



SHIFTING THE PARADIGM OF TEACHING AND LEARNING DURING AND AFTER PANDEMIC

Dr. Kishore Mukhopadhyay

Associate Professor in Physical Education, Union Christian Training College,
Berhampore, Murshidabad, West Bengal

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Abstract :

In light of the rising concerns about the spread of COVID-19 and calls to contain the Corona Virus, a growing number of tertiary institutions have shut down in regards to face-to-face classes globally. The Corona virus has revealed emerging vulnerabilities in education systems around the world. It is now clear that society needs flexible and resilient education systems as we face unpredictable futures. A meta-analysis methodology was adopted for this study and pertinent literature was visited to capture the essence of continued learning during these unprecedented times. Findings reveal that universities worldwide are moving more and more towards online learning or E- Learning. The emergence of the Internet and related networks such as the World Wide Web has had and will increasingly have a radical effect on the transformation of education and training in all sectors. The paradigm of traditional teaching -learning has been shifted towards the virtual mode following the methodology of blended and flipped learning rather in a a synchronous , asynchronous , or mixed pattern both during and after the pandemic.

Key Words: Paradigm, Teaching, Learning, Pandemic

Introduction:

Against the backdrop of the COVID-19 outbreak various policy initiatives are being launched by governments and tertiary institutions across the world to continue teaching activities so as to contain the virus. However, there is ambiguity and disagreement about what to teach, how to teach, the workload of teachers and students, the teaching environment, and the implications for education equity (1). Large-scale, national efforts to utilize technology in support of remote learning, distance education and online learning during the COVID-19 pandemic are emerging and evolving quickly. Literature highlights certain deficiencies such as the weakness of online teaching infrastructure, the inexperience of teachers, the information gap, the complex environment at home, and so forth (2). However, despite certain limitations, the current situation demands action so that the education of the students is not affected in any way. For example, China initiated a Suspending Classes Without Stopping Learning policy to see that learning was not compromised at any time during COVID-19 pandemic lockdown (1). This is one of the many policies China put in place to see that student learning was least affected during national lockdowns and school closures. To tackle the problems, educationist and researchers (3) suggested that governments and education providers need to further promote the construction of the educational information, considering equipping teachers and students with standardized home-based teaching and learning equipment, conduct online teacher training and support academic research into online education, especially education to help students with online learning difficulties According to a UNESCO Report by the end of 2019, Coronavirus (COVID-19) started rapidly spreading worldwide, causing the death of over 3000 people. Subsequently, several countries started initiating relevant strategies to contain this virus, including school closures. Subsequently, as of 12th March forty six countries in five different continents announced school and university closures to contain the spread of COVID-19 (3). As time moved on 500 million children and youth are still threatened with not attending their schools and universities due to national lock downs. International organizations started paying particular attention to the document Education Response in Crises and Emergencies. UNESCO stated in the Education 2030 Incheon Declaration and Framework for Action that countries should: Provide alternative modes of learning and education for children and adolescents who are not in education institutions, and put in place equivalency and bridging programmes, recognized and accredited by the state, to ensure flexible learning in both formal and non-formal settings, including in emergency situations (2,3).

The crisis is exacerbating pre-existing education disparities by reducing the opportunities for many of the most vulnerable children, youth, and adults – those living in poor or rural areas, girls, refugees, persons with disabilities and forcibly displaced persons – to continue their learning. Learning losses also threaten to extend beyond this generation and erase decades of progress, not least in support of girls and young women's educational access and retention. Some 23.8 million additional children and youth (from pre-primary to tertiary) may drop out or not have access to school next year due to the pandemic's economic impact alone.

Education is not only a fundamental human right. It is an enabling right with direct impact on the realization of all other human rights. It is a global common good and a primary driver of progress across all 17 Sustainable Development Goals as a bedrock of just, equal, inclusive peaceful societies. When education systems collapse, peace, prosperous and productive societies cannot be sustained (4-8).

