BLENDED LEARNING APPROACH IN EDUCATION

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Abstract: Blended Learning is the combination of online learning with traditional methods. This paper discusses blendedlearning, itshistory, models and its impact on people. It also focuseson the meritsand demerits of blendedlearning. This paper summarizes the thoughts of both the authors onblended education and how it is shaping up modern education after we studied and perused through various papers combined with our personal experiences.
KEYWORDS: Traditional education, blended education, virtualeducation, e-learning.

I. INTRODUCTION

Education is one of the fields which is growing at a rapid pace due to huge technological advancements. Traditional education is when educators teach lessons, values and motives in a classroom interacting face to face with their students. There is little practical knowledge and a lot of students face difficulties due to distance, speed of learning, financial problems etc. This is solved in modern education by the introduction of: Distance Learning. Distance learning is when students cannot be physically present in the classroom regularly. Usually, this entails correspondence courses and nowadays it involves MOOCs (Massive Open Online Courses) which are accessed using the internet. E-learning is a system which combines formal teaching with electronic devices. Using desktops, laptops, phones connected to the internet to facilitate education is already becoming the "new normal" which is the basis of e-learning. Usage of computers connected to the internet is a requirement for e-learning as knowledge through it can be transferred anytime and anywhere. Technological tools such as Khan Academy, GoogleMeet, Base Camp, GoogleDocs etc. are being incorporated in our classrooms. Blended learning is the form of learning when online and offline teaching is mixed. Students have the advantage of setting the pace, time, path and place. It is a collaboration between traditional classes which require the physical presence of students and staff and elements of virtual learning. With such fast growth in technology and the advancement in learning systems, blended education is being accepted by the masses. Devices such as computers, phones, tablets are being embraced in our classrooms. Hard copies of paper books are being replaced by electronics. Blended education makes use of e-learning to facilitate education as in contrast to e-learning where classrooms can be replaced with webinars, blended learning integrates online and instructor based learning. Blended learning is more student- focused rather than educator focused. But, Blended Education does not have a fixed definition, so research work in this is flimsy and can barely determine its true effectiveness. Most of the studies done on Blended Education are evidence- based.

1.1 History of blended learning

Blended learning has existed since forever. But, it's usage has come into play with the involvement of technology. As technology started playing a role in our lives, simultaneously blended learning also started playing the same. It got rapidly popular amongst the younger generations. It has given an advanced level to the traditional method of teaching and studying. Sir Isaac Pitman used to send "texts" to his students via mail using shorthand, becoming one of the first people to pioneer the concept of distance learning. In the 1960s and 1970s, Employees could simply utilize printed materials and virtual instructions. An amazing invention called Plato developed by Control Data and the University of Illinois is still active in the world of virtual education or computer-assisted education.

In the 1980s, TV-based video networks started to gain popularity as it was frequently being used for training. The learners could get instructions via their television set and for queries, they could use snail mail service.

CD ROMs started to gain popularity in the 1990s which changed the direction of blended learning. Teaching organizations started to use CD ROMs for an enhanced learning experience as it facilitated more interactiveness and was apt for distance learning. This was also the time when the first learning management systems (LMS) were founded although they were very basic as compare modern tools.

1998 saw the rise in Web-Based instruction as PCs and desktops became more affordable and consumer-friendly. Graphics, Sound, Video etc increased in quality and accessibility and producers fine-tuned their CD ROMs courses for the internet. After 2000, Blended learning kept a high pace and now it plays an important role in modern education. Technology will keep on changing and it will be useful if we also start working on it simultaneously. The traditional way of teaching is not replaced but it just got an advanced view of teaching and studying. It is not limited to classroom teaching but students can learn anytime and anywhere through online platforms. Companies have also started giving training to their trainees through the online platform.

II. BLENDED LEARNING MODELS

As there is no concrete research on blended learning, sub categorizing it is difficult but still it can be classified into distinct methods or models.

Fig. 1. Blended Learning Models

Face-to-face driver model.

In this model, teachers identify students who have a different pace for learning. This works best in a diverse classroom where students have different speeds of learning the course material. It allows a blend of technological tools with traditional methods to supplement learning. Students who are faster than their grade levels can successfully move upwards while students who have trouble following the curriculum are provided with online remedial assignments etc to progress.

To use this model the instructor has to properly identify the students who need help, pick an online tool which is most beneficial to them and then set a time appropriate for the student and teacher to use the tool. The instructor needs to oversee the students and lend a helping hand wheneverneeded.

Rotation model.

As the name suggests, students here "rotate" through a cycle of self online study and offline face- to-face class time. Here the digital tool selection is based on the fact that everyone should be comfortable with using it. Students have individual time with teachers who can help them with a particular subject they are weak in and afterwards they can move to the technological tool at their work station. This model encourages individual time with the student and allows the teacher to focus on a particular area of the problem. The teacher can also go around the classroom addressing the issues faced by the children. This type of model is perfect for classrooms who are already teaching through traditional methods.

Flex model.

In this model, specialized instructions are provided to the students online while the teacher is available for lessons and doubt sessions offline. Teachers are facilitating the students rather than being primary educators. This model is usually applicable for secondary and higher grade students. Students are grouped to learn through their preferred digital tool. Teachers are instructed to motivate, supervise and help students.

Online labs model.

All the syllabus provided in this method is strictly online and students travel to the lab. This model works best for students who want to learn a secondary course or cannot attend traditional classes due to personal reasons (financial constraints, second jobs etc). This model usually works perfectly for schools made up entirely of computer labs. Paraprofessionals are the supervisors here rather than teachers/educators. This model also works for students who need to move at a slower pace than their peers and for schools who are going through budget cuts and cannot accommodate all of their students in one place.

