

# PEDAGOGICAL PROBLEMS DURING THE PANDEMIC: A STUDY OF ISSUES AND CHALLENGES IN TEACHING

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## ABSTRACT

**Concept.** COVID-19 has pressed the need for social distancing that was unprecedentedly invoked across societies during the pandemic. The governments that launched emergency steps to divert physical learning systems into online pedagogical alternatives created critical possibilities and adverse challenges for both tutors and learners. The study aims to review several cases concluding that the closure of schools and colleges has impacted around 94% of the student population across globe. The present study tries to comprehend the transformation (both expansion and constraints) in the pedagogical processes comparing results and feedback from both developed and developing nations.

**Result and Discussion.** The study made a far-reaching analysis on the sweeping impact of COVID-19 at the integrative three-tier educational level i.e., primary, secondary and higher education in two separate perspectives i.e., teachers and learners. The restrictive movement policies adopted by governments have changed the conventional (face-to-face) educational practices. The findings suggest that different populations faced different problems during the pandemic because of number of reasons which is discussed and highlighted in the study.

**Originality.** In order to map efficacy and efficiency, the principles, difficulties, and praxis of online educational pedagogy have been comprehensively examined in the study. The key contribution of the research is the result claiming the potential of technology as well as the obstacles faced by students while learning, due to digital mechanisms.

**Keywords:** pedagogical problems, pandemic, educational transformation, issues and challenges in teaching, online learning in education during crisis

## INTRODUCTION

The quest for enlightenment saw knowledge as logical and all-encompassing into a value cluster, progressing in a linear and predictable manner. Being measurable and cohesive, yielded amazing solutions to scientific,



social, and economic problems. Today, however, the concept of knowing, learning, and practising is more complicated, non-linear, and mixed. The study aims to review the new curriculum and technological strategies in this time of crisis in order to remain the most aware global tutors and students. When television, wired phones, and handwritten information were the most trustworthy and daily techniques in the late 1990s, the world transformed. Currently, internet, satellite, or digital-cantered connectivity on computer and laptop displays becomes the new norm (Chan, Bista, & Allen, 2021). COVID-19 was declared as a global pandemic on 12 March 2020, affecting and transforming distinct social, economic, political, environmental life. What has become a burning issue around the world is to mark the gap in communication disintegration between a tutor and a pupil in an educational set-up.

The uncertain health emergency due to COVID did enforce technology-based pedagogy available to the students in almost all the three tier education system. The pandemic has not only taught us about the challenges of physical disunion between a student and a teacher but also about the mental partition among the peer groups and from a scholarly structured educational atmosphere. The orders that were passed by government institutions for the suspension of face-to-face learning in schools and colleges had adverse effects on improving the mind in the history (Espino-Díaz et al., 2020). We are already aware of the negative impact of the non-supervisory role of educational institutions during summer vacations or due to natural calamities or any other personal absenteeism. The digitalisation of education with the help of ICT has brought achievements for students in academia but also accelerated learning inequalities. Although researches around the world suggest that restriction and closure of institutions did curb the spread of coronavirus, the negative impact of delay and unequal distribution of knowledge has widened the gap among the elite and marginalized group up to 30% (Haeck & Lefebvre, 2020). There are ample amount of literature available to remodel distance education or remote learning but the agenda or the plan must rely on equal utilization of digital learning and overall students' counselling.

## LITERATURE REVIEW

“Open and distance learning in the developing world,” by Hilary Perraton (2012) is one of the most fascinating works on distance, online, or technology-based learning in third-world countries. She explains how and what these countries confront in terms of difficulties and opportunities, as well as teaching and learning results. It entails context analysis and synthesis, as well as communication, commitment, and complex strategies aimed at making education more accessible to all. Since the 1960s, the impact of technology on social, economic, and political institutions has been a source of hope.

A research paper by Henny Yulia (2020) named "Online learning to prevent the spread of pandemic coronavirus in Indonesia," explains how COVID-19 virus has an impact on all parts of life including the education system, which is one of the most important aspects of society. It elaborates the preconditions required for educators to change their teaching methods whether they want it or not. The research was done to determine how the coronavirus pandemic has reshaped schooling and discusses the different types of online learning that educators employ in the era of pandemic around the world. Aleksander Kobylarek (2021, p. 6) accentuates "pupil and students pretended that their lack of preparation and reluctance to make contact were based on spurious technical problems, such as an inoperative camera, broken microphone, or an interruption of their internet connection."

