

BLENDED MODE OF TEACHING AND LEARNING PROCESS

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ABSTRACT

The expectations, learning preferences, and interests of students are constantly changing how teaching and learning is done. The most recent advances, which changed the conventional classroom, were all centred on technology. As a result, blended learning has become more popular. Blended learning is a method of teaching that mixes online learning resources with more conventional in-person instruction in a classroom setting. For its end users, blended learning transforms the learning process and offers a comprehensive knowledge. Students have more opportunities to interact with their professors and teachers through blended learning mode. Learning is made available to everyone by utilising a virtual environment. There would be no requirement for a student to attend classes or training at a set location as they could access their classrooms from anywhere. Blended learning techniques are more efficient than only in-person or only online instruction. It can encourage more in-depth learning, lower stress levels, and boost student satisfaction. It takes a well-organized, methodical educational procedure to implement blended learning. An effective teaching and learning process in a blended environment necessitates knowledge of proficiency with the use of acceptable pedagogies and technology.

INTRODUCTION

Our educational system faces new challenges as a result of the quick changes and increased complexity of the modern world. The need to alter and enhance student preparation for effective functioning in the constantly changing and extremely demanding environment has typically gained more attention. A teaching and learning strategy called blended learning combines traditional classroom techniques with computer-mediated learning to offer information. This pedagogical strategy entails a combination of in-person and online activities as well as the incorporation of synchronous and asynchronous learning resources, offering the best

opportunity for the design of efficient learning processes. The term "blended learning" refers to the educational strategy of integrating digital learning resources with more conventional face-to-face instruction in a classroom. Both the student and the teacher should be physically present in the same area for a blended learning environment to be effective. However, the students should be able to use the digital tools in order to exert some influence over the pace or subjects of their study.

Government of India has taken many initiatives to improve the standard of education. A rare window into what can be accomplished through the transformation of education has been provided by the National Education Policy (NEP). The new NEP makes it quite evident that it is time to adopt a strategy that is unquestionably centred on students, or what is appropriately referred to as Education 4.0!. The time has come to acknowledge that students are the primary stakeholders and that steps must be taken to ensure that the system supports their goals and objectives. According to this way of thinking, the new policy makes a variety of learning methods acceptable, including face-to-face instruction, online learning, and remote learning. Additionally, it encourages the use of multidisciplinary, multimodal, and vocational courses, with a focus on blended teaching and learning.

The concept of the ABC (Academic Bank of Credit) that takes into account the potential of time, place, mode, speed, and language is what will, in many ways, be the new approach to education. It also refers to the availability of multiple entry and exit points, the promotion of the mother tongue and other languages, the focus on the arts and humanities, the reforming of the examination systems with open book testing and group exams, and, above all, the ready support for mature learners. There is opportunity for many things in the field of education, particularly when considering topics like flexibility and quality; interests and needs; student centricity; the real worlds of study; and taking exams when you're ready.

In other words, students can choose their own professors, set their own schedules, create their own degrees, study in any format they choose, and take tests and lessons whenever they choose. Changes in Education Technology is a crucial component of the entire process, and the ABC as it is now understood recognises this. The new NEP 2020 teaching policy will need to be supported by knowledge acquisition. ABC is a carefully planned collection of building blocks that allows everyone to progress at their own pace, while slow learners will need more time and

support to reach their academic goals. Keeping this in mind, there are six essential components that can help you understand the ABC:

1. Any subject combinations with specialties that are equivalent to inter-vocational courses.
2. Flexible education or the fusion of traditional, distant, online, and virtual modes.
3. Option for students to study at any institutions, whether they are domestic or foreign.
4. Transforming credits into degrees and diplomas.
5. Permitting lifelong learning so that the idea of a set amount of time for education is eliminated with the option of various entry and departure points.
6. If the student's credits don't add up to a particular discipline, they have the option to take a variety of courses leading to a degree called a Bachelor of Liberal Education.

Credit, which in many ways is going to be the future method of education, takes into account the potential of time, place, mode, speed, and language.

