019b; Almaiah and Al-Khasawneh 2020). These outcomes in a fruitless framework and is a misuse of colleges' cash (Naveed et al. 2017). Examination of this theme is still at its outset, where the perspectives on the understudies are not completely considered (Tarhini et al. 2017; Almaiah and Alamri 2018). Examining e-learning reception can lead colleges to more readily comprehend their understudies' requirements, and in the long run, lead to an effective e-learning framework (El-Masri and Tarhini 2017; Alksasbeh et al. 2019). To the best of our insight, there has not been an intensive examination of difficulties and elements impacting the utilization of the e-learning framework during the COVID-19 pandemic; notwithstanding that, e-learning frameworks were presented in numerous colleges right around 3 years prior. Hence, this examination looks to explore the primary difficulties and components that influence the utilization of the e-learning framework during the COVID-19 pandemic. Henceforth, we pose the accompanying inquiries in that regard:

1. What are the primary difficulties that face the e-learning framework used during the COVID-19 Pandemic?

2. What are the principal factors that influence the fruitful use of the e-learning framework during the COVID-19 Pandemic?

The remainder of this paper is coordinated as follows: in the principal segment, we examine related investigations of e-learning framework appropriation, e-learning framework challenges. This will be trailed by a show of the examination procedure, information assortment interaction, and information investigation technique. Then, at that point conversation of the discoveries lastly, impediments and ends.

The accomplishment of any data framework relies upon the utilization of the framework by clients (Almaiah 2018). Subsequently, with regards to the e-learning framework, the understudy's acknowledgment of e-learning is considered as one of the fundamental measures for the achievement e-learning framework. A few investigations in the writing have resolved issues identified with e-learning selection in numerous nations over the world. For example, in Malaysia, Al-Rahmi et al. (Almaiah and Man 2016) utilized the TAM with IDT model to research the basic factors that influence the utilization of e-learning framework Malaysian understudies. The outcomes uncovered that relative benefits, perceptibility, preliminary capacity, seen similarity, intricacy, and saw satisfaction are the components that assume a critical part in understudies' choice to utilize the e-learning framework in Malaysia. Salloum et al. (2019) utilized UAE as a contextual analysis for a quantitative examination. The outcomes demonstrated that four components (creativity, quality, trust, and information sharing) were seen to accomplish better e-learning framework acknowledgment among understudies. Al-Gahtani (2016) examined the variables affecting understudy acknowledgment of e-learning based. He tracked down the main determinants of e-learning acknowledgment were liveliness, self-viability, and nervousness, while utilizing PCs, view of outside control, abstract standards, and saw

convenience. Notwithstanding, with regards to Saudi Arabia, social impact, evidence, and saw pleasure were not identified with the acknowledgment of e-learning frameworks. Another investigation led by Almaiah and Almulhem (Almaiah et al. 2016a), proposed a new structure utilizing the Delphi technique to decide the achievement variables of e-learning framework execution in Saudi Arabia. The outcomes featured 11 basic components assembled into four areas that cover site quality, innovation choices, top administration backing, and e-learning mindfulness by scholarly personnel and understudies. Bellaaj et al. (2015) utilized the Unified Theory of Acceptance and Use of Technology (UTAUT) model to investigate the components influencing understudies' utilization of e-learning frameworks at the University of Tabuk, Saudi Arabia. They found that assumptions about execution and exertion impacted e-learning acknowledgment. In another examination in Azerbaijan, Chang et al. (2017) discovered emotional standards, experience and pleasure impacted the acknowledgment of e-learning. Abdullah and Ward (2016) likewise examined factors impacting e-learning acknowledgment utilizing TAM. Their discoveries uncovered that self-viability; emotional standards, delight, uneasiness, and involvement in utilizing PCs significantly affected understudies' acknowledgment of e-learning. Essentially, Alhabeeb and Rowley (2017) tracked down that scholarly staff information on learning innovations, understudy information on PC frameworks, and specialized foundations were huge factors in working with the fruitful acknowledgment of e-learning in Saudi Arabian colleges.

Albeit various examinations exist on e-learning reception, the current examination means to add a new commitment to the current writing on examination of the

fundamental difficulties and variables affecting e-learning effective appropriation in a new setting, which is Jordan, which may set a model for other agricultural nations.

Abdullah and Ward also investigated factors inflexing e-learning acceptance using TAM. Their findings revealed that self-efficacy; subjective norms, enjoyment, anxiety, and experience with using computers had a significant effect on students' acceptance of e-learning. Similarly, Alhabeeb and Rowley found that academic staff knowledge of learning technologies, student knowledge of computer systems, and technical infrastructure, were significant factors in facilitating the successful acceptance of learning in Saudi Arabian universities.

Although numerous studies exist on e-learning adoption, the current study aims to add a new contribution to the existing literature on an investigation of the main challenges and factors influencing e-learning successful adoption in a new context, which is Jordan, which may set an example for other developing countries.

2.7 Review studies on E-leaning system challenges

E-learning usage and adoption among users is a challenging issue for many universities, both in developed and developing countries, but it is likely to be less of a concern in developed countries over the willingness of their students to accept and use the e-learning system, as significant progressive steps have already been taken, according to works of literature, in this regard (Almaiah et al. 2016). Eltahir (2019) indicated that the challenges of adopting e-learning systems in developing countries, however, remain a reality due to the digital divide with the developing countries.

Our existing literature review identified several challenges related to adopting the e-learning system. After this review, we noted that these challenges could be classified into four categories namely

- Technological challenges,
- Individual challenges,
- Cultural challenges and
- Course challenges.

We found also that these challenges are very different from one country to another country, due to different cultures, contexts, and readiness. For example, lack of ICT knowledge, poor network infrastructure, and weakness of content development were the main challenges of e-learning system adoption in developing countries (Aung and Khaing 2015). Another study revealed that system characteristics, internet experience, and computer self-efficacy were the main issues that impede the successful adoption of e-learning systems in Pakistan (Kanwal and Rehman 2017). A comparable report directed in Kenya distinguished three fundamental difficulties of e-learning are insufficient ICT foundation, absence of specialized abilities, and monetary requirements (Tarus et al. 2015). An examination by Kisanga and Ireson (Mulhanga and Lima 2017) distinguished that a helpless interface plan; insufficient specialized help and absence of IT abilities are the essential obstructions that impede the effective execution of existing e-learning projects. Mulhanga and Lima (Kenan et al. 2013) asserted that social, political, and efficient requirements are the principal motivations to bomb the e-learning drives in Libya. Similarly, Kenan et al. (Chen and Tseng 2012) ordered the difficulties that influence the genuine utilization of e-learning into four classes: the executive's challenges, mechanical difficulties, execution challenges, and social difficulties. Despite these endeavors, none of these examinations have researched the genuine difficulties that face clients during the utilization of the e-learning framework.

An investigation led by Al-Araibi et al. (2019), which puts the mechanical issues as the primary rules for the accomplishment of e-learning framework, demonstrated that 45% of e-learning projects in non-industrial nations are all out disappointments, 40% are halfway disappointments, while just 15% are effective. Hence, in light of these discoveries, alongside different investigations, numerous scientists in the field of IS/IT have directed explores to investigate the difficulties to the fruitful execution of e-learning framework drives (Al-Araibi et al. 2019; Esterhuyse and Scholtz 2015; Islam et al. 2015). Table Table1 sums up the basic issues that caused the low use and appropriation of the e-learning framework.

Table 2.2

Reason for E-Learning System Failure	**Explanation**
Technological Challenges	Understudies confronting innovation in utilizing E-Learning frameworks
Absence of specialized help	Inaccessibility of specialized staff and need the backing of offices to perform different exercises and (establishment, activity, upkeep, network organization, and security) Slow speed of the web and high web traffic during e-learning experience.
Lack of Awareness	Understudies lacking consciousness of web abilities and hesitance of understudies in assuming liability for their e-learning

Universities readiness	Students having conflicting e-learning availability over the long run
Quality course content	Course content having less quality as far as intuitiveness
IT skills of faculty members	Feeble IT abilities of employees
Faculty members accepting of E-Learning Systems	Teacher’s inadequate with regards to innovation acknowledgment
Low level of knowledge of faculty members	Teachers lacking grasp on course content while conveying an e-learning meeting
Faculty member efforts	Absence of exertion and backing being placed employees being used of e-learning
Lack of security and privacy concerns	The receptiveness of e-learning frameworks testing the security of individual data of understudies/staff/personnel
Lack of technological infrastructure	Alludes to the equipment, programming, offices, and organization capacities inside the college
Localization of content	Absence of Customization/Adaptability content as indicated by understudies necessities
Course content	Absence of pertinence, precision obviously substance, and misalignment

content with students' need

In stage one, a survey of writing on e-learning reception factors and difficulties has been led. In stage two, the topical investigation was utilized for distinguishing and grouping e-learning appropriation factors and difficulties. The subjective information got during the meeting was investigated utilizing the topical examination method utilizing the NVivo programming. For leading the topical investigation measure for this examination, five stages were recognized by Braun and Clarke (2006), specifically: acquaintance with information, creating starting codes, looking for subjects, characterizing and naming topics, and delivering the last report. In the third stage, gathering and deciding the primary difficulties and variables of e-learning reception. In the accompanying segments, we will depict in subtleties the information assortment strategy, test of the examination, and the information investigation method utilized in this investigation.

2.8 International issues in E-Learning

The world is changing into a worldwide town with the quick advancement of data and correspondence innovation (Nabil, Awerbuch, Slonim, Wegner, and Yesha, 1997). This change has an ever-increasing number of organizations walking toward a worldwide economy; as the CEO of General Electric, Jack Welch expressed, "associations should either globalize or they kick the bucket". Today, very nearly 50% of the economy depends on fares and imports. U.S. organizations have contributed more than $1 trillion abroad and utilized abroad specialists (http://www.astd.org). The capacity to contend around the world is reliant upon the development, the ability, and the information on a learning association and its kin. Globalizing corporate preparation is significant to the accomplishment of worldwide business techniques. At

the point when organizations move to prepare into a worldwide field, the greatest difficulties are the overall varieties in friendly, social, political, and financial conditions (Wellins and Rioux, 2000). Various dialects, schooling frameworks, picking up/showing styles, unofficial laws, and foundations are instances of these varieties. To adjust preparing to multicultural settings requires another worldview that incorporates comprehension of the more profound brain science of culture and the extraordinary contrasts culture brings to a worldwide work environment (Kemper, 1998). This part expects to address four worldwide e-learning issues; they are social and, social contrasts, and language and innovative issues. In the first place, we survey culture definitions and measurements of social variety. Independence and cooperation will be utilized as a structure to examine social contrasts. Collaboration and correspondence styles, and picking up/instructing styles will be utilized to talk about concrete social contrasts. Educational plan ideal models will likewise be evaluated. Second, social issues like training, political, and strict contrasts will be talked about. Third, language and mechanical issues in worldwide e-learning will be inspected. The segment finishes up with a synopsis.

2.9 Difficulties of executing e-learning in colleges

The combination of e-learning programs into the instructive framework has reshaped the cycle of obtaining and dispersal of information all through the general public. Even though quantities of specialists endorse the viability of e-learning combination as far as the development it offers to draw in with understudies doesn't ensure the achievement of e-learning programs. This can be seen in non-industrial nations like Pakistan, which have not yet had the option to profit completely from the upsides of e-learning. Even though the significance of this issue is hypothetically featured in research, the observational proof is scant especially in regards to non-

industrial nations like Pakistan. Thusly, the reason for this investigation is to distinguish the issues, identified with e-taking through the input caught from understudies and give systems to effectively beat the issues. To accomplish this reason, various issues winning in a Pakistani private college were distinguished through top to bottom writing audit and conversation with the understudies. The discoveries exhibited power disappointment and English capability as the main boundaries to effective incorporation of e-learning. Finally, the end was drawn and ideas were made based on issues distinguished.

A mix of data and correspondence innovation in instruction is arising as the new worldview of learning and preparing. Advanced education foundations are battling to move to this new worldview to work with an ever-increasing number of students with the adaptability of any time-anyplace learning. E-learning isn't acquiring as much notoriety in the non-industrial nations as it was normal somewhat recently. Little work has been done around here of exploration in the non-industrial nations. This examination adds to distinguish and dissect the effect of basic issues which are making obstructions in the advancement of e-learning in agricultural nations like Pakistan. Besides, this investigation contributes to contriving scientific classification and proposing new classification programming for the recognized basic issues. A blend mode research model has been applied to gather information from the e-learning specialists of various public area colleges of Pakistan to get a more profound comprehension of the issues and their effect on the advancement of e-learning in Pakistan. The discoveries of this examination uncover sixteen (16) basic issues which are arranged in five (5) measurements, to be addressed on the needed premise to advance e-learning in Pakistan. The distinguished measurements and issues have been

focused on as per their significance utilizing the Analytical Hierarchy Process strategy.

2.10 Major Issued faced by Students in Utilization of E-Learning System

E-Learning's time and place flexibility attract more and more students to online education. However, many of them encounter serious challenges that prevent them from completing their courses successfully. Here are the 5 most common problems faced by students in eLearning and some suggestions on how to overcome them.

eLearning, being the most recent influx of training, is now having a reasonable show regardless of presenting difficulties for the two educators and understudies. While teachers need to place in serious work and time to plan the guidance, understudies need to furnish themselves with the specialized capability to decipher the course material. There are 5 basic issues looked at by understudies in eLearning classes and which should be tackled through legitimate drives for the understudies' future advantages.