Major Educational Impacts of the Corona Pandemic:

Social Impacts of the Pandemic and Its Relative Side Effects on Education. Educational undertakings are social which take shape in terms of individual- social interplays. Rieley (2020) considers the social situation in schools to be scaring to educational institutions for the fact that, most educational organizations are now scrambling to identify the options they have in front of them to deal with two major challenges pertaining with detaining or stopping social contacts and keeping learning going. Under the pressure of corona, COVID-19, society members may hesitate to send their children to school for fear that, they may contract the infection through as a result of contacts in classrooms or out-of-school. From the very outset, the spread of the pandemic has been noticed to be based on contact-effects (9).

Instructional Impacts and Adjustment to the New Paradigm:

The time for lesson coverage may be very short and the lesson-delivery system may be very hasty. This may pose a heavy discrepancy on children's learning. Even in the normal lesson-delivery situation, most of the students have been reported to have had average achievement and fluctuating attendance. The lockdown situation may have posed sense of reluctance to wake up early and be punctual to school, arrange sufficient time for reading and prepare a self-regulated notes.

Online Education Programs:

International experiences denote that, schools and universities are opting to continue their normal classes on online. Online teaching and learning is designed to reach and engage the modern learner on one-to-one basis anywhere, anytime. A popular one involves Massive Open Online Courses (MOOC), which have grown to involve many researchers and research institutions (9). The reasons for offering online course include easy and convenient access for students, higher degree completion rates, and the appeal of such courses to nontraditional students. In a similar vein, barriers to the adoption of online courses include lack of faculty commitment and high costs of implementation and delivery of the courses (10). The key to a successful implementation of online teaching and learning is taking student characteristics into account. Strategies that work for conventional full time students may not be effective for adult learners with full-time jobs and family responsibilities. These students are mostly practically-oriented with a keen interest in tools and technologies (11).

Internet and Web-Based Education:

The emergence of the Internet and related networks such as the World Wide Web has had and will increasingly have a radical effect on the transformation of education and training in all sectors. The impact is already significant in all developed countries, and the great majority of developing countries are despite difficulties and fears seeking to take part in the emerging global educational community (12).

The Web offers a worldwide forum in which to teach courses that can be dynamically updated in ways never before possible. Each student has an enormous range of resources available, free from limitations of time and space. There remains considerable work to be done concerning searching and sifting techniques within these resources for learners and teachers alike. These resources are reconfiguring the ways in which students learn, and new approaches to networked learning are evolving (12).

The trans-cultural nature of the Web also creates problems of legislative and public control, with fears that local culture can be threatened by the international culture of developed countries. While the use of the Internet and the World Wide Web in open and distance learning is predominantly represented within higher education, it is also beginning to be used in schools.

Online Teaching:

Online teaching offers exciting opportunities to expand the learning environment for diverse student populations. As the demand for online teaching increases, college professors may be asked to consider teaching their classes' online. Online teaching shares much with face-to-face teaching, but it also has a unique set of skills and requirements. Both approaches are similar in content, except in pace and delivery. Rather than developing the courses from scratch, a company has emerged to take care of the courses. Professors just need to use the Course Management System (CMS) software to prepare and deliver their courses. Using the software allows instructors to get it right from the beginning. For online teaching to be successful, it is recommend that the instructor should follow the following seven principles (13) : (1)encourage student participation, (2) encourage student cooperation, (3) encourage active learning, (4) give prompt feedback, (5) emphasize time on task, (5) communicate high expectations, (7) Respect diverse talents and ways of learning. To these principles one may add seven more [6]: (1) address individual differences, (2) motivatethe student, (3) avoid information overload, (4) create a real-life context, (5) encourage social interaction, (6) provide hands on activities, and (7) encourage student reflection.