BACKGROUND

The world is always changing, and such changes have an impact on different spheres as well. Even in the field of education, there is no exception. The development of online learning platforms has had a significant impact on educational institutions and has ultimately led to the conventional techniques in the rear seat. Both technology and conventional teaching approaches are needed, though. As a result, the term "Blended Learning" was created to describe the practise of integrating digital learning tools with more conventional classroom face-to-face instruction.

Blended learning refers to a well-planned mixture of worthwhile activities in both online and face-to-face modes, not just a simple blend of the two. The mix necessitates taking into account a number of elements, with a primary focus on learning outcomes and the learner-centred instructional environment. The NEP 2020 encourages the adoption of blended learning models in light of the development of digital technologies and the growing significance of utilising technology for teaching and learning at all levels. The NEP 2020 claims that while encouraging digital education and learning, the value of in-person, face-to-face instruction is fully acknowledged. As a result, several successful blended learning models will be found and appropriately replicated for various subject areas.

The greatest flexibility is offered by a blended learning environment in many ways. It can be applied to any programme that utilises digital media while maintaining the principles of traditional education. It is significantly more efficient and appealing than anything that has ever existed required flexibility and freedom. The only transition from the classroom to the computer, or vice versa, approaches and procedures, show that blended learning mode is the "best of both worlds". It is the finest since it accommodates all learning needs and preferences using a range of tools and methods. Blended learning is one of the most widely used teaching methods worldwide.

TYPES OF BLENDED LEARNING MODELS

Different models can be used to facilitate blended learning. The various definitions overlap to some extent, and the precise details of each model's parameters are up to interpretation. However, these categories describe the most common blended learning methods. In terms of teacher responsibilities, administrative obligations, and instructional emphasis, each model varies somewhat. Additionally, for different forms of learning, schools may decide to change or adapt how often kids travel between their homes and the school. All blended learning strategies provide for some degree of implementation flexibility.

(i) The Flipped Classroom Model

The flipped classroom model is a related initiative that tries to use technology to reorganise the educational process and maximise the value of precious face-to-face time in the classroom. Students would be encouraged to use a cloud-based learning platform to access digital learning resources on their own time as part of a flipped classroom programme.

Before each session, the teacher would impart the majority of the necessary knowledge to the student using resources like podcasts, video lectures, recordings, and articles. As a result, teachers will have more time in class to support students during activities, moderate debates, and encourage participation. This makes the learning environment impactful, engaging, interesting and challenging.

Flipped classrooms allow teachers the chance to assist students in finishing school tasks and to encourage them as they put principles they have learned independently into practise. Teacher-led activities can be conducted in person in a blended learning setting, while individual study is done at home utilising online modules or video lectures. According to a recent EdSurge

article, teachers frequently employ this model's face-to-face component for class discussions, group activity, delivering higher-order thinking-related insights, and identifying and resolving specific misunderstandings.

The flipped classroom and this approach are comparable. Although face-to-face lessons with the tutor are also necessary, most of the lessons that students take are online. The enriched virtual model begins with distant instruction as its source, but the flipped classroom can be regarded of as reversing the initial order of instruction in comparison to typical learning environments. Then, required in-person educational experiences are added to the online instruction.

(ii) The Individual Rotation Model

The individual rotation approach is adaptable and can be used in a variety of educational contexts, including blended learning models. According to a learning resource from the Wisconsin Department of Public Instruction, teachers or specialist software will place kids in this arrangement into certain educational pathways based on their requirements. Learning possibilities include things like independent study, small groups, cooperation, lessons taught to the whole class, and one-on-one interventions. If necessary, fixed schedules may be employed in place of personalised learning trips, and different stations may be performed either in person or online. Students can take part in autonomous study on a lab rotation schedule for an entirely in-person experience. Students have immediate access to learning resources through libraries and computer labs.

(iii) The Flex Model

This paradigm is student-driven and self-paced. Flex models were initially developed to help returning students who had not finished high school, according to the book *Learning in the Digital Age*. Individual students move through modules on their own, while teachers create learning opportunities for their pupils and provide guidance as needed. Older pupils might be better equipped for this amount of independence. The physical parts of the model can be used for collaboration, breakout sessions, lab activities, and potential interventions.

