

## RESPONSES TO THE OBSTACLES FACING ONLINE LEARNING IN THE POST-COVID ERA: A CASE STUDY OF PRIVATE UNIVERSITIES IN KHYBER PAKHTUNKHWA

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### ABSTRACT

#### Keywords:

*Post-COVID-era, adaptability changes, technical issues, computer literacy, time management, and self-motivation.*

Pakistan is facing unprecedented challenges amid post-COVID-19. Remote or virtual learning has now replaced traditional classrooms. The five most important problems that students confront when participating in online education were taken into consideration as phenomena within the scope of this study and are being discussed. These challenges included adapting to new conditions, dealing with issues caused by technology, enhancing one's computer literacy, improving one's ability to efficiently manage one's time, and motivating oneself. In addition to that, a discussion using Skype that only a select 20 students, and participated in was organized. Students from seven distinct departments at universities were considered to be part of the commercial sector participate in the session and provided their perspectives on the difficulties that have developed as a direct consequence of post-COVID. After the audio recording of the whole session was over, the textual data was transcribed and coded in order to make them ready for the manual analysis. This was done so that the data would be as accurate as possible during the manual analysis. The findings indicate that students in the post-covid era have various problems while attempting to use online education. Educators and policymakers can combat these challenges by prioritizing student access to technology and infrastructure, providing teachers with training and support in online instruction, devising methods for keeping students engaged and motivated during online learning, and ensuring that assessments and evaluations are valid and accurate.

### INTRODUCTION

The COVID-19 epidemic has had a significant effect on the way education is carried out all around the world. As a direct consequence of this, several educational establishments have

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started providing courses that are only available online in an effort to halt the future propagation of the virus.

Students, teachers, and policymakers have all discovered, in the course of this epidemic, that online learning has been a valuable addition to the conventional classroom education that they would have otherwise gotten; yet, this has also brought up a number of issues.

As we transition into the post-COVID era, it is quite possible that we will face obstacles that are analogous to those we have faced in the past. Depending on the specifics of the situation, some of these issues may even become more severe. Providing individuals with access to the appropriate technology and infrastructure is one of the most critical challenges that will need to be conquered if the use of online education is going to become more prevalent in the post-COVID age.

The results of a research that was carried out by Bacher-Hicks, Goodman, and Mulhern (2021) indicate that some students have a lower likelihood of having access to the infrastructure and technology that is required for online learning. As a direct consequence of this, these students face substantial obstacles if they seek to pursue an education through online means. Another barrier that must be overcome is the inferior quality of education that may be obtained by attending an online education.

According to Jaschik (2020), a significant proportion of professors working in higher education lacked the abilities required to teach online and voiced concerns about the quality of education offered by online courses. In this day and age, with the installation of COVID, one of the most major challenges is getting students involved. The results of a research that was carried out by Dennen, Darabi, and Smith (2021) indicated that students who were enrolled in online classrooms had lower levels of interest and motivation than those who were enrolled in in-person classes. Another problem that might be presented by online educational settings is that of assessment and evaluation.

According to the findings of a study that was carried out by the National Academies of Sciences, Engineering, and Medicine (2020), it was difficult to evaluate the educational progress of students while the pandemic was in effect. This was especially true for subjects that required students to participate in various types of practical activities. It's feasible that in the future that comes after COVID, the problem of building online communities and participating in social interactions will still be there. This is something that's worth keeping an eye out for. According to the results of a research that was carried out by Huang, Li, and Huang (2021), online learning may be alienating and may not give the same possibilities for

socialization and the building of communities as in-person sessions do. Also, online learning may not provide the same amount of information.

Online education is considered as the watershed moment for learning because of the digital delivery win over the skeptics, the teaching staff is teaching online for the first time, and for many students, online education is the first experience. This online education will have a lasting impact on the people operate and think about digital delivery (Volery & Lord, 2000). However, there are challenges faced by students during the COVID-19 pandemic. Some students lack proper access to technology to participate in digital learning (Basilaia & Kvavadze, 2020).

The biggest challenge is how to move from traditional education to e-learning. The coronavirus pandemic brings unprecedented challenges to the education segment. Presently, the education sector of Pakistan is undergoing the second resurgence. The universities in Pakistan are now adopting new tacit knowledge and strategies to increase productivity and efficiency of education (Akram et al., 2020). The success of academia is based on how well they have adapted to the changing times.

