

## From face-to-face to screen-to-screen instruction: Pakistani students' experiences, challenges, and learning effectiveness

Ch. Mahmood Anwar<sup>1\*</sup>  <https://orcid.org/0000-0002-0526-2232>

Aerni Isa<sup>2</sup>  <https://orcid.org/0000-0002-3489-1660>

<sup>1</sup>Scholars Index, New Jersey, United States

<sup>2</sup>School of Education, Taylor's University, Malaysia

### ABSTRACT

The closure of schools and campuses due to the COVID-19 pandemic in the recent years has been shocking and resulted in a new learning habit from face-to-face interaction to online activities. Challenges, problems, potentials, and other attributes related to the administration of online teaching and learning are highly necessary to be explored. This study is conducted to portray college students' learning experiences at the time of COVID-19 pandemic as well as post-pandemic recovery in Pakistan. A narrative inquiry by means of written reflection and semi-structured interviews is employed to scrutinize the online learning experiences of 19 university learners' studying at a medical university in Pakistan. This study's results depict that the use social media has dominated the whole learning activities in higher education context experienced by the students. Although the students confessed that they were ill-prepared, and there were issues with electricity supply, unstable internet connection, and access to digital equipment, they were still motivated to engage in online learning activities. When they were asked to provide opinion about the teaching modes, most of them argued that face-to-face interaction in a formal classroom was more preferred. The findings offer an empirical implication that teachers and related stakeholders are required to enhance the efficacy of online learning activities in Pakistan. Moreover, the findings contribute as an input enhancement to improve the quality of digital learning from the students' point of views, both at the time of COVID-19 pandemic and post-pandemic recovery.

### ARTICLE INFO

#### Keywords:

face-to-face learning;  
Pakistani students; screen-to-screen instruction

#### Article History:

Received: 10 April 2022

Revised: 15 June 2022

Accepted: 21 June 2022

Published: 28 June 2022

#### How to Cite in APA Style:

Anwar, C. M. & Isa, A. (2022). From face-to-face to screen-to-screen instruction: Pakistani students' experiences, challenges, and learning effectiveness. *Journal of Educational Management and Instruction*, 2(1), 24-34.

## Introduction

The effect of COVID-19 outbreak in the recent years has resulted in the changes in many aspects of human life. In education, the global pandemic causes the shift of teaching and learning mode from face-to-face interaction in a formal classroom to screen-to-screen learning activities through digital tools such as smartphone and computers. At this moment, the use of digital technology for educational purposes has been urgently needed. In Pakistan, the integration of technology, particularly social media, has seemingly been neglected except for the personal initiatives from some teachers who really enjoy using technology for teaching (Makki & Bali, 2021). The need of online learning as resulted by COVID-19 pandemic, then, foster the awareness of Pakistani teachers toward the importance of technology integration in education setting, particularly in higher education (Ali Ahmed et al., 2021). For some countries, even before COVID-29, the use of technology to support the efficacy of educational purposes has massively been

implemented. However, it might be struggling for a developing country such as Pakistan along with its social, political, and environmental issues to develop digital learning environment in education system (Al-Abdali & Alzayadi, 2020; Al-Azawei et al., 2016).

Although we are in such a global pandemic, the show must go on. Teaching and learning activities in all education levels in Pakistan must still be conducted along with all challenges and problems that may occur. Other alternatives are not available except for administering the teaching and learning activities in an online mode using digital technology platforms. In the recent years, there are more than 24 web designed applications that have been developed by universities in Pakistan to facilitate blended learning (Ameen et al., 2019), including Edmodo and MOOC system. The platforms have been tested in about three academic years in some universities in Pakistan, and it was the first trial by Pakistani higher education institution to adopt blended mode in daily learning activities (Mustafa Radif, 2019). Besides the e-learning platforms, social media receives an ample of attention from teachers and students as an alternative digital platform to assist digital learning environment (Makki & Bali, 2021). Since it is still at the time for trial and error, some obstacles including poor internet connectivity and access to digital equipment are encountered, particularly for students. The desire to use digital platforms in online teaching during this global pandemic forces them to be more familiar with screen-to-screen learning activities instead of face-to-face interaction in the schools and universities. Hence, exploring Pakistani students' experiences as well as feelings during the online learning activities becomes an interesting attribute to explore.

