


## Exploring Intangible Barriers and Challenges in Adopting Hybrid Education System in Pakistan

Iqra Khalid<sup>1</sup> \*

1-Sindh Madressatul Islam University, Karachi, Pakistan

\*Corresponding Author: [kiqra1995@gmail.com](mailto:kiqra1995@gmail.com)

### ABSTRACT

With the changing landscape of educational paradigms, the emergence of Hybrid education system provides promising results and is used by educational institutions all over the world especially after COVID-19. In Pakistan, the adoption of Hybrid mode not only faced physical obstructions but also non-physical challenges. This study digs in to find the intangible barriers such as cultural obstructions, stagnant perceptions and lack of digital trust by people which increasingly obstructs the integration of hybrid mode. Using interview method and thematic analysis to analyze qualitative data, this study explores the barriers in adoption of hybrid mode in public and private universities in Pakistan with a sample size of 12 students. Findings revealed that students considered lack of teachers training, fixed mindset of students and teachers, lack of resources, reluctance to use hybrid mode by students and teachers and inclination towards traditional mode as the major barriers. Moreover, if hybrid mode has to sustain in Pakistan, a change in thinking and a complete perception shift of people is required. This study yields significant results and has implications for students, faculty of educational institutions and policy makers of educational institutions and can be helpful in decision making process of educational sector.

Article Type: Original

OPEN ACCESS



Copyright © 2025 The Authors

Received:

5 May, 2025

Revised:

27 August, 2025

Accepted:

17 September, 2025

Published:

30 September, 2025

**Keywords:** *intangible barriers, hybrid instruction, technological change, digital education*

**JEL Classification:** I23

**How to cite this article (APA):** Khalid, I. (2025). Exploring Intangible Barriers and Challenges in Adopting Hybrid Education System in Pakistan. *JISR management and social sciences & economics*, 23(3), 59–81. <https://doi.org/10.31384/jisrmsse/2025.23.3.4>

## INTRODUCTION

One of the famous lines by Zig Ziglar is, "If you are not willing to learn, no one can help you. If you are determined to learn, no one can stop you" (Ziglar, n.d.). Incorporating e-learning in educational settings is a challenging task and many problems arise during the process as can be seen in many universities during Covid-19 pandemic (Qazi et al., 2022). This paper will highlight the intangible hurdles faced by Hybrid Education system in Pakistan. Change in the art of teaching is constant. The pandemic Covid-19 drastically shifted the paradigm of many institutions including education and caused immediate changes in its operation (Singh et al., 2021). The concept of Hybrid learning can be thought of as a byproduct of alterations done to education system as a result of Covid-19 pandemic. In the 21st century, with increasing technology and ease of access to information, distance learning is adopted all over the world (Gnaur et al., 2020). Hybrid learning mode evolved because of the needs of students to ensure students can participate and learn without the obstruction of geographical barriers and thereby increasing flexibility. Defining hybrid learning is not a straightforward task, as it involves a variety of methods and terminologies. This concept has evolved, and the incorporation of other modes has added to its complexity. Generally, hybrid learning can be conceptualized as a method of instruction, which includes the aspects of physical classroom along with efficient aspects of online method of delivery thus ensuring maximum learning possibilities (Dziuban et al., 2018). Technically, it combines elements of physical mode of learning and digital mode to develop necessary expertise to ensure successful learning. Moreover, it utilizes technology to engage students in different learning environments to respond to their diverse learning preferences (Kazu & Yalçın, 2022).

Regarding the modes of online learning, there are two types, one is synchronous learning, in which the two modes of instruction, physical and online, occur at the same time. The other type is asynchronous learning, where the instructor teaches the students face to face and then shares supportive or supplementary materials afterwards through any online means such as Blackboard, Edmodo, Moodle which would help learners to have a better understanding of the topic at hand. Hybrid learning involves synchronous learning mode. In comparison to pure online courses, hybrid learning offers students the chance to communicate physically with their teachers and classmates to have discussions and obtain knowledge. Teachers function as facilitators to guide students and also function as instructors to impart knowledge. (Singh et al., 2021).

As there are many benefits of physical classroom learning such as increased student participation, interactive environment, the evident benefits of hybrid learning are its flexible approach, working at one's own pace and time, increasing

students access to courses and resources, catering to learners' diversity, in-depth learning experiences, self-regulated learning, cost-effectiveness, fostering student autonomy and independence (Singh et al., 2021). One of the effective methods for attracting students in online mode is to compel them to show their presence on camera and to become an active participant (Raes, 2022). Whenever a new concept arises in higher education, at first individuals are reluctant to adopt it but with the passage of time, after analyzing the pros and cons the subject is adopted. When the idea of Hybrid education was considered for implementation, educators predicted many barriers. When finally, it was implemented in education sectors, many unanticipated challenges and barriers came into light. Some of the challenges faced by teachers were that they were reluctant to incorporate hybrid learning as they had no training on how to implement it and they lacked expertise to incorporate it. Teachers faced problems while designing their lecture for hybrid classroom. Secondly, teachers faced technical difficulties regarding the use of technology as there was shortage of labs and computers (Soomro et al., 2018). Students also face technical difficulties while attending hybrid class, they face connectivity issues, downtimes, and network errors. Technical difficulties greatly undermine the effectiveness of instruction. Due to decreased interaction between students and teachers, the bonding between them was not able to develop and students felt reluctant to ask questions and pose their queries and ultimately did not develop practical academic education and social skills necessary for navigating life (Raad et al., 2021). The future of hybrid learning seems optimistic as increasingly educational institutions are practicing it for increased benefits (Li et al., 2023).