In this new paradigm, the online education shall be the new standard and the academia shall invariably switch from traditional classroom teaching to e-learning. According to a research published by the United Nations Educational, Scientific, and Cultural Organization (2022), online education often lacks the human connection that is offered in conventional classroom settings. Students may have feelings of isolation as a result of this, and it may be more challenging for them to ask questions and get responses to those inquiries.

An uninterrupted internet connection as well as access to the right gear and software are necessities for online education. The learning experience may be negatively impacted by a variety of technical challenges, including inadequate connection, software bugs, and device breakdowns (World Bank, 2022). Students who choose to get their education online need to possess high levels of self-discipline and motivation since they are often responsible for managing their own schedules and finishing their assignments alone. Some students may have trouble managing their time effectively or may lack the enthusiasm to remain interested in the content of the course. This may provide a barrier for such students.

Students may have less possibilities for socialization when they get their education online since they may not have the opportunity to connect with their classmates in person. Because of this, it may be more difficult for them to form relationships and connect with other people. Access to resources like libraries, labs, and other facilities that are offered on conventional

campuses may be more limited for students who get their education online. This may have a negative effect on the quality of education that students get, especially in disciplines that need practical experience or specialized equipment (UNESCO, 2022).

Pakistani universities are facing an unprecedented massive migration from traditional learning to online education. Most of the universities started online classes due to the government requirement of non-stop learning (Shaikh & Dahri, 2020). The universities are facing many problems in implanting the online education system. Therefore this study identifies the problems of online education in KP, Pakistan. A focus group of twenty students from private sector universities was interviewed on skype. Students were selected using random sampling technique.

### ***Problem Statement***

The world COVID-19 problem has had a big effect on the education settings, making it hard for students, teachers, parents, and policymakers to do their jobs. COVID-19 forces many educational institutions to go online. Online education has offered an alternative to in-person learning during the pandemic, but it has caused problems for students, instructors, and policymakers. Post-covid problems may intensify.

Technology and infrastructure have plagued online education throughout the pandemic. Bacher-Hicks, Goodman, and Mulhern (2021) found that low-income students had poorer access to online learning technologies and infrastructure. Poor online instruction has also affected the pandemic. Online instructors were unprepared and concerned about quality (Jaschik, 2020). Online education struggles with student engagement. Dennen, Darabi, and Smith (2021) found online students less motivated than in-person students.

After the pandemic, online learning struggled with assessment and evaluation. The National Academies of Sciences, Engineering, and Medicine (2020) found that evaluating student learning during and after the pandemic was challenging, particularly in hands-on or in-person fields. Online education has socialization and community building issues. Huang, Li, and Huang (2021) found that online learning may be more isolated than in-person classes. In general, the findings of the prior studies point to the fact that, despite the fact that COVID was just enacted, there are still significant barriers preventing the widespread use of online education. In order to be successful in overcoming these challenges, there will need to be a concerted effort on the part of educators, policymakers, and many other stakeholders.

This will be important in order to ensure that all students have access to education of a high degree and that online learning can be an effective and exciting technique of instructing

pupils. In the post-COVID age, in order to guarantee that online education is efficient, fair, and interesting for all students, we need to explore certain new practices.

### **LITERATURE REVIEW**

According to research that was carried out by the National Bureau of Economic Research (Bacher-Hicks, Goodman, & Mulhern, 2021), during the COVID-19 pandemic, students who came from families with lower incomes had a lower likelihood of having access to the necessary equipment and infrastructure for online learning. This was the case even though students from families with higher incomes had access to the same resources.

The results of a survey of faculty members working in higher education that was carried out by Inside Higher Education found that many educators acknowledged feeling unprepared to teach online and expressed anxiety about the quality of online training (Jaschik, 2020). The results of a study that was carried out at the University of Illinois (Dennen, Darabi, & Smith, 2021) revealed that the levels of engagement and motivation shown by students in online classrooms were much lower than those exhibited in conventional classroom settings.

According to the findings of a study conducted by the National Academies of Sciences, Engineering, and Medicine (National Academies of Sciences, Engineering, and Medicine, 2020), there were challenges associated with assessing managing time and student learning during the pandemic. These challenges were most prevalent in fields that require students to have direct experience.