2.10.1 Adaptability Struggle

Changing from conventional homeroom and up close and personal teacher preparing to PC-based preparing in a virtual study hall makes the learning experience unique for understudies. Their protection from change doesn't permit them to adjust to the web-based learning climate, though it sets aside effort for them to get acquainted with Course Management Systems (CMS) and the techniques for PC-based schooling. While aloof tuning in and notes taking are normal in a conventional study hall, online conversations or provoking a website page interest getting a move on. Understudies with a "conventional" mentality think that it is hard to adjust; in any case, they need to

acknowledge the new learning conditions with a receptive outlook and heart. Understanding the advantages of eLearning and in any event, talking about them with their companions may alter this attitude and better get ready understudies for online classes.

2.10.2 Technical Issues

Many students are not provided with the high bandwidth or the strong internet connection that online courses require, and thus fail to catch up with their virtual classmates: Their weak monitors make it hard to follow the Course Management System and their learning experience becomes problematic. Moreover, most of them live off campus and find it difficult to keep in tune with the technical requirements of the chosen course. Some of them don't even own computers and seek help in Learning Resource Centers for technical assistance. The only solution to this problem is knowing exactly what kind of technical support they will need for a certain course before enrolling in it, as well as properly equipping themselves for the course's successful completion.

2.10.3 Computer Literacy.

Although students are generally tech-savvy, and thus able to manage computers well, lack of computer literacy is a major issue among students today. Many of them cannot operate basic programs such as Microsoft Word and PowerPoint and therefore are not able to handle their files. Furthermore, many students find fixing basic computer problems troublesome, as they do not know this area. However, technological proficiency is a must for following online courses, as it enables students to manage their assignments and courseware in an organized manner without struggling. Basic courses in computer literacy enhance students' knowledge in the field; having a

fundamental knowledge of computer hardware would help them participate in online classes without interruptions and hindrances.

2.10.4 Time Management

Using time effectively is a troublesome undertaking for E-students, as online courses require a great deal of time and escalated work. Besides, while it is generally grown-ups who lean toward electronic learning programs for their place and time adaptability, they seldom have the opportunity to take the courses because of their different ordinary responsibilities. A normal timetable organizer would be a huge assistance to these students, as they could even set updates for their courses and tasks.

2.10.5 Self-Motivation

Self-inspiration is an eLearning fundamental necessity; notwithstanding, numerous online students need it, causing them a deep sense of shock. In the wake of taking a crack at distance learning courses, numerous students fall behind and sustain surrendering, as troubles in taking care of an innovative medium likewise appear to be unrealistic. Understudies need to discover the inspiration to pursue the new instructive directions and appropriately prepare themselves for future difficulties in their schooling and vocations. Just an uplifting perspective will assist them with conquering the difficulties in eLearning; however this is difficult to rehearse, understudies need to comprehend that it is important to receive the eLearning's rewards later on.

2.10.6 Learning Style and Culture Challenges

Everybody has their learning style alongside their social impacts; the ones who are encouraged to utilize their learning style and mulling over social parts of people will perform better scholastically. To accomplish the best learning result, it is attractive to have a comprehension of understudies' learning styles. Online

understudies' learning styles can be hazy, this has suggestions on how scholastics foster learning 2material. A few understudies learn through connecting, some lean toward learning through the visual show, and some by paying attention to directions and utilizing composed notes. This test has ramifications on the learning results and represents a significant issue for scholastics to comprehend the learning styles of their understudies in an e-learning climate. There are different showing styles; outstanding methodologies are pedantic, facilitative, and Socratic and the exploratory strategy (Banning, 2005). The pedantic is the conventional strategy that mostly includes addressing and is a lot of educator-focused where learning is included principally through note-taking and paying attention to instructors. Customary techniques for instructing keep on utilizing the talk as a method for educating and a practical one where one scholastic can scatter information to an enormous crowd (Walkin, 2000). However didactic can mean full responsibility of teaching on academics as it is strongly teacher-centered; the teacher is the knowledge expert, all the learning objects and knowledge flows from the teacher The facilitative learning moves away from strong teacher-centered learning to what is known as self-directed learning, where the academic uses various strategies by acknowledging students experience and learning styles to encourage the student to become independent learners. To be a competent academic to be a facilitator they have to be competent in their knowledge base, have confidence, authority and be empathic to students' needs and individual learning styles. The Socratic method is heavily student orientated learning so students can think independently and various strategies can be used by academic such as quizzes, discussion, strong group work sessions with strong emphases on communicating with peers, self-assessment, and research to make student critical thinkers. However, not all students may able to reach this position of critical thinkers without proper

guidance, encouragement, and nurturing. The time and effort spent nurturing students can be enormous (Banning, 2005). Researchers have pointed out that no particular learning style is dominant amongst students; therefore, teachers are expected to understand various learning styles to accommodate students (Mupinga, 2006). When a student has a strong preference for a particular learning style it becomes impossible for them to learn if materials and resources are not delivered using that particular method (Zapalska and Brozik, 2006). A popular method of identifying the learning style of an individual is the VARK questionnaire. This process identifies a learning style of a student and categorizes it as Aural, Read/Write, Visual and kinaesthetic. Aural (A) refers to students who prefer to learn through receiving verbal instructions. Read/Write refers to the learning style of students who prefer reading instruction and writing notes as the best way to learn. Visual (V) are students who prefer the utilization of visual objects as a way to learn such as graphs, charts, and videos. Kinaesthetic (K) is when learners prefer to learn by a doing approach. It should be noted that a student may fall into two categories but one may be a stronger preference than the other (Zapalska and Brozik, 2006). A current challenge for academics in an e-learning environment is to understand the different learning styles of different students for better learning outcomes. The traditional method of learning may not be adequate in the modern-day classroom where e-learning technology is playing a major role in the delivery of education. In principal the key to understanding the student needs is to understand the diversity in the virtual class (Folley, 2010; Donahue and Glodstein, 2013). Researchers have pointed out various problems when instructors use e-learning technology. Phipps and Merisotis (1999) authored a 48-page report reviewing and examining research papers throughout the 1990s on the effectiveness of e-learning technology. They put forward recommendations to cover the gaps in

research that require further investigation. They recommend that “there needs to be more emphasis on individual differences such as gender, age, educational experience, motivation and learning style” (p.3). Implying current research on e-learning learning does not identify individual needs. This poses a question as to how instructors are coping with the technology to teach a variety of students with different educational needs and coming from different backgrounds. Commonly, students, lecturers, and institutions use a variety of different application platforms for learning and teaching, therefore they suggest that in the future “research should focus on the interaction of multiple technologies rather than the impact of single technologies” (p.3). Taylor (2002) describes e-learning as exceptional for courses that require cognitive learning. However, for teachers dealing with cultural barriers, differences in student attitudes do not work well in the e-learning environment. Academic staff that is better trained will bear the fruits of higher student learning. However, if the teaching staff are not trained in using the e-learning technology and do not have a strong grasp of the operation of the technology then student learning is likely to suffer. Teachers must understand and recognize the individual learning styles of the many hundreds of students (how they learn and how they perceive) in the context of online education. It is important to convey and share the information with students (Brozik and Zapalska, 2006). For the hundreds of students who usually are not seen by academics in the e-learning environment, at present, the technology practice does not help such a scenario. Hannon and D’Netto (2007: 419) state “instructors usually fail to take into account cultural differences when designing and delivering courses”. He argues that because pedagogy and technology do not reflect the culture of the student, it reduces his or her learning outcome and the cultural differences affect their ability to work with e-learning technologies. The outcome is reduced because students of different

languages respond differently to how things are organized in e-learning technologies and also students of different cultures have different abilities to work with e-learning technology. Although there are models and theories proposed to deal with individual and cultural learning differences in the e-learning environment, there is a greater urgency for content providers to design courses and materials that take into consideration these differences and “engages culturally diverse audiences” (Callaghan et al., 2008: p.56). When a student has a preference for a particular learning style then it became difficult to learn other ways, which means academics must be aware of different styles and needs to design learning materials that enable students to learn. This is the most important role of an academic. Therefore, understanding learning style is a critical consideration during course design and institutions should provide resources and training for academics to meet this challenge. However, this is a time-consuming and costly task, a lot of time and effort is required and the course material and students learning styles have to be assessed when a new student cohort joins. Assuming learning style isn't perceived, a chance of learning won't be accomplished and it is the main test to meet.

E-Learning is uplifting news, yet at its underlying stage, it represents certain dangers to understudies. Disposition change and innovative education would help them acquire trust to prevail in their courses with an inspirational tone.

2.11 How to Resolved the Common eLearning Challenges?

Regardless of whether your crowd comprises of corporate leaders or understudies, different detours can keep students from really engrossing the substance and the vital parts of your eLearning deliverable. Along these lines, you as an eLearning proficient need to consider a wide assortment of eLearning difficulties, for

example, extensive daily agendas, furious plans for getting work done, and various interruptions, earlier planning your eLearning courses.

2.11.1The absence of students' inspiration

Perhaps the most widely recognized eLearning challenge that eLearning experts should defeat is a general absence of student inspiration. It may come from students who aren't excited about the substance or aren't keen on the topic. To beat this obstacle, it's critical to make the eLearning course as connecting with and rousing as could be expected. Indeed, even points that are dry or exhausting can get energizing and powerful if you realize how to make them important and intriguing for your students. Situations, eLearning games, and recordings are extraordinary approaches to accomplish this. These offer students the chance to inundate themselves with the topic, instead of simply finding out about it.

2.11.2 The bustling timetables of the students

Nowadays, it appears to be that everybody is running low on schedule. There aren't sufficient hours in the day, and there isn't any room in the timetable for learning. Numerous individuals are reluctant to take an eLearning course since they feel that they will not have the option to go at their speed or that it's anything but a lot of their time. You can beat this by guaranteeing that your eLearning course is in reduced down lumps that they can get to at whatever point and any place your students are prepared to learn. You ought to likewise stay away from long content squares or jumbled pages inside your eLearning modules. By doing this, you allow them the opportunity to all the more adequately obtain and hold data, on account of the way that they have an immediate say in how much or how rapidly they are investigating the substance. Remember that these students are in a hurry, and don't have a ton of time to commit to the eLearning experience. Thusly, you'll need to catch their eye

from the beginning with outwardly convincing designs and pictures, and keep them drew in with mixed media components which convey key snippets of data plainly and succinctly.

2.11.3 The conviction that students ought to be technically knowledgeable

Not all of the learners are going to have the latest and greatest tech gadgets, nor all learners are going to be “tech-savvy”. And the truth is that there is no reason to be! This perception is yet another eLearning challenges. However, this can be overcome by ensuring that your eLearning course is available on a wide range of devices and platforms and that it is easy to navigate. Your eLearning deliverable should also be free of any multimedia elements that may be difficult to use, or those that can't be controlled by the learners conveniently. For example, you shouldn't include a video that the learners cannot pause or adjust the volume, regardless of whether they are watching it on their laptop or mobile phone. In short, keep things simple, but meaningful, when integrating multimedia into your eLearning course, so that you appeal to a broader learning audience.

2.11.4 The belief that E-Learning offers no support.

It is a general misconception that eLearning courses offer no support for their learners. This belief prevents many individuals from enrolling, even if they are highly motivated to learn and have the time to do so. To overcome this eLearning challenge, be sure to have a solid support system in place for all of your learners. Offer them an FAQ that can help them remedy any common issues, and email or instant message support for more complicated questions or concerns. It's also a good idea to encourage peer collaboration. For example, you can set up a forum where learners can collaborate if a problem arises, or divide the learners into groups and ask them to give feedback. Let them know that working on their own doesn't mean that they don't have

access to support when they need guidance or advice. Bear in mind that one of the most significant advantages of eLearning is that you can work at your own pace, while still being able to benefit from the experience and skills of your online peers, even if they happen to be in other regions of the world.

2.11.5 Students can't see these present reality ramifications of the eLearning course

Now and again a student can't see the worth or advantage of the eLearning course, and particularly how the topic will help him/her in reality. For students to turn out to be genuinely occupied with the general eLearning measure, they must know about how the substance will decipher in certifiable settings. Indeed, even the most enlightening eLearning courses won't be viable if students aren't made mindful of how the material can assist with improving their lives, either by and by or expertly. To handle this eLearning barricade, you might need to incorporate reproductions or eLearning situations that assist the student with perceiving how they can apply the data they've learned, in actuality. You can likewise offer them true models, or gathering cooperation projects that are based around issues or issues they may experience routinely outside of the virtual homeroom.

2.12 E-Learning: Challenges and Solutions

Data and specialized apparatuses (ICT), Web2.0 applications, and the effect these assets are having on schooling are quickly making new difficulties for teachers and students confronted with learning on the web. Educating and learning in an e-learning climate happens uniquely in contrast to in the customary study hall and can introduce new difficulties to educators and students taking part in this web-based learning climate. There is a need to e-figuring out how to recognize the difficulties

and consider best practice answers to guarantee educator and student accomplishment in this new learning climate.

To understand the challenges associated with an e-learning environment it is important to define what the term e-learning means. Clark and Mayer help define e-learning as instruction delivered by any technological mode intended to promote learning (2011). Teaching and learning in an e-learning environment happen differently than in the traditional classroom and can present new challenges to instructors and learners participating in this online learning environment. Technology-assisted learning tools are quickly changing the face of education, transitioning the classroom-only learning environment to an online-only or blended online learning experience.