Online Learning:

The process of learning is complex and it involves the auditory, visual, and tactile senses. The traditional way of learning at a campus university is not for everyone. Online learning is for those who wish to study for a degree alongside work or other commitments. Online learning has been referred to as a form of distance education and as web-based learning, e-learning, and digital learning. It is offered over the Internet and

uses web-based materials and activities. Students need to be technologically savvy to use technology tools that may be required. Students of the digital age appear to be independent, more technology disciplined, and technology savvy, well suited for the online environment. Online learning at your own pace is beneficial for a high-quality college degree. Whether offered on campus or delivered online, each course offering must meet the same rigorous criteria and the strict academic standards. The only difference is in the way the course is delivered. Generally, students are required to have access to a computer system with high-speed Internet connections. They may also expect electronic academic support services such as registration, financial aid, libraries, tutoring, and advisement (14).

Benefits of Online Teaching and Learning:

Why online distance learning and why now? Online distance learning meets the needs of an ever-growing population of students who cannot or prefer not to participate in traditional classroom settings. These learners include those unable to attend traditional classes, who cannot find a particular class at their chosen institution, who live in remote locations, who work full-time and can only study at or after work, and those who simply prefer to learn independently.

The minimum requirement for students to participate in an online course is access to a computer, the Internet, and the motivation to succeed in a non-traditional classroom. Online courses provide an excellent method, of course delivery unbound by time or location, allowing for accessibility to instruction at anytime from anywhere. Learners find the online environment a convenient way to fit education into their busy lives. The ability to access a course from any computer with Internet access, 24 hours a day, seven days a week is a tremendous incentive for many of today's students (15).

Some of the main advantages of online learning include:

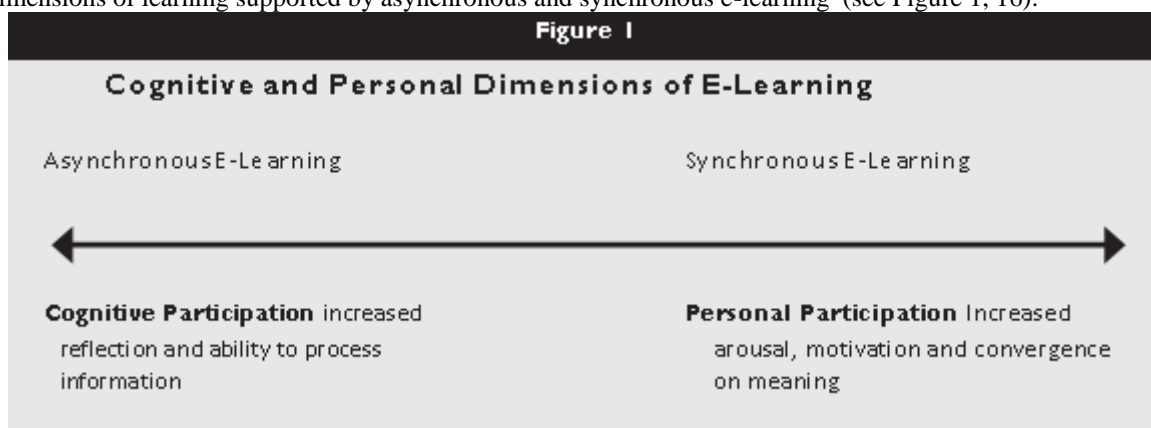
- Convenience: 24/7 access from any online computer; accommodates busy schedules; no commuting, no searching for parking.
- Enhanced Learning: Research shows increased depth of understanding and retention of course content; more meaningful discussions; emphasis on writing skills, technology skills, and life skills like time management, independence, and self-discipline.
- Leveling of the Playing Field: Students can take more time to think and reflect before communicating; shy students tend to thrive online; anonymity of the online environment.
- Interaction: Increased student-to-teacher and student-to-student interaction and discussion; a more student-centered learning environment; less passive listening and more active learning; a greater sense of connectedness, synergy.
- Innovative Teaching: Student-centered approaches; increased variety and creativity of learning activities; address different learning styles; changes and improvements can translate to on-ground courses as well.
- Improved Administration: Time to examine student work more thoroughly; ability to document and record online interactions; ability to manage grading online.
- Savings: Accommodate more students; increased student satisfaction = higher retention and fewer repeats.
- Maximize Physical Resources: Lessen the demand on limited campus infrastructure; decrease congestion on campus and parking lots.
- Outreach: Give students options; reach new student markets; appeal to current students thus increasing enrollments.