This was particularly true in disciplines such as medicine, which need patients to have hands-on experience, like other sectors such as education. As a direct consequence of the pandemic, a significant number of businesses were pushed to swiftly modify their business models in order to include new technologies.

According to the results of the research that was carried out by Carroll and Conboy (2020), the majority of the time, these firms did not have sufficient time to think about how new strategies and the associated technologies should be accepted and incorporated into their already existing structure. This was the conclusion drawn from the research that was carried out. The issue has now spread to institutions that are located in every single region of the planet. As a direct result of the worldwide pandemic, Bao (2020) may have been the first person to bring attention to the trend of educational institutions turning away from traditional classroom settings and towards online learning.

Researchers in India (Mishra, & Gupta, 2020), Serbia (Bojovic, Vujosevic, & Suh, 2020), and the United States of America (Patricia, 2020) sought to investigate students' perceptions on

online education during the COVID-19 outbreak. These research relied on original data that was acquired from a number of sources, such as surveys, interviews, and observations done in India, Serbia, and the United States of America.

According to the results of the research that Mishra and his colleagues carried out in the year 2020, quite a few countries already had a substantial infrastructure for online education prior to the outbreak. On the other hand, not a single institution was ready to completely transition to providing education only via online means. Students have reported that they believe they are able to study more effectively when they are physically present in a classroom setting as opposed to when they are engaging in online education, which was the subject of research that was conducted in 2020 by Bojovic and colleagues.

Students are dissatisfied with the restricted access they have to the library, as well as the lack of assistance they get from their fellow students and lab partners in both the lecture hall and the laboratory (Patricia, 2020). Students thought that despite the fact that online education provided them with the opportunity to successfully finish their tasks despite the pandemic, according to the results of a research that was done by (Mishra et al., 2020).

It has been claimed that educational institutions are in the process of putting into practice innovative strategies in order to ensure that their students will continue their studies, as stated by Zhu and Liu (2020). The course materials are being made available to the students by the instructors in a wider number of formats and formats that may be used for dissemination. Online educational platforms, software for videoconferencing, and social media platforms are used in today's classrooms (Patricia, 2020). By using online educational platforms such as Google Classroom and Blackboard, educators and students are able to work together on the production of notes for class as well as multimedia materials that are applicable to the topics that are being addressed in each of their respective classes. This is made possible via the sharing of Google Docs. Students are able to hand in their homework assignments and instructors are able to monitor their progress while utilizing online educational platforms.

This benefits both parties. The organization of online classes and conversations may be made simpler by using videoconferencing tools like as Google Meet, Zoom, and Microsoft Teams. These technologies are all available for free online. In addition to slide presentations, these sorts of programming will often have a conversation segment as well. A lot of educational institutions host the course content for their students on their own websites and make use of their very own learning management systems, as shown by the conclusions of a research that was carried out (Mishra et al., 2020). According to the findings of study conducted by Ray

and Srivastava (2021), an increasing percentage of teachers in traditional classroom settings are teaching scientific subjects using virtual labs that can be labs, students are given the opportunity to engage in online simulations of experiments that are applicable to their studies (Lorenzo et al., 2021). Chakraborty, & Chakraverty, (2018) although the use of technology of this kind has been utilized for simulation and data visualization for quite some time, the practice of doing so is becoming more widespread. There hasn't been a lot of study done on how effectively students can communicate with their instructors and other students by utilizing a variety of online platforms. This is something that needs to be looked into further.

In a similar vein, there hasn't been a great deal of study done to determine how reliable the techniques of online evaluation are. The search for answers to these problems has only been undertaken by a handful of academic organizations so far. For example, Patricia (2020) discovered that students choose in-person contact with their teachers above other forms of interaction. However, Bojovic et al. (2020) discovered that a significant number of academics do not have faith in the methods of assessment that are used for online courses.

In summary, previous research studies have shown that online education in the post-COVID era has a number of issues, some of which include challenges relating to technology and infrastructure, the quality of teaching, student engagement, assessment and evaluation, as well as socialization and the formation of communities. To overcome these challenges, researchers, educators, governments, and other stakeholders will need to continue their efforts to guarantee that online education is effective, equitable, and engaging for all students.

### **METHODOLOGY**

Qualitative approach was used. According to Saunders et al. (2016), a focus group interview is a kind of qualitative research that involves bringing together a small group of individuals to talk about a certain topic or problem. The purpose of the interview is to get insight into how people feel about the subject.