The concept of hybrid learning in Pakistan is considered as an innovative and interactive method of learning with better opportunities for students from faraway areas and equipping students with modern technology and expertise to bring the best possible outcome of their learning and to keep students updated with modern targets and requirements in education (Irum, 2020). This paper will highlight the Pakistan universities higher education student's perspective on hybrid learning and what kind of barriers and challenges students will face in the implementation of this mode.

## RESEARCH OBJECTIVES

1. To recognise the foremost tangible and intangible challenges faced by university students in a hybrid education system in Pakistan.
2. To access the impact of barriers on students' academic performance and overall learning experiences.

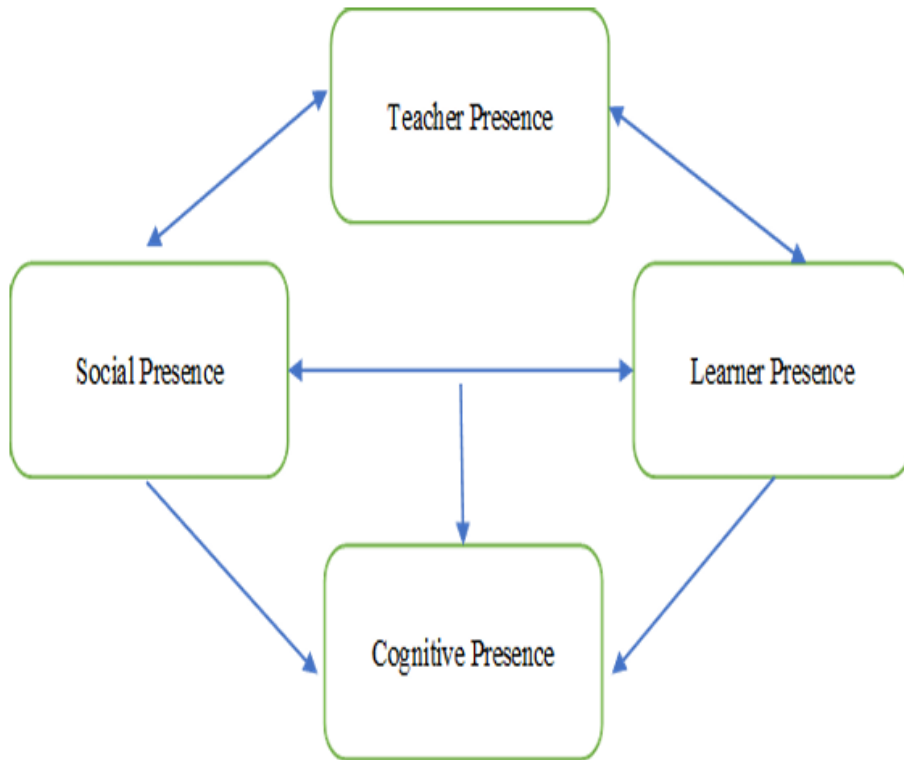
## RESEARCH QUESTIONS

1. What are the major tangible and intangible challenges faced by university students in a hybrid education system in Pakistan?
2. How do the barriers affect students' academic performance and overall learning experience in hybrid education system?

## THEORETICAL BACKGROUND

The shift in education system from traditional to online required complete change in perspectives and perceptions of people involved in education systems. The increase in technology along with disruption caused by Covid-19 necessitated people to adopt a shift of perception and change their ways of thinking and believing. According to Rodrigues (2023), transformational thinking lead towards changes in the habitual ways of people regarding education and compelled them to critically think and reflect to bring a change in their perspective. Educational transformation cannot be achieved without changes in learning, understanding and application. Historically, transformational learning theory is not a new phenomenon but has its roots in 1970s and at its grass root level it tries to understand and promote human development through the process of learning. It works on transformation of individual by education (Andreev, 2023).

Humans' thought processes, beliefs, feelings, and behaviors are changed and they try to make meaning of their life consciously. It completely alters our ways of being in the world. In this process, the individual keeps in mind the different elements of a concept and then examines their relevance for deciding. In the contemporary age, adopting the hybrid and other e-learning modes assert opportunities to educators and students to go through various experiences and challenges and align themselves to the new modes of learning. Observably, hybrid learning empowers students and focus on learner centered approach. It facilitates autonomy of students, cooperation, and participation among the students (Rodrigues, 2023). The transition from traditional modes of learning to hybrid mode was not easy but it was achieved following concept of transformational learning, and a successful transformation took place as can be seen in the educational institutions by following the new perspectives about learning.



**Figure 1:** Revised Community of Inquiry Framework Note. Adapted from Revised community of inquiry as a theoretical foundation for understanding students' blended learning experiences (Ramalingam et al., 2021).

The Community of Inquiry framework was originally proposed by Randy Garrison, Terry Anderson and Walter Archer in 2000. This framework provides a detailed understanding of students learning experiences in online learning environments and explains that learning in distance learning environment works through the interaction of three core elements. First is social presence, which means that participants in online learning undergo meaningful communication using personal traits to improve their interpersonal communication. Social presence enables learners to achieve a sense of responsibility towards the community by expressing their viewpoints in an effective manner. The second is cognitive presence which enables learners to construct meanings from the knowledge they obtain from online learning environment. Students focus on

exploration and application of new ideas and solutions. The third element, teaching presence is related to the process of designing and facilitating and also directing the social and cognitive presence for achieving learning outcomes. Teaching presence acts as a medium to being social and cognitive presence together and provide importance to curriculum, tasks, techniques and to provide feedback. This framework was revised in 2020 and named as revised Community of Inquiry and another element was added which is learner presence. This element is linked to the process of autonomous learning process by students in online learning environment. Learner presence requires the process of self-regulation in which students monitor and regulate their own learning and manage their learning environment and enhance their communication with peers and teachers.