Self-blend model.

This model is aimed at students who aim to learn courses other than those taught at the school/classroom. Students enrol in these courses for advance placements, college credits, additional learning and to gain knowledge specific to their career path. Selection of the extra course is heavily influenced by target based advertising. Gifted or highly motivated students usually opt for these courses. The lessons may not directly be related to the curriculum but they enhance or supplement the curriculum.

Online Driver model.

The Online Driver Model is suitable for students working in remote areas as it focuses on transferring instructions strictly online. Face-to-face supervision isn't required. Students can check in with their teachers periodically or as per required. This model was a boon for the ongoing pandemic (2020), as students and teachers could communicate through webinars and education could continue. This model is very adaptable and focuses primarily on the flexibility of the student.

III. ADVANTAGES OF BLENDED LEARNING

Cost efficient- Blended Learning is one of the worthwhile systems in terms of cost. It saves an ample amount of money appropriately as students are not needed to travel anywhere. They are just required to work from home. Another positive point is that they are learning something and saving their expenses, which gets difficult when they step out of our house.

Comfort in Technological Tools- As students are more inclined towards technology today in every way, blended learning brings them closer to the technological sphere. In the coming years, they will be dealing with digitalisation around them. Their day to day tasks, whether it is sending work to someone or spreading news, they find it easier to do through social media as it is convenient and covers a large population. Blended learning makes them comfortable with handling these tools.

Individual Learning- Blended learning focuses on individuality. Students can focus on themselves, this will

improve their self-learning abilities. They will not face peer pressure. Students will develop a pattern of judging themselves on their own. Even it will be smooth for teachers to focus on an individual student.

Exploration and New Experience- Blended learning can make students and trainees explore things at a deeper level. There are many topics which are difficult to explain on a classboard and become a tedious task. Though, an online platform can make students study actual visuals or diagrams regarding any subject.

Feasibility- Blended learning seems to be feasible too. students can learn anytime and anywhere. They will not be bound with time domains. Time constraints will be dealt with smoothly.

Parent's Guidance- Students will be under the eyes of their parents. Parents can analyse their performance, can keep a record on a daily basis and can guide them properly.

Extra Time- In blended learning, you will not be bound to any specific timings the way you are in a traditional classroom, so it is going to provide you with extra time so that you can fulfil your interests.

IV. DISADVANTAGES OF BLENDED LEARNING

Rural Problems- Everyone knows the importance of technology in their lives. But there are some sections in the society who are not aware of the technology till yet. The underprivileged sections of the society can find difficulty in accessing it. Not everyone is privileged or educated in our country to access technology in a proper way.

Disciplinary obstacles- As the videos can be recorded, students won't understand the term discipline in their lives. They will procrastinate and will rely on learning things later. There will be no certain timetable which is necessary in the beginning years of a child's learning. It will make them have many backlogs. Sooner or later, they will face hardships covering the syllabus. It can affect their disciplined learning pattern.

Technical Glitches- While using an online platform to teach, teachers can face network issues. Teachers as well as students can face technical glitches. Unnecessary wastage of time can be a major issue. Particularly those residing in rural areas, they can face the problem. So the devices or the platform used should be reliable and easy to use.

Loss of Social Connections- Students learn individually on an online platform. So at the same time they are losing one thing that is social interaction. There will always be some variation in interacting with someone virtually than face to face. It can affect their social and emotional bonds. In the coming future, they can find struggle in doing group tasks. Experiencing things from the outer world is necessary.

Burden Over Teachers- Blended Learning can increase tasks for teachers. If students don't understand a topic, it can be difficult for teachers to make them understand it virtually. For teaching, teachers may have to prepare a lot of study materials prior to the beginning of class. It can double their work.

High Maintenance Cost- Managing technological devices or if teachers are teaching from a certain platform, maintaining the platform can be expensive. Not everyone can afford to teach from expensive platforms.

V. IMPACT OF BLENDED LEARNING ON PEOPLE

The impact of blended learning on students is going to be a boon and bane simultaneously. It will have a tremendous impact on students. Blended Learning will make sure that in the tough time of crisis, students don't get behind in terms of their skills and studies. They can master multiple skills as they will be introduced to various online platforms. It is not like that they are going to attend college for the continuous stretch of 6-7 hours, so it is going to give students extra time to pursue their interests. Blended learning will bring students closeto the digital world. Future demands more digitization. That's why it is necessary that from the early stage learners are taught with this way of learning. But at the same time blended learning can have its side effects like screen time is going to increase, so it will affect eyesight. Constant use of laptops may increase lethargicness in students. Due to issues with learning new technological tools, the learning process will be slowed down considerably. The students could also face cognitive load as the educators may increase the load of educational instructions.

VI. CONCLUSION

Blended education should have only one goal: To enhance education and to create a safe and rich environment for learning. A lot of traditional teachers scoff at the idea of blended learning but, as the world becomes more digitized day by day traditional education will have to bend towards a blended approach. Students are more digital- oriented these days so they know the potential behind a blended approach as it gives them flexibility in their schedule. School administrators are faced with budget issues constantly so online education is a viable option. Blended learning produces great results in terms of quality, lower dropout rates, tracking the performance of students, access to information and other positive results. But,there are difficulties faced due to the blended model. Not everyone has access to technological tools, high-speed internet, and other things. Lack of these things creates a hindrance in the pace of student's learning. Health issues may also increase as continuous usage of computers affect eyesight, increases strain, overwhelms a person and may create a strained relationship between the student and teacher. A lot of blended models also require robust architecture which isn't available everywhere in every school.

But, with better implementations and direction blended learning can create a stable environment for learning.

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