







Studying the need of digital **academic institutes in Pakistan** 

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### Abstract

A digital academic institution takes place virtually, although it accomplishes most of the same responsibilities as a conventional institute. This learning occurs online and is facilitated by information and communication technologies (ICTs). This research paper studies the attitude/ perception of students towards digital academic institutes. Intermediate, undergraduate, postgraduate and professional certification students participated in the survey to find their perceptions about online educational institutes in Pakistan. The study's findings revealed that, while digital education in Pakistan has advanced tremendously since the beginning of the Coronavirus pandemic (COVID-19), however, to reach the ideal situation, there are still considerable milestones to achieve. The majority of the students want to have online institutions; nevertheless,

they do not want to enrol themselves in them owing to their terrible experience especially during COVID-19. The key concerns encountered by students were absence of availability to adequate internet connectivity, professors failing to deliver their lectures in time, non-existence of a proper system to invigilate students during online exams, and presence of inadequate technological system for online classes. Furthermore, more than 40% of the survey participants selected online education as their preferred educational institution approach. According to them, education should not be "one size fits all." One of the main reasons these students give while choosing online institutes is that they feel it provides a more personalized learning experience, assuring that every individual can succeed.

### **Research Context**

Education is the foundation to national growth. It conveys a sense of duty in the community. People who have received any sort of education not only understand their responsibilities, but also know how to exercise their national, social and individual rights. (Ahmad, Ali and Khan, 2014) However, not everyone is able to have education due to several reasons, such as unavailability of good educational institutes, sufficient resources or time to receive education in conventional academic institutes. (Larreamendy-Joerns and Leinhardt, 2006)

Furthermore, education has provided knowledge for long-term survivability and economic progress for many generations. Even though the brick & mortar educational structures have survived and are still evident in the landscape, the students studying in traditional academic institutions have evolved with the period. Students nowadays are dissatisfied with learning and teaching methodologies that do not use information and communication technologies (ICTs). (Bell and Fedeman, 2013) They consider such approaches monotonous and uninteresting. These students have been called "digital natives," referring to a generation that was born and raised in an atmosphere saturated with ICTs. These digital native learners no longer value the efficient and promising teaching and learning techniques of the past. (Jing Lei, 2009)

This paper fills the gap in literature by documenting the students' perceptions of digital academic institutions, as well as their attitudes toward these institutes and intent to utilize the implemented online-based educational system for the benefit of both the Government of Pakistan and the educational institutions which would ultimately result in increased returns from the technological investments in education. Distance education is an experience with the goal of acquiring certain information, skills, and perspectives. It is a paradigm transition from assisted individual study to interactive digital education. (Kirschner, Valcke and Sluijsmans, 1999) Digital Academic Institutes are based on the distance education that include students' convenience and flexibility, communication facilitation amongst students, more adaptation to a student's needs, a larger diversity in student learning experience using ICTs, as well as nonverbal presentation of educational content. Video interaction provides video and auditory content that the user controls and can be stopped and reversed to view again. E-learning offers distance learning and flexible learning; however, it may also be used in combination with face-to-face instruction, in which case the phrase Blended learning is widely applied. (Amani, 2014)

Numerous universities and colleges worldwide are now offering totally digital or hybrid/blended programs that incorporate online learning with face-to-face teaching by using ICTs such as Zoom, Google Classroom and Microsoft Teams or by efficient learning management system (LMS). Moreover, Some private online education platforms are also emerging in reaction to students' technological expectations in Pakistan, such as nearpeer.org and campus.pk. However, according to Rehman and Khan (2021) Covid-19 has been a catastrophe for all social, economic, and political systems across the globe. The existing system's status quo has been seriously questioned. One of its most impacted sectors is education. It forced the world's school system to close for roughly a year. In spite of that, advanced nations have switched from traditional to online schooling. Third-world nations, like Pakistan, were the worst hit since they lacked the necessary infrastructure for online schooling at any point throughout the Covid-19 epidemic.

At this time, the adoption of ICTs is inevitable in education; but, owing to Pakistan's inadequate funding for education (Abbas, Ahmed, Khalid and Yasmeen, 2017), no particular funds are allotted for advanced technologies and ICT projects in the field of education (Kayani, 2005). Following the closure of physical academic institutions throughout the nation during COVID-19, all educational institutions in Pakistan were instructed to offer online education using e-learning and learning management system (LMS) (Ali, 2020). Because of the absence of e-learning and LMS, the majority of academic institutions, especially colleges and schools were unable to conduct their online classes for a brief period. Only a handful of the country's top colleges and universities were able to begin offering online classes quickly.