This framework highly corelates with the hybrid learning environment as all the elements of this framework, social presence, cognitive presence, teaching presence and learner presence are necessary for the successful implementation of hybrid mode in online learning environment.

## **HISTORICAL REVIEW**

The concept of hybrid learning is not a very recent one. In the beginning, the concept blended learning was being used which referred to combining instructional technology such as video, films, and web-based training with physical instruction by teachers. The idea was to incorporate e-learning into education and benefit all parties involved. People used blended learning for different purposes such as to put assessment online, delivering work online, to use mentoring as online tool, access experts online, maximizing email and messaging. Blended learning was adopted to make learning more interactive as one medium of instruction is not always sufficient for learning. The concept of this mode of learning was improved with increasing time; it focused on learning styles and models of teaching and different modes of delivery. Heinze and Procter (2004), highlighted the fact that every mode of instruction has its own pros and cons thus gave some of them. Blended learning was considered to be flexible, suited diverse types of learners, compatible with work life along with lack of communication, technical issues, and less guidance. The methodology used in blended learning is also an important aspect, the research on blended learning is carried out by case studies of universities. The focus of research on learning should be holistic and focus on integration of different learning components especially focus of research and method of research (Bliuc et al., 2007). The results of blended learning are maximized when there is a two-way interaction between teacher and students in online mode. Shea and Bidjerano (2010), introduced a concept called epistemic- engagement which means that

the learner engages in active knowledge generation during the online instruction which enables the learner to grasp the knowledge in an effective manner and brings self-efficacy in the learner.

As time progressed the real question regarding composition of hybrid learning emerged, that is combination of both traditional and hybrid methods. It includes web-based courses (face to face with some materials shared on web), hybrid mode (online along with physical interaction), fully online (distance education through online means) (Vernadakis et al., 2011). Mcnaught (2011), signifies concept of blending various modes of learning to maximize learning outcomes and it provides bridge for modern technologies, but this is not an effortless process. The combination of traditional learning methods along with hybrid instruction gives rise to efficient learning ideas for students. The quantity of students in distance learning doubled with passing of time as the web became preferable learning platform. Klimova and Kacetyl (2015), added new elements to the definition of hybrid learning and considered it as amalgamation of different methods of training and applying most efficient method for achieving learning outcomes. A hybrid learning approach gives the best results when applied properly according to the needs of the learner and overall purpose of the learning. The need to accommodate the diversity in educational settings, educators resorted to hybrid and blended learning which provides flexibility and accessibility to a diverse range of students. Synchronous hybrid learning method emerged in educational settings because of its increasing benefits over traditional instruction (Raes et al., 2020).

After the Covid 19 crises, educational institutions from all over the world suffered as physical classes were not being conducted and educators had to resort to online means to conduct classes and lectures. This was the point when teachers as well as students realized the importance of Hybrid learning and other online modes of instruction. Raes (2022), emphasized that to create a hybrid classroom, the most important thing was to initiate work by working on technical solutions and set ups. Outlook of upcoming educational institutions will become hybrid to cater different learning contexts and diverse students. The design of learning spaces was also given importance with regard to the success of hybrid learning. Kazu and Yalçın (2022), highlighted that hybrid learning combines the best elements of physical learning and digital learning to develop the necessary expertise to ensure successful learning and emphasized that hybrid learning utilizes technology to engage students in different learning environments to respond to their diverse learning needs. Now the shift in research of hybrid learning is to explore its maximum potential and make its use easy in educational settings. Li et al. (2023) focused on the positive features of hybrid learning such as increased student participation using flipped approach, improved self-

regulated learning skills, having high flexibility, simplicity, facilitation of student's time management, providing interesting class activities, performing authentic assessment and evaluation. Hybrid learning is now applied in a number of areas such as nursing education, education, second language learning, science education and medical education. Educators are applying their efforts to use this mode in other complex areas as well such as mechanics and engineering thus promising a bright future.

## **RESEARCH METHODOLOGY**

The choice of research methodology is important part of the study at hand. In this study, a qualitative approach was used to collect credible data from the sources. An inductive approach was used in the study along with qualitative techniques and data was collected from the individuals about the research topic by using exploratory strategy. Qualitative research methodology focuses on understanding and interpreting the meaning, context and subjective experiences of individuals or groups. It typically draws on text-based data and aims to explore complex social phenomena (Creswell & Poth, 2018). To get rich narratives and useful information, thorough questioning and probing is required, which is possible by the flexibility provided by qualitative research design. The present study was conducted by phenomenology method. Phenomenology is the method of qualitative research that emphasizes the cohesion of a lived experience within a certain group. The ultimate goal of the method is to reach an explanation of the nature of the certain phenomenon (Creswell & Creswell, 2022).

The interview method was used in research as a data collection tool. By following the preset interview questions, in depth interviews were taken from the participants one to one. It was a structured interview and one by one questions were asked by the respondents. The questions were designed carefully and checked upon repeatedly to ensure that no lead is provided to the participants. In this study, research instrument is the interview technique. Mujeeb et al. (2025), highlights that undertaking interviews to explore the phenomenon is the most appropriate way to extract meaningful information from the interviewee. As the study intended to explore in detail the lived experiences of students, conducting interviews is the best way to collect the data. After the reviewing of literature content, structured interview questions were designed.