(iv) A La Carte Model

A little element of student autonomy is also present in the a la carte approach, but this time it pertains to choosing specific courses. While students can select extra topics from a menu of a la carte possibilities, school-offered classes are done as usual. These individualised classes

are frequently taught by a remote instructor of record fully online. The student can finish this part of their study at home or in the classroom utilising the equipment that is provided. According to a research brief from the Philadelphia Education Research Consortium, a la carte models can increase the range of educational options available to students beyond what a school is able to offer on its own.

FEATURES OF BLENDED LEARNING

The important features of Blended Learning environment are:

- More flexible teaching and learning environment.
- Increase student engagement in learning.
- Better opportunities for experiential learning.
- Enhance teacher and student interaction.
- Time management and flexibility.
- Improve student learning outcomes.
- More conducive to self- and lifelong learning.

BENEFITS OF BLENDED LEARNING

- Accessibility:

A blended learning system offers a variety of learning models that are simple to adapt to any specific student demand. As a result, students can simply select from a variety of face-to-face or digital teaching techniques to obtain high-quality education while utilising their available time and space.

- Interactive Pedagogy:

This method of teaching has been successful in improving student involvement, which is challenging to do in a regular classroom. It leads to numerous ways to motivate students to become more engaged and use unique approaches in the process of learning, opening up possibilities for improved student collaboration.

- The growth in the creation of useful learning features:

With less expensive alternatives to enterprise learning management system software, such as WordPress web development tools and the availability of free resources for creating

educational websites, it is getting simpler for local schools and private tutors to create a great site with little outlay of funds.

- Cost-effectiveness:

This particular trend in blended learning works both ways, which is one of its most important characteristics. Reduced transportation costs might be advantageous to students. Cost-effectiveness is attained, especially for colleges, by reducing the need for physical space and by gaining access to the global market much more quickly and effectively.

- Enhances academic performance:

More interaction is continually being produced and the advantages of blended learning techniques, such as time and space flexibility and a variety of suitable learning models that lead to greater academic performance.

TEACHER'S ROLE IN BL ENVIRONMENT

Blended learning necessitates a special level of digital proficiency since teachers must design online courses, distribute them to students, track their progress, and do much more. Not many teachers may be ready to devote the time and effort necessary to learn a new technology tool because some eLearning systems have a steep learning curve. As per guidelines of NEP, Teachers should have the following learning and teaching skills to improve the learning environment

- Subject Competency
- Pedagogy Competency
- Digital / Technical Skills
- Language Competency
- Passion, Patience and Perseverance
- Thorough understanding of teaching, learning ecosystem and its components

This evolution of educational system created a great impact on the role of a teacher which is described below:

Changes in teacher's Role

From	To
Transmitter of Knowledge	Guide and Facilitator of Knowledge

Controller of Learning	Creator of Learning Environment
Always Expert	Collaborator and Co-Learner
Learning to use ICT	Using ICT to Enhance Learning
Deductive/Expository	Interactive / Experimental / Exploratory

Blended learning gives teachers a more complete, precise view of each student's performance. As a result of blended learning, teachers are able to interact with each student more frequently and personally, fostering closer bonds between them and their charges. Close connections and the trust they foster can give teachers insights into the needs and struggles of individual students, enabling them to support and guide those students as they overcome difficulties that frequently stand in the way of their ability to learn.

When deciding how to combine in-person and online teaching and learning activities, many elements must be taken into account. In other instances, the majority of the interactions between the teacher and the students, as well as the actual delivery of education, take place in the classroom, while the materials and sometimes some extracurricular activities are supplied online. In other instances, the majority of the class activities take place online, with infrequent sessions held in person to resolve issues and foster a sense of community. In certain mixed learning environments, students can pick and choose which assignments to finish in class and which ones to finish online. Blends should ideally be customised for each kid so that they have the blend that best suits their age, circumstances, and educational needs. These models are referred to as *à la carte*.

Students can select courses that are entirely online, entirely in person, or blended courses, where they can select when to attend in-person sessions and when to watch videos, download readings, and submit assignments online. This level of customization is not always accessible. The most crucial thing is to make sure that kids can learn effectively using any delivery method, whether it be single-mode or blended, even if it is not their preferred manner or the optimum circumstance for them. It is up to instructors and learning designers to provide blended activities that best suit the subject, the learners' needs, and the curriculum requirements.