Studies on the implementation of online teaching and learning activities during the COVID-19 pandemic have been conducted in many contexts, especially in developing countries where digitalization still remains struggling. Itmeizeh and Farrah (2021) examined the extent to which online applications used in Palestine universities met the standard of online learning mode. The instructors and learners' perceptions of online learning during the COVID-19 pandemic were further investigated. The results depicted that Palestinian teachers and students were at a moderate level in seeing the phenomena of online learning as the result of global pandemic. Although they were enjoying the online mode, some constraints were encountered such as lack of students' engagement in learning, the unstable internet connection, and monotonous online learning activities. In the context of online teaching and learning in Iran, Derakhshan et al. (2021) explored the aversive emotion experienced by students learning in online mode during the COVID-19 pandemic. The findings showed that teachers' long, monotonous learning activities, lack of students' engagement, repetitive tasks, and logistic problems became the primary sources of boredom. The potential solution offered by Derakhshan et al. (2021) is that the need to improve teacher-student interaction, inter-personal relationships, and solve the technological barriers.

In Nigeria, it is also struggling for some higher institutions to promptly move from face-to-face classroom activities to online learning mode (Olayemi et al., 2021). A study conducted by Ebohon et al. (2021) about challenges faced by Nigerian teachers and students toward the online teaching and learning revealed that the issue of internet connection became the main problem. From the students' perspective, they experienced limited interactions with their classmates and this negatively affected students' learning satisfaction. In the context of higher education in Afghanistan, Hashemi (2021) snapshotted the challenges and opportunities of online teaching and learning amidst the COVID-19 pandemic. It was found that gender was an important matter in influencing the challenges of online teaching and learning. Different genders of the students were found to have a significant impact on the academic achievement during online learning. As for the opportunities, teachers' qualifications and experiences played a crucial role to have a significant impact on the efficacy of online teaching and learning, especially during the COVID-19 outbreak.

These previous studies from Pakistan's neighboring countries (e.g. Palestine, Iran, Nigeria, and Afghanistan) have shown that the administration of online teaching and learning activities is still encountering some challenges, although it surely has great potential. The issue of technological barrier seems become general problems faced by these countries and some other developing countries to create an effective distance learning using adequate use of digital platforms. Other studies conducted in south-east Asia countries have also revealed similar situations. For instance, the study of Nugroho et al. (2021) in Indonesian context depicted that lack of students' participation, inability to provide quick feedbacks for the students, and unfamiliarity of digital platforms for some teachers were the main challenges encountered by Indonesian teachers during the administration of online learning activities. The similar situation was also happening in Malaysia (Kamil & Sani, 2021), Vietnam (Van & Thi, 2021), and Thailand (Phattanawasin et al., 2021) that technological problems became the primary challenge for conducting an effective online teaching and learning activities, especially during the shocking time of COVID-19 pandemic.

Having reviewed all these precedent studies, we are at a conclusion that the implementation of online teaching and learning activities in around the world still requires a lot of attention and insights to enhance its effectiveness. Hence, examining the attribute of online teaching and learning still becomes a crucial attempt to do, particularly in a developing country such as Pakistan. Here, a research gap is observable. There is an urgent matter to explore the experiences of Pakistani college students when they were joining online learning activities during the COVID-19 pandemic. It is crucial to depict what they feel, what challenges they encounter, what they need, even what they expect from the online learning. Hence, this study casts the light on Pakistani higher education students' experiences and perceptions toward the practice of online learning during the global pandemic. A narrative inquiry is chosen as the procedure of data collection to obtain natural and rich understanding about the students' perspectives. The results are expected to contribute to the efficacy of online teaching and learning activities in Pakistan by offering some valuable insights for related stakeholders (teachers, government, curriculum designer, etc.) from the standpoints of college students. To ensure the objective, this study is guided by three research question as follows:

- (a) What teaching activities do Pakistani college students experience at the online learning amidst COVID-19 pandemic?
- (b) What are the challenges encountered by Pakistani college students at the online learning amidst COVID-19 pandemic?
- (c) From the students' perspectives, is the online teaching effective to facilitate their learning activities?