Sampling is the process of selecting the right individual, object or event as representative for the entire population. In this study, purposive sampling was employed so that the students who have real experiences of hybrid education were included. Purposive sampling is introduced by Micheal Quinn Patton,

and it is widely used in qualitative research because it allows individuals to select participants with the relevant experiences and guarantee that data is meaningful. By selecting individuals from purposive sampling, the depth of information is achieved which gives rich narratives for the study (Ahmad & Wilkins, 2025). The population included different university students from different departments from public and private universities of Pakistan. A total of twelve interviews were taken, mostly on the university premises. The sample size for this study was 12 students so as to obtain a variety of perspectives. The sample size depends on the concept of data saturation, where no more interviews will be taken when repeated themes occur. There were 8 females and 4 male students from different programs and semesters. Data saturation occurred at 12 interviews, and no more interviews were conducted. During the interviews, more probing questions about the learning environment were asked. The participants were given complete freedom to comment on the subject as much as they wanted. An interview protocol is formed to guide the interview process and greatly aided in identifying clear differences in respondents' perceptions and perspectives on the phenomenon under study.

A rapport was created with the participants, and they were assured of the confidentiality of their data along with the option to withdraw from the research anytime. A comfortable environment was ensured during the interview and audio recordings were done after properly informing the participants. The participants were assured about the confidentiality of the information and assured that it will only be used for research purpose. The participants were also informed about the recording of their data prior to the interviews. The confidentiality of data and identity is maintained by the researcher to ensure trustworthiness of the bond between research and the respondent (Mujeeb et al., 2025). Moreover, the audio recordings of the participants' in-depth interviews were protected by a password to maintain the confidentiality. The researcher also makes sure to protect the notes taken during the interview process so that they are only available for the researcher and research process.

## DATA ANALYSIS

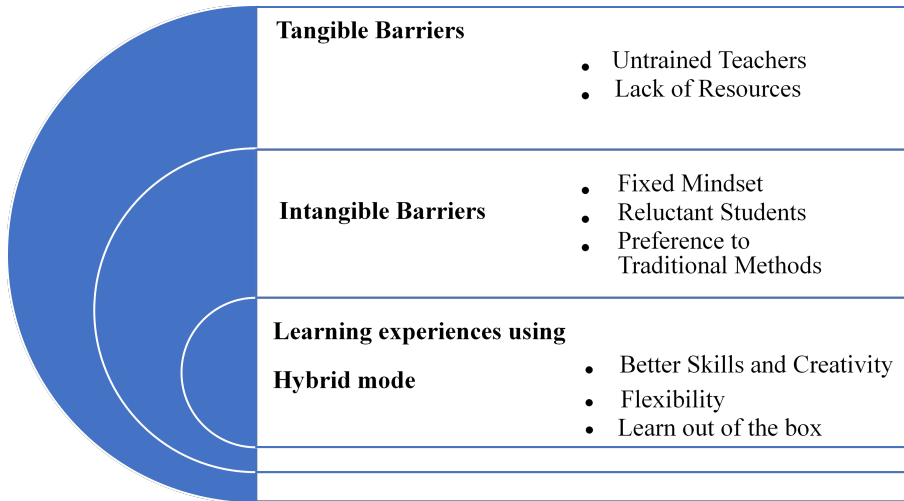
In this chapter, a detailed data analysis of qualitative data regarding the lived experiences of students in hybrid education system is done according to the research objectives of this study. The data is analyzed by using reflexive thematic analysis approach proposed by Braun and Clarke in 2021. Thematic analysis can be understood as a qualitative research approach that focuses on detecting relationships or themes, from the data. This method is flexible, and it enables researcher to apply different theoretical frameworks onto the data. It has various steps which are structured that allow researcher to examine data,

code it, make themes and finally formulate findings in a clear and precise way. The process starts with a detailed familiarization with the raw data, chased by coding that focuses on similar themes. Researchers then combine these codes into wider themes, ensuring that each theme accurately reflects the data. This is followed by improving and reviewing the themes and establishing relationships among them, often envisioned with a thematic map. Then the names of themes are finalized and themes are defined. The final stage involves creating a systematic report that files the themes and their importance. While thematic analysis is commended for its flexibility and ease of use, it also presents difficulties, particularly regarding the capacity for partiality and prejudice, as researchers' explanations can impact the results. By using data analysis, eight themes have been generated.

**Table 1.**  
Themes and corresponding codes

Category	Themes	Codes
Tangible Barriers	Untrained Teachers	Incompetent teachers, Inadequate training of teachers, Issue of trained teachers
	Lack of Resources	Need for Technological resources, Lack of Fund, Poor internet, Poor mobile signals, lack of energy, Electricity shutdowns, Poor Infrastructure, Poor Fiber optics
Intangible Barriers	Fixed Mindset/ Thinking	Fixed Educational culture, Lack of Awareness, Fixed mentality of parents and students, Perception shift, Understanding Barrier, Mental gap, Stereotyped thinking in villages.
	Reluctant Students	Screen shyness, Mental gap towards online medium, Misuse of Internet, Comfort in interacting Physically, Discipline required, Laziness of students.
	Preference to Traditional Methods	Bounded education system, Smartphones as stigma, Data not safe, Using traditional methods again.
Learning Experiences using Hybrid mode	Better Skills and Creativity	Gain more Information, More skills and creativity, Engaged learning, Problem based learning, Active participation of students.
	Flexibility	Learning at ease at home, Diverse ways of learning, Helpful for rural area students, Affordable education at ease of home,
	Learn out of the box	Providing flexibility to students during problems Learn from Challenges, Lear from experiences, Face more challenges, Prepare students for future.