The possible challenges instructors and learners face in an e-learning environment must be considered to ensure learner success. Therefore, there are two roles in e-learning that must be considered when discussing ways to improve these challenges. The first is the instructor's role and the second, the student's role. Both roles include a transition away from traditional teacher-student relationships, roles, and responsibilities, to virtual space roles. However, it is the instructor's primary role within the learning environment, which will help overcome challenges, support, and sustain student success.

2.12.1 The New Digital Divide

In education, the digital divide is most commonly defined as the gap between those students who have, do not have, and know how to use the internet and the information technologies that are currently transforming education (Bernard, 2011; Hall, 2013). According to Warschauer (2003), the "digital divide is marked not only by physical access to computers and connectivity but also by access to the additional

resources that allow people to use technology well" (p. 6). Due to the affordability of many information technologies today the current meaning of the digital divide is changing from having access, to knowing how to use the technologies (Bernard, 2011). In this way, the digital divide still acts as a challenge for education and more specifically e-learning environments. In education, the digital divide has, most recently, become more about closing the gap between using the resources appropriately to obtain quality educational outcomes than not having access to the technology (Warschauer, 2003; Bernard, 2011). The quality of learning outcomes, and more importantly the successful use of the expected technology resources, all hinge on the amount of experience and comfort level each learner has with these specific resource technologies (Warschauer, 2003).

One solution to this challenge is for the instructor to implement a learning environment that encourages collaboration. Providing learners with the opportunity to collaborate, share, and create will increase the learner's use of various technologies, enhance their e-learning experience, and support self-directed and ongoing learning (Clark & Mayer, 2011; Li & Irby, 2008). During this time the instructor must consider the learner's technological incompetence and accept various ability levels; willing to allow learners choice with the expected performance objectives given it results in the appropriate learning outcomes (Bernard, 2011). The learner should ask questions, seek additional information from credible sources, reflect often, and interact with other learners in academic discourse related to the online learning objectives. Having an online community where learners can collaborate in a safe and respected learning environment will help close the gap of the new digital divide, and in doing so helps to create a culture of digital natives conducive to effective e-learning (Warschauer, 2003; Li & Irby, 2008; Clark & Mayer, 2011).

2.12.2 Student Motivation

Although student motivation can only truly happen intrinsically, creating the right online environment where students want to learn and feel successful is the primary responsibility of the instructor or course designer. According to Martin, in today's online environments there is a lack of teacher presence, face-to-face (f2f) interaction, and tech support (2009). The most well-planned and explicitly laid out online instructional environment is not enough to sustain learner interest or support intrinsic motivation. On the other hand, learners new to an online learning environment typically lack the level of metacognition awareness, time management skills, and self-directed learning needed to be successful (Martin, 2009).

To promote student motivation, the primary role falls to the teacher to anticipate and prevent motivational challenges unique to e-learning. One way this can be done is by increasing f2f interactions through a variety of technological modes (Martin, 2009). Online learning does not have to be isolated to merely email communication and web-based-only classroom interactions. Learners often have anxiety about learning online and need to feel connected, reassured, and safe to contribute to their new learning environments (Terry & Leppa, 2009; Hastie, Hung, Chen, & Kinshuk (2010). E-learning environments often lack a variety of communication options creating an unwelcoming online learning atmosphere (Terry & Leppa, 2009; Martin, 2009; Hastie et al., 2010), which only the instructor can control. To help lighten understudy tension e-guides ought to give different and elective methods of collaborating and convey using such applications as Skype, talk gatherings, or conversation sheets.

2.12.3 Course Design

Deficient time spent on course improvement and configuration can be a colossal contributing variable to inadequately created web-based learning encounters and a significant test for e-learning educators. As indicated by Leanna Archambault (2010), the measure of time expected to plan and carry out a good plan exercise, on the web, is a significant thought. Archambault showed that educators announced an expansion in the measure of time they spent making e-learning courses on account of new substance, new advances, and better approaches for connecting with online students.

One approach to conquer the test of time fostering an online course is for educators to work together regularly inside their e-learning proficient networks. Teaming up with different educators ought to be spent sharing, creating, and making (Terry and Leppa, 2009; Hastie et al., 2010). This cooperation and talk limit the time spent arranging and planning. An approach to conquering the test of a very much created by and large course configuration ought to be tended to because of the student and ought to incorporate these general course qualities: (a) openings for students to work together, (b) a grounded convention for conveying, (c) clear execution assumptions, and (d) openings for students to pick the mode in which tasks are made and introduced (Hastie et al., 2010). All together for educators and students to be fruitful these qualities are vital for the general course plan and e-learning climate.

2.13 E-Learning Facilities Management & Social Sciences

E-learning offices are important to address the difficulties of the contemporary world schooling seriousness in logical and mechanical progression. This examination researched the accessibility and usage of e-learning offices by science instructor

instructors in showing pre-administration educators in Pakistan. A portion of these incorporate PC, printer, PC research facility, and public location framework. Overall, be that as it may, most e-learning offices were accessible to a moderate degree. Results likewise uncovered that science instructor teachers use e-learning offices to a moderate degree. The significant expense of PC units, absence of earlier information concerning the understudies on utilization of PCs, low perusing speed coming about to wastage of payer's cash and inaccessibility of some e-learning offices because of helpless financing are a portion of the elements that add to helpless use of e-learning offices. The scientists suggested (among others) that schools ought to be furnished with e-instructing and e-learning offices and science instructor teachers ought to go through standard in-administration preparing and re-preparing programs.

Practical and subjective instruction, which is seen as a fundamental condition for public improvement can't be accomplished without sound information and the use of e-learning. Subsequently, all instructive frameworks everywhere on the present reality are under expanding strain to utilize e-figuring out how to show understudies the information and abilities they need in the 21st century (Ezeugbo and Asiegbu, 2011). Instructive establishments, in acknowledgment of the effect of new advancements on the workplace and regular day-to-day existence, are putting forth an attempt to rebuild their instructive software engineers and study hall offices and educational systems to limit the instructing and learning innovation holes among created and agricultural countries. In this manner, Ushie et al. (2009) focused on that the new work power of instructor instructors and understudy educators should be equipped for finding, getting to, breaking down, and orchestrating data to create new information and items. This requests that instructor instructive establishments like Colleges of Education

become progressively included as motors of logical and innovative improvement of the general public.

The significance of educators in any educational plan execution can never be overemphasized. This is because educators are the rotate of the instructing calling and the schooling of any country can't develop over the information on its instructors. Studies, (Ezeugbo and Asiegbu 2011, Nwana 2012), have shown that there are imperatives to the fruitful use of e-learning and e-learning offices for educational program execution in schools. Otuka in Ezeugbo and Asiegbu (2011) communicated that PC proficiency in Nigeria is still at its most minimal ebb fundamentally because e-learning is confronted with plenty of difficulties some of which incorporate deficient e-learning offices, absence of talented labor to deal with the accessible assets, insufficient subsidizing of advanced education and hesitance/failure concerning the instructors to completely coordinate new advances in their academic practices. Ezeugbo and Asiegbu (2012) recognized significant e-learning difficulties as insufficient financing, absence of specialized foundation, and lacking offices and noticed that the utilization of e-learning in instructing will flourish just if these difficulties or requirements were appropriately tended to. Owolabi in Nwana (2012) was of the assessment that deficiency of prepared instructors for e-learning, absence of offices, foundations, and gear were among the variables that militate against successful use of e-learning. These difficulties might be important for reasons why most instructors, including science educator teachers, seem to in any case adhere to the old customary technique for address in conveying their exercises.

As per Ushie et al. (2009), the World Bank had communicated expressed that the new course to innovative and monetary improvement is not, at this point in broad difficult work, yet in information building and utilization of precise data in the plan and creation of labor and products. The labor and products for this situation are the understudy educators who are exceptional with the information and abilities of e-acquiring and PC proficiency to have the option to stream with the innovation-driven world. Subsequently, encouraging now requires instructor instructors who are fit for applying the empowering limit of e-learning educational correspondence innovation to take care of informative issues, plan new methodologies and procedures with the sole point of improving instructing and learning.

2.14 E-Learning: Sex viewpoint

The need to talk about eLearning from a sex viewpoint is gotten from the perspective that all spaces are gendered. As a take-off point for this part, we draw on Barriteau's (2001, p.30) assessment that: "Sexual orientation philosophies uncover what is proper or expected of the socially comprised creatures ' ladies and 'men'". Thusly, these belief systems uncover how people make sexual orientation characters. The social assumptions and the individual developments of sex personalities structure the center of sexual orientation belief systems inside a specific culture. These belief systems build up the physically separated, socially-developed limits for 'guys' and 'females'. We talk about sexual orientation in this examination not as a forced dynamic, which may or probably won't be the situation, as this has a place in an alternate talk, yet rather as a socially built driver of what is correct and expected for every sex inside the setting of HE. Writing on sexual orientation in eLearning is restricted. Arroyo et al. (2013) analyze the impact of the utilization of cutting-edge learning advancements for arithmetic on male and female junior, center school, and secondary school

understudies. They tried the pre and post-test capacities just as the auras of the understudies to perceive how the utilization of explicit numerical programming (Wayang Outpost Tutor) influenced the sexual orientations. Also, Ding et al. (2011) report on an investigation on sexual orientation and sex blending for understudies in PC upheld synergistic learning (CSCL). While both these investigations uncovered some sex aberrations and likenesses under different conditions according to the utilization of innovation, they are explicit to younger students and those taking STEM (science, innovation, designing, and math) subjects. Lin et al. (2012) analyze sex inclination in virtual learning conditions according to Taiwanese younger students discovering incongruities and likenesses in the utilization of innovation. These examinations on sex are not quite the same as our investigation in that they don't address the factors that influence grown-up guys and females in instructive pursuits. In this examination, we look at the requirements experienced by working grown-ups attributable to their sexual orientation personality and issues emerging from this, which influence their quest for HE through eLearning. We will draw on discoveries from the two sexes to show the significance of importance to the eLearning stage plan and treat the issue as one relevant to the functioning grown-up understudy populace all in all.

With the improvement of the advanced economy, instruction conveyance, especially advanced education (HE), has gone through significant change. HE Institutions (HEIs) enjoy taken benefit of the high-level highlights of computerized innovations for improved intuitiveness among teachers and understudies by carrying out new eLearning drives, including the MOOCs (Massive Open Online Courses), ALISON (Advanced Learning Interactive Systems Online) LMOOC (Language MOOC), OPEN2STUDY just as the 'Flipped Classroom'" and 'Mixed Learning'

(Liyanagunawardena et al., 2015; Doherty et al., 2015). With an expanding number of eLearning drives, we look for in this article, to investigate their significance to understudy populaces and in doing as such, a sex point of view is received. Current writing on eLearning in HE gives specific consideration to the nature of the plan and stage highlights. These have been exposed to quality confirmation measurements to guarantee their innovative viability (Nguyen, et al., 2014; Nawaz and Khan, 2012; Kidwell and Kent, 2008). Security is an unchallenged element in advanced exchanges and HE through the Internet has gotten sufficient consideration around here (Nawaz and Khan, 2012). This is especially uplifted when managing the web assessments and evaluating. Regardless of buying into the significance of value and security in eLearning, in this article, our position is that strength of safety and money of substance are useless as far as worth if the objective clients are missing. As this type of getting the hang of utilizing innovation has flourished in the field, (Mouyabi, 2011), we consider it significant, to comprehend what draws in individuals to eLearning and how it serves their requirements. The clients we center around in this investigation contain the functioning grown-up people who look to seek after HE through eLearning. Without surviving writing, this article utilizes a blended strategies way to deal with study the significance of eLearning to grown-up working people to decide why a greater amount of the last are utilizing this strategy for learning. The discoveries show that the decision to take part in eLearning is made by people for reasons that are fundamentally identified with their sexual orientation. Moreover, our study extends theory on eLearning, bringing relevance into the study of it in HE. This, as we discuss, has both theoretical and practical implications for the HE sector. The existing literature on the topic is first covered. We then present the approach we have

taken to arrive at our findings and move on to a discussion of these and their implications for HEIs.

2.14.1 Theoretical Foundations

eLearning can be considered a ubiquitous ‘catch-all’ term for describing learning with the use of technology. Web facilitates the engagement of technology in dynamic ways that enables HEIs to supplement teaching or to use it as the sole educating mechanism. It also allows corporations to provide training and development to their staff. The idea of eLearning is principally to get knowledge (through education and/or training) to people who are not confined to a single physical location and who, in many cases, are geographically dispersed. Cross (2004) describes eLearning as learning that is facilitated by networks (ibid). However, in this study, we adopt the more encompassing definition put forward by Nichols (2003, p2), who defines it as: “The use of various technological tools that are either Web-based, Web-distributed or Web-capable.” eLearning has contributed to a dramatic shift in the paradigm of education delivery and is described by Bulfin et al. (2014) as ‘disruptive technology. In making particular reference to MOOCs, they highlight that these have increased public discussion of online education and eLearning. Named for their outreach potential, MOOCs can touch vast numbers of learners simultaneously through the same channel – the Internet. The New York Times declared 2012 the year of the MOOC (White, 2014), highlighting the implications of the ‘Massive’ aspect.

2.14.2 Quality

The issue of quality is salient regarding eLearning programs (Nawaz & Khan, 2012; Al-Saif & Anandhavalli, 2013). It pertains to the content of the program, the human resources engaged in the delivery, and to the technological facilities (hardware and

software including the Internet). Quality has also been established as a critical measure by which to assess the value that eLearning brings to the learner. The word quality is applied to the learners themselves and the outcome of the eLearning process for those learners. Lecturers and content are all scrutinized under the microscope of quality.