In one book *Online teaching and learning in higher education at COVID-19: International perspectives and experiences* written by Roy Y. Chan, Krishna Bista, and Ryan M. Allen (2021) a detailed analysis and voices from various faculties, professors, and students have been compiled. Despite global limits, the collection explores the medium of online instruction and demonstrates the endurance of higher learning and the determination of the teaching faculties. The international viewpoint allows for greater detail on contemporary transformation narratives, as well as reflection on knowledge creation and continuity in Commonwealth and European countries. The pandemic has prompted a desire among institution members to classify, cope with, and coordinate the education process.

"Pandemic school closure may increase inequality in test scores," by Catherine Haeck and Pierre Lefebvre (2020), details how schools and learning institutes across countries have been closed and decided to remain shut until Covid-19 ends. The current disparities in expansion of human cognitive skills and persistent hierarchy of the advanced countries being efficient and successful other than the under-developed continues. The study urges an arrangement for the reopening of institutions to reduce the gap between knowledge accumulation and establishment of young minds. A case study of Canada is used to provide a detailed report on the 15-year longitudinal estimation of the socio-economic growth gap. There is also a detailed examination of the pandemic's impact on educational disparities, as well as the use of comparable strategies for future improvements.

"Investigating self-directed learning and technology readiness in blending learning environment" by Shuang Geng, Kris M. Y. Law, and Ben Niu (2019), signifies the importance of both face-to-face and virtual instruction, called as blended learning (BL). This expands a discussion on the emerging concept of "affluent educational system" with several tech-efficient communication networks. The research aids us in understanding how the BL approach's features influence student learning effectiveness. The research demonstrates how students' capacity to determine their own learning and employ learning tools might affect their learning effectiveness. Thro-

ugh inquiry, it depicts the impacts of self-directed learning, technological inducement, and learning inclination on three distinct dimensions (cultural, teaching, and cognitive) among learners in BL and Non-BL (NBL) situations. Finally, the findings have formed a firm base for this particular study which reveals that the BL environment is conducive to student learning.

Hassan Mirzajani, Rosnaini Mahmud, Ahmad Fauzi Mohd Ayub, and Su Luan Wong (2016) study's "Teacher's adoption of ICT and its integration in the classroom," gave a detailed analysis with a solid literature. The paper's major goal was to uncover factors that consistently motivate teachers. Many educational policymakers who campaigned for the use of ICT in educational processes long before the pandemic as a key advance in classroom learning were convinced by the optimism that information and communications technology (ICT) will alter education. As a result, the research was unique in that it used primary data sources to answer the following question: How might instructors benefit from incorporating ICT into the classroom? What are the strategies for improving e-learning?

Hedviga Tkáčová, Martina Pavlikova, Patrik Maturkanič, and Aleksander Kobylarek (2021b) in the article titled "Homogeneity - a mechanism responsible for students' confidence in disinformation in the social media environment" opine:

Students are communicating with each other, asking questions and looking for answers. Depending on the degree of success or failure that users acquire during this process, social media become a space where active audiences spend a lot of its time (Tkáčová et al., 2021, p. 6).

Furthermore, the authors emphasize:

(...) a significant problem, especially in the area of social media, which are based on the idea of free and collective creation of content, brings active, communication and information hungry users, and especially their noncritical and increasing credibility against false information on the Internet (Tkáčová et al., 2021, p. 8).

In the research paper "School's out, but class's on. The largest online education in the world today: Taking china's practical exploration during the COVID-19 epidemic prevention and control as an example" online learning has broken the study limitations described in the research paper by Zhou Longjun, Wu Shanshan, Zhou Ming, and Li Fangmei (2020). According to the study's findings, large-scale online education projects require a well-established Internet infrastructure. They demonstrated how large-scale online education activities cannot be carried out without a strong infrastructure through a study of China and its cities. And, after nearly three decades of construction, China's internet infrastructure has vastly improved, offering a solid foundation for future growth under the "Education Informatization 2.0 Action Plan." This study aims to show how developing countries can better integrate and employ technology in education by

focusing on extending teaching content, using novel teaching techniques, and improving teacher assessment.