(Source: Author's own work)



**Figure 2:** Categorization of barriers and learning experiences in hybrid mode  
(Source: Author’s own work)

**RESULTS**

After carefully analyzing the data obtained from the interviews by the procedure mentioned in methodology, a total of eight themes has been emerged. The results are presented in the form of a table with clear depictions of themes and a few relevant codes.

**Tangible Barriers**

The barriers are divided into two categories, the first one is tangible barriers, which includes the visible barriers towards the adoption of Hybrid education system.

**Untrained Teachers**

The findings indicate that teachers at all levels, whether it be school, college or university, are untrained for this system as they are used to traditional methods of instruction, and they perform well in that system. If a hybrid education system has to be implemented, then proper training of teachers regarding this new system is required, otherwise the required results are impossible to achieve. One participant said:

“Another issue I would also or another challenge I would also like to share and that is like you know we have to train our teachers also for this. They need proper guidance and training is required, then umm until we are not providing them the proper like you know assistance for like you know implementing the system so you cannot have like you know the desired outcomes which you are looking for.”

### ***Lack of Resources***

This includes several types of resources, such as funds, power, electricity, internet connectivity, technological resources, infrastructure, mobile signals, specific software, and others. Findings indicate that the lack of resources in Pakistan due to varied reasons can contribute to issues regarding the adoption of Hybrid education system in Pakistan. Without proper and appropriate resources, the future of Hybrid education system is very unlikely. One of the participants said:

“Why our child is lagging behind in technology, just because he did not get that thing, if he uses the internet, then he needs a proper internet connection, if he wants to take something online, then he does not have electricity, if he has electricity, then he can have family problem, or he is not so aware of how to use technology, even if he has a mobile in his hand, but he is going in a negative way, just because of our society, the challenges that come, hybrid is still behind us”.

### ***Intangible Barriers***

The other category of barriers are the intangible barriers, which cannot be seen and touched but they can play important part in impeding the successful implementation of Hybrid education system in Pakistan.

### ***Fixed Mindset***

When we consider the people living in Pakistan, they have a fixed mentality almost towards everything. Especially when we talk about change in modern times, people are reluctant to change their ways and thinking. Bringing change to our society, especially regarding technology, is an exceedingly arduous task and people are adamant about their traditional ways of living. Findings from interviews focused on this aspect that parents, students, even teachers have fixed mindset because of lack of awareness and culture. There is a fixed educational culture in Pakistan that is bounded one, and there is a need of change in perception of people if any change is required in educational settings. For any change, tolerance is required which lags in our country and if we talk about rural areas, people have stereotyped thinking regarding use of technology.

So, to bring this type of technological change to education, a change in ways of thinking is required. One of the participants said:

“So, that mindset is a bigger barrier, which umm influences the people, which influences students and parents to receive education only through the formal medium or only through the campus learning programs, not through online programs. Even the international programs are offering, like Coursera and edX are offering different programs. But students in our country are not going for that, just because they want to share with their family, their relatives that they are enrolled in some university, which is physically present. So, that is a bigger barrier, I think.”

### ***Reluctant Students***

Students are also believed to show reluctance whenever any change is required in educational settings because most students want to remain in their comfort zone, which can be provided by physical classes only. The Hybrid education system requires a lot of changes regarding use of technology, adapting to new methods of instruction and changing ways of students. So, students have a mental gap towards online medium due to varied factors such as screen shyness, laziness of students, non-serious attitude of students, lack of motivation of students and lack of discipline required by the students. One of the participants said:

“The second thing for them is a non-physical barrier is that, how will they adopt this thing themselves, how will they complete the assignments, this means a thinking, the main thing is that there is a thinking, some are from their parents, some are from their parents, some will have a personal thinking too, that how will I do this, how will I face this, or how will I be able to cope up with this thing”.

### ***Preference to Traditional Methods***

Teachers and students are more inclined towards physical classes and old methods of education as evident from the post COVID times. After the reopening of schools and universities, teachers and students preferred to go back to their traditional modes of learning as they find themselves more comfortable in that mode. Students, especially from rural areas, are not believed to be comfortable in using technology, as they think that their data is not safe online or they will face difficulties in using hybrid mode. One of the participants said:

“See umm when we because what I have seen after covid, mostly like you know schools are come back to their traditional ways of teaching right, at that time you know we were unable to have physical uhm like you know classes, we all were

compelled to like you know use that online system but as like you know we have come back to physical classroom structure so mostly I have seen people have again started using traditional methods”.

### **Learning Experiences using Hybrid mode**

The challenges and barriers towards the adoption of Hybrid education system in Pakistan can impact on effectiveness of students learning experiences in numerous ways. Findings found out that despite of various challenges faced by students in hybrid mode, students favored the adoption of this system and gave possible benefits of its adoption and implementation in our educational system. The possible benefits of adoption of this system are discussed below.

#### ***Better skills and Creativity***

If hybrid education system will be fully integrated into educational system in Pakistan at all levels, then it can bring promising results especially in improving skills and creativity of the students. Students will be able to adapt better to modern technology and online tools and experiences. Development of skills is vital for preparing students for the future, so this will ultimately increase chances of a successful future for the students. One participant informed:

“This will develop the skill, you know how much is the issue of our economy, so when our youth will be educated, then it will contribute in a positive way.”