The majority of Pakistan-based e-learning research work has been undertaken in a typical circumstance and environment. (e.g., Ahmad, Ali, and Khan, 2014; Abbas, Ahmed, Khalid, & Yasmeen, 2017; Ali and Ahmad, 2011; Kayani, 2005), where e-learning was just a non-mandatory means of enhancing the teaching and learning cycle, and ICTs were used by just a few major academic universities. Certain Pakistani academic studies have shown good distance learning outcomes in the past. Ali and Ahmad (2011) concluded that, in distance education, there is good contact between instructors and learners, the curriculum is well-designed as well as up-to-date, the teachers are devoted, and they are educated in the necessary skills and expertise. Nevertheless, the current scenario is quite different from traditional physical learning programs since many students have experienced online education during the COVID-19 and would like to incorporate it into their daily lives.

Several recent researches have looked at the problems and potential of e-learning/digital learning during pandemic (Mailizar, Almanthari, Maulina and Bruce, 2020). Researchers are attempting to investigate the benefits and drawbacks of modern e-learning projects from the viewpoints of diverse stakeholders. Mailizar et al., (2020) did research on this topic and stated that students' views matter on this subject and that future studies should look into students' perspectives on digital learning to see what obstacles they experience. More study is required to investigate students' difficulties while using e-learning to achieve their learning objectives. Furthermore, it was advised by Basilaia and Kvavadze (2020) that future research studies should focus on the quality of online learning.

### **Research Aim:**

This study aims to determine:

To know the need of digital academic institutes in

Pakistan from students' perspectives To find the students' opinions about to what extent digital academic institutes can improve or ease their life

# **Research Design**

#### Sample:

The primary goal of this study was to discover students' overall sentiments regarding digital academic institutes. The study's sample size was 360 students from more than 57 universities and colleges of Lahore, Pakistan, including 115 female and 245 male participants. 73.6% (n = 265) respondents were between in the age group of 16 to 22, while 26.4% (n = 95) respondents were between in the age group of 23 to 30 out of the total 360 students. The participants included intermediate (N = 89, 24.7%), undergraduate (N = 176, 48.9%), postgraduate (N = 65, 18.1%) as well as Professional certification (N = 30, 8.3%) students. All of the students that took part in the study were currently studying in online courses or had completed one of their previous semesters digitally.

#### Survey:

The questionnaire included combination of open-ended and closed-ended questions concerning students' perceptions of digital academic institutions, as well as their attitudes toward these institutes and intent to utilize the implemented online-based educational system. The questionnaire was given to students at Government College University Lahore (GCUL) in Pakistan as a pilot test. Based on their suggestions and ideas, appropriate adjustments were made. It was then distributed among a cohort of over 400 intermediate, undergraduate, graduate, and postgraduate students from more than 17 colleges (i.e., Punjab College, Concordia College, Government Colleges, etc.) and 40 universities (i.e., University of the Punjab, University of the Central Punjab, Government College University, The Institute of Chartered Accountant of Pakistan, University of Health Sciences Lahore, Lahore University of Management Sciences, etc.) of Lahore, a metropolitan city in a developing country in South Asia. The students were able to fill out the surveys in their spare time. Also, there was no chance of the survey's progress being lost as students' progress was saved on their email server, resulting in a 90 percent response rate.

### Analysis:

The results collected via online survey were examined and expressed in percentages based on the frequency of common student replies. The Likert scale was used to gather demographic information of the participants and is expressed in the percentage of participants' responses.

# **Key Findings and Discussion**

#### **Results:**

About 71% (n = 256) students said they have proper internet connection (Landline Internet/ WIFI), 17.5% (n = 63) students said they have limited internet availability whereas nearly 11% (n = 41) said they do not have internet connectivity through their mobile phone or portable device.

While responding to the question of whether there is need of the Digital Academic Institutes implemented by the ICTs, 81% of students felt the need for online institutions. 83% of respondents believed that having the facility of digital academic institutes can ease their life. While almost 85% of students agreed that having the facility of digital academic institutes can help them in their academic studies. However, only 41% of students chose online institutions over conventional institutions, while the majority of the students (59%) chose conventional institutions due to their bad experience of online education especially during pandemic as their encounter with online education during COVID-19 did not meet their learning expectations. Many students prefer online education and they gave reasons as they have access to their lectures 24/7, are cost-friendly; students don't have to pay tons of money to get

a degree and don't have to travel to their classes. They can go to class at the time which is suitable for them, day or night, which will be flexible for many students.

The students expressed their dissatisfaction with the system, not because they did not want to be a part of online education, but because they had better expectations with the online education system which could not be provided during COVID-19, and which they criticized for its inefficiency and lack of value. They expressed their disappointment with the unprofessional manner in which they received their final term papers through WhatsApp groups. They indicated that their fellow classmates were cheating in exams since there was no mechanism in place to monitor them while conducting paper online. Furthermore, teachers were not showing up to take their classes in their short online education period during COVID-19. Many students also indicated that they were not benefiting from online learning as exams are primarily based on summative rather than formative types, limiting their ability to be innovative and creative. Teachers, too, were unprepared for this kind of situation.