In a paper titled "Online learning and emergency remote teaching: Opportunities and obstacles in emergency situations," Fernando Ferri, Patrizia Grifoni and Tiziana Guzzo (2020) describe three types of challenges. These are technological, pedagogical, and social issues stemming from a lack of technological access, interactive educational multimedia, and conducive home learning environment respectively. During the Ebola outbreak, highlighting the options for using television and radio to convey educational content and the distribution of teaching resources in hard copies requires a collaborative effort involving schools, post offices, news channels, broadcasting ministries, and others. Such networks provide a pattern for other countries to follow.

Tkáčová, Pavlikova, Maturkanič & Kobylarek (2021a) in the paper titled "Problems of pedagogical practice: Disinformation in media and credibility factors in a group of high school students in Slovakia," write: "the use of modern technologies and applications, including smart phones and computer games, designed to promote critical thinking" (Tkáčová et al., 2021a, p. 3520). Moreover, the overuse and misuse of technology is a hindrance in virtual learning platforms.

The performance of schools and colleges using digital media is described by Anna Yates Louise Starkey, Ben Egerton, and Florian Flueggen (2021) in their study "High school students' experience of online learning during Covid-19: The influence of technology and pedagogy." Throughout the study, the use of the technique to investigate students' experiences with virtual learning at home during the epidemic is mentioned. It describes how collaboration facilitates learning, and how supportive pedagogies and incentive techniques promote academic advancement and improved human well-being.

Ann E. Austin and Mary Pilat (1990) concluded that stress and anxiety are a part of teaching personnel's daily life in their study "Tension, stress, and the tapestry of faculty lives." These tensions are also exacerbated by necessary responsibilities and commitments linked to faculty members' personal lives, such as parenting and caregiving for loved ones.

Kobylarek et al. (2021) emphasize that:

It would be worth rethinking the education system in order to focus on what is most important and necessary, so that key competences are at the centre and not lost in the mass of teaching material, mixed in with less important content. The structure of the whole body of material, as well as the educational process itself, raises justifiable doubts (Kobylarek et al., 2021, p. 7).

A worldwide conversion the book titled *Competencies in teaching, learning, and education leadership in the digital era* by J. Michael Spector, Dirk Ifenthaler, Demetrios G. Sampson, and Pedro Isaias (2016) is about twenty-first century promoting competencies in the digital age. Sue Bennett, Karl Maton, Lisa Kervin (2008), Chris Jones and Graham Healing are among the

best academics that have campaigned for how digitalization has impacted the lives of young minds that vary in terms of socio-economic background, gender, regions, learning preferences, and so on. PCK Pedagogy content knowledge as a dimension has been synchronised with TPCK, where "T" stands for technology, where pre-service training on what the teacher should know before joining the institute. To press the cognitive and social psychological perspective, a detailed understanding of whether learners and teachers have developed hypermedia thinking is presented. This study takes a close look at both the teacher's and the students' perspectives. Kobylarek et al. (2021) say:

Remote learning was enforced by the emergency caused by the pandemic. It is difficult to identify it with online education and the comparisons or attempts at identifying with e-learning must be considered as far from accurate. Remote learning is somewhat reminiscent of clumsy attempts at coping with an uncomfortable situation and attempts at obtaining the best possible results, despite worsening working conditions. Therefore, for those teachers who have so far only used the Internet to a small extent to support their teaching, remote learning can be a particularly serious challenge (Kobylarek, Plavčan, & Amini Golestani, 2021, p. 74)

This study by Pedro Isaias, Demetrios G. Sampson, and Dirk Ifenthaler (2020), titled "Online teaching and learning in higher education," provides a new perspective on the impact of distance learning from higher education on student experiences. The entire online survey was based on arguments and analysis to assess the extent to which students have internet access. A quick introduction to higher education learning systems in developing nations, particularly in India, one of the world's largest democracies, is provided, with a suitable sample size. Throughout the article, many government papers aided in suggesting the proper flow of secondary data in the study. Through a combination of models and their components, as well as remarkable online courses embracing the pre- and post-pandemic attitude, Open Distance Learning (ODL) has decentralized information "for everyone." It must also concentrate on quality assurance.