2.14.3 Security

Security is important when eLearning is used as an in-house corporate tool for staff training to protect trade secrets and other proprietary material. It is also necessary to protect student grades when eLearning forms part of a university program and where official grading is performed online. This is concerning protection from intruders as well as from manipulation by students themselves (Graf, 2002). Security, therefore, is a vital component in the creation, delivery, and management of eLearning programs. It follows that the implementation of an eLearning system must be accompanied by security features to protect it from external and internal threats.

2.14.4 Pertinence

The third space of significance in eLearning is importance. This gives off an impression of being the most un-addressed in the writing. By definition, it is "the bearing on or having reference to the matter close by" (The Concise Oxford Dictionary, 1990). Drawing on this and with regards to this investigation, significance alludes to how much what is offered as a course on those to whom it is advertised. Importance in eLearning identifies with whether the originators are discerning of the objectives, capacities, and proclivities of the clients. With regards to HE, in regards to the importance of eLearning programs, they need to consider the different gatherings of clients who become occupied with this type of learning. Specifically, of interest in

the current investigation are the fluctuating necessities of the various sexual orientations. There has been some certain reference to the requirement for importance in HE. Dias (1992) in talking about the requirement for strategy changes that will improve the quality and congruity of HE frameworks, places that significance concerns the job of HE inside the more extensive social framework including the turn of events and democratization of work. The idea of significance in HE, which has gotten some consideration in this unique circumstance, has not been satisfactorily stretched out to eLearning for HE purposes or concerning sexual orientation. Martinez et al. (2012), while thinking about the preparation of informative plan experts, cause to notice the requirement for importance in how these technologists are prepared in what they need to do, to be specific, plan informative projects in instructive innovation. Tarus and Gichoya (2015) think about the sluggish development of eLearning in Africa, featuring the test of adjusting imported eLearning strategies from created nations with various societies. Importance to the crowd is an issue in that review, however, the creators give little consideration to it, liking to zero in on the nature of the mechanical framework. The significance of John Keller's (1987) ARCS Model (Attention, Relevance, Confidence, and Satisfaction) is recognized by Jones (2010) as propelling students for in-house hierarchical preparing. Nonetheless, in the model, the idea of importance is limited to the restricted setting of preparing inside an association. In this examination, we inspect the significance of pertinence through a sexual orientation focal point 5 by distinguishing the jobs this plays in the decision concerning eLearning chasing HE. In the accompanying segment eLearning from sex, the viewpoint is talked about.

2.14.5 Female working grown-ups and Using eLearning

The exploration uncovered that for various reasons, eLearning is considered by both male and female members a fundamental device for female working grown-ups. The straightforward entry, especially the offbeat strategy, permits females to satisfy numerous parts of their lives. The discoveries highlight eLearning being a female-accommodating action. There are two principal explanations behind this, quite an adaptability and professional improvement, while different reasons referenced were wellbeing and monetary contemplations.

2.14.6 Male Working Adults and Using E-learning

The nature and substance of the online projects have been discovered to be factors in grown-up male cooperation. A member in one Focus Group battled that "The idea of the online instruction program will decide the number of men is drawn to the program. Projects equipped for designing are more appealing than a program outfitted to morals or training at the college level. Toward the rear of the mind of guys is the longing to do a manly branch of knowledge." There is a deficiency of writing on eLearning in a quest for sex. In this investigation, the convergence of eLearning is uncovered as we endeavor to address the examination question: How is the decision of eLearning in the establishments influenced by sex? It is inside the point of view of sexual orientation that the significance of pertinence goes to the front.

2.15 Challenges in Utilization of E-Learning in Public & Private Sector

Information and communication technology (ICT) has become an important source of innovation and improvement of efficiency for many sectors across the globe. In the education sector, particularly, the application of ICT has become a critical part of the

learning process for public and private university students both outside and inside the classroom setting.

This current report is a new analysis of this collection of data, focusing on the role of online education among private-sector colleges and universities. For the report, private-sector institutions are defined as for-profit colleges that are Title IV eligible. Comparative national results are provided for context of the public and private-sector results.

Academic leaders at private-sector colleges and universities have a more positive view of the learning outcomes for online education than do academic leaders at other types of institutions.

- Over two-thirds of academic leaders at private-sector institutions rate the learning outcomes in online education the same as or superior to those in face-to-face.
- There has been a small but steady increase in the proportion of private-sector leaders with positive views of online learning outcomes.
- Academic leaders at private-sector institutions have positive views of the relative quality of an education at a for-profit institution; leaders at other types of institutions do not.

Recently, considerable attention has been focused on the growth of the for-profit sector, with proposed new rules for awarding financial aid and resulting in sometimes contentious congressional hearings. What opinions do the nonprofit and public institutions have about these private-sector institutions? In particular, do they believe that private-sector institutions provide an education that is of a quality equal to that provided by nonprofit institutions? There is a wide gap in opinions between the

different types of institutions when institutions are asked about their perceptions of the relative quality of the education provided at for-profit institutions. Only 9% of the academic leaders at non-private-sector colleges agree that the quality of an education at a for-profit institution is as good as at a nonprofit institution. This compares with 72% of the leaders at private-sector colleges and universities who say for-profit institutions provide an education of equal quality. While it is not a surprise that this gap exists, it is somewhat surprising that 15% of academic leaders at private-sector institutions do not agree that they provide learning outcomes equal in quality to those at nonprofit institutions. Note that we are measuring perceptions by academic leaders—not specific outcomes-based metrics. However, the results do show the widening gulf that appears to be developing among higher education institutions, with several large, for-profit institutions moving aggressively into online—an area that public institutions have traditionally occupied. By enrolling large numbers of students, a number of the larger private-sector institutions have shown substantial growth, and with that, attracted considerable attention from both regulators and other higher education institutions.

2.16 Impact of the Economy on Online Education

The research reports have provided evidence that bad economic times can be good for higher education enrollments—either because the decreased availability of jobs encourages more people to seek education or because those currently employed seek to improve their chances for advancement by advancing their education.

Academic leaders at all types of institutions continue to report that the bad economy has a positive impact on the demand for both face-to-face and online courses.

- Nearly one-half of private-sector colleges and universities report that the economic downturn has increased demand for face-to-face courses and programs.
- Three-quarters of private-sector colleges and universities see increased demand for online courses and programs due to the economic downturn.
- Nearly three-quarters of private-sector institutions report increases in applications for financial aid, but the rate is lower than that at other types of institutions.
- Nearly one-half of private-sector institutions say their budgets have increased year to year—a higher rate than that reported by other types of institutions.

2.17 International Problems in E-Learning

The world is changing into a worldwide town with the quick advancement of data and correspondence innovation (Nabil, Awerbuch, Slonim, Wegner, and Yesha, 1997). This change has an ever-increasing number of organizations walking toward a worldwide economy; as the CEO of General Electric, Jack Welch expressed, "associations should either globalize or they bite the dust". Today, just about 50% of the economy depends on fares and imports. U.S. organizations have contributed more than $1 trillion abroad and utilized abroad specialists (http://www.astd.org). The capacity to contend internationally is reliant upon the advancement, the ability, and the information on a learning association and its kin. Globalizing corporate preparation is essential to the accomplishment of worldwide business systems. At the point when organizations move to prepare into a worldwide field, the greatest difficulties are the overall varieties in friendly, social, political, and financial conditions (Wellins and Rioux, 2000). Various dialects, instruction frameworks, getting the hang of/showing styles, unofficial laws, and foundations are instances of

these varieties. To adjust preparing to multicultural settings requires another worldview that incorporates comprehension of the more profound brain science of culture and the interesting contrasts culture brings to a worldwide work environment (Kemper, 1998). This part expects to address four worldwide e-learning issues; they are social and, social contrasts, and language and innovative issues. To start with, we audit culture definitions and measurements of social variety. Independence and cooperation will be utilized as a system to talk about social contrasts. Cooperation and correspondence styles, and picking up/encouraging styles will be utilized to examine concrete social contrasts. Educational plan ideal models will likewise be looked into. Second, social issues like training, political, and strict contrasts will be examined. Third, language and mechanical issues in worldwide e-learning will be analyzed. The part finishes up with a rundown. E-Learning Facilities Management and Social Sciences

E-learning offices are important to address the difficulties of the contemporary world schooling seriousness in logical and innovative progression. This examination researched the accessibility and usage of e-learning offices by science instructor teachers in showing pre-administration educators in Pakistan. A portion of these incorporate PC, printer, PC research center, and public location framework. By and large notwithstanding, most e-learning offices were accessible to a moderate degree. Results likewise uncovered that science instructor teachers use e-learning offices to a moderate degree. The significant expense of PC units, absence of earlier information concerning the understudies on use of PCs, low perusing speed coming about to wastage of payer's cash and inaccessibility of some e-learning offices because of helpless financing are a portion of the elements that add to helpless use of e-learning offices. The specialists suggested (among others) that schools ought to be given e-

instructing and e-learning offices and science instructor teachers ought to go through ordinary in-administration preparing and re-preparing programs.

Utilitarian and subjective instruction, which is seen as an essential condition for public advancement can't be accomplished without sound information and the use of e-learning. Accordingly, all instructive frameworks everywhere on the present reality are under expanding strain to utilize e-figuring out how to show understudies the information and abilities they need in the 21st century (Ezeugbo and Asiegbu, 2011). Instructive organizations, in acknowledgment of the effect of innovations on the workplace and regular daily existence, are putting forth an attempt to rebuild their instructive software engineers and study hall offices and informative techniques to limit the educating and learning innovation holes among created and agricultural countries. Subsequently, Ushie et al. (2009) focused on that the new work power of instructor instructors and understudy educators should be equipped for finding, getting to, breaking down, and combining data to create new information and items. This requests that educator instructive foundations like Colleges of Education become progressively included as motors of logical and mechanical improvement of the general public.

The significance of educators in any educational plan execution can never be overemphasized. This is because instructors are the turn of the encouraging calling and the training of any country can't develop over the information on its educators. Studies, (Ezeugbo and Asiegbu 2011, Nwana 2012), have shown that there are limitations to the effective use of e-learning and e-learning offices for educational program execution in schools. Otuka in Ezeugbo and Asiegbu (2011) communicated that PC proficiency in Nigeria is still at its most reduced ebb principally because e-learning is confronted with a ton of difficulties some of which incorporate deficient e-

learning offices, absence of gifted labor to deal with the accessible assets, lacking financing of advanced education and hesitance/failure concerning the speakers to completely coordinate innovations in their academic practices. Ezeugbo and Asiegbu (2012) distinguished significant e-learning difficulties as insufficient subsidizing, absence of specialized foundation, and lacking offices and noticed that the use of e-learning in encouraging will flourish just if these difficulties or imperatives were appropriately tended to. Owolabi in Nwana (2012) was of the assessment that shortage of prepared instructors for e-learning, absence of offices, foundations, and hardware were among the elements that militate against powerful use of e-learning. These difficulties might be important for reasons why most instructors, including science educator teachers, seem to in any case adhere to the old customary technique for address in conveying their exercises.

As per Ushie et al. (2009), the World Bank had communicated expressed that the new bearing to mechanical and monetary advancement is not, at this point in broad difficult work, yet in information building and utilization of deliberate data in the plan and creation of labor and products. The labor and products for this situation are the understudy instructors who are exceptional with the information and abilities of e-acquiring and PC education to have the option to stream with the innovation-driven world. Thusly, training currently requires instructor instructors who are fit for applying the empowering limit of e-learning informative correspondence innovation to take care of educational issues, plan new methodologies and strategies with the sole point of improving instructing and learning.

2.18 E-Learning: Sexual Perspective

The need to talk about eLearning from a sex point of view is gotten from the perspective that all spaces are gendered. As a take-off point for this part, we draw on Barriteau's (2001, p.30) assessment that: "Sex belief systems uncover what is suitable or expected of the socially established creatures ' ladies and 'men'". Thusly, these philosophies uncover how people make sex personalities. The social assumptions and the individual developments of sex characters structure the center of sexual orientation belief systems inside a specific culture. These belief systems set up physically separated, socially-developed limits for 'guys' and 'females'. We talk about sex in this examination, not as a forced dynamic, which may or probably won't be the situation, as this has a place in an alternate talk, yet rather as a socially developed driver of what is correct and expected for every sexual orientation inside the setting of HE. Writing on sexual orientation in eLearning is restricted. Arroyo et al. (2013) look at the impact of the utilization of cutting edge learning innovations for arithmetic on male and female junior, center school, and secondary school understudies. They tried the pre and post-test capacities just as the airs of the understudies to perceive how the utilization of explicit numerical programming (Wayang Outpost Tutor) influenced the sexes. Likewise, Ding et al. (2011) report on an examination on sexual orientation and sex blending for understudies in PC upheld cooperative learning (CSCL). While both these investigations uncovered some sex inconsistencies and likenesses under different conditions corresponding to the utilization of innovation, they are explicit to younger students and those taking STEM (science, innovation, designing, and math) subjects. Lin et al. (2012) analyze sex inclination in virtual learning conditions according to Taiwanese younger students discovering inconsistencies and similitudes in the utilization of innovation. These investigations on sex are not the same as our

examination in that they don't address the factors that influence grown-up guys and females in instructive pursuits. In this investigation, we inspect the imperatives experienced by working grown-ups attributable to their sex character and issues emerging from this, which influence their quest for HE through eLearning. We will draw on discoveries from the two sexual orientations to outline the significance of importance to the eLearning stage plan and treat the issue as one appropriate to the functioning grown-up understudy populace all in all.