#### ***Flexibility***

A hybrid education system is believed to be more useful for students who are working or live in rural areas or students who cannot afford to go to university due to extremely limited resources. This system can provide them with flexibility and opportunity to study in the ease of their homes and gain the same benefit as other students. In this way, every student can get equal access to education regardless of their socioeconomic status. One participant said:

“Yeah, as I told you before that the flexible time availability and the busy schedule of any student. If the student is learning as well as is working, it is quite versatile way of teaching to them. Because I’m also working and learning. So, I need this convenience of time. So, I want to advise many universities to convert their system into hybrid education. So that the generation can get better way of education and the better experience as well.”

### **Learn out of box**

Students who are used to of getting education in the same traditional ways as their parents or elders, will not be able to generate anything novel or innovative. When students are exposed to different instructional strategies and methods, it will enable them to think and learn out of the box and will enable them to produce productive and useful ideas. Students will be able to face more challenges and learn from new experiences and challenges. One participant said:

“I would say, through the experience and the barriers which came in the way of the hybrid system, they have achieved it and yes, I agree with this point that whatever challenges come in your way, they teach you. The barriers come and they teach you and then you cross them. Easy and then you get prepared for the upcoming things as well.”

### **DISCUSSION**

The change of educational system from traditional to online required complete change in perspectives and perceptions of people involved in education systems. The increase in digitalization along with disruption caused by Covid 19, necessitated people to adopt a shift of perception and change their ways of thinking and believing. The shift from traditional mode of education to hybrid mode was not an easy task and required a lot of efforts by all the parties involved in the educational process. Initially when hybrid education system was adopted in the world after covid- 19, educational institutions faced number of problems. One of the key factors was that teachers were lagging in digital skills and necessary training to adopt this system (Bayaga & Plessis, 2023). Findings from interviews indicated that teachers in Pakistan lack technical skills and training to conduct hybrid mode of education and unless and until they do not receive the required guidance and training the required outcomes cannot be achieved. According to Halton (2025), after the adoption of Hybrid education system all over the world, many people negated the idea of using this system due to the barriers they face while adopting this system and they were not ready to adopt this mode in their educational setup and preferred traditional mode.

On the contrary, COVID- 19 necessitated educational sector to go online, educational institutions all over the world had to switch to different online modes. The Hybrid mode became increasingly popular among universities. Despite the challenges confronted by students and teachers, hybrid mode showed promising results after its adoption. It was adopted in educational institutions because of the advantages it brings with it (Raes et al., 2020). One of the positive impacts of Hybrid education system was believed to

provide accessibility to students especially who are working or belong to marginalized areas where students cannot travel and afford to receive physical education. Kazu and Yalçın (2022), stressed that hybrid system when incorporated into educational settings produced a lot of satisfactory results in terms of learning outcomes and digital skills. Findings revealed that Pakistani students favored hybrid mode especially after experiencing it. One of the big factors highlighted here is that students got used to online mode during covid and it was difficult for them to operate in conventional mode afterwards.

The findings of this paper align with the theory of Transformational learning. The theory focused on how people change their ways of thinking, believing, feelings and behaviors as a result of transformational thinking about a particular aspect or idea and they try to make meanings of their lives consciously (Simsek, 2012). Due to transformational thinking process, people accept latest ideas and beliefs and mold themselves to new ways. As we can see, people changed their perspectives regarding the use of technology and new methods in the educational process by changing their thinking and ideas about online education. The shift from traditional mode of education to online learning and teaching was a big step towards the implementation of digital technology into educational settings. The outcomes of this study highlighted that learners changed their ways of thinking and aligned their thinking with modern methods about education and how this new hybrid system can bring versatile learning experiences and opportunities for them. These types of technological changes in education are possible when people change their perspectives regarding the use of technology in educational settings.

Community of Inquiry Framework presented by Garrison and Anderson gave concepts of different presence in online learning environments. The themes emerging from the findings are reflected in the concepts described by Col framework. The teaching presence in Col framework represents the instructional design, delivery methods and facilitation provided by the teachers, which is an important element in hybrid education. Findings indicate that students mentioned about ignorant teachers, poor delivery of instruction and lack of communication with the teachers which serves as an impediment in the learning process of the students. This aspect aligns with the Col assumption and confirms that deficiencies in instructional design causes disruptions in the hybrid learning experiences in Pakistan. Another element discussed in Col framework is the cognitive presence by which the students construct meaning of the knowledge provided to them. Students in this study reported the vagueness in the instruction and lack of understanding of the course material due to which they were not able to understand the meaning of instruction provided to them. It is evident that without proper facilitation and structured

guidance, students will not be able to understand concepts which will result in shallow learning. Col highlighted another element which is called learner presence which indicated that learner is equally involved in the learning process by doing self-management, motivating oneself and doing persistent efforts. The findings indicate that students faced problems in focusing and managing time and navigating their studies. This indicates that learner presence was not up to mark which aligns with Col assumption that students' self-regulation affects their success and quality of their learning experiences.