## OBJECTIVES OF THE STUDY

The present study will focus on the following objectives given below. The study will record the changes that occurred during pandemic and it also examines the learning and teaching aspects in academia:

- The objective is to record and discuss such an educational transformation including traces from all aspects of pedagogy.
- It is to examine whether the stress, confidence and learning aspects among the teachers and students has increased or decreased?
- The countries are already unable to improvise the given age-old mechanisms to improve quality of distance learning. Then how has

the pandemic impacted the same old process into a new improvised techno-learning mechanism?

- The study concludes the need for an hour to address the challenges related to pedagogy through digitalization. And the main focus is to revitalize the upgraded learning sources and complexities experienced both by the tutors and students.

## RESEARCH QUESTIONS

The following research questions will be answered through the study conducted by the researcher:

- How the transformation in core concepts of learning from traditional to online has been performing in the recent time of crisis?
- How has online learning environment improved social presence by using web applications, like CISCO, WebEx, so on so forth, which is an important aspect in e-learning?
- How quality of learning and deeper interaction is achieved through the digital learning mechanism?
- How digital skills or online learning is responsible for the growth and decay of human knowledge creation, sustenance and future development?

## METHODOLOGY OF THE STUDY

The study has followed a rigorous scrutiny of the literature available on the impact of traditional and online (distance) learning through qualitative understanding of the available data. The methodology follows analytical methods and allows the study dividing the section into expansion and constraints experienced by the teachers and learners involving a combine results from all stages of education through quality research papers and articles in recent times.

## THE IMPORTANCE OF “ONLINE” LEARNING IN EDUCATION DURING CRISIS: EXPANSION AND CONSTRAINT

Mobility restrictions have exacerbated severe restraints, but they have also encouraged collaboration with technical industrial giants and philanthropic organisations in order to traverse the alteration from conventional to modern online learning. The impact of COVID-19 has created better moment for the significant adoption of internet in educational activities. The Educators are acutely aware of the current state of human awareness as they work to integrate diverse intelligence theories with technology (Isaias, et al., 2020). Joseph Firth et al. (2019) discusses how the internet, the

human brain, and intelligence theory are changing teaching and learning. The study considers distance learning as a process occurring in different place from regular face-to-face communication through a special or technological assistance. The advent of the internet has advanced a connecting bridge between online learning and distance learning through adjustments made in the mechanism used to deliver lectures. Anthony Bates (2015) elaborates that both the teacher and student in the age of digital learning is a learner in themselves. He justifies the availability of literature related to linguistic differences between approaches like electronic learning, internet-based, and online learning and so on. His study imposes some obligatory skills required by the students of current digital generation idiosyncratic to IT knowledge but must have detail engagement and attitudinal changes towards it. A successful conversion of traditional learning or classrooms into "Smart Classroom" or "Digital Education" depends upon instructional strategies utilized by teachers to communicate contents to students.

## CONCEPTUAL FRAMEWORK OF ONLINE LEARNING

As explained in the introduction, educational practices that do not require school premises appear to adapt themselves to public or adult education. Public education regarding agriculture and health, as well as literacy and basic education, has long been a priority for both ministries and non-governmental organizations. As a regular feature of many agricultural extension programmes, radio is still utilized to guide farmers in developing nations. In Latin America, radio schools have been providing adult education for rural families for half a century, with church support (Yulia, 2020).

