

## PARADIGM SHIFT IN EDUCATION: ROLE OF TECHNOLOGY IN POST COVID-19 EDUCATION IN INDIA

**Dr. Vandana**

Assistant Professor

Dept. Of Education

Chaudhary Devi Lal University

Sirsa Haryana.

vandanabarbola@gmail.com

### Abstract

*The Covid-19 pandemic has thrown the world into disarray and posed a significant challenge to worldwide schooling systems. The pandemic has resulted in the widespread closure of educational institutions, national borders, and business entities in several countries, to name a few, in an attempt to reduce the number of escalating infections (Maringe, 2020). All private and public colleges and institutions in South Africa went into what is known as a 'complete lockdown' as the country went into what is known as a 'total lockdown.' In this study, I examine the steps made by the South African higher education department and institutions to guarantee that learning continues through alternative pedagogies. I also consider the ramifications of moving to virtual teaching and learning environments. In this work, I argue that the greatest paradigm shift in educational history occurred during Covid-19 and the 'uncertain post-Covid-19 era.' According to Martin and Furiv (2020), despite the novel coronavirus pandemic's projected short-term duration, its impact on the character of higher education is likely to be long-lasting and profound. Since a result, the transition to online learning and teaching could be considered a paradigm shift, as new ways of thinking, knowing, and teaching have grown from traditional teaching practises into online curriculum delivery.*

**Keywords:** COVID-19, Role of technology in education, Importance of education..

### Introduction

There are chances for all higher education institutions to continue access in the online medium, depending on the effectiveness of online curriculum delivery across different universities in the country (Eickelmann & Gerick, 2020; Huber & Helm, 2020). Traditional universities and colleges may need to retrain their lecturers and consider additional staffing needs to ensure effective teaching and learning in the context of online curriculum delivery to maximise the success of online teaching and learning (Maringe, 2020). As students learn from home in the new education paradigm, it's more important than ever to rethink our pedagogies and principles of lifelong learning in order to promote excellent learning and equal access to educational knowledge for students from all walks of life.

### Review of related literature

#### ***Higher Education and Covid-19***

There are chances for all higher education institutions to continue access in the online medium, depending on the effectiveness of online curriculum delivery across different universities in the country (Eickelmann & Gerick, 2020; Huber & Helm, 2020). Traditional universities and colleges may need to retrain their lecturers and consider additional staffing needs to ensure effective teaching and learning in the context of online curriculum delivery to maximise the success of online teaching and learning (Maringe, 2020). As students learn from home in the new education paradigm, it's more important than ever to rethink our

pedagogies and principles of lifelong learning in order to promote excellent learning and equal access to educational knowledge for students from all walks of life.

With the exception of the University of South Africa and a few private higher education institutions that offered distance teaching and learning before to the epidemic, most South African universities are unlikely to have the experience to adapt and deal effectively with distance learning. In the aftermath of the Covid-19 pandemic, online curriculum delivery has become a popular option among South African universities, both private and public, and has become a necessary condition for the continuation of learning and teaching. The majority of South African public institutions' traditional teaching situation was pigeonholed by students who gathered in physical lecture halls and lecturers who taught their topics' standard curriculum using lecturing ways until March 2020. (Lipowsky & Rzejak, 2015). As previously mentioned, continuing changes in national lockdown alert levels and, as a result, the closure of universities for physical attendance of lectures presented both lecturers and students with an entirely new situation, which for many traditional universities was an unfamiliar mode of content delivery (Eickelmann & Gerick, 2020; Huber & Helm, 2020; Tarman, 2020).

While the use of various digital tools such as Blackboard, Microsoft Teams, Zoom, Google Meet, and YouTube allowed for the continuation of learning and teaching, we should be aware of the extent to which these platforms affect the quality of teaching, students' learning and understanding, as well as the development and attainment of skills essential to specific professions. It's worth noting that, prior to March 2020, neither students nor lecturers from traditional colleges had any idea how to navigate the distant learning and teaching environment.