### **Implication**

This study has theoretical implications as the findings align with the concept of Transformational learning theory. The theory focused on how people change their ways of thinking, believing, feelings and behaviors as a result of transformational thinking about a particular aspect or idea and they try to make meanings of their lives consciously (Simsek, 2012). Due to transformational thinking process, people accept latest ideas and beliefs and mold themselves to new ways. As we can see, people changed their perspectives regarding the use of technology and new methods in the educational process by completing changing their thinking and ideas about education. The shift from traditional mode of education to online learning and teaching was a big step towards the implementation of modern technology into educational settings. The outcomes of this study highlighted that learners changed their ways of thinking and aligned their thinking with modern views about education and how this new hybrid system can bring ease for them. These types of technological changes in education are only possible when people change their perspectives regarding certain things and overcome the barriers and obstacles in the way of their execution.

There are practical implications of this study for different people. Mostly it has implications regarding learners of distinct levels, faculty, mentors, and decision-making authorities of educational institutions. The results clearly indicate that if hybrid education system can be implemented in educational institutions in Pakistan, then it can bring promising results at all levels. Understanding the dynamics of this system can enable teachers and educators to change their traditional methods of instruction and make mindful decisions by thinking from the perspectives of students and keeping in mind their viewpoints and finally enabling students to develop skills and change their ways of learning. Educational institutions, on the other hand, can benefit from this study and try to incorporate this new system in their institutes by working on minimizing the challenges faced during the adoption of hybrid mode, as the world is moving towards technology and mechanics, it's high time that Pakistan should compete

with other countries and improve their educational ranking in the world.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The introduction of modern technology and its applications have entered all spheres of life and its introduction in educational settings is gaining momentum with the passage of time and with the increase in modern technology. The use of modern and changing digital technology has played a significant hand in broadening students' understanding and learning experiences and enabling them to link education to practical situations. The introduction of hybrid education system formally started after COVID- 19 pandemic and now it is being implemented all over the world. Students in Pakistan hold mixed views regarding the hybrid education system, some find it difficult in the landscape of Pakistan while others see this system as the future of educational environment. In this paper the intangible challenges towards the adoption of hybrid education system were found and they mainly indicated that the lack of resources and trained teachers, fixed mentality of Pakistani citizens, reluctant students towards hybrid mode, preference to traditional methods of education by students and teachers. On the contrary, students showed increased interest for adopting hybrid mode in their universities provided the challenges are minimized. If hybrid mode of education has to be adopted in educational settings in Pakistan, it should be adopted in a proper manner with the pros and cons equally realized, then it will bring promising results and will enable students to develop skills and creativity and have versatile learning experiences.

### Recommendations

Due to increasing use of technology in the educational sector it has become crucial for researchers to study the hybrid education system and its applications in the educational sector. This study is limited to the findings of students regarding the adoption of this system. The research should also include the perspectives of teachers and parents and their views for the adoption of this system. This research is only limited to the educational sector and adoption of this system in the educational sector, but it can be implemented in other sectors, so more work is required in this field as well. The upcoming work should also focus on new ways of integrating hybrid education system in Pakistani context keeping in view of the possible challenges and barrier in its adoption.

If we see this in context of practical research, this research can be useful for students, teachers, educators, and educational institutions policy makers. The

direction of future research should be towards finding practical ways to adopt this system in our educational institutions. The research should aim towards the help of teachers in improving themselves to adapt to new technological modes of learning and have a strong grip in implementing hybrid mode in their classrooms. Research should be conducted towards how policies and decision making should be done in accordance with the need to incorporate technology in educational settings.

## REFERENCES

- Ahmad, M., & Wilkins, S. (2025). Purposive sampling in qualitative research: a framework for the entire journey. *Quality & Quantity: International Journal of Methodology*, 59, 1461–1479. <https://doi.org/10.1007/s11135-024-02022-5>
- Andreev, O. (2023). Modern trends in innovative development of business education. *E3S Web of Conferences*, 371, Article 5039. <https://doi.org/10.1051/e3sconf/202337105039>
- Bayaga, A., & Plessis, A. D. (2023). Ramifications of the Unified Theory of Acceptance and Use of Technology (UTAUT) among developing countries' higher education staffs. *Education and Information Technologies*, 29, 9689–9714. <https://doi.org/10.1007/s10639-023-12194-6>
- Bliuc, A.-M., Goodyear, P., & Ellis, R. A. (2007). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *The Internet and Higher Education*, 10(4), 231–244. <https://doi.org/10.1016/j.iheduc.2007.08.001>
- Braun, V., & Clarke, V. (n.d.). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352. <https://doi.org/10.1080/14780887.2020.1769238>
- Creswell, J. W., & Creswell, J. D. (2022). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (6th ed.). SAGE.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15, Article 3. <https://doi.org/10.1186/s41239-017-0087-5>
- Gnaur, D., Hindhede, A. L., & Andersen, V. H. (2020, October). Towards hybrid learning in higher education in the wake of the COVID-19 crisis. In C. Busch, M. Steinicke, & T. Wendler (Eds.), *Proceedings of the 19th European Conference on e-Learning, ECEL 2020* (Vol. 2020-October, pp. 205–211). Academic Conferences International (ACI). <https://doi.org/10.34190/EEL.20.093>
- Halton, C. (2025, May 27). *Diffusion of Innovations Theory: Definition and Examples*. Retrieved from <https://www.investopedia.com/terms/d/diffusion-of-innovations-theory.asp>
- Heinze, A., & Procter, C. (2004). Reflections on the use of blended learning. Education in a Changing Environment. In *Proceedings of the Education in a Changing Environment Conference*. Retrieved from [https://www.researchgate.net/publication/28579830\\_Reflections\\_on\\_the\\_use\\_of\\_blended\\_learning](https://www.researchgate.net/publication/28579830_Reflections_on_the_use_of_blended_learning)
- Irum, S. (2020). Blended Learning: Innovative challenge faced by students at University level in Pakistan. *Indian Journal of Science and Technology*, 13(42), 4386–4395. <https://doi.org/10.17485/IJST/v13i42.1212>