When delivered over the internet or internet-based mechanisms, or a range of advanced strategies, traditional text books and hard copies material knowledge has substantial social assimilation. Students in primary level use the internet to develop their early reading abilities, middle-school students participate with practicing scientists/laboratory instructors to design and conduct research, and youth who have dropped out of college take online courses to attain the credits they require to graduate are just a few examples (Mirzajani, et al., 2016). The use of online learning through various courses and content is intended to stimulate rather than replace face-to-face interactions (e.g., virtual courses designed and delivered online by instructors through Zoom, Google Meet and so on). Why is it important to distinguish between face-to-face and simply virtual content? The former involves a live session or face-to-face encounter that results in a spontaneous activity, whilst the latter does not. The activity is regarded successful if the outcomes of online face-to-face or conventional learning deliver equivalent effectiveness in knowledge dissemination without sacrificing learner achievement. On the other hand, online improvement activity produces learning outcomes that are merely proportionate (rather than superior) to



those obtained through face-to-face discipline alone, which would be considered a waste of money and effort because technological advancement does not improve pupil learning (Geng, et al., 2019). As a result, the outcomes of online learning demonstrate that Blended Learning is well-functioning having positive benefits.

The major goal of an online learning system is to integrate information technology into the broader educational process. Even during the post-lockdown and current COVID days, such online learning is utilized to disseminate about the disease-related information itself. Online learning is a form of distance learning in which educators use the internet to assist and teach their students with a number of online learning alternatives to select from (Yulia, 2020).

### EXPANSION

Educators from both developing and established countries advocate in favour of open, online, and distance learning as a solution to nation-wide economic and social upheavals. If we look attentively, the number of colleges and universities has increased at a faster rate in the previous forty years than ever before. However, inequalities in access to such educational institutions are most prevalent in Sub-Saharan African regions, where just one out of every four children attends school, compared to one out of every two in Asian countries (Pityana, 2009). Despite the unusual pandemic catastrophe, millions of students remain outside of schools and institutions. It was stated in the late 1960s that maintaining the current rate of educational expansion would be challenging.

As the developing countries of the world faced an unprecedented combination of demands, there was a quantitative mismatch between the social need for education and the capacity to provide it. The need was to expand education due to political pressure and growing economic evidence for benefitting general public. The comparative ratio of increased demand for teaching and learning was much less than the advanced industrialized countries moving to a concept known as "universal education" (Jacobsen, 2018). According to a 1991 UNESCO report, Africa needs an additional 5.6% of primary school teachers and 7% of secondary school teachers to meet its teaching capacity. In general, developing-country schools and educational institutions lack fundamental resources such as trained and skilled teachers, as well as superior curriculum and textbook availability. Teachers' salary has reduced as the frequency of double triple shifts or hours worked has increased. With the most recent data accessible in the case of universities, similar stories of unequal resource distribution, libraries lacking advance journals, scientific goals, and experiments without suitable equipment may be found. Forget about online or digital learning; education has long been lacking in quality, which is inextricably linked to it (Perraton, 2012).

## EXPANSIVE PEDAGOGICAL POLITICS AND PRAXIS

Since the 1980s, neoliberalism has dominated the world, and it is thought to be one of the underlying plagues in addressing global economic imbalances. The disproportionate impact on society, as well as minorities and the disenfranchised in developing nations, has revealed a major and persistent power, pandemic, and educational system relationship. For example, even during the epidemic, when the underprivileged cannot afford food, education, or basic health care, the elites and business class have been seen exploiting them. The commercialization of education as a market, where the wealthy could afford “online classrooms” facilities throughout the pandemic, while the poorest of the poor struggled with lack of technical access, medical crises, political animosity, and religious extremism (Giroux, 2021) Only discussing the enrolment ratio and literacy rate would not result in improvements. It is incredibly difficult to compare quality standards across cultures and countries. However, a quality-control method is simple to implement. Students are more likely to stick with the curriculum and complete all cycles of education if education is inexpensive to all, exciting, student-centered, or connected to their adult lives (Anderson, Rainie, & Vogels, 2020).

## SUDDEN CHANGE IN THE PEDAGOGY

The above mentioned discussions talked about how a pandemic affects every part of the global system, including agriculture, manufacturing, energy, socioeconomics, and so on. It has a massive impact, affecting millions of pupils from closing pre-schools and to the cancelling of university conferences and workshops. Because of the coronavirus pandemic, teachers were obliged to teach children digitally in order to stop the sickness from spreading. The adoption of an online assessment style could encourage students to employ computer-based instruments and other potential sources of influence (Ali, 2021). According to data from Priori-Data obtained by the World Economic Forum, global downloads of Skype, House-party, and Zoom each increased by more than 100% in March 2020. In the wake of the recent turmoil, a variety of online platforms such as Google Classroom, WhatsApp, WeChat, Telegram, Messenger, and several other virtual tools are being investigated and evaluated for the benefit in teaching and learning. Even if face-to-face training continues, online platforms may be investigated further to provide learners with more knowledge and growth chances (Pokhrel & Chhetri, 2021).