### **The Impact Of Technology On Students And Lecturers**

The day when lecturers depended solely on printed materials to educate has passed, giving way to a technology era in which lectures are merged with a variety of virtual platforms (Mahaye, 2020). This is a paradigm change in higher education, moving away from traditional face-to-face lectures and toward technology-based curriculum delivery. While this is true, Sintema (2020) claims that fewer underdeveloped countries are equipped to undertake online education due to a lack of expertise and training, which is aggravated by a lack of resources to conduct online curriculum. Despite this reality, the introduction of online education during Covid19 provided chances for both lecturers and students to access numerous learning materials via the internet, despite the geographic distance imposed by the epidemic (Hodges et al., 2020; Molise & Dube, 2020). It's worth noting that the pandemic has decentered lecturers by pushing more learning obligations to students. This is in line with Mahlaba's (2020) argument that "we should not make our pupils forever reliant on us (as instructors) for their learning, because we will not always be there to give learning" (p. 123). Covid-19 has demonstrated that, as teachers, we will not always be present to be a source of information for our students, so we should empower students to manage their own learning. This is not to argue that lecturers should not engage in active teaching with students; rather, it is to ensure that students share power in the construction of educational knowledge and in self-directing their own learning (Kopish & Marques, 2020).

Similarly, Mahaye (2020, p. 13) claims that "one of the significant impacts of technology is that it may be utilised to improve access to information and learning standards." This illustrates that technology not only allows for continuous content delivery in higher education institutions, but it also allows for successful teaching and learning. Morgan (2020) provides a good reflective review of the International Society for Technology in Education's instructions on how to use online distance teaching and learning to benefit students during the Covid-19 pandemic to maximise successful teaching and learning during the epidemic. These principles emphasise the need of ensuring successful online education access and equity, as well as the utilisation of free high-quality resources, responding to emotional demands, and providing student-facing teaching and learning. For both instructors and students, the pandemic provides a unique teaching and learning opportunity to critically reflect on the future of education. Many students and educators have understood that it is feasible to teach and learn differently, according to the World Economic Forum (2020), which presents the possibility for a paradigm change in education. For example, the widespread adoption of online learning as a means of delivering curriculum has resulted in new types of innovative teaching and learning that would have been unthinkable previous to the Covid-19 pandemic. The way we think about teaching and learning at universities is shifting, and this shift may be irreversible.

### **Understanding the paradigm shift**

The prediction of a paradigm shift in education following Covid-19 is based on the observation that higher education institutions are faced with the task of implementing alternative teaching, learning, and research methods, which is further complicated by the uncertainty of what will happen in the future. As colleges and universities around the country work to save academic years in the midst of the outbreak, ceremonial norms and traditions will have to change, especially given the incompatibility of online and on-campus learning and teaching methodologies. In order to be effective in teaching and learning within the new paradigm, both staff and students in traditional universities will need to become informed about the complex and dynamic scholarship of remote teaching and learning (Mavundla & Mgutshini, 2021). "We regard this transformation as the beginning of the process that will move education to 4IR where learning will be primarily digital, with a few instances of face-to-face exchanges," Mhlanga and Moloi (2020, p. 8) predict. This demonstrates how the Covid-19 pandemic has altered what we previously thought of as the standard way of teaching and learning in the education system. Institutions of higher learning in South Africa are now focusing their efforts on providing online curriculum delivery through various learning platforms, despite the fact that there has been little discussion about education since the pandemic. It might be argued that the higher education sector's adoption of numerous Fourth Industrial Revolution tools has been greatly influenced by the forced move to online teaching and learning.

With the foregoing in mind, the issue of social justice, equity, and access in the context of South Africa cannot be overlooked whenever educational processes and provision are discussed (Mhlanga & Moloi, 2020), particularly for students in remote rural communities and other previously disadvantaged communities. Maringe's (2020, p. 1) statement that "problems of increasing disparities for previously disadvantaged pupils must be examined

and mitigated lest the achievements already won may be wiped away in an instant" resonates with this. "Rural learners encounter enormous hurdles in transitioning to a new manner of life and learning," writes Dube (2020, p. 1).