Attitudes	No. (%) *
Do you feel the need of digital academic institutes?	
Yes	291 (80.8)
No	43 (11.9)
Not Sure	26 (7.3)
Do you believe that having the facility of digital academic institutes can ease your life?	
Yes	300 (83.34)
No	30 (8.33)
Not Sure	30 (8.33)
Do you agree that having the facility of digital academic institutes can help you in your academic studies?	
Strongly Agree	136 (37.8)
Agree	171 (47.5)
Not Sure	32 (8.9)
Disagree	13 (3.6)
Strongly Disagree	8 (2.2)
If you are given a choice, which mode of education you would choose?	
Online Education	145 (40.3)
Conventional Education (On-Campus presence is mandatory)	215 (59.7)
If you have chosen online education in the previous question, what reason for choosing it?	was the
Easy and 24/7 access to lectures	125 (34.7)
No traveling involved	75 (20.8)
Cost Friendly	67 (18.6)
Did not choose	215 (59.7)
Others	6 (0.16)

\*Percentages based on the number of respondents answering the question.

Table 1: Students Attitudes Regarding Digital Academic Institutes

# **Discussion:**

The majority of the participants expressed hesitation regarding online/digital learning. Their experience with online education during COVID-19 did not meet their learning expectations. Absence of access to adequate internet facilities, nonpunctuality of lecturers to deliver their lectures, non-existence of a suitable mechanism to invigilate students during the online exams and presence of inadequate technology were among the primary issues experienced by students. The majority of the students want to have online institutions; nevertheless, they do not want to enrol themselves

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in it owing to their terrible experience. These students believe that, although digital education has progressed significantly since the beginning of the COVID-19 outbreak, however, there is still a long way to go in terms of advancement.

According to Thomas, Khan and Ahmad (2022), a third-world nation like Pakistan lacks the necessary infrastructure and technological support in institutions and homes to enable virtual schooling. Owing to the restricted resources of academic institutes of Pakistan, only a few educational institutions were able to establish efficient online learning during the pandemic. Computer literacy is extremely important for students since it provides them with key computer abilities. Today's students require proper digital skills that are necessary for survival in an information-rich society. (Tabassum, Akram and Moazzam, 2022)

Motivation is also necessary for distance learning, which is one of the less addressed aspects of online education. In conventional educational institutes, students frequently participate in academic activities because of their in-person interaction with the teacher and fellow students. Students stated that traditional classroom learning is more motivating than online learning. However, some students were quite confident that they could organize their study time properly and complete assignments on time if they were enrolled in distance learning programs.

Moreover, more than 40% of students chose online education as their preferred educational model. They feel that education should not be one-sizefits-all proposition. One of the major justifications these students give for choosing online learning is that they believe it delivers a more individualized learning experience, ensuring that each student can succeed. These students expect from digital educational institutes to employ personalized teaching techniques and technology that fulfils students' needs, abilities, limitations, and styles of learning. They expect that this system should enable individuals to study within their own comfort without worrying about falling behind or moving too rapidly.

# **Conclusion:**

Digital education is here to stay and is highly expected to rise in the coming years. This survey clearly reveals that most students require online educational institutions; unfortunately, they are reluctant to enrol because of their negative experience of it especially during COVID-19. Students faced many challenges including a lack of appropriate internet connectivity, instructors not appearing to take their online classes, lack of a proper system to invigilate students during online tests, and inefficient technology. We can confidently forecast that digital education will continuously increase its influence on education through a dynamic process of restructuring, improving, and reforming. It is highly unlikely to replace conventional educational institutions, but, for sure, these online platforms can serve as a vital alternative. However, digital education is gaining popularity due to its accessibility, versatility, and affordability, particularly among those who would otherwise be unable to get an education due to physical distance, scheduling problems, or unaffordable expenses.

# **Policy Recommendations**

The following propositions are recommended in consideration of the results and conclusions of the study. The research demonstrates that existing online educational systems are insufficient to satisfy students' learning expectations; thus, significant efforts should be made for the continuous enhancement of online technology that creates dynamic learning possibilities for students through distance learning, for example:

- Government of Pakistan (GoP) should introduce new policies for the implementation of quality online education and advancement of current implemented online educational techniques such as increasing the budget of the Higher Education Commission (HEC), particularly to equip educational institutions with good online education infrastructure.
- 2. There should be a separate body under HEC which is to be given the mandate to regulate online educational institutes. This body should help all educational institutions build their own infrastructure for digital education and help them in continuous up-gradation of the implemented system.
- 3. Online education is becoming more popular, particularly among those who would otherwise be unable to acquire education due to geographical distance, scheduling conflicts, or prohibitive expenses. Stakeholders should look into this and take initiatives to create new digital academic institutes.