## **Method**

### ***Research Design***

Since this study aims to portray Pakistani college students' experiences of online learning activities during the time of COVID-19 pandemic, a qualitative approach under narrative inquiry research was employed. A narrative inquiry records the experiences of an individual or small group, depicting the particular perspective of that individual, primarily through interview which is then recorded into a chronological narrative (Haydon et al., 2018). In the context of this study, the narrative inquiry research was utilized to scrutinize a group of college students' perceptions about online teaching and learning activities during COVID-19 pandemic and post-pandemic recovery in Pakistan.

### ***Participants***

A group of college students in Pakistan was invited to participate in this study. They were students of a medical university in Pakistan, and were experiencing remote learning activities through digital technology at the time of COVID-19 pandemic. The

total number of participants was 19 students (coded as S1-S19) who were conveniently selected based on the principle of accessibility. Their age was between 18 and 22, consisting of undergraduate and postgraduate students. Among the 19 participants, 11 are male and 8 are female.

### ***Instruments and Data Collection***

The required data for the purpose of this study were in form of students' responses about their experiences in joining online classroom activities, particularly at the time of global pandemic. Two instruments were utilized to gather the data, i.e. self-written reflection and semi-structured interviews. First, self-written reflection was employed. It is a kind of open-ended questionnaire in which the participants were asked to write down their responses to the provided questions related to the research questions of this study (Yin, 2015). The participants narrated their experiences and feelings about online classroom activities freely without any intervention from the researcher and their teachers. All the 19 participants were required to fill out the self-written reflection. Second, semi-structured interviews were further employed following the administration of self-written reflection. In this stage, 8 participants were chosen to join the interview section. The selection was based on the uniqueness and detailed responses provided in the self-written reflection. The researcher prepared several questions, but they were enhanced according to the situation of the conversation with the participants. The interviews were conducted in Arabic or English, according to the participants' preferences. Each interview was last for about 15-20 minutes.

### ***Data Analysis***

The data obtained from self-written reflection and semi-structured interviews were further analyzed by following the procedures below. First, the data, both from self-written reflection and semi-structured interviews, were tabulated. Second, the data were identified and classified based on the themes as mentioned in the research questions of this study. Third, coding, review, analysis, and integration of the data were performed to ensure that the research questions had been clearly answered, and this process led to the final results of data analysis to further be used as a basis of conclusion drawing. As for the validity and reliability, the researcher firstly performed the procedures of data analysis, then, several stages of discussion were conducted by involving some experts (2 lecturers at universities in Pakistan) to achieve the consensus of data conclusion.

## **Results**

This section presents the results of data analysis concerning to the empirical answers of the three research questions described in the previous section. The most relevant and representative quotes of the participants are presented to support the delineation of the findings. The responses of self-written reflection are written as "WR", and the data from semi-structured interviews are coded as "Int".

### ***Pakistani College Students' Experiences on Online Learning Activities***

According to the results of data analysis, there were two main digital platforms used by college teachers in Pakistan to assist the online learning activities during the COVID-19 pandemic, i.e. social media and a web-based resource, Edmodo. In general, the use of social media has dominated the online teaching and learning activities, particularly in higher education which was being the context of this study.

Through self-written reflection and semi-structured interviews, the participants stated that Facebook, Youtube, and Instagram were the most frequently used social media platforms to facilitate online learning activities. S3 pointed out that most of online learning activities in her class was conducted using Facebook. The practical use of Facebook made students and teachers felt familiar to use this platform for learning

media. They could create a group, share materials (files, videos, pictures, etc.), and give feedbacks or comments to each other. Here are several responses from the participants.