In addition to the aforementioned discussion, the majority of students in South African public universities rely solely on various government bursaries to pay for tuition, housing, food, and an allowance because they come from poor backgrounds and their parents are unable to afford the university fees (Masutha, 2020; Beaunoyer et al., 2020). As a result, the extended closure of institutions means a significant loss of a basic safety net, including food, learning resources, and emotional support (Odeku, 2021; Masutha & Naidoo, 2021). I claim that the Covid-19 epidemic exacerbates social exclusion by way of education and the resulting inequities created by the apartheid educational system. For instance, in South Africa's traditional colleges, a lack of adequate access for students transitioning to online learning has exacerbated exclusion and hampered effective learning. This is especially true given the haste with which institutions transitioned to online learning, leaving little time for lecturers to teach online and students to adjust to learning from a distance. As a result, the traditional methods of delivering curriculum information at universities prior to Covid-19 will almost probably be incompatible with the predicted post-Covid-19 period. In place of face-to-face physical attendance of classes, the new paradigm needs the use of huge modern-day e-learning tools and technologies (Jimola & Ofodu, 2021). Another factor driving a paradigm shift in education is that the epidemic is compelling institutions to reconsider and reorganise assessment methodologies, as well as how to perform work-integrated learning and other practical activities in an online environment. "The Covid-19 pandemic has created a dramatic transformation in education systems during 2020, disrupting the teacher training procedures in tertiary education," according to Almonacid-Fierro et al. (2021). (p. 72).

**Table 1. Online learning platforms**

<b>Platform</b>	<b>Platform Descriptions</b>
<b>Microsoft Teams</b>	✓ Used by lecturers and students to hold online discussions ✓ Chat, audio calls, video calls and collaboration features
<b>Google Meet</b>	✓ Used by lecturers and students to hold online discussions ✓ Video meeting recordings and screen sharing
<b>Online (Websites)</b>	✓ Learners learn independently at home
<b>Blackboard (Collaborate)</b>	✓ Used by lecturers and students to hold online discussions ✓ Live interaction, teach with screen sharing or using a whiteboard, having breakout rooms
<b>Zoom</b>	✓ Used by lecturers and students to hold online discussions ✓ Video and audio conferencing, collaboration, chat, webinars, breakout rooms

<b>Skype</b>	✓ Used by lecturers and students to hold online discussions ✓ Video and audio calls with talk, chat and collaboration features
<b>WhatsApp</b>	✓ Used by lecturers and students to hold online discussions and used by learners to engage in collaborative learning ✓ Video and audio calls with talk, chat and collaboration features

Table 1 shows some of the efforts done by South African higher education institutions to ensure learning continuity, provide students with support during Covid-19, and promote online learning in general (see Dipa, 2020). It's worth noting that the majority of the platforms in Table 1 have various features as indicated, and the majority of students and lecturers face the challenge of learning how to use the platforms to interact during teaching and learning processes. The platforms indicate a transformation in how we think about teaching and learning in traditional South African higher education institutions, and signal the start of a paradigm transition to 4IR, in which teaching and learning will be primarily digital, with few physical contacts. As a result, Covid-19 may be said to have had a significant impact on the usage of various 4IR tools in higher education, as well as forcing a paradigm shift in the sector's normative practises.

### **Paradigm shift in education role of technology in education post covid-19**

- 1. What is the staggering impact of Covid-19 on global Education?**
- 2. How many students are willing to go back to school after Covid?**
- 3. How many Parents agree that online education is better than offline?**

### **Conclusion**

In higher education, the shift to online curriculum delivery has altered how students and instructors interact with instructional content. The constant use of 4IR technology for teaching and learning in the framework of Covid-19 means that established pedagogies are being disrupted, and all educational stakeholders must adapt to new ways of teaching and learning. What used to need a trip to the library before Covid-19 is now available on digital devices like cell phones and laptops. While traditional educational institutions used to demand students and instructors to meet in physical lecture halls, the continuous growth in Covid-19 infections throughout the country has forced us into the '4IR age.'

### **References:**

- 
- <https://blogs.worldbank.org/education/changing-role-teachers-and-technologies-amidst-covid-19-pandemic-key-findings-cross>
  - <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>
  - <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0256283>