

Implementation of Innovative Learning Strategies in Promoting Inclusive Education and its Impact on the Upcoming Generation in India

Sumeli Das (Bhakat)

M.Phil Scholar

Diamond Harbour Women's University, West Bengal.

Dr. Amalendu Paul

Associate Professor, Department of Education, Diamond Harbour Women's University

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Abstract

At present standing in the 21st century, we have come a long way in the world of technology. In the age of modernization, children are deeply involved with various types of technologies. Nowadays most of the higher education institutions are giving a lot of importance to e-learning in their teaching learning method. So, the blended learning and flipped learning probably the better ways for delivering teaching learning materials and feedback for the new generation of students in higher level education system. The blended learning design adopted in these programs has involved the thoughtful amalgamation of learning and teaching approaches in both on-campus, face-to-face and online/virtual learning environments by utilizing the benefits of each of these environments. In flipped learning use revised bloom taxonomy which is related to higher thinking order with the help of online learning. There are so many students pay their volitional and non-volitional attention and fully engaged with online learning in abroad. So far as due to the pandemic situation mostly all of the institutions are going to adapt the blended and flipped learning over traditional learning. It will increase the collaborative and cooperative learning perspective in classroom situation. It will also focus the light on the paradigm shift from traditional learning to blended and flipped learning.

Key Words: *Blended learning, Flipped Learning, Traditional learning, Collaborative learning, Cooperative learning, Virtual learning environment, Online teaching activities, Self-paced learning.*

Introduction

Blended learning and flipped learning are relatively new educational innovation that has swept the nation in recent years and in the process, garnered quite a bit of both support and scepticism. The term blended learning has no single agreed upon definition, but it refers to an approach to the development of curriculum where some form of an online learning environment supports and enhances the traditional classroom or face-to-face experience in an

integrated mannerⁱ. Blended learning and flipped learning both the term are increasingly used in education to describe the way e-learning being combined with traditional teaching methods and independent study to create a new, fusion teaching methodology. In the present era, increased demand for self-paced learning products and services predicted has reduced the percentage of tertiary education students preferring blended learning to traditional face-to-face classroomⁱⁱ.

Innovative Learning Strategies: Need of the day for bringing “Inclusion”

“The principle goal of education in the schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done; men and women who are creative, inventive and discoverers, who can be critical and verify, and not accept, everything they are offered.”(Jean Piaget, 1967). Education is the most important tool, evolved by man, for one’s progress. It is, therefore, no wonder that all dynamic and progressive nations demand an educational system that will take leadership in piloting and managing a future that ensures a better life to allⁱⁱⁱ. In the context of developing countries, education will eventually have a great role in the process of sustainable development. Hence, the progress of any society depends mainly on the utilization of the potential of its individuals and the best educational ideas in all disciplines of knowledge. Evidence shows that there has been an enormous advancement of knowledge in every field. In the history of civilization, both knowledge and education have always been predominant factors of progress. Presently, India’s educational purpose is the one that envisages creating a good and valued society, an enlightened life for all its members and using all the intellectual and natural resources to that purpose^{iv}. Education is considered to be the most vital and powerful instrument in achieving rapid development, technological progress and creating a social order founded on values of freedom, socio-economic justice and with equal opportunities for all in all fields. The different types of innovative learning strategies are:

Blended learning- It is an approach to education that combine online educational materials and opportunities for interaction online with traditional place-based classroom methods. It will be the mixture of online and offline mode. The term blended learning originated in USA^v. There is no clear single definition available for it. Blended learning combines online learning with face-to-face learning. It also defined as the combination of multiple approaches to pedagogy or teaching, for example, self-paced, collaborative or inquiry-based study. The goal of blended learning is to provide the most efficient and effective instruction experience by combining delivery modalities^{vi}.

Flipping the classroom- A flipped classroom is a type of blended learning where students are introduced to content at home and practice working through it at institution in face-to-face mode. This learning is a pedagogical approach in which direct instruction moves the group learning space to the individual learning space and the educator guides students as they apply concepts and engage creatively in the subject matter^{vii}. The concept of flipped learning was first brought up by Jonathan Bergmann and Aaron Sams, who were both high school chemistry teachers in their book, “Flip your classroom: Reach every student in every class every day (2012)”.

There are three stages in flipped classroom:

1. **Before class:** Content sharing, Remembering and understanding
2. **During class:** Doubt clearing, Application, Analysing, Practicing
3. **After class:** Evaluation and Creation

Flipping allows teachers to know their students better. It increases student-student instruction. It makes the class transparent. Flipping changes, the way we talk to parents and educate parents. Flipping is a great technique for absent teachers and absent students^{viii}.

Use of Virtual Labs: The implementation of technology in classroom goes beyond Google searches and reading apps. It stretches into every area of learning, including the sciences. Virtual laboratories are popping up in education as they are easy to use, less expensive and can be done anywhere at any time^{ix}. A virtual lab is an interactive experience during which students observe and manipulate system-generated objects, data, or phenomena in order to fulfil the learning objectives of a lab (electronic, computer lab) experience. Virtual classroom any online area in which server and user meet via internet/wired connection. This helps in integrated e-learning environment for a user. This will also be used by distance education programs which are offered by institutes, which enable students to aware of the academic facilities. Virtual labs help teachers and learners to understand the concepts of theory through practical approach. The virtual lab is intended to be of use both to tutors giving in-class demonstrations and to students studying at home and performing lab practical^x. Virtual lab is mainly for all engineering educational colleges. Virtual labs are a boon for science students where there is Lack of lab or equipment, or insufficient lab conditions which limits the teacher to perform a simple lab activity. Virtual labs create an environment for Interactive learning by using animations and simulations. They provide opportunities for students to construct and understand difficult concepts more easily^{xi}. Therefore, use of Virtual lab, use of virtual lab or simulation programs, overcomes some of the problems faced in traditional lab and make positive contributions in reaching the objectives of an educational system.

