

10.0 Blended Learning: The Future of Teaching and Learning Process

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Abstract

Blended Learning (BL) is not just a trend, and we're starting to see technology integrated in really intentional ways and it is an instructional methodology, a teaching and learning approach that combines face-to-face classroom methods with computer mediated activities to deliver instruction. BL is an approach to education that combines online educational materials and opportunities for interaction online with traditional regular classroom methods and it requires the physical presence of both teacher and student, with some elements of student control over time, place, path, pace, etc. where the educational institutions with a teacher present, face-to-face classroom practices are combined with computer-mediated activities regarding content, activities, delivery, etc. In a true blended learning environment, both the student and the teacher should be physically located in the same space. Despite this, the digital tools used should be able to be utilised by the students in order to enforce some control over the speed/topics of students learning. BL is also used in professional development and training settings and it allows students to learn at their own pace and their own ability level. By including a virtual environment, learning is not limited to a physical classroom and can happen in long periods, in bits and pieces, from home, from a coffee shop, during a lunch break, depending on what works for a student schedule. It provides increased flexibility, as it enables anytime anywhere learning and eliminates the need to attend class, which allows a further geographical reach, this helps students who can't attend class at set times every day or week. Hence the main purpose of the present study focuses on the current situation of BL towards teaching and learning process of 21st century.

Keywords: *Blended Learning, Education, Learning, Students, Teaching, Technology*

Introduction

In general terms, BL combines the online delivery of educational content with the best features of classroom interaction and live instruction in such a way as to personalize learning, allow thoughtful reflection, and differentiate instruction from student to student across a diverse group of learners. It is a new way of teaching and learning, as the name implies it is a combination of classroom learning with the online learning platform. This way of learning enables students to partially control the process of learning. The present study aims to find out the effect of blended teaching and learning towards students' performance and satisfaction. Students' satisfaction with blended learning does not necessarily lead to students' performance improvement and the advent of new technologies has impacted the learning process among students in education. The new technologies have been embraced by students and led to the growth and popularity of learning using the internet. Nowadays, many universities use online teaching in the field of education. Online learning represents the use of the internet as a means of interaction between students and teachers. BL and online

educations are used by many educational institutions in order to embrace the new challenges in education system. Thus, student satisfaction with BL helps in evaluating the effectiveness of using this form of the class mixture in higher educations. Understanding what method leads to student satisfaction provides an insight into educational institutions to create a more effective learning environment for students (Wu et al., 2010). However, even though there has been a significant number of studies that investigated students' perception concerning online learning and face to face learning, a few pieces of research have been carried out about satisfaction and its relation to students' overall performance in courses delivered through blended mode. Satisfaction with blended learning can lead to performance improvements for students in certain areas. It is an approach to education that combines online educational materials and opportunities for interaction online with traditional classroom atmosphere and requires the physical/in-person presence of both teacher and student, with some elements of student control over time, place, path, or pace. While students still attend "brick-and-mortar" schools with a teacher, face-to-face classroom situation are combined with computer-aided activities regarding content and delivery. Blended learning has also gained importance in professional development and training settings. Blended learning allows students to learn study and grasp learning's at their own pace and their own ability level. With the presence of virtual environment, learning is not limited to a physical classroom. Learning we all know, can be done in long lengthy periods, in bits (small) and pieces, from home, from a cafe, or during a lunch break, depending on what works for your schedule. The definition of blended learning is a formal education program in which a student learns: In part through online learning, with some element of student control over time, place, path, and/or pace. In part in a supervised brick-and-mortar location away from home. In the concept of blended learning, mainly three main delivery modes like face-to-face, flexible and distance learning. Importantly, learning technology applies to all three modes; technology can be used to enrich traditional in-person teaching, strengthen existing flexible forms of delivery. Enhance the level of engagement and social presence of students studying at a distance, etc.