*"We often use social media Facebook in our class. Our teacher provides us with materials posted in the class group created in Facebook, and we had discussion there. Our teacher also asks students to have the materials discussed by giving questions and answers related to the materials. In addition, our teacher often posts video and quiz links in Facebook group. In my opinion, this activity of learning is enjoyable and relaxing." (WR. S3)*

*"I often experience the use of Youtube for a medical course in my class. We are asked to watch particular videos with certain theme provided by the teacher, and discuss the videos. At a moment, we were asked to create our own videos about a particular topic, and post the video in our Youtube account. Moreover, other students are asked to provide feedbacks on our videos." (WR. S1)*

*"Ya, we use Youtube to access videos. But my teacher prefers using Instagram to facilitate the submission of assignments from the students. We are frequently asked to post contents in Instagram, can be in the form of short description of something or video telling a certain material that is being discussed." (Int. S6)*

Besides social media, this study also reveals the use of a web-based resource namely Edmodo to assist the online learning activities in Pakistani college context. Although it is not massive, however, according to the participants' narratives, some of their teachers were using Edmodo in the online learning activities. It is not surprising, since according to previous studies exploring the development of e-learning in Pakistan (Al-Abdali & Alzayadi, 2020; Al-Azawei et al., 2016; Mustafa Radif, 2019), Edmodo has gained special attention for educational purposes from users in the country. Below are some participants' comments related to the use of Edmodo in online learning activities.

*"I have learned particular material, but I forget exactly what it was, by using Edmodo. My teacher often give assignment to us in Edmodo. As far as I know, it makes the assignments easy in grading process. In addition, my teacher also shares files and links using Edmodo, as well as sending a quiz for us after finishing particular chapter." (WR. S7)*

*"..... and one more thing, my teacher ever uses Edmodo in my class. She posts quiz, learning materials, and some references for learning in Edmodo, so we can easily access them through our digital devices as long as connected to internet. I agree to the use of Edmodo for learning. It has complete features for learning instead of using social media platforms." (Int. S10)*

### **Challenges Encountered by Pakistani College Students' during Online Learning Activities**

As shown in the results of data analysis, most of the participants mentioned that technical problems became the primary challenges during the online learning activities. In his written reflection, S2 stated that problem with electricity and unstable internet connection hindered the efficacy of her online learning activities. Meanwhile, S8 revealed that he was difficult to access the digital equipment such as smartphone, tablets, or computer. It might due to the current political and social situation that is happening in Pakistan, so that the education system is affected. Furthermore, S11 pointed out that preparation was the crucial part of the success of online learning activities. However, he and the majority of the participants confessed that they did not well-prepared in joining the online learning. It might because of their unfamiliarity toward the shocking and new model of teaching and learning activities. The following statements are delivered by the participants.

*"As I experience, the problems during online learning activities are unstable internet connection and electricity supply. I often did not join the online class because of the problems. I hope the situation will be good soon, so that when having online learning activities, we can join without facing any problem." (WR. S2)*

*"Problems I face during the online learning are the limited availability of internet network. It is the most crucial part of attributes for online learning, particularly in this pandemic time when we are obliged to do distancing. Because I live in a remote area, so that internet is not the only problem. Sometimes, I have to deal with the problem of electricity too." (Int. S15)*

*"Not all students are coming from rich family, even most of us are living under the threat of poverty. Like me, I am difficult to be able to use a high quality of digital devices. I only have a smartphone which is a reward from my father years ago, and it sometimes does not support the activities of online learning in this pandemic era" (Int. S8)*

*"In my opinion, we are not doing our best in joining the online classroom activities. Especially, we did not have good preparation before teaching and learning begin. Therefore, the activities are often getting bored and are not effective. That is my opinion." (Int. S11).*

### **The Effectiveness of Online Learning Activities in Pakistani Higher Education Context**

After scrutinizing the learning activities as well as challenges encountered by the participants during online learning activities, this study continue its journey to reveal their perceptions about the effectiveness of the current teaching mode. Data from self-written reflection and semi-structured interviews depict that all Pakistani college students participating in this study preferred face-to-face classroom interaction instead of online learning activities. It is undeniable that the problems of online learning the encountered became the primary reason why they choose so. Although they show a positive perception toward online learning, they tend to still choose the offline learning in the university. S19 mentioned that learning directly at the university makes her motivated and joyful since she could meet her friends and teachers. In a similar direction, S17 argued that face-to-face classroom interaction is more effective than online learning due to its practicality and accessibility. In general, the participants prefer classroom learning in face-to-face mode to online activities through digital technology. Below are some excerpts from the participants' responses.