Audio and Visual Aids in Teaching: Audio visual aids are important in education system. Audio visual aids are devices that are used in classrooms to encourage teaching learning process and make it easier and interesting. They are the best tools for making teaching effective and for the dissemination of knowledge^{xii}. They help to complement teaching, stimulate discussion, or allow out-of-class teaching. Tools designed for this purpose, such as PowerPoint, can be used well, to draw the attention of the students. Use of internet can also serve as a catalyst in process of teaching and learning. There is no doubt that technical devices have greater impact and dynamic informative system^{xiii}. The apps like text to speech and speech to text can be used to make presentations more interesting.

Collaborative and Cooperative Learning: Collaborative style focuses on the process of working together. It has British roots. Collaboration is a philosophy of interaction and personal lifestyle. The students are in charge of obtaining the additional source material^{xiv}. On the other hand, cooperative learning stresses the product of working together. It has largely

American roots. It is a structure of interaction to facilitate the accomplishment of goals. The teacher provides extra materials for learners to analyse.

Changes in Technology Enhanced Teaching & Learning with respect to Inclusive Education

Widely accepted definition of technology-based learning is learning of content through electronic technology which includes Internet, Intranet, Audio and Video Conferencing, Computer-based Instruction etc. Technology Based Learning also encompasses related terms such as e-learning and web-based learning. Technology Enhanced Learning describes a methodology in which technology plays a role and serves to enrich a traditional face to face classroom. Technology-based learning is grouped into synchronous and asynchronous delivery modes^{xv}. In synchronous learning instructor and learners meet in a physical or virtual classroom at the same time which occurs in web Conferencing or webinars. Asynchronous learning are self-paced learning environments where instructors and learners have no constraints of timing and geography likewise in blogs, podcasts, simulations etc^{xvi}. So, the changes in technology from Multimedia, Video Lectures, E-Learning, Educational Videos to Blogs, Wikis, Webpage, Podcasts, Social media (Face book, Twitter), Video Conferences, Webinars, Skype Lectures, Learning Management Systems, Virtual Labs & Simulations, Concept/Mind Mapping, Info graphics, Collaborative Learning, Mobile Learning.

Upcoming Implications of Innovative Learning Strategies for brining ‘Inclusion’ in the Present Education System

In today’s world, some degree of education is necessary for people of all countries and the education should be full of qualities. Most technical sense, education is the formal process by which society deliberately passes accumulated knowledge, skills, customs and values from one generation to the next^{xvii}. So, the implications are:

- 1) Providing universal access to quality education specifically with respect to Inclusive Education is the key to economic growth, social justice and equality, scientific advancement, national integration and cultural preservation; and for India’s continued ascent, progress, and leadership on the global stage.
- 2) There will be a growing demand for humanities and art, as India moves towards becoming a developed country and among the three largest economies in the world. So, the courses are trying to amalgamate in the new education system^{xviii}.
- 3) While learning by rote can be beneficial in specific contexts, pedagogy specifically with respect to Inclusive Education must evolve to make education more experiential, holistic, integrated, discovery-oriented, learner-centred, discussion-based, flexible, and, of course, enjoyable^{xix}. The curriculum must include basic arts, crafts, humanities, games, sports and fitness, languages, literature, culture, and values, in addition to science and mathematics, to develop all aspects of learners’ brains and make education more well-rounded, useful, and fulfilling to the learner.

- 4) The National Education Policy specifically with respect to Inclusive Education also lays particular emphasis on the development of the creative potential of each individual, in all its richness and complexity. It is based on the principle that education must develop not only cognitive skills - both ‘foundational skills’ of literacy and numeracy and ‘higher-order’ cognitive skills such as critical thinking and problem solving – but also social and emotional skills - also referred to as ‘soft skills’ - including cultural awareness and empathy, perseverance and grit, teamwork, leadership, communication, among others^{xx}.

Conclusion

The teacher student ratio in West Bengal is very poor. It drives a demand for courses which can be available and can be teach without any physical presence. The demand for online teaching learning and the advancement in technology can very well support this new way of education. People are creating 2000 websites every hour in a day of 24 hours^{xxi}. Due to pandemic COVID-19 pupil spend more time in online education in compare to offline education. Now the government of India also promoting the online class in the way of digital India mission, skill India mission. The government of West Bengal arranges various types of refresher courses to develop the skills of teachers^{xxii}. Therefore, we can see a paradigm shift from conventional teaching process to online teaching process specifically with respect to Inclusive Education. Teacher must help their students to hold the span of attention level. So, long duration class should be avoided by the teachers. In this way the school level education aspiring students can be provided so many facilities by means of online teaching-based education and innovative learning strategies.

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