Objectives of the Study

- To study about Blended Learning and its Models
- To know the advantages and disadvantages of Blended Learning
- To analyse the features of Blended Learning
- To highlight the significance of Blended Learning and teaching in the Indian Education System

Methodology

The present study is mainly established on secondary data which are gathered from renowned research articles, journals, position papers, etc. which are all related to "Blended Learning: The Future of Teaching and Learning Process".

Review of Literature

Blended Learning is provided by the effective combination of different modes of delivery, models of teaching and styles of learning which are exercised in an interactively meaningful

learning environment and BL courses combine online and classroom learning activities and uses resources in an optimal way in order to improve student learning outcomes and to address important institutional issues (Garrison, 2004). BL can be defined as the organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies (Graham, 2006). Students' perception concerning higher education course delivery has changed due to the new trends in instructional delivery modes that are influenced by the information technologies (Wu et al., 2010). Nowadays, students seem to prefer online learning apart from face-to-face traditional learning (Okaz, 2015). The advancement in information communication technologies has influenced students to prefer other complementary forms of content delivery. Therefore, blended learning is seen as a new way of complementing conventional face to face learning and online learning. Blended learning is a combination of conventional face to face classes and online learning that uses the internet and physical presence in classrooms (Friesen, 2012) BL is "hybrid teaching" (Verkroost et al., 2008). Regarding blended learning definitions, many authors point out that it consists of face-to-face and online learning components (Drysedale et al., 2013; Huang, 2016). Blended learning is a combination of traditional face to face and online learning (Graham, 2013). Blended learning facilitates course management since it combines online and faces to face course components to be accessible for students any time they want to use the resources. It also helps in organizing the process of arranging and grading assignments, since it collects everything in a given platform, and helps in managing the learning process (Rahman et al., 2015).

Blended Learning Models

Rotation model: A course or subject in which students rotate on a fixed schedule or at the teacher's discretion between learning modalities, at least one of which is online learning. Other modalities have activities such as small-group/full class instruction, group projects, individual tutoring, and pencil-and-paper assignments. The students learn mostly on the brick-and-mortar campus, except for any homework assignment.

Station Rotation: A course/subject in which students experience the Rotation model within a contained classroom or group of classrooms and this differs from the individual rotation model because students rotate through all of the stations, not only those on their custom schedules.

Lab Rotation: A course or subject in which students rotate to a computer lab for the online-learning station.

Flipped Classroom: A course or subject in which students participate in online learning off-site in place of traditional homework and then attend the brick-and-mortar school for face-to-face, teacher-guided practice or projects.

Individual Rotation: A course/subject in which each student has an individualized playlist and does not necessarily rotate to each available station or modality.

Flex model: A course/subject in which online or digital learning is the backbone of student learning, even if students at times do offline activities. The teacher record is on-site, and students learn mostly on the brick-and-mortar campus, except for any homework assignments.

A La Carte model: A course/subject that a student takes entirely online to accompany other experiences that the student is having at a brick-and-mortar school or learning center. The teacher of record for the A La Carte course is the online teacher and students may take the A La Carte course either on the brick-and-mortar campus or off-site.

Enriched Virtual model: A course/subject in which students may require face-to-face or in-person learning sessions with their teacher of record and then are free to complete their remaining coursework remote from the in-person or face-to-face teacher/faculty. The same person generally serves as both the online and face-to-face teacher. Most of the Enriched Virtual programs began as full-time online schools and then developed blended programs or learning to provide students with brick-and-mortar school experiences. every weekday and it differs from a fully online course because face-to-face learning sessions are more than optional office hours or social events; they are required.