Asynchronous and Synchronous E-Learning:

An ongoing debate addresses the usefulness of asynchronous versus synchronous e-learning. Asynchronous e-learning, commonly facilitated by media such as email and discussion boards, supports work relations among learners and with teachers, even when participants cannot be online at the same time. It is thus a key component of flexible e-learning. In fact, many people take online courses because of their asynchronous nature, combining education with work, family, and other commitments. Asynchronous e-learning makes it possible for learners to log on to an e-learning environment at any time and download documents or send messages to teachers or peers. Students may spend more time refining their contributions, which are generally considered most thoughtful compared to synchronous communication. Synchronous e-learning, commonly supported by media such as videoconferencing and chat, has the potential to support e-learners in the development of learning communities. Learners and teachers experience synchronous e-learning as more social and avoid frustration by asking and answering questions in real time. Synchronous sessions help e-learners feel like participants rather than isolates (16-17).

Cognition and Personal Dimensions of E-Learning In the previous section, I suggested that synchronous communication makes it possible to monitor the receiver's reaction to a message, making the receiver feel more committed and motivated to read it. When communicating asynchronously, however, the receiver has more time to comprehend the message, since the sender does not expect an immediate answer. Thus, synchronous e-learning increases arousal and motivation, while asynchronous e-learning increases the

ability to process information. The concepts of personal participation and cognitive participation describe the dimensions of learning supported by asynchronous and synchronous e-learning (see Figure 1, 16).



Post-Covid-19 Recovery:

In post COVID-19 recovery time, an overall remedial approaches may include adjustments to the academic calendar, prioritizing students in grades, preparing for high-stakes examinations, and continuing to distance learning in parallel to schools (18). Adjustments to the academic calendar could be done through consideration of the time it takes for individual learning and coverage of assignments, time to share ideas with peers online (if any), time to get assignments checked and obtain/give feedbacks and enrichment works.

Where students are preparing for national or other competitive examinations of a holistic nature, there must be due consideration of lesson-coverage, students’ mastery level, students’ skills to work on national tests with due cope-up in speed and accuracy, and ensuring that, the distance learning. The impact of the corona pandemic of educational undertakings and possible breakthrough mechanisms, materials are goal-oriented, manageable, time-based, clear, comprehensive and user-friendly (11).

A sustaining work could also be done in relation to Estrada’s National Domestic Economic Auto-Sustainability Model (18). Based on the breakthrough suggested above, a domestic education and technical training platform responding to the current situation could be framed. This could embrace, but not limited to, using local timeframe and resources for educational extension, instead of pushing every responsibility to schools (19).

In the light of the experiences of the past twenty or more years, there is today recognition of other, related, benefits. Some of these are:

- balancing inequalities between age groups;
- extending geographical access to education;
- delivering educational campaigns and other education for large audiences;
- providing speedy and efficient training for key target groups;
- expanding the capacity for education in new and multidisciplinary subject areas;
- offering the combination of education with work and family life;
- developing multiple competencies through recurrent and continuing education;
- enhancing the international dimension of educational experience;
- improving the quality of existing educational services.
- blending between synchronous and asynchronous mode of learning.

Conclusion:

E-learning seems to be the forthcoming trend. It has been extending widespread. The online method of learning is best suited for everyone. Depending on their availability and comfort, many people choose to learn at a convenient time. This enables the learner to access updated content whenever they want it. Due to the wide set of benefits, it gives the students a variety of options and enrich their technological knowledge. The paradigm of traditional teaching learning has been shifted towards the virtual mode following the methodology of blended and flipped learning rather in synchronous , asynchronous or mixed pattern both during and after pandemic.

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