- 4. GoP should subsidize laptops and internet packages for students enrolled in distance learning programs. GoP should make arrangements with telecom companies to provide free or almost free internet access to apps like Zoom, Microsoft Teams, etc.
- 5. HEC should make regulations for educational institutions to meet quality standards for online education, such as invigilating services for online exams like ProctorU. (ProctorU is a secured, real-time, online proctoring service that enables students to give their exams at home. It is a helpful alternative for students enrolled in distance learning programs. Students must use their microphone and webcam while giving exams using the ProctorU service.)
- 6. The HEC should require strict criteria about basic computer literacy for students to meet if they want to enrol in a distance learning program. HEC should have a limit on maximum number of students for each online session/class.
- Educational institutions should give training to teachers for online classes. There should be proper workshops and courses for teachers that the HEC requires in order to take online classes.
- It should be mandatory for students to use webcam to take online classes so that teachers can know whether the students are not doing anything other than taking lectures.

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# References

Ahmad, I., Ali, A., Khan, I. and Khan, F.A. (2014) 'Critical Analysis of the Problems of Education in Pakistan: Possible Solutions', International Journal of Evaluation and Research in Education, 3(2), pp.79-84. doi: https://doi.org/10.11591/ijere.v3i2.1805.

Larreamendy-Joerns, J. and Leinhardt, G. (2006) 'Going the Distance with Online Education', Review of Educational Research, 76(4), pp. 567–605. doi: https://doi.org/10.3102/00346543076004567.

Rehman, A.U. and Khan, B. (2021) 'Challenges to online education in Pakistan during COVID-19 δ the way forward', Social Science Learning Education Journal, 6(07), pp.503-512.

Bell, B. S., & Federman, J. E. (2013) 'E-learning in postsecondary education', The Future of Children, 23(1), 165–185. doi: https://doi.org/10.1353/ foc.2013.0007.

Lei, J. (2009) 'Digital Natives as Preservice Teachers', Journal of Computing in Teacher Education, 25:3, 87-97. doi: https://doi.org/10.1080/10402454.2009.10 784615.

Al-Arimi, A.M.A.K. (2014) 'Distance learning', Procedia-Social and Behavioral Sciences, 152, pp.82-88. doi:https://doi.org/10.1016/j. sbspro.2014.09.159.

Abbas, W., Ahmed, M., Khalid, R., & Yasmeen, T. (2017) 'Analyzing the factors that can limit the acceptability to introduce new specializations in higher education institutions', International Journal of Educational Management, 3(4), pp. 530-539. doi: https://doi.org/10.1108/IJEM-06-2016-0139

Jaffry S. W. u. Q. and Kayani, U. R. (2005) 'FOSS Localization: A Solution for the ICT dilemma of developing countries', IEEE. In 2005 Pakistan Section Multitopic Conference (pp. 1-5). doi: https://doi.org/10.1109/INMIC.2005.334488. Ali, N.U. (2014) ' Students disappointed with online teaching system amid COVID-19', Daily Times, 2 April. Available at: https://dailytimes.com. pk/587446/students-disappointed-with-onlineteaching- system-amid-covid-19 (Accessed: 27 April 2022).

Ali, A., & Ahmad, I. (2011) 'Key factors for determining students' Satisfaction in distance learning courses: A study of Allama Iqbal Open University', Contemporary Educational Technology, 2(2).

Mailizar, Almanthari, A., Maulina, S., and Bruce, S. (2020) 'Secondary School Mathematics Teachers' Views on E-learning Implementation Barriers during the COVID-19 Pandemic: The Case of Indonesia' Eurasia Journal of Mathematics, Science and Technology Education, 16(7), em1860. doi: https:// doi.org/10.29333/ejmste/8240

Basilaia, G., & Kvavadze, D. (2020) 'Transition to online education in schools during a SARS-CoV-2 coronavirus (Covid-19) pandemic in Georgia' Pedagogical Research, 5(4), 1-9.

Thomas, M., Khan, A. H. and Ahmad, N. (2022) 'Way forward for post pandemic online teaching: A case of higher education in Pakistan', Journal of Humanities, Social and Management Sciences (JHSMS),3(1), pp. 1–15. doi: https://doi.org/10.47264/ idea.jhsms/3.1.1.

Tabassum, F., Akram, N. and Moazzam, M. (2022) 'Online Learning System in Higher Education Institutions in Pakistan: Investigating Problems Faced by Students During the COVID-19 Pandemic', International Journal of Web-Based Learning and Teaching Technologies (IJWLTT), 17(2), pp.1-15. doi: http://doi.org/10.4018/ IJWLTT.20220301.oa1