*"When asking to choose, I choose offline learning at my university. It gives me more motivation to wake up early in the morning and going to campus. I feel more prepared when having face-to-face interaction directly at campus because I will be able to meet with my friends and teachers." (WR. S13)*

*"Of course I prefer going to campus. We have to deal with many problems to join the online learning activities. So, I think face-to-face classroom activities still become the best solution of our education context." (Int. S14)*

*"Yes I choose in the class directly. Because it will be more enjoyable and effective to learn about the materials. Especially for me who is the student of medical science. It is more effective to have a campus activity since we have to go to the laboratory." (Int. S12)*

*"I prefer face-to-face learning, because it is more effective." (S16)*

### **Discussion**

Drawing on the data analysis, the results of this study depict some compelling results. Related to the online learning activities experienced by Pakistani college students, the use of social media and a web-based resource, Edmodo, is found in almost of online learning activities conducted in this time of pandemic. In terms of the challenges, this study reveals that ill preparation of learning, unstable internet connection, electricity supply, and limited device equipment are the main problem that should be encountered by Pakistani students when following the online learning. As for their perspectives on its effectiveness, Pakistani college students prefer face-to-face learning to online learning using technological devices. This section discusses the

uniqueness, implications, and interpretation of these results from the perspective of current theories and previous research findings.

As for the first research question, this study finds that social media has been massively used as technological platforms to assist online teaching and learning activities in Pakistani higher education. The massive use of social media such as Facebook, Youtube, Instagram, and Twitter for educational purposes is not surprising since the users of social media in Pakistan reach 61.4% of the total population in the end of 2021 (Makki & Bali, 2021). By receiving such a great attention from users in Pakistan, social media surely becomes frequently-used platforms for conducting daily activities, including for educational purpose in terms of online teaching and learning. In addition, the factors of easy to use, practicality, and familiarity make social media to be a potential and promising platform to conduct interaction and communication between people, which is a crucial part for the success of online learning activities (Haghegh & Nugroho, 2021). This finding is in line with several previous studies conducted in a similar context. The use of social media was also happening some neighboring countries particularly during the COVID-19 pandemic, such as in Palestine (Affouneh et al., 2021; Marbán et al., 2021), Egypt (Al-Rahmi et al., 2021; Al Mabruk et al., 2021), and Pakistan (Khan et al., 2021; T. M. Khan, 2021). In conclusion, because of its practicality, social media is 'a shortcut' to facilitate people daily activities, including online teaching and learning activities.

Still related to the first research question, this study also depict that the online teaching and learning activities experienced by the participants are facilitated by the use of Edmodo. As we know, Edmodo is a global education network that helps people to connect with others to reach the goal of their learning. It provides teachers with tools to help teachers connect to their students as well as parents. Teachers can share content, texts, videos, assignments, and even can automatically grading the students' homework. With its promising features, it is not surprising that Edmodo becomes a 'favorite' online learning platform including in Pakistani context. It is in line with the design of e-learning development in Pakistan that since 2016, they are developing digital learning based on Edmodo and Massive Open Online Courses (MOOC) system (Ameen et al., 2019). The use of Edmodo is not new in online learning context. This finding is similar to the previous results revealed by Asfar and Asfar (2021) and Sefriani et al. (2021) in Indonesian context, Safdari (2021) in Iranian learning context, and Unal and Uzun (2021) in Turkish context.