With the improvement of the computerized economy, schooling conveyance, especially advanced education (HE), has gone through significant change. HE Institutions (HEIs) enjoy taken benefit of the high-level highlights of computerized innovations for improved intuitiveness among instructors and understudies by executing new eLearning drives, including the MOOCs (Massive Open Online Courses), ALISON (Advanced Learning Interactive Systems Online) LMOOC (Language MOOC), OPEN2STUDY just as the 'Flipped Classroom'" and 'Mixed Learning' (Liyanagunawardena et al., 2015; Doherty et al., 2015). With an expanding number of eLearning drives, we look for in this article, to investigate their significance to understudy populaces and in doing as such, a sexual orientation viewpoint is received. Current writing on eLearning in HE gives specific consideration to the nature of the plan and stage highlights. These have been exposed to quality affirmation measurements to guarantee their innovative viability (Nguyen, et al., 2014; Nawaz and Khan, 2012; Kidwell and Kent, 2008). Security is an unchallenged element in advanced exchanges and HE through the Internet has gotten plentiful consideration around here (Nawaz and Khan, 2012). This is especially increased when managing the web assessments and evaluating. Regardless of buying

into the significance of value and security in eLearning, in this article, our position is that strength of safety and cash of substance are useless as far as worth if the objective clients are missing. As this type of getting the hang of utilizing innovation has flourished in the field, (Mouyabi, 2011), we consider it significant, to comprehend what draws in individuals to eLearning and how it serves their requirements. The clients we center around in this investigation include the functioning grown-up people who look to seek after HE through eLearning. Without surviving writing, this article utilizes a blended strategies way to deal with study the significance of eLearning to grown-up working people to decide why a greater amount of the last are utilizing this technique for learning. The discoveries show that the decision to take part in eLearning is made by people for reasons that are fundamentally identified with their sex. Additionally, our examination broadens the hypothesis on eLearning, carrying pertinence into the investigation of it in HE. This, as we talk about, has both hypothetical and pragmatic ramifications for the HE area. The current writing on the point is first covered. We then, at that point present the methodology we have taken to show up at our discoveries and proceed onward to a conversation of these and their suggestions for HEIs.

2.18.1. **Theoretical Foundations**

eLearning' can be considered a ubiquitous 'catch-all' term for describing learning with the use of technology. Web facilitates the engagement of technology in dynamic ways that enables HEIs to supplement teaching or to use it as the sole educating mechanism. It also allows corporations to provide training and development to their staff. The idea of eLearning is principally to get knowledge (through education and/or training) to people who are not confined to a single physical location and who, in many cases, are geographically dispersed. Cross (2004) describes eLearning as

learning that is facilitated by networks (ibid). However, in this study, we adopt the more encompassing definition put forward by Nichols (2003, p2), who defines it as: "The use of various technological tools that are either Web-based, Web-distributed or Web-capable." eLearning has contributed to a dramatic shift in the paradigm of education delivery and is described by Bulfin et al. (2014) as 'disruptive technology. In making particular reference to MOOCs, they highlight that these have increased public discussion of online education and eLearning. Named for their outreach potential, MOOCs can touch vast numbers of learners simultaneously through the same channel – the Internet. The New York Times declared 2012 the year of the MOOC (White, 2014), highlighting the implications of the 'Massive' aspect.

2.18.2 Quality

The issue of quality is salient regarding eLearning programs (Nawaz & Khan, 2012; Al-Saif & Anandhavalli, 2013). It pertains to the content of the program, the human resources engaged in the delivery, and to the technological facilities (hardware and software including the Internet). Quality has also been established as a critical measure by which to assess the value that eLearning brings to the learner. The word quality is applied to the learners themselves and the outcome of the eLearning process for those learners. Lecturers and content are all scrutinized under the microscope of quality.

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well as from manipulation by students themselves (Graf, 2002). Security, therefore, is a vital component in the creation, delivery, and management of eLearning programs. It follows that the implementation of an eLearning system must be accompanied by security features to protect it from external and internal threats.

2.19 Challenges in Utilization of E-Learning in Public & Private Sector

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- Nearly one-half of private-sector institutions say their budgets have increased year to year—a higher rate than that reported by other types of institutions.

2.20 Issues in E-Learning

The world is transforming into a global village with the rapid development of information and communication technology (Nabil, Awerbuch, Slonim, Wegner, & Yesha, 1997). This transformation has more and more companies marching toward a truly global economy; as the CEO of General Electric, Jack Welch stated, “organizations must either globalize or they die”. Today, almost 50 percent of the economy is based on exports and imports. U.S. corporations have invested more than

$1 trillion abroad and employed overseas workers (http://www.astd.org). The ability to compete globally is dependent on the innovation, skill, and knowledge of a learning organization and its people. Globalizing corporate training is crucial to the success of global business strategies. When companies move training into a global arena, the biggest challenges are the worldwide variations in social, cultural, political, and economic circumstances (Wellins & Rioux, 2000). Different languages, education systems, learning/teaching styles, government regulations, and infrastructures are examples of these variations. Adapting the training to multicultural settings requires a new paradigm that includes an understanding of the deeper psychology of culture and the unique differences culture brings to a global workplace (Kemper, 1998). This section aims to address four global e-learning issues; they are: cultural and, social differences, and language and technological issues. First, we review cultural definitions and dimensions of cultural variation. Individualism and collectivism will be used as a framework to discuss cultural differences. Interaction and communication styles and learning/teaching styles will be used to discuss concrete cultural differences. Instructional design paradigms will also be reviewed. Second, social issues such as education, political, and religious differences will be discussed. Third, language and technological issues in global e-learning will be examined. The section concludes with a summary.

CHAPTER 3

RESEARCH METHODOLGY

The research approach is described in this chapter. The research design, population, sample and sampling strategy, data collection procedure, research instrument, validity and reliability, and data analysis are all covered in this section.

3.1 Research design

The study employed a quantitative research strategy. Numerical measurements were used in quantitative research, and statistical analysis was used to analyze the results. According to research objectives researcher used this approach. The current research study was descriptive and comparative in nature. As per demand of five objectives used inferential statistics were used to identify the challenges of e-learning faced by students of different disciplines. The researcher had used descriptive research design as well. The targeted population of this research is under graduate students of management sciences and social sciences who were enrolled in four year bachelor program. For this research questionnaire was developed on basis of theoretical framework which have four construct.

3.2 Population

For the current study list of universities was taken from HEC website (www.hec.gov.pk) .Bachelor's students from public and private universities in Islamabad made up the study's population. Male and female students from

management and social science department from Islamabad's public and private universities were the target population. Total number of universities was 21 from which 14 universities were taken because other universities didn't have management and social science department.

Table 3.1 Population of the study

Population	Public Universities	Private Universities
23,322	10	4
	No of Students	No of Students
	16,788	6,534

3.3 Sampling Technique

Researcher used random sampling technique to collect data from both male and female students. Simple random sampling means each item of the study has equal chance of participating in sample. The researcher randomly selected thirty students from management sciences and thirty from social sciences of each university to collect data. So public universities students were 375 and private universities students were 361.

3.4 Sample

The sample size was taken by using Krejcie and Morgan table (1970). So the total number of students after sample of public universities was N=375 and total number of students after sample of private sector universities was N=361. The participants of the study were the students of management science department and social science department.

Table 3.2 Sample of the study

	No of Students in Public Universities	No of Students in Private Universities
Sample	375	361

Table 3.3 Department wise table

University	Management Sciences	Social Sciences
Public	237	197
Private	198	105
Total	434	302

Table 3.4 Gender wise table

University	Male	Female
Public	198	237
Private	107	194
Total	305	431

3.5 Research Instrument

Questionnaire was developed on the basis theoretical framework proposed by (Andersson & Grönlund, 2009). Research tool had two parts, in first part demographic information was taken like gender and age. In second part four construct were made according to four major challenges of e-learning mentioned in theoretical framework. In which individual challenges had 19 items, course challenges had 14 items,

contextual challenges had 10 items and technological challenges had 13 items. So the total number of items was 56. Research instrument was developed on five point likert scale which was based on criteria i.e, 1=Never, 2= Rarely, 3= Sometimes, 4= often, 5= Always.

Table 3.5

Number of Items of Questionnaire

Construct	**No of Statements**	**No of Items**
Individual challenges	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19	19
Course challenges	20,21,22,23,24,25,26,27,28,29,30,31,32,33	14
Contextual challenges	34,35,36,37,38,39,40,41,42,43	10
Technological challenges	44,45,46,47,48,49,50,51,52,53,54,55,56	13
Total		56

3.5.1 Demographic Information to collect information on firm variables for analyzing the data demographic information was added.

- Sector
- Faculty
- Gender

3.5.2 Five Point Likert Scale. Five point likert scale scoring was based on criteria i.e

1. Never
2. Rarely
3. Sometimes
4. Always
5. Often

3.5.3 Validity of the Instrument for the validation of research instrument three questionnaires was given to the research experts. Researcher discussed the important points of instrument with experts. After discussion each expert suggested minor changes. After editing recommended changes researcher got experts approval and got validation form. So the final form of questionnaire made.

3.5.4 Pilot Testing before collection of data questionnaire was distributed for pilot testing in two universities one public and one private. Total 130 questionnaires were given from which 120 got returned back. Questionnaire for pilot testing were given to the students of bachelor of management and social science departments.

3.5.5 Reliability of the Instrument. A reliability of the instrument was checked by using Cronbach Alpha. The reliability value is shown below in the table.

Table 3.6

Cronbach Alpha Reliability of e-learning challenges

Scale	Dimensions	Items	Cronbach Alpha
e-learning	e-learning challenges	56	.892
	Individual Challenges	19	.637
	Course Challenges	14	.861
	Contextual Challenges	10	.782
	Technological Challenges	13	.845

The above table shows the reliability of e-learning challenges i.e individual challenges (.637), course challenges (.861), contextual challenges (.782), and technological challenges (.845).

Table 3.7

Inter scale correlation of e-learning challenges i.e. individual challenges, course challenges, contextual challenges and technological challenges

	IC	**CUC**	**CTC**	**TC**
Individual Challenges	1			
Course Challenges	.657**	1		
Contextual Challenges	.613**	.754**	1	
Technological Challenges	.637**	.729**	.785**	1

****** Correlation is significant at the 0.01 level (2-tailed)

The table shows that e-learning challenges i.e individual, course, contextual and technological challenges were statistically significant correlated with each other at 0.01level of significant.

Table 3.8

Item Correlation of e-learning challenges (N=120)

Item Code	R	Item Code	r
I1	.483**	CUC10	.661**
IC2	.526**	CUC11	.522**
IC3	.186*	CUC12	.516**
IC4	. .315**	CUC13	.554**
IC5	.119	CUC14	.631**
IC6	.077	CTC1	.433**
IC7	.603**	CTC2	.300**
IC8	.452**	CTC3	.521**
IC9	.357**	CTC4	.447**
IC10	.101	CTC5	.535**
IC11	.477**	CTC6	.690**
IC12	.572**	CTC7	.458**
IC13	.568**	CTC8	.734**
IC14	.309**	CTC9	.485**
IC15	.435**	CTC10	.581**
IC16	.147	TC1	.373**
IC17	.468**	TC2	.508**
IC18	.408**	TC3	.646**
IC19	.556**	TC4	.483**
CUC1	.606**	TC5	.570**
CUC2	2.337**	TC6	.636**
CUC3	.677**	TC7	.456**
CUC4	.432**	TC8	.592**
CUC5	.574**	TC9	.563**
CUC6	.492**	TC10	.689**
CUC7	.698**	TC11	.642**
CUC8	.637**	TC12	.377**
CUC9	.342**	TC13	.489**

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is Significant at the 0.05 level (2-tailed)

3.6 Data Collection

Data was gathered from Islamabad's public and private universities. Researcher personally visited the universities and e-form questionnaire was also developed due to covid many universities were not open for regular classes. Data was collected from the male and female students of morning and evening shifts of management and social sciences department of universities.

3.7 Data Analysis

The study's data was gathered and analyzed with the help of the Statistical Package for the Social Sciences (SPSS). The data collected from the respondents was summarized and described using descriptive statistics. For data analysis, the researcher employed statistical procedures such as the independent t-test to meet the current objectives.

Table 3.9

Objectives	**Hypotheses**	**Statistical Technique**
To assess challenges In utilization of e-learning faced by students of public sector universities		Mean
To assess challenges In utilization of e-learning		Mean

faced by students of private sector universities		
To explore challenges in utilization of e-learning facilities faced by students of public and private sector universities.	There is no significant difference between challenges in utilization of e-learning facilities faced by students of public and private sector universities.	Independent t-test
To explore challenges in utilization of e-learning facilities faced by students of social sciences and management sciences at university level.	There is no significant difference between challenges in utilization of e-learning facilities faced by students of social sciences and management sciences at university level	Independent t-test
To assess gender based difference regarding challenges in utilization of e-learning facilities faced by students at university level.	There is no significant gender based difference regarding challenges in utilization of e-learning facilities faced by students at university level.	Independent t-test

3.8 Ethical Consideration

In the start of data collection it was mentioned to the participant that this data would only be used for research. In the questionnaire the name of participants and name of institution was not mentioned.

CHAPTER 4

ANALYSIS OF DATA

4.1 Introduction

The researcher has detailed described how data is processed and interpreted in this chapter. The data for this study was gathered from Islamabad's public and private universities. The researcher distributed a questionnaire based on 56 items of e-learning problems that undergraduate students in management sciences and social science departments experience. The data obtained from the respondents was summarized and described using descriptive statistics. The researcher utilized statistical approaches such as independent samples to analyze the data.