Researchers with a background in management sciences, psychology, or sociology are often the ones that lead interviews with focus group participants. According to Saunders et al. (2016), the number of people who take part in a focus group interview normally ranges anywhere from 10 to 20.

A research question in relation with the study that inquires as to whether or not you would be interested in examining how students have experienced online learning when the COVID-19 epidemic was still in process. Because of this relationship, we decided to ask for the involvement in the research of a representative cross-section of students who had participated

in online education all during the course of the pandemic. These students were enrolled in a variety of private sector universities and were receiving their education online.

An invitation to participate voluntarily in the focus group interviews was sent out by email and WhatsApp to all of the participants. This was done to increase participation. When conducting a semi-structured interview by using Skype, it is common practice to ask the respondents open-ended questions concerning the topic of the study (Saunders et al., 2016). After the textual material had been gathered, it was then transcribed and put through a qualitative examination that included manually coding.

## RESULTS

The COVID-19 pandemic had a big influence on the globe and brought about a lot of difficulties in the post-COVID period. Teachers put their intensive work and time to design the online course and lectures while students need the technical proficiency to decode the material.

The use of technology to support online learning, remote learning, and distance education during and after the pandemic of COVID-19 are emerging and evolving quickly. There are several problems faced by students during online education, which need to be solving through proper initiatives.

Table 1. List of the participants

| Participant no | Position | Department                     | No |
|----------------|----------|--------------------------------|----|
| 1              | Scholar  | Engineering department         | 4  |
| 2              | Student  | Journalism                     | 4  |
| 3              | Scholar  | Education                      | 2  |
| 4              | Student  | Management Sciences department | 4  |
| 5              | Scholar  | English Department             | 1  |
| 6              | Student  | Computer science department    | 3  |
| 7              | Scholar  | Political science department   | 2  |

The theme generated from the interviews is adaptability fight, technical matter, computer knowledge, time managing, and self-motivation.

### *Adaptability changes*

Switching from a traditional classroom of face-to-face learning to computer-based learning is difficult for students because the virtual classroom makes learning experience entirely different. The computer-based education and course management system (CMS) is not a new method in developed countries, but under developing countries, the fashion of such studies is not accustomed. The student of traditional mindset finds it difficult to adapt; however, they



need to adopt the new mode of study and new learning circumstances. Understanding the benefits of E-Learning and adopting new methods will enhance the use of new technology and learning more feasible.

*“In my opinion, online education is not working because we cannot ask many questions from the teacher and there is no proper understanding of the course. It brings a lot of challenges we cannot manage studies because we have to manage our home activities and also our assignments. An Online study has just given us tension that how we will do assignments without proper guidance and how to set a timetable. As we used to study in university classrooms, I find it difficult to adapt to these changes and switch to online education. We are thinking that what will happen next? And how we will be able to give an exam without learning? I think the online study is just to give students an extra burden and tensions, making students mentally disturbed.”-FG participant no 2*

The easy delivery of lectures makes it better for students to understand it. Students will take time to adapt some changes as it is for the first time that regular students all over the country are taking online classes as the traditional classroom setting is different than that of virtual learning.

### ***Technical issues***

Online education requires a strong communication medium, most of the time students are not provided with a strong internet connection or high bandwidth, therefore they fail to attend the virtual class. The learning experience becomes problematic when it is hard to follow the online learning through technical issues. Many of the students do not have computers or laptops, they find it difficult to tune with the technical requirement as many of them live off-campus.

*“We are facing a lot of problems due to online education. My laptop is dead my internet connection is sometimes not working properly and internet cafés are closed due to lockdown. Firstly, I am unable to attend online classes due to internet issues as I am living in hilly areas of Pakistan where internet connection is very slow and sometimes not working at all. Secondly, everything is dispersed these days due to coronavirus and due to other reasons, in that case, the online studies assignments are a burden on us.”- FG participant no 4*

So it is important to know that exactly what kind of technical assistance is needed before starting the online classes, as it is quite important for successful course completion.

### **Computer literacy**

The students in universities are generally tech-savvy, they know how to use a computer well, but many of them lack computer skills and are unable to understand the new software's and programs. Many of the students hardly use Microsoft word and excel but are unable to handle their files. Many students find computer problems troublesome as many of the students do not know this area. For online courses, technical proficiency is a must, as it helps the students to manage their coursework and assignments in organized manners. Having a fundamental knowledge of computers is important.