CISCO WebEx and Zoom are widely utilised by users for online meetings and education, particularly in underdeveloped nations. Social presence is improved in the online learning environment by using these web applications, which is an important aspect in e-learning because studies have shown that the more the social engagement, the higher the quality of lear-

ning and deeper interaction. If students notice an improvement in their performance, they will be more inclined to assume that e-learning is more beneficial (Özüdoğru, 2021). Higher education institutions have used a variety of ways to decrease the impact of student plagiarism in examinations. This makes it difficult for educators and researchers to employ online assessment formats, and they are less inclined to propose and integrate them into their courses as a result (Spector, et al., 2016).

### ADVANTAGES

The findings of the study are discussed below. The study highlighted that the students and teachers both have some kind of freedom to tap their own skills and talents by teaching and learning online:

- Students and faculty were allowed to discover their own talent, potential, and a variety of learning opportunities through the application of technological mechanism for educational development (Mirzajani, et al., 2016);
- Lecturers and university management looked into the possibility of developing blended learning - Working remotely, which enables instructors and students to remain involved outside of the constraints of a regular university classroom;
- Flipped classroom activities are in which students undertake preliminary research and/or complete action in advance of online sessions, which has been applied as a strategy to enhance student's commitment to learning. The option for private chat, has increased scope for privacy, reduce hesitation and building personal rapport between students and teachers.

Unsurprisingly, schools and colleges in affluent countries have vast libraries, reading and research resources, teachers and students who are driven to learn, hours and hours are spent on language and curriculum design, and so on. In the last two years of the epidemic, 85 million instructors and 900 millions of pupils around the world have seen a mix of educational progress and crisis. It's always going to be crude.

### CONSTRAINT (TEACHERS-PERSPECTIVE)

The imperative need to "go online" has increased stresses and workflow in universities. As the usage of online education and remote learning grows in tandem with the COVID-19 pandemic, many academics and researchers are raising concerns. Internal features or determinants in schools and HEIs resist technological advancements that contradict current standards, according to studies. At a purely historical sense, faculty members in such institutions have circumvented themselves as senior authority throughout time. Creating a vertical hierarchy with instructors at the top and pupils below is

a fundamental aspect of bureaucracy, where policy standards, curriculum, assignment evaluation, and program-related decision-making are all handled by teachers. In such institutions, there is always a greater likelihood of a centralised system of operations and a lower likelihood of decentralisation in schools and colleges of advance countries (Yates, 2021).

Teachers across the globe were earlier struggling to experience balance teaching and service to an institution. But obligatory technological intellect from all age group of teachers; right from the school to colleges were prepared to deliver lectures and take online classes from home (Austin, et al., 1990). In reality, there have been demands for advance technological guidance or pedagogical content knowledge (PCK) required for teaching (Adnan & Anwar, 2020). Tutors from schools and colleges are without proper technical assistance e.g., countering online technical service, changes, appropriate presentation skills, knowledge for designing and planning content through computer applications and so forth. Authorities have been regularized the developing countries schools and universities with nil or little expertise in online teaching. The complexity involved in building web-based courses, as well as instructional limitations, has been identified via various studies in this area (Rapanta et al., 2020).

Burns identified three impediments to web-based dissemination of knowledge in teacher's education; lack of teachers-student technical skills and support, lack of speed in internet, and lack of trainer (Ferri, Grifoni, & Guzzo, 2020). Educators land up to mechanisms and ideas to test the validity and trustworthiness of online formative assessment, whether it has the same validity and connection to that on the basis of a physical, in-house evaluation (Evans, Zeun, & Stanier, 2014). According to a 2016 survey, 18% of full-time tutors believe that online learning produces results that are comparable to in-person learning, while 57% disagree. Prognosticators and academics have offered a variety of explanations for these perceptions, including sentimentalising classroom teaching, doubting the accuracy and effectiveness of employed technologies, seeing inadequate return on early attempts (such as MOOCs), and fearing curricular authority erosion (Gu, 2021).