With regards to the second research question, this study shows that there have been some challenges encountered by Pakistani college students during the online learning activities. Most of the participants mentioned unstable internet connection and problem with electricity supply were the main challenges for online learning during the pandemic. According to the researcher's analysis, it might due to slow-paced digital transformation experienced by Pakistan. Pakistan was one of the last countries in the Arab region to adapt to digital initiatives in education, just starting at the late of 2010 (Abdulazeez et al., 2020). In addition, Pakistan is still struggling to obtain up-to-date information and communication technology (ICT) facilities, capacities, and trainings (Doghonadze et al., 2020). Hence, it quite acceptable and reasonable that today, students in Pakistan still encounter some digital learning problems such as the lack of internet resources, digital equipment, and electricity supply as portrayed in this study. This finding supports the previous results about online and digital learning activities in Pakistan such as the studies of Al-Abdali and Alzayadi (2020), Al-Azawei et al. (2016), Ali Ahmed et al. (2021), and Mustafa Radif (2019).

In terms of the third research question, this study portrays that most of the Pakistani college students participating in this study argue that face-to-face classroom activity is more effective than the online learning mode. This is also reasonable and acceptable, along with the challenges and problems they encounter in following the

online learning activities. The reasons behind their preferences are about achievement and satisfaction. They prefer to study in the universities so that they can maximize the potential use of learning facilities such as laboratory, campus library, etc. In addition, they are more satisfied when they can meet classmates and friends to study together. This finding is in accordance with what have been found by Landrum et al. (2021) that students' satisfaction depends on the dimensions of interaction between student and teacher and student and student. This fact is also found by Faize and Nawaz (2020) that the students' satisfaction levels of the online learning lied on to what extent the degree of interactions among the related stakeholders (teachers, students, academicians, and parents).

Overall, the results of this study show that Pakistani university students consider online learning as crucial as face-to-face learning before the time of COVID-19 pandemic. Due to a number of challenges encountered by the students, they prefer face-to-face learning in a formal classroom to screen-to-screen learning using digital technology. These results provide several implications for teaching-learning activities in higher education context. First, the findings of this study should be a basis of the development of higher education policy, particularly in terms of digital learning implementation in post pandemic era. Second, the findings could be used by teachers and lecturers in designing tasks and learning activities for students. Last yet importantly, the findings are as input enhancement for higher educational stakeholders in Pakistan and the neighboring countries to design a 'wise' and appropriate policy on digital learning practices.

## Conclusion

This study aims to cast the light on experiences of Pakistani college students amidst following online learning instruction at the time of COVID-19 pandemic. This study concerns on three primary themes as formulated in the research questions, i.e. (1) online learning activities experienced by the students, (2) challenges faced by the students during the online learning, and (3) the students' perception regarding to effectiveness of online learning. To reach the objective, a qualitative approach under narrative inquiry is adopted by using self-written reflection and semi-structured interviews as the data collection instruments. The findings depict that most of the online learning activities in Pakistani higher education context is conducted through the integration of social media for educational purposes. Besides the social media, a web-based resource named Edmodo is also employed in some universities. In terms of challenges, it is revealed that the students are not well-prepared and less motivated in joining the online classroom. In addition, they must also deal with technical problems such as unstable internet connection, electricity supply, and limited access for digital devices. As for the students' perceptions, all Pakistani students participating in this study mention that face-to-face classroom interaction is more effective than the online learning mode.

Despite of the interesting results, this study acknowledges several limitations. First, the number of participants involved in this study is still limited due to some constraints because of the global pandemic, so we could not draw generalization about the results of this study in the entire education situation in Pakistan regarding the online learning. Hence, we suggest that future studies should portray the students' online learning experiences using a quantitative survey by inviting a greater number of the subjects. Second, this study is lack of multiple data collection instruments due to the time and cost consuming. A classroom observation should be conducted to confirm the participants' responses provided through self-written reflection and semi-structured interviews. In addition, research should also portray the situation of online learning activities from the teachers' and educators' points of view. By doing this, the literature about online teaching and learning activities in Pakistani education context will

experience great enrichment. Thus, future studies are strongly suggested to execute the issues.

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