Advantages of blended learning

- Learn different things in different ways
- Using multiple modalities reinforces learning, retention and engagement
- Saves money
- Learners can control the pace of their learning
- Blended kind of learning is modular and scalable
- Prepares students to work at digital based jobs that require technology proficiencies
- More engaged students
- More leadership roles
- Better information and feedback on work
- Team teaching
- Focus on deeper learning
- Extended time with students
- Motivate hard to reach kids
- New options to teach at home
- More earning power
- Individualized professional development plans Improved Teaching Conditions
- Meaningful professional development
- Improved Time efficiency
- Better student data
- Reduced Isolation
- More opportunities for collaboration
- Role-differentiation

Disadvantages of BL

- There are also some perceived negative aspects to using technology in the classroom, such as abusing internet privileges for non- school related activities.
- The best way to guard against any negative effects of technology integration and implementation is to make sure teachers and students are trained on.
- Teachers should always understand how and why each piece of technology is being used by their students, and they should monitor student activities to the best of their abilities.
- Nothing is perfect, and we certainly shouldn't diminish the roles of traditional learning processes such as handwriting, but when used correctly, technology can help both teachers and students soar to success.

Features of Blended Learning

- Flexibility
- Efficiency
- Extended reach
- Collaboration
- Personalised learning
- Tracking and reporting

Need for Blended learning in the Indian education system

The Union Budget 2017 over the education sector has made the education especially higher education to be multidimensional and the modernized education along with the personality development which gives an open way for employment. Government's vision of education system that is the digitization is one of the trendy norms of the government and it has released various measures/schemes to support the online education like SWAYAM an online portal, HEERA an Higher Education Empowerment Regulation Agency, NEP a National Education Policy, UGC (University Grants Commission), etc. SWAYAM regulation, 2016, mentioned that at least 20% materials, and in 2020, it was decided that at least 40% from the total number of courses by an Indian university should be released in the form of MOOCs for the fast dissemination of knowledge and information among the prospective Indian learners. But the major problems related to the SWAYAM are the high rate of dropout (UGC Regulations, 2020). There may be some other factors too such as the syllabus not being at par, course contents failing to motivate the students. However, the abrupt, also unexpected shift to online teaching mode in India where a rampant digital divide still exists and where a large number of learners still belong to the disadvantaged groups, internet accessibility and unaffordable technology were more likely to make learning beyond the reach of many thousands of learners. The biggest challenge, however, was to make learning accessible to all age group and stages in this moment of crisis. The author has suggested that instead of starting online teaching in an unplanned way, one should understand students' priorities and challenges then online learning would help in aligning technology and pedagogy in tune with students' interests and learning preferences. During the Covid-19 pandemic, lockdown,

with a view to reconsider the idea of pedagogy from traditional chalk-and-talk method to online/blended learning, the Indian Government launched the initiative called “Bharat Padhe Online” so that to encourage the teachers, educationists to create digital educational related contents, share ideas and innovations in public platforms by creating educational blogs, and creating more and more OERs means Open Education Research. Initially, everyone from political leadership to academic administrators was so much confused as to what course of action to be taken to continue education during pandemic. After considerable discussions and debates, it was decided that teaching–learning be shifted to e-mode i.e through online platform so as to compensate the loss of academic semester. That’s why change was sudden, drastic, posing unique challenges to both the teachers and learners. Teachers had to undergo digital transformation overnight, overcome technology phobia and work so hard for the sake of their students. When the traditional educational institutions in India switched over to online education or e-mode overnight, the teachers shifted from blackboard to computer screen or Laptop. Against these unprecedented contexts, there is an urgent need to explore the perception of the teachers and learners on the use of online/blended learning particularly in the conventional universities and colleges, the challenges in the implementation of the online/blended learning and how to mitigate the existing digital division in a country like India. When the different ICT-based practices had already changed the entire teaching–learning method and have redefined the role of tutoring, mentoring and counselling across the world, the case of online/blended learning in India was not that attractive. However, and the corona virus pandemic in a way compelled the F2F and ODL institutions to adopt technologies for delivering contents to the learners undisturbed. In fact, by using the given affordable, accessible and cost-effective technology, the benefits of education can be uniformly disseminated to all irrespective of any socioeconomic discrimination and teachers are undertaking Facebook Live classes, Google classroom, YouTube contents, teaching through WhatsApp and meeting apps like Zoom, Teams, Cisco WebEx or Google Meet as an emergent response to the Covid-19 crisis. But whether such efforts are actually transforming the Indian educational system from the pedagogical point of view is a matter of serious discussion. Therefore, it is alarming that we seriously addressed, what is also the purpose of this paper, the perception of both teachers and learners towards the use of online/blended learning in their regular curriculum transactions during the Covid-19 pandemic so that both teachers and students in Indian colleges and universities are able to continue their transactions without any disruption and a proper roadmap is prepared for the right use of online/blended learning at the policy level in the 21st century.