- Kazu, İ. Y., & Yalçın, C. K. (2022). Investigation of the Effectiveness of Hybrid Learning on Academic Achievement: A Meta-Analysis Study. Cemre Kurtoğlu Yalçın, English Teacher, Ministry of National Education. *International Journal of Progressive Education*, 18(1), 249–265. <https://doi.org/10.29329/ijpe.2022.426.14>
- Klimova, B. F., & Kacetl, J. (2015). Hybrid Learning and its Current Role in the Teaching of Foreign Languages. *Procedia - Social and Behavioral Sciences*, 182, 477–481. <https://doi.org/10.1016/j.sbspro.2015.04.830>
- Li, K. C., Wong, B. T. M., Kwan, R., Chan, H. T., Wu, M. M. F., & Cheung, S. K. S. (2023). Evaluation of hybrid learning and teaching practices: The perspective of academics. *Sustainability*, 15(8), Article 6780. <https://doi.org/10.3390/su15086780>
- Menaught, C. (2011). The best of both worlds: Effective hybrid learning designs in higher education in Hong Kong. In R. Kwan, J. Fong, L. Kwok, & J. Lam (Eds.), *Hybrid Learning. ICHL 2011. Lecture Notes in Computer Science* (Vol. 6837). Springer Berlin Heidelberg.
- Mujeeb, N., Ali, A., & Anam, S. (2025). Exploring Qualitative, Quantitative, and Mixed Methods: A Comprehensive Review in Educational Research. *UMT Education Review*, 8(1), 24–60. <https://doi.org/10.32350/uer.81.02>
- Qazi, M. A., Sharif, M. A., & Akhlaq, A. (2022). Barriers and facilitators to adoption of e-learning in higher education institutions of Pakistan during COVID-19: perspectives from an emerging economy. *Journal of Science and Technology Policy Management*, 15(1), 31–52. <https://doi.org/10.1108/JSTPM-01-2022-0002>
- Raad, M. E. A., Odhabi, & Hamad. (2021). Hybrid Learning Here to Stay! *Frontiers in Education*, 4(2), 121–131. <https://doi.org/10.22158/fet.v4n2p121>
- Raes, A. (2022). Exploring student and teacher experiences in hybrid learning environments: Does presence matter? *Postdigital Science and Education*, 4, 138–159. <https://doi.org/10.1007/s42438-021-00274-0>
- Raes, A., Detienne, L., Windey, I., & Depaepe, F. (2020). A systematic literature review on synchronous hybrid learning: gaps identified. *Learning Environments Research*, 23, 269–290. <https://doi.org/10.1007/s10984-019-09303-z>
- Ramalingam, S., Hashim, H., & Yunus, M. M. (2021). Revised Community of Inquiry as a theoretical foundation for understanding students' blended learning experiences. *Proceedings of the 2nd Progress in Social Science, Humanities and Education Research Symposium*, 563, 206–210.
- Rodrigues, A. L. (2023). Innovative Hybrid Learning: A New Paradigm in Teacher Education for Transformative Learning. In M. D. Lytras (Ed.), *Active and Transformative Learning in STEAM Disciplines: From Curriculum Design to Social Impact*. <https://doi.org/10.1108/9781837536184>
- Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. *Computers & Education*, 55(4), 1721–1731. <https://doi.org/10.1016/j.compedu.2010.07.017>

- Simsek, A. (2012). Transformational Learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 3341–3344). Springer. <https://doi.org/10.1007/978-1-4419-1428-6>
- Singh, J., Steele, K., & Singh, L. (2021). Combining the Best of Online and Face-to-Face Learning: Hybrid and Blended Learning Approach for COVID-19, Post Vaccine, & Post-Pandemic World. *Journal of Educational Technology Systems*, 50(2), 140–171. <https://doi.org/10.1177/00472395211047865>
- Soomro, S., Soomro, A. B., Bhatti, T., & Ali, N. I. (2018). Implementation of Blended Learning in Teaching at the Higher Education Institutions of Pakistan. *International Journal of Advanced Computer Science and Applications*, 9(8).
- Vernadakis, N., Antoniou, P., Giannousi, M., Zetou, E., & Kioumourtzoglou, E. (2011). Comparing hybrid learning with traditional approaches on learning the Microsoft Office Power Point 2003 program in tertiary education. *Computers & Education*, 56(1), 188–199. <https://doi.org/10.1016/j.compedu.2010.08.007>
- Ziglar, Z. (n.d.). *If you are not willing to learn, no one can help you. If you are determined to learn, no one can stop you.* Retrieved from <https://academy.thebusinessprofessor.com/quotes/zig-ziglar/>

## APPENDIX

### STRUCTURED INTERVIEW QUESTIONS

- Do you feel that hybrid education system can be adopted in Pakistan successfully, give reasons?
- What do you think is the future of adoption of hybrid education system in Pakistan?
- In your opinion, what are the potential challenges in implementation of hybrid education system in Pakistan?
- What do you think are some of the non-physical barriers that could hinder the successful adoption of hybrid education system in Pakistan?
- How do you think the barriers and challenges in adoption of hybrid education system can impact the overall effectiveness of students learning experiences?
- How do you think adoption of hybrid education system can bring a versatile learning experience for students in Pakistan?