Objective 1: To assess challenges in utilization of e-learning facilities faced by students of public sector universities.

Table 4.1 Public Sector Universities

Variable	Mean	Remarks
Individual Challenges	2.9	Sometimes
Course Challenges	2.8	Sometimes
Contextual Challenges	3.03	Sometimes
Technological Challenges	2.97	Sometimes
Total	2.96	Sometimes

Table 4.1 shows Mean of Variables of utilization of e-learning facilities at university level i.e individual challenges (2.96), Course Challenges (2.8), Contextual challenges (3.03), and technological challenges (2.97). It is concluded that public sector universities mean fall in category of sometimes.

Objective 2: To assess challenges in utilization of e-learning facilities faced by students of private sector universities.

Table 4.2 Private Sector Universities

Variable	Mean	Remarks
Individual Challenges	3.1	Sometimes
Course Challenges	3.02	Sometimes
Contextual Challenges	3.09	Sometimes
Technological Challenges	2.22	Rarely
Total	2.8	Sometimes

Table 4.2 shows Mean of Variables of utilization of e-learning facilities at university level i.e individual challenges (3.1), Course Challenges (3.02), Contextual challenges (3.09), and technological challenges (2.22). It is concluded that public sector universities mean fall in category of sometimes

Objective 3: To compere challenges in utilization of e-learning facilities faced by students of public and private sector universities.

H_{01}: There is no significant difference between challenges in utilization of e-learning facilities faced by students of public and private sector universities.

Table 4.3 Public and Private Sector Universities

Variable	University	n	Mean	t-value	Sig.
Individual	Public	375	56.39	4.622	.000
Challenges	Private	361	59.97		
Course	Public	375	9.39	3.935	.000
Challenges	Private	361	42.34		
Contextual	Public	375	30.31	.192	.234
Challenges	Private	361	30.93		
Technological	Public	375	38.71	.386	.699
Challenges	Private	361	28.97		
e-	Public	375	164.79	3.23	.001
Learning	Private	361	172.23		

According to the table 4.3 there is a significant difference between the challenges of public and private universities. The result indicates that the mean value of private sector universities (172.23) is higher than public sector universities (164.79). Thus the Null hypothesis “There is no significant difference between challenges in utilization of e-learning facilities faced by students of public and private sector universities” is being rejected.

Objective 4: To compare challenges in utilization of e-learning facilities faced by students of social sciences and management sciences at university level.

H_{02}: There is no significant difference between challenges in utilization of e-learning facilities faced by students of social sciences and management sciences at university level.

Table 4.4 Social Sciences and Management Science Departments

Variable	Departments	n	Mean	t-value	Sig.
Individual Challenges	Management Sciences	434	58.02	.284	.776
	Social Sciences	302	58.24		
Course Challenges	Management Sciences	434	40.47	.748	.455
	Social Sciences	302	41.05		
Contextual Challenges	Management Sciences	434	30.15	1.402	.161
	Social Sciences	302	30.90		
Technological Challenges	Management Sciences	434	39.20	.948	.343
	Social Sciences	302	38.57		
e-learning	Management Sciences	434	167.85	.389	.697
	Social Sciences	302	168.77		

According to the table 4.4 there is no significant difference between the challenges of Management Sciences and Social Sciences departments. The result indicates that the mean value of Management Sciences (167.85) and Social Sciences (168.77) departments Thus the Null hypothesis "There is no significant difference between challenges in utilization of e-learning facilities faced by students of Management Sciences and Social Sciences departments" is failed to reject.

Objective 5: To assess gender based difference regarding challenges in utilization of e-learning facilities faced by students at university level.

H_{o3}: There is no significant gender based difference regarding challenges in utilization of e-learning facilities faced by students at university level.

Table 4.5 Gender Based Difference

Variable	Gender	N	Mean	t-value	Sig.
Individual	Male	305	57.63	1.098	.272
Challenges	Female	431	58.51		
Course	Male	305	39.83	2.235	.026
Challenges	Female	431	41.54		
Contextual	Male	305	29.80	2.599	.010
Challenges	Female	431	31.19		
Technological	Male	305	38.37	1.196	.232
Challenges	Female	431	39.17		
e-	Male	305	165.65	2.03	.042
learning	Female	431	170.42		

According to the table 4.5 there is a significant difference between the challenges of male and female students of universities. The result indicates that the mean value of female students (170.42) is higher than male students (165.65). Thus the Null hypothesis "There is no significant gender base difference between challenges in utilization of e-learning facilities faced by students of universities" is rejected.

CHAPTER 5

SUMMARY, FINDING, CONCLUSION, DISCUSSIONS AND RECOMMENDATIONS

In this chapter summary of the study is discussed along with the findings, conclusions, discussion and future recommendations. The details of the study is given below

5.1 Summary

The present study was descriptive in nature. The main aim of the study was to study the challenges in utilization of e-learning facilities faced by the students of university level.

The first objective of this study was to explore challenges in utilization of e-learning faced by the students of public sector universities. For this purpose the researcher used the model of (Andersson & Grönlund, 2009).

The second objective of the study was to explore the challenges in utilization of e-learning facilities faced by the students of private sector universities. For this objective same model was also used which have four challenges that are individual challenges, course challenges, contextual challenges, and technological challenges. As

per 1st and 2nd objective the data analysis was descriptive. These results were calculated through means. The 3rd objective was to explore challenges in utilization of e-learning faced by the students of public and private sector universities The 4th objective was to explore challenges in utilization of e-learning faced by the students of management sciences and social sciences of Islamabad universities. The 5th objective was to explore gender based difference between the challenges in utilization of e-learning facilities faced by the students of universities. As per the demand of 3rd,4th and 5th objective inferential statistics were used. Sub hypotheses were made and independent t-test was applied.

Null hypotheses were created in accordance with the research objectives in order to determine whether or not the present study's objectives were met. The current study's population includes both male and female students of management sciences and social sciences at all public and private universities in Islamabad. The sample size of the current study consist of public university that is N=375 and private university that is N=361. The sample was taken from 9 public universities and 4 private universities of Islamabad. The data was collected using a questionnaire designed on the basis of the theoretical framework. The Cronbach Alpha Coefficient was used to test the questionnaire's reliability using SPSS 21 version. A questionnaire was used to gather information. The data was collected by the researcher during his visits to the universities. SPSS was used to analyze and interpret the data once it was collected.

According to the findings of the current study, there is a considerable disparity in the problems that students at public and private institutions experience while using e-learning facilities. Students from other fields, such as management sciences and social sciences, experience distinct obstacles while using e-learning resources, according to the research. The survey also found that male and female students experience

different obstacles when it comes to using e-learning resources. There are also differences among the various age groups.

5.2 Findings

Results were drawn on the basis of data analysis. In detail findings were given below

Mean of Variables of challenges in utilization of e-learning facilities at university level i.e individual challenges (2.96), Course Challenges (2.8), Contextual challenges (3.03), and technological challenges (2.97). It is concluded that public sector universities mean fall in category of sometimes. The highest mean value is of contextual challenges which mean students of public sector are facing more contextual challenges.

Mean of Variables of challenges in utilization of e-learning facilities at university level i.e individual challenges (3.1), Course Challenges (3.02), Contextual challenges (3.09), and technological challenges (2.22). It is concluded that public sector universities mean fall in category of sometimes. The lowest mean value is of technological challenges which mean students of private sector are facing less technological challenges.

According to the table 4.3 there is a significant difference between the challenges of public and private universities. The result indicates that the mean value of private sector universities (172.23) is higher than public sector universities (164.79) which show that there is significant difference between the challenges in utilization of e-learning facilities faced by students of universities. Thus the Null hypothesis "There is no significant difference between challenges in utilization of e-learning facilities faced by students of public and private sector universities" is being rejected.

According to the table 4.4 there is no significant difference between the challenges of Management Sciences and Social Sciences departments. The result indicates that the mean value of Management Sciences (167.85) and Social Sciences (168.77) departments are almost the same which show that there is no significant difference between the challenges in utilization of e-learning facilities faced by students of Management Sciences and Social Sciences departments. Thus the Null hypothesis "There is no significant difference between challenges in utilization of e-learning

facilities faced by students of Management Sciences and Social Sciences departments" is being failed to reject.

According to the table 4.5 there is a significant difference between the challenges of male and female students of universities. The result indicates that the mean value of female students (170.42) is higher than male students (165.65) which show that there is significant difference between the challenges in utilization of e-learning facilities faced by students of universities. Thus the Null hypothesis "There is no significant gender base difference between challenges in utilization of e-learning facilities faced by students of universities" is being rejected.

5.3 Discussion

In Pakistan, the demand for university education is increasing at an incredible rate. To meet the rising demand, many solutions have been devised, including e-learning. E-learning is a flexible teaching technique that can accommodate virtually all qualified students seeking a university degree provided it is well-designed.

Unfortunately, the findings of this study indicated that, aside from the pandemic, e-learning is expanding slowly among Pakistan's public institutions in a normal condition, an issue created by the numerous obstacles that this approach to content distribution faces. This is not a problem specific to Pakistani colleges; this research backs it up by Innocent, & Masue, (2020). They discovered that students at many institutions had access to internet instructional resources that aided in the learning process in some way. Similar issues have been found to be hindering the acceptance and implementation of e-learning at institutions throughout South Asia. One of the most significant difficulties to teaching is human frailty. Most educators in Pakistan who help with openness, distance, and e-learning are clearly not well educated in open and lengthy reading as a delivery modality and are not used to teaching locally

online. Tarus (2011) discovered that postsecondary colleges in poor nations required a longer, more resourceful, and completely equipped internet connection. Inadequate resources and, in particular, the teaching brothers' apathy were considered as key barriers to the uptake of e-learning at Public Sector Universities. The poor adoption of e-learning is due to a lack of adequate human skills and ability. The lack of available internet bandwidth has also hampered the growth of e-learning at these institutions. Major infrastructural problems were discovered throughout this investigation, including the lack of Internet connectivity, technological inefficiency, and visual difficulties, which impede the complete acceptance of e-reading in the country's higher education institutions. In Pakistan, we found that educators are more concerned with loading learning resources onto e-learning platforms than with resisting online teaching due to a lack of training and overwork. Based on the outcomes of this study, it can be concluded that digital technology is significant for tertiary universities since it delivers greater time and cost savings than conventional or integrated teaching programmers when compared to traditional or integrated teaching programmers. With a broad coverage of an excellent delivery system, digital studies can boost university offerings. It can compensate for a lack of university-level teaching experience. Little john and foss (2010) shown in his study that digital learning allows students to replicate and assimilate the most recent material into their present knowledge of fresh concepts and the capacity of interaction to read. Sife's, et. al. (2007) found that the challenges of digital learning at tertiary universities in developing countries include a lack of training in the use of ICT tools and resources for e-content development, high technology costs, slow internet communication, and a shortage of ICT professionals in these regions.

Top institutions in Pakistan lack a full online learning environment, necessitating proper planning and online learning tools in order to adopt digital learning. According to studies, postsecondary colleges in poor nations demand more time, more money, and better-equipped infrastructure and internet access. Most undergraduates do not have access to technology, and many students in remote regions do not even have an internet connection, which is one of the most significant barriers to digital literacy for academics and university administration. Similarly, according to a research by Bates (2005), most tertiary colleges continue to utilize print materials as the language of instruction since students lack access to technology. The efficient use of available resources at the university, for example, decreases the cost of technology, increases the quality of technology, and the use of those resources or learning technology that distance students have in their hands, according to research. A careful examination of the issues raised reveals that all public institutions are in the midst of a serious financial crisis. Inadequate internet access, excessive workloads, poor ICT/computer skills, a lack of incentives, a shortage of PCs and/or laptops, and inadequate computer laboratories Most public colleges do not have the financial ability to invest in today's fast-paced computers, as revealed by university management managers. In higher education Quality Assurance (QA) is very important, in case e-learning the importance of QA is of great concern to all participants. The main reason electricity is hindering the successful implementation of e-learning. Users have to wait a long time for electricity to resume their e-learning activities. Alternative power systems can be used to overcome power shortages. However ICT infrastructure including the Internet was available as most respondents believe that infrastructure and Internet broadband are not problems for them to participate in e-learning activities as suggested by (Ahmed, Farid and Hussain, 2021)

E-Learning’s time and place flexibility attract more and more students to online education. However, many of them encounter serious challenges that prevent them from completing their courses successfully. Here are the 5 most common problems faced by students in eLearning and some suggestions on how to overcome them.

E-Learning, being the most recent influx of training is now having a reasonable show regardless of presenting difficulties for the two educators and understudies. While teachers need to place in serious work and time to plan the guidance, understudies need to furnish themselves with the specialized capability to decipher the course material. There are 5 basic issues looked at by understudies in eLearning classes and which should be tackled through legitimate drives for the understudies' future advantages.

Changing from conventional homeroom and up close and personal teacher preparing to PC-based preparing in a virtual study hall makes the learning experience unique for understudies. Their protection from change doesn't permit them to adjust to the web-based learning climate, though it sets aside effort for them to get acquainted with Course Management Systems (CMS) and the techniques for PC-based schooling. While aloof tuning in and notes taking are normal in a conventional study hall, online conversations or provoking a website page interest getting a move on. Understudies with a "conventional" mentality think that it is hard to adjust; in any case, they need to acknowledge the new learning conditions with a receptive outlook and heart. Understanding the advantages of eLearning and in any event, talking about them with their companions may alter this attitude and better get ready understudies for online classes.