## STUDENTS' PERSPECTIVE

Despite the fact that the Covid-19 epidemic is likely to be the most dominant to effect current generation from all disciplines, lessons and experiences from prior crises can be used to help us adjust and continue our studies. During the 2003 pandemic, for example, web-based learning was efficiently applied limit the number of teaching children received. A well-designed online content that incorporates a range of components into a learning expedition appears to be a possible solution to the on-going stumbling block in face-to-face method. Furthermore, virtual reality (VR) reso-

urces would be a current ideal for home study of anatomy (specifically for science streams), and while we are not yet in an era where technology is a household necessity (especially in less developing countries), there may be other possibilities to explore for a remote learning set-up. The application of Google Cardboards is mostly compatible to smart phone today, allowing students to use their phones to experience virtual reality (VR) if they are provided with the related software. Despite the fact that creating a remote teaching module that duplicates clinical experiences is highly challenging, to imitate the clinical setting and keep students involved, several schools use limited case study presentations/research activities (Smith, et al., 2015). Objective structural clinical tests (OSCE) are an alternative tool used to evaluate students remotely in a setting similar to a clinical setting.

Following the COVID-19 crisis, it is becoming evident that these tactics for remotely delivering course content, simulating clinical encounters, and administering exams will facilitate dental education. It will enable students to have more customised timetables and, as a result, greater adaptation to varied learning styles when strategically utilized in alliance with invaluable clinical experiences. Some professors and students believe they are more beneficial than regular classroom sessions, which are backed up by recent dentistry education research. In terms of student engagement, discussion forums and live meetings have been demonstrated to be highly beneficial, leading in confined curriculum and more time for reflection, information gathering, and application. Student barriers to online learning could include misreading expectations, time management, and interpersonal communication, whereas instructor barriers could include expectation identification, feedback, and interpersonal relations. Time restrictions, a lack of technology skills, insufficient infrastructure, a lack of institutional policies and support, and everyone's negative attitudes are all obstacles to online learning in education. Lack of motivation, interpersonal relationships with peers, and learning challenges in online forms, and a lack of proper study areas in a distracting home setting were among the adaptive barriers that "students" experienced.

## RESULTS OF THE STUDY

The results of the present study are discussed below:

- The combination of significant use of Information and Communication Technology (ICT) with teaching pedagogy does not allow substantial egalitarian growth desired during the turbulent times.
- The final reflection of the study explains the drawbacks of reduction in personal communication from both the sides, technical impossibilities for non-professional teachers, absence of internet or Wi-Fi facilities for rural and marginalized populations responsible for an increasing depressive disorder among them.

- The findings propound how young children and graduates from low socio-economic background have a negative effect from closure of educational institutions and indicate some path-breaking suggestions for innovative and creative practices.

## CONCLUSION

“Online Learning” and “Digital skills” have been defined in a variety of ways in official and academic papers, resulting in a variety of meanings and nomenclatures. As a result, a large bibliography can be generated by conceiving the term, resulting in both separate and redundant definitions. The study’s major purpose was to demonstrate how online learning and digital competencies have impacted the lives of both teachers and students. In terms of teaching and learning, students have a wide choice of options for affiliation and communication. The study furnished by Sohaib Alam, Mohmmad Rezaul Karim and Farhan Ahmad (2020) also emphasize that different strategies can be applied to encounter the problems that teachers’ face in virtual classrooms during pandemic.

One technique for achieving these comparable learning outcomes despite varying preconditions is to adapt the routine demand of the learner’s growth. As a result, a debate on competencies and issues experienced in transforming conventional style and digital skills across the globe was held, involving both teachers and students. Therefore, as technology has driven educational advances, the functionality of mixed complicated-comprehensive digital learning and the use of ICT in teaching become perennial. Future research may be able to overcome the majority, if not all, of these issues, forming an agile interface between research and application and potentially resulting in effective implementations of online learning arrangements.

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