*“I prefer online education, I know most of the students will say that social interactions are not there, but I oppose this because all the time we are doing socialization on our phones even while attending the class's on-campus. So, if the majority of us (students) are so busy on our phones/laptops etc. in Socializing, it would be a good use of that technology to involve education with it but the fact is many of the students are unaware about online classes schedule and how they will participate? As it is for the first time in our university online classes arranged, many of the students lack knowledge about it. So I think knowledge about technology and how to use it properly is one of the keys through which we can make it feasible for students to make them a part of ELearning. I think it will be more effective to study, but only if the online infrastructure is well planned.”*-FG participant no 5

### **Time management**

A difficult task for Learners is time management as an online course requires a lot of effort and intensive work. Most of the time people prefer web-based learning programs for their time flexibility and their place. Students most of the time find it difficult to attend a name class due to other day-by-day activities and commitments.

*“I feel due to online education we have some spare time to develop new skills or to utilize this time to in studying for the competitive-examinations. As we are not used to this method it is a bit difficult to manage a time I think we need to make a new timetable. There are lots of assignments and coursework and I do not know how to manage it within a given time frame. The date on the university website about assignment sessions is different from the given deadline by the teacher, so it is a bit confusing as well.”* -FG participant no 3

Many of the students are not in favor of online education, because some of the students are weak in studies and cannot do assignments without any help.

### ***Self-motivation***

An essential requirement for ELearning is self-motivation. Many students give up because they lack motivation. After enrolling in distance learning courses many students find it difficult to continue learning as difficulty in handling technology and due to the psychological effects of COVID-19 makes it harder for students to focus on studies.

*“I do not prefer online education from University...if we want only education then it’s better to learn from YouTube and the internet ...rather than a university. I mean for what purpose we are going to university...for practical work...not for theoretical work only. There should be no online education system after that because we are tired of that it was a very bad experience of our life if we want to do the online study we should start it from the earlier stages of starting education of children. For some of the students, online studies are too difficult they can study and learn on-campus only, thus feeling demotivated. One of the reasons is that on campus; most of the students (not all students but the majority) just take classes for attendance including me, while not paying attention to the lectures and then study at home from the internet.”- FG participant no 1*

### **CONCLUSION**

In conclusion, the pandemic caused by COVID-19 has exerted a significant amount of pressure on educational systems located all over the world. As a consequence of this, a great number of establishments have been obliged to make a rapid transition to online learning in order to lessen the chances of the virus spreading to other areas. During the course of the pandemic, online education has offered a helpful alternative to conventional methods of learning, yet it has also posed a number of challenges for students, instructors, and policymakers alike. As we are now in a post-COVID era, it is essential to find solutions to these challenges and ensure that online education is effective, equitable, and interesting for all students.

The difficulties that persist in the educational system in KP, Pakistan, were the focus of this qualitative study's main objective, which was to analyze such difficulties. Within the framework of this discussion, the five most significant challenges that students face while taking part in online education were taken into account as phenomena within the scope of this study. These hurdles included adjusting to new circumstances, coping with technology problems, improving one's computer literacy, managing one's time effectively, and motivating oneself. In addition, a Skype-based debate with a small number of people was organized. It was asked that students from seven different departments at universities that are

part of the private sector participate in the session and provide their points of view on the challenges that have surfaced as a result of COVID. Within this particular setting, there was a total of twenty people that were willing to participate in the session. Following the completion of the audio recording of the whole session, the textual data were transcribed and coded in order to get them ready for the manual analysis that was going to follow.

### **Recommendations**

A significant barrier to online education, such as time management and adaptability, throughout the epidemic has been access to infrastructure and technology, especially for students from low-income families and rural locations. Since many teachers were unprepared to teach online, there have also been questions about the quality of the education. During the epidemic, there have also been considerable obstacles for online education in the areas of student engagement, assessment and evaluation, socialization, and community development.

In order to overcome these difficulties, educators and policymakers should give access to technology and infrastructure top priority, train and support teachers in online instruction, come up with strategies to keep students interested and motivated while learning online, and make sure that assessments and evaluations are reliable and accurate. Promoting student achievement and wellbeing also requires creating a sense of community and building social relationships among students in an online setting.

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