Many students are not provided with the high bandwidth or the strong internet connection that online courses require, and thus fail to catch up with their virtual classmates: Their weak monitors make it hard to follow the Course Management System and their learning experience becomes problematic. Moreover, most of them live off campus and find it difficult to keep in tune with the technical requirements of the chosen course. Some of them don't even own computers and seek help in Learning Resource Centers for technical assistance. The only solution to this problem knows exactly what kind of technical support they will need for a certain course before enrolling in it, as well as properly equipping themselves for the course's successful completion.

Although students are generally tech-savvy, and thus able to manage computers well, lack of computer literacy is a major issue among students today. Many of them cannot operate basic programs such as Microsoft Word and PowerPoint and therefore are not able to handle their files. Furthermore, many students find fixing basic computer problems troublesome, as they do not know this area. However, technological proficiency is a must for following online courses, as it enables students to manage their assignments and courseware in an organized manner without struggling. Basic courses in computer literacy enhance students' knowledge in the field; having a fundamental knowledge of computer hardware would help them participate in online classes without interruptions and hindrances.

Using time effectively is a troublesome undertaking for E-students, as online courses require a great deal of time and escalated work. Besides, while it is generally grown-ups who lean toward electronic learning programs for their place and time adaptability, they seldom have the opportunity to take the courses because of their

different ordinary responsibilities. A normal timetable organizer would be a huge assistance to these students, as they could even set updates for their courses and tasks. Self-inspiration is an eLearning fundamental necessity; notwithstanding, numerous online students need it, causing them a deep sense of shock. In the wake of taking a crack at distance learning courses, numerous students fall behind and sustain surrendering, as troubles in taking care of an innovative medium likewise appear to be unrealistic. Understudies need to discover the inspiration to pursue the new instructive directions and appropriately prepare themselves for future difficulties in their schooling and vocations. Just an uplifting perspective will assist them with conquering the difficulties in eLearning; however this is difficult to rehearse, understudies need to comprehend that it is important to receive the eLearning's rewards later on.

Everybody has their learning style alongside their social impacts; the ones who are encouraged to utilize their learning style and mulling over social parts of people will perform better scholastically. To accomplish the best learning result, it is attractive to have a comprehension of understudies' learning styles. Online understudies' learning styles can be hazy, this has suggestions on how scholastics foster learning 2material. A few understudies learn through connecting, some lean toward learning through the visual show, and some by paying attention to directions and utilizing composed notes. This test has ramifications on the learning results and represents a significant issue for scholastics to comprehend the learning styles of their understudies in an e-learning climate. There are different showing styles; outstanding methodologies are pedantic, facilitative, and Socratic and the exploratory strategy (Islam et al, 2015). The pedantic is the conventional strategy that mostly includes addressing and is a lot of educator-focused where learning is included principally

through note-taking and paying attention to instructors. Customary techniques for instructing keep on utilizing the talk as a method for educating and a practical one where one scholastic can scatter information to an enormous crowd (Banning, 2005). However didactic can mean full responsibility of teaching on academics as it is strongly teacher-centered; the teacher is the knowledge expert, all the learning objects and knowledge flows from the teacher The facilitative learning moves away from strong teacher-centered learning to what is known as self-directed learning, where the academic uses various strategies by acknowledging students experience and learning styles to encourage the student to become independent learners. To be a competent academic to be a facilitator they have to be competent in their knowledge base, have confidence, authority and be empathic to students' needs and individual learning styles. The Socratic Method is heavily student orientated learning so students can think independently and various strategies can be used by academic such as quizzes, discussion, strong group work sessions with strong emphases on communicating with peers, self-assessment, and research to make student critical thinkers. However, not all students may able to reach this position of critical thinkers without proper guidance, encouragement, and nurturing. The time and effort spent nurturing students can be enormous (Banning, 2005). Researchers have pointed out that no particular learning style is dominant amongst students; therefore, teachers are expected to understand various learning styles to accommodate students (Mupinga, 2006). When a student has a strong preference for a particular learning style it becomes impossible for them to learn if materials and resources are not delivered using that particular method (Zapalska and Brozik, 2006). A popular method of identifying the learning style of an individual is the VARK questionnaire. This process identifies a learning style of a student and categorizes it as Aural, Read/Write, Visual and kinaesthetic.

Aural (A) refers to students who prefer to learn through receiving verbal instructions. Read/Write refers to the learning style of students who prefer reading instruction and writing notes as the best way to learn. Visual (V) are students who prefer the utilization of visual objects as a way to learn such as graphs, charts, and videos. Kinaesthetic (K) is when learners prefer to learn by a doing approach. It should be noted that a student may fall into two categories but one may be a stronger preference than the other (Zapalska and Brozik, 2006). A current challenge for academics in an e-learning environment is to understand the different learning styles of different students for better learning outcomes. The traditional method of learning may not be adequate in the modern-day classroom where e-learning technology is playing a major role in the delivery of education. In principal the key to understanding the student needs is to understand the diversity in the virtual class (Dalal, 2014). Researchers have pointed out various problems when instructors use e-learning technology. Phipps and Merisotis (1999) authored a 48-page report reviewing and examining research papers throughout the 1990s on the effectiveness of e-learning technology. They put forward recommendations to cover the gaps in research that require further investigation. They recommend that "there needs to be more emphasis on individual differences such as gender, age, educational experience, motivation and learning style". Implying current research on e-learning learning does not identify individual needs. This poses a question as to how instructors are coping with the technology to teach a variety of students with different educational needs and coming from different backgrounds. Commonly, students, lecturers, and institutions use a variety of different application platforms for learning and teaching, therefore they suggest that in the future "research should focus on the interaction of multiple technologies rather than the impact of single technologies" (p.3). Taylor (2002) describes e-learning as

exceptional for courses that require cognitive learning. However, for teachers dealing with cultural barriers, differences in student attitudes do not work well in the e-learning environment. Academic staff that is better trained will bear the fruits of higher student learning. However, if the teaching staff are not trained in using the e-learning technology and do not have a strong grasp of the operation of the technology then student learning is likely to suffer. Teachers must understand and recognize the individual learning styles of the many hundreds of students (how they learn and how they perceive) in the context of online education. It is important to convey and share the information with students (Zapalska, and Brozik 2006). For the hundreds of students who usually are not seen by academics in the e-learning environment, at present, the technology practice does not help such a scenario. Hannon and D'Netto (2007) state "instructors usually fail to take into account cultural differences when designing and delivering courses". He argues that because pedagogy and technology do not reflect the culture of the student, it reduces his or her learning outcome and the cultural differences affect their ability to work with e-learning technologies. The outcome is reduced because students of different languages respond differently to how things are organized in e-learning technologies and also students of different cultures have different abilities to work with e-learning technology. Although there are models and theories proposed to deal with individual and cultural learning differences in the e-learning environment, there is a greater urgency for content providers to design courses and materials that take into consideration these differences and "engages culturally diverse audiences" (Callaghan et al., 2008:). When a student has a preference for a particular learning style then it became difficult to learn other ways, which means academics must be aware of different styles and needs to design learning materials that enable students to learn. This is the most

important role of an academic. Therefore, understanding learning style is a critical consideration during course design and institutions should provide resources and training for academics to meet this challenge. However, this is a time-consuming and costly task, a lot of time and effort is required and the course material and students learning styles have to be assessed when a new student cohort joins. Assuming learning style isn't perceived, a chance of learning won't be accomplished and it is the main test to meet.

E-Learning is uplifting news, yet at its underlying stage, it represents certain dangers to understudies. Disposition change and innovative education would help them acquire trust to prevail in their courses with an inspirational tone.

Lacking preparation implies inadequate advancement of clients for e-learning selection. The discoveries uncover that university clients of e-learning offices are not enough prepared which thusly influences the reception of e-learning offices; "absence of ability and we are still new to a few". "Absence of satisfactory preparing". This was upheld by members. It is clear from the discovering which is 46.7% of the respondents' insights that the speakers are deficiently prepared; subsequently, consistent preparation ought to be done to address this restraining factor. This finding proposes that the motivation behind why most teachers don't use e-learning offices is a direct result of the restricted information on the best way to utilize the offices. In their examination, Nbina et al. (2011) tracked down that a few speakers have no information on ICT offices and along these lines, avoid using them for educating exercises. Likewise, Asogwa (2011) tracked down that the significant difficulties for enhancing e-acquiring are the absence of imperative abilities, the educators are not as

talented and intensive in the arrangement, activity, and uses of the bundles as they should be. Numerous instructors are as yet bad at driving PCs their PCs, making and sending messages, getting to sends, joining records, and those other fringe issues. Thusly, Universities should attempt to lead periodical pieces of training for their staff. Currently, almost all universities, educational institutions, and schools are using different online learning management systems. Universities are also using the LMS platform.

As we see now on the planet, the COVID-19 pandemic is driving instructive establishments like colleges to move quickly to remove and web-based learning. Coronavirus has constrained colleges throughout the planet to embrace internet learning. We are presently in a highly sensitive situation and should respond with various and accessible methods of learning, for example, e-learning frameworks and versatile learning applications. Web-based learning isn't new to students, nor is distance learning. Be that as it may, COVID-19 is restoring the need to investigate internet instructing and learning openings.

E-learning incorporates a variety of computer and technological features including online-based learning also called online learning. Ong, Lai and Wang (2004) highlight e-learning as a teaching lesson or learning practice introduced using electronic technology including the Internet, intranet and extranet. Markus and Silver (2008) thinks of e-learning as a teaching process that is integrated with digital content through networking and communication services and teacher support in a remote learning environment. Therefore, technology and pedagogy are key elements of e-learning (Moore et al., 2011), where some definitions are closely related to technical aspects; and others focus on teaching methods of learning processes using different

teaching strategies (Hadjerrouit, 2007). These many types of e-learning, particularly in developed and developing nations, provide a variety of problems and obstacles spanning from technology to instruction. As a result, public institutions are dedicated to providing computerized laboratories with enough bandwidth for a large number of students, as well as competent and qualified personnel and experts. They're also insufficient for equipping teachers with the necessary e-learning and delivery abilities.

5.4 Conclusion

This study was conducted to assess and compare the challenges in utilization of e-learning facilities university students. The first objective was targeted to assess the challenges of public sector universities. From finding N0.1 it was concluded that students of public sector universities face challenges in utilization of e-learning facilities. It is concluded that public sector universities mean fall in category of sometimes. The highest mean value is of contextual challenges which mean students of public sector are facing more contextual challenges.

The second objective was targeted to assess the challenges in utilization of e-learning facilities of students in private sector universities. The lowest mean value was of technological challenges which mean students of private sector was facing less technological challenges. It is concluded that students of private sector universities was facing less technological challenges than public universities students.

The aim of this study was to compare the challenges in utilization of e-leaning facilities at public and private sector universities. From finding No.3 the researcher concluded that a statistically significant difference was found between students of public and private sector universities. The result indicates that the mean value of private sector universities is higher than public sector universities. It was observed

that the e-learning facilities available at public universities are better than private universities.

From finding No.4 the researcher concluded that statistically no significant difference was found among students of Management Sciences and Social Sciences departments. The result indicates that the mean value of Management Sciences and Social Sciences departments are almost the same. It was observed that the challenges faced by students of both faculties were same.

From finding No. 5 the researcher concluded that a statistically significant difference was found between male and female students of universities. The result indicated that the mean value of female students is higher than male students. It was observed that male students showed more positive and enthusiastic behavior towards the use of e-learning facilities

5.5 Recommendations

1. Proper timetable may be made by universities faculties and properly followed by teachers and students like traditional classroom.
2. Universities may increase number of computer labs and make sure computer are virus free. Free internet service may be available in all universities foe students.
3. Course and curriculum designers may work on making new curriculum for only e-learning classes at university level.
4. Curriculum designers and university faculty may revise process of assessment and evaluation according to e-learning classes.
5. Female students may be trained to participate actively in e-learning sessions.

6. New software and interface design may be made by software designers according to pedagogical model of e-learning course to facilitate the students and teachers.

7. IT departments of universities may train the teachers for developing e-learning materials, as well as help them to improve their feedback skills and how to support students in e-learning classes.

8. Universities may provide equipment and facilities in computer labs for conduction of e-learning classes.

9. All universities' departments may encourage students to share their research materials on their e- library website, to promote multi- disciplinary research.

10. University may arrange different workshops and training sessions so that students and teachers may receive proper training in the usage of e-learning facilities. It may be made mandatory for teachers to take refresher training and workshops on how to utilize e-learning facilities.

5.6 Future Recommendations

- Conduct more studies on the different challenges of e-learning future research is needed to deepen the analysis of these challenges. Educate teachers about the importance of considering their students learning patterns and their role in achieving effective e-teaching.
- It is also recommended that this study is only conducted in federal area and was limited to only university level. This same study may be conducted in other areas as well as on other educational levels also.

- The government may be more forceful in its control of private university administration and assist them in preparing for the use of ICT and e-learning in their institutions. Furthermore, even with COVID-19, private universities may be proactive in addressing the problems outlined in this study and capitalizing on the potential that e-learning provides schools. Furthermore, efficient government policies are necessary to maintain functional social infrastructures that can withstand unanticipated crises.
- Universities administrative and advisory services at regional institutions need to be improved to ensure that students with various problems have easy access to these services. Universities must ensure the production and delivery of adequate learning materials.
- There is no way any university can arrange internet access in rural areas. However, universities can work together to set up local 'hubs' where students can look to access online resources. Universities can create well-equipped small campuses in all regions that can be digitally funded by a university campus to assist teachers and students.