Examples of Teaching and Learning activities from BL

- Self-directed learning- meaning students can go through the content on their own
- Story mapping a visual depiction of a story related to the concepts covered online
- Online self-assessments and quizzes
- Discussion forums

Challenges in Blended Learning

- The students in blended learning programmes assumed that fewer classes meant less work, inadequate time management skills were inadequate
- Experienced problems with accepting responsibility for personal learning.
- Students in such courses have also reported feeling isolated due to the reduced opportunities for social interaction in a face-to-face classroom environment
- Having difficulty with more sophisticated technologies is another challenge when implementing blended learning.
- The challenge for implementation of blended learning in higher institutions is time commitment.
- Planning and developing a blended learning course for large numbers usually takes two to three times the amount of time required to develop a similar course in a traditional format.
- Funds are insufficient for the development of a learning management system which is required to enhance blended learning in higher institutions
- Technical support for course design may be lacking

Conclusion and Summary

Blended Learning Environments promise to be an important part of the future of both higher education and corporate training, over the past decade, with the increased availability of technology and network access, the use of BL environments has steadily grown and it provides students with time flexibility and improved learning outcomes. The blended learning offers the open way for many students who can get through the physical and cultural barriers in the education. By learning to use technology in the classroom, both teachers and students will develop skills essential for the 21st century. Students will learn the critical thinking and workplace skills they will need to be successful in their futures. Education is no longer just about learning and memorizing facts and figures; it's about collaborating with others, solving complex problems, developing different forms of communication and leadership skills, and improving motivation and productivity. Despite initial hurdles and challenges, the future looks promising for blended learning adoption in the developing country like India. In fact, if the current growth rates continue, India might soon pass western countries in blended learning adoption. The challenge for implementation of blended learning in higher institutions is time commitment. Thus, estimates that planning and developing a BL course for large numbers usually takes two to three times the amount of time required to develop a similar course in a traditional format. BL improves the interaction of teachers with students and it also leads to the improvement of students' satisfaction and performance with the blended learning process and helps students and teachers in managing their courses. BL makes it easier for publishing resources and organizing independent work by students, as well as managing and organizing courses, which eventually leads to students' satisfaction with BL and their outcome improvement. In order to ensure a successful blended learning experience for students, there should be all educational institutions support for course redesign, which may involve deciding what course objectives can best be achieved through online learning

activities, what parts of the course can best be accomplished in the classroom, and how to integrate these two learning environments for the 21st century children.

Educational Implications and Suggestions

- Focus on new trends in information technologies and how to assess the adoption process of students and teachers with so many new trends in information communication technologies.
- Pedagogical frameworks to support blended learning for teachers and students.
- More investigation into successful models of professional development and support for instructors who adopt this new mode of teaching. of blended courses within institutions,
- BL provides flexibility in learning for both students and teachers. Integration of the virtual and physical landscapes enables both instructors and students to become learners, but this is most effective when there is institutional support through the provision of professional learning and the opportunity for redesigning courses for the most appropriate blend.
- Provide students with time flexibility and improved learning outcomes.
- More student and teacher interaction.
- Increase student engagement.
- Allow for continuous improvement in a course.
- Enhance an institution's reputation.
- Expand access to educational offerings.
- Acquire more technological literacy and greater confidence using new technologies.
- Improving communication between teachers and students and extending relationships across boundaries.

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