OPEN EDUCATIONAL RESOURCES

Important ICT projects that our country's teachers in higher education can use when implementing BL. The United Nations defines open educational resources (OER) as any kind of educational content made available under an open licence or in the public domain. Learning materials that support (a) legal and free copying, (b) usage, (c) adaption, and (d) sharing are known as open educational resources (OER). Any number of materials, including textbooks, syllabi, lecture notes, exams, videos, or animations, can be used as resources.

OER give the chance to offer accessibility, high-quality education delivery, and cost-effectiveness, and they have significantly influenced the discussion of laws governing knowledge sharing and capacity building in the social and economic world. OER are not required for effective blended learning, but the combination of these two educational innovations can significantly increase access to high-quality, reasonably priced education. Utilizing well-crafted, freely accessible OER can free up resources that can then be applied to creating and delivering blended learning opportunities.

A worldwide, cooperative movement called Creative Commons promotes the exchange of cost-free, universally usable resources. The international community supports universal access to education as well as greater equality. The people who founded, support, and use Creative Commons believe that sharing and working together to produce content will enable the Web to reach its full potential, which is especially vital for the people who will use it. Anyone can use a set of licences from Creative Commons when publishing any teaching or learning resources as OER. In order to mark the resources as openly accessible resources (OER), the licences also offer a technical solution. This enables potential users to filter their searches in Google Advanced Search based on "use rights." We can find and share OER on a wide variety of platforms. Some of the OER are listed below:

- NPTEL
- ePGpathshala
- Shodhganga
- Khan academy
- Udemy
- NDL
- Swayam

ICT TOOLS

Digital learning skills are being a lifelong learner is increasingly important, and blended courses assist students in developing their technical proficiency. Technology-enabled learning allows for learning anytime and regardless of time or place, this permits pupils to learn but with the possible support of in-person engagement. Implementation of digital tools as a learning tool enhance the learning skills and improve the scope of learning at their pace. It is clear that learner-centred learning has always aided students in achieving curriculum goals and, more importantly, has improved their ability to succeed as students in the twenty-first century.

For a teacher to contribute to a constructive society, collaboration must be fostered rather than individual competition. Studies also point out that learners' active involvement in the co-creation of knowledge increases their level of motivation and learner satisfaction. While collaborative ICT tools prove to be a wonderful help to teachers in co-creating knowledge by students, cooperative learning tactics, group projects, and group work in the classroom surroundings help teachers create conducive learning environments. In person and online, Blended learning may not resemble teacher-centred classroom settings.

On the other hand, a variety of ICT technologies can be used to engage students in creative and useful tasks. Teachers can design student collaboration contributions using free ICT technologies. Although teachers are encouraged to investigate a wide range of different tools for attaining student collaboration, the following list of illustrative ICT tools serves as some samples only:

- OR Code Generation
- Mentimeter.com
- Kahoot
- Quizizz.com
- Blogs
- Mind maps

FUTURE OF BLENDED LEARNING

Well, some of the elements that we know for sure will affect how blended learning programmes develop moving future are as follows:

- More people will work remotely or flexibly.

- Organisations will try to cut back on employee travel expenses and time.
- Virtual and augmented reality will become a bigger part of our daily lives.
- Technology and the internet continue to advance.

CONCLUSION

There are countless ways that blended learning can enhance learning and produce outstanding results for both the teacher and the learner. However, it is crucial that blending calls for the proper ratio of online and offline learning in order to get desired results. The decision to develop a plan for integrating effective technology with pertinent pedagogy to achieve the ideal balance between the two is entirely up to the course designer, who is typically the instructor or the university. Future learning is predicted to include blended learning in the majority of cases. Students benefit from blended learning by developing their learning abilities, having better access to information, feeling more satisfied with their learning outcomes, and having opportunities to both learn from and teach others. Blended learning offers a platform to facilitate greater interactivity between students, as well as between students and teachers. Learning resources and experiences are made repeatable and reliable by blended learning and reproducible. In conclusion, blended learning combines the best elements of both direct instruction and online learning, making it simple for teachers to satisfy additional student requirements without adding to their already demanding job.

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