5.7 limitations of the Research Study

- The research was only restricted to under graduate students because of large population.
- Only the questionnaire had been used for data collection from the students.

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APPENDIX A

NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF EDUCATION

ML.1-4/2020/Edu

Dated: 20-01-2020

To: **Ghulam Zehra,**
1508-MPhil/Edu/SI8

Subject: **APPROVAL OF MPHIL THESIS TOPIC AND SUPERVISOR**

1. Reference to Minute Sheet No. ML.1-2/2020-Edu dated 02-1 -2020, the Higher Authority has approved your topic and supervisor/s on the recommendation of Faculty Board of Studies vide its meeting held on 15th Oct 2019.

a. **Supervisor's Name & Designation**
Dr. Shazia Zamir
Assistant Professor, Department of Education
NUML, Islamabad.

b. **Co-Supervisor's Name & Designation**
Dr. Farkhanda Tabbassum
Contract Assistant Professor, Department of Education
NUML, Islamabad.

c. **Topic of Thesis**

A Study of Challenges in Utilization of E-Learning Facilities at University Level

2. You may carry out research on the given topic under the guidance of your Supervisor/s and submit the thesis for further evaluation within the stipulated time. It is to inform you that your thesis should be submitted within the prescribed period by **31st Jan 2021** positively for further necessary action please.

3. As per policy of NUML, all MPhil/PhD theses are to be run through Turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis prior run by any other individual.

4. Thesis is to be prepared strictly on NUML's format that can be taken from the MPhil & PhD Coordinator, Department of Education.

Telephone No: 051-9265100-110 Ext: 2090
E-mail: mdin@numl.edu.pk

Dr. Hukam Dad Malik
Head,
Department of Education

Cc to:
Dr. Shazia Zamir
Dr. Farkhanda Tabbassum

Appendix B

Certificate of Validity

A STUDY OF CHALLENGES IN UTILIZATION OF E-LEARNING FACILITIES AT UNIVERSITY LEVEL

By Ghulam Zahra

M.Phil scholar, Faculty of Education National University of Modern Languages H-9, Islamabad, Pakistan

Subject: Validation of Research Instruments

It is stated that the research instrument, developed for research above-titled, is according to the objectives and theoretical frame work of the research. The research instrument is valid for data collection after certain modifications.

Name Dr. Wajeeha Shahid

Designation Assistant Professor

Institute NUML, H-9, Islamabad.

Signature Wajeeha

Date 9th February, 2021.

Appendix B

Certificate of Validity

A STUDY OF CHALLENGES IN UTILIZATION OF E-LEARNING FACILITIES AT UNIVERSITY LEVEL

By Ghulam Zahra

M.Phil scholar, Faculty of Education National University of Modern Languages H-9, Islamabad, Pakistan

Subject: Validation of Research Instruments

It is stated that the research instrument, developed for research above-titled, is according to the objectives and theoretical frame work of the research. The research instrument is valid for data collection after certain modifications.

Name Dr. Saira Nudrat

Designation AP

Institute NUML

Signature

Date 29-10-2020

Appendix B

Certificate of Validity

A STUDY OF CHALLENGES IN UTILIZATION OF E-LEARNING FACILITIES AT UNIVERSITY LEVEL

By Ghulam Zahra

M.Phil scholar, Faculty of Education National University of Modern Languages H-9, Islamabad, Pakistan

Subject: Validation of Research Instruments

It is stated that the research instrument, developed for research above-titled, is according to the objectives and theoretical frame work of the research. The research instrument is valid for data collection after certain modifications.

Name Dr Yasir Hussain

Designation Assistant Professor

Institute NUML, ISB

Signature

Date March 5, 2020

APPENDIX- C

This questionnaire is about challenges which students face during utilization of e-learning facilities. E-learning means learning conducted via electronic media, typically on the Internet. Typically, e-learning is conducted on the Internet, where students can access their learning materials online at any place and time.

All information you provide will be kept strictly confidential. Your responses will not be released to any authority to be used for any other purpose.

University **Public** **Private**

Gender **Male** **Female**

Faculty **Management Sciences** **Social Sciences**

Age ☐

Rate on a scale from 1 to 5, where 1= Never, 2= Rarely, 3= Sometimes, 4=Often, 5=Always

Item No	Statements	Never	Rarely	Sometimes	Often	Always
	Individual Challenges					
1	E-learning facilities increases my motivation in learning					
2	I feel more competent in learning due to e-learning facilities.					
3	Learning through e-learning facilities is more time taking then traditional learning.					
4	I find it difficult to manage time with e-learning schedule which increases my learning stress.					

Item No	Statements	Never	Rarely	Sometimes	Often	Always
5	I have financial difficulties in taking e-learning courses/lectures					
6	I face lack of financial support in utilization of e-learning facilities.					
7	I feel confident in utilization of e-learning facilities.					
8	I feel assured in completion of e-learning course without any help of teacher/instructor.					
9	E-learning facilities affects (positive/negative) my academic performance.					
10	I find it hard concentrating on study using e-learning facilities.					
11	I am skilled at using computer and internet to access e-learning facilities.					
12	E-learning promotes the development of students' computer skills through learning technology.					
13	My family provides me suitable learning environment					
14	My friends help me in the use of e-learning facilities.					
15	My teacher combines digital instruction with face to face interaction					
16	My teacher is well-informed in using e-learning sources for our learning					
17	The teacher provides online support to students when needed.					
18	It is easy to get teacher feedback on my work through e-learning facilities					
19	E-learning course uses learner/student centered approach.					

Item No	Statements	Never	Rarely	Sometimes	Often	Always
	Course Challenges					
20	Course content available online is interactive with traditional learning.					
21	E-learning faces lack of reliability of online assessment process.					
22	E-learning course uses learner/student centered approach.					
23	E-learning course is interesting for students					
24	E-learning course is up to date for students.					
25	E-learning course content is relevant and accurate with future employers' need					
26	There is proper sequence of assessment and evaluation in e-learning course					
27	There is open choice for students between self-studies and group studies in e-learning course.					
28	E-learning course lack the adability of course content according to local culture, language and religious believes.					
29	E-learning course have appropriate example and images related to local culture.					
30	I am allowed to learn at my own pace through e-learning facilities.					
31	I am allowed to choose the medium of content through e-learning facilities.					
32	I am allowed to take online examination when and where I want.					
33	Technical staff provides support to students for e-learning.					

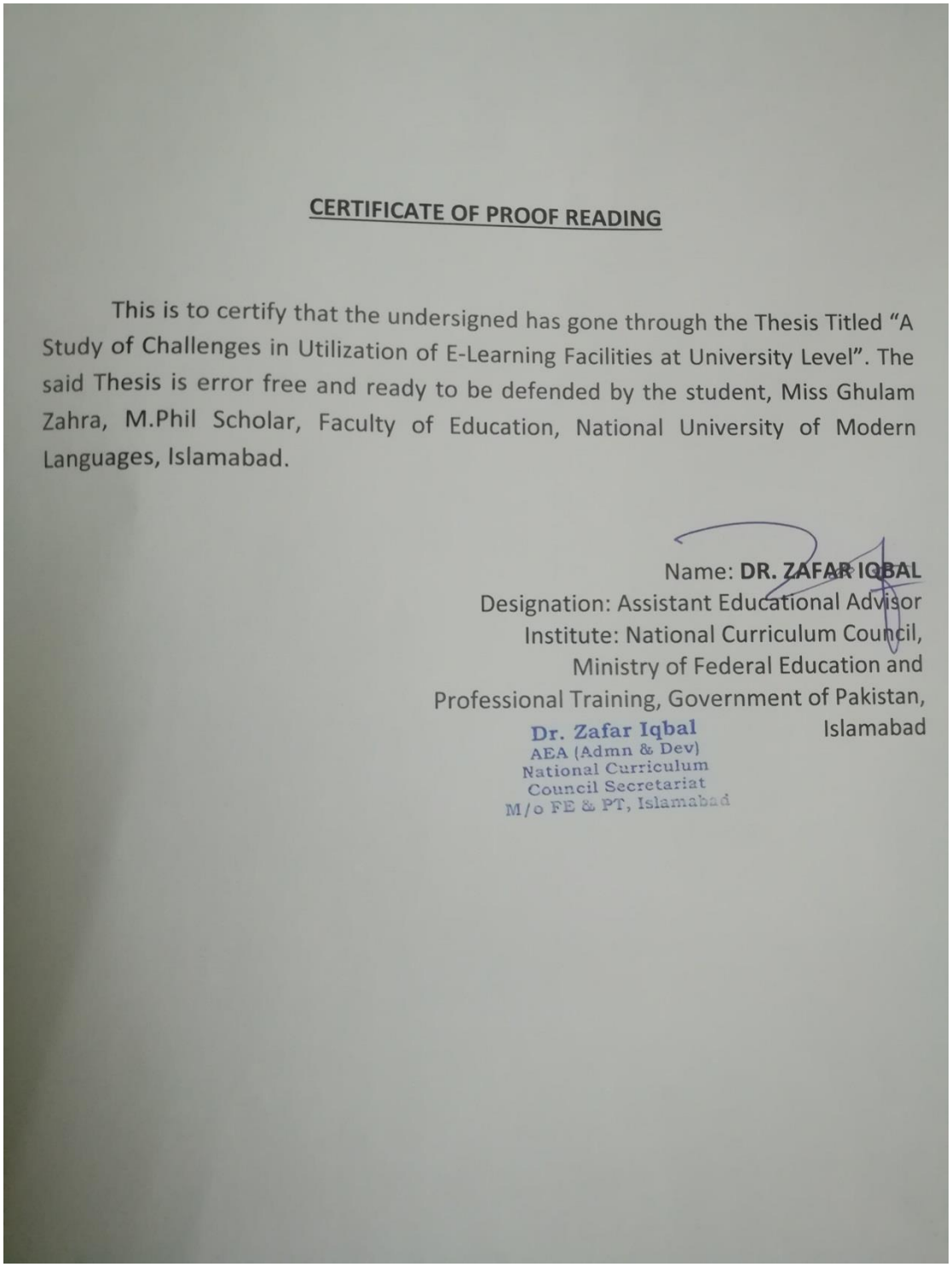
Item No	Statements	Never	Rarely	Sometimes	Often	Always
	Contextual Challenges					
34	In e-learning programs research and evaluation repositories are available.					
35	I can access digital libraries for e-learning					
36	Different aspects of knowledge are shared through e-learning					
37	High cost of maintaining electronic gadgets discourages the use for e-learning facilities					
38	Financial support is sufficient for development and completion of e-learning projects.					
39	My teachers are trained to use e-learning sources.					
40	I prefer more face to face interaction of teacher and learner.					
41	Teachers have positive attitudes towards the use of e-learning facilities					
42	Students have positive attitudes towards the use of e-learning facilities					
43	Rules and regulations for provision of e-learning facilities are considered in my universities					
	Technological Challenges					
44	There exist reasonably fast and constant Internet services in my university.					
45	Mode of Internet access from outside the university (e.g. Dial up, ADSL, etc.) is available.					
46	I can easily download the web content for e-learning					
47	There are sufficient computers in the computer labs in my university for e-learning.					

48	I can easily access e-learning system in my university					
49	Use of e-learning is costly in terms of resources.					
50	High cost of purchasing relevant materials online discourages e-learning usage.					
51	Software and interface designed are according to students learning needs					
52	Software and interface designed are according to pedagogical model of e-learning course					
53	Poor power supply affects the use of electronic devices for teaching and learning.					
54	E-learning technology is more successful when it is part of students' home environment.					
55	I can use computer in my university with my own user name and password					
56	Viruses in university computers are great threat to own work					

APPENDIX-D

Name of University	Sector
Air University, Islamabad	Public
Allama Iqbal Open University, Islamabad	Public
Bahria University, Islamabad	Public
Capital University of Science and Technology, Islamabad	Private
COMSATS University, Islamabad	Public
Foundation University, Islamabad	Private
Institute of Space Technology, Islamabad	Public
International Islamic University, Islamabad	Public
Muslim Youth University, Islamabad	Private
National Defense University, Islamabad	Public
National University of Computer and Emerging Sciences, Islamabad	Public
National University of Modern Languages, Islamabad	Public
National University of Sciences & Technology, Islamabad	Public
National University of Technology, Islamabad	Public
Pakistan Institute of Development Economics (PIDE), Islamabad	Public
Pakistan Institute of Engineering and Applied Sciences (PIEAS), Islamabad	Public
Qauid-e-Azam University, Islamabad	Public
Riphah International University, Islamabad	Private
Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad	Private
Shifa Tameer-e-Millat University, Islamabad	Private
Federal Urdu University for Arts, Science & Technology, Karachi	Public

APPENDIX E



CERTIFICATE OF PROOF READING

This is to certify that the undersigned has gone through the Thesis Titled "A Study of Challenges in Utilization of E-Learning Facilities at University Level". The said Thesis is error free and ready to be defended by the student, Miss Ghulam Zahra, M.Phil Scholar, Faculty of Education, National University of Modern Languages, Islamabad.

Name: **DR. ZAFAR IQBAL**
Designation: Assistant Educational Advisor
Institute: National Curriculum Council,
Ministry of Federal Education and
Professional Training, Government of Pakistan,
Islamabad

Dr. Zafar Iqbal
AEA (Admn & Dev)
National Curriculum
Council Secretariat
M/o FE & PT, Islamabad

APPENDIX F

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970