

ONLINE LEARNING A GAME CHANGER DURING COVID 19 PANDEMIC

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ABSTRACT

Student learning is a key factor in the assessment of quality of education. In fact the extent to which the student learning is tackled by our teachers decides the quality of education we impart to them. Now there are three pillars that govern student Learning. First being the curriculum, second being the assessment and third and the most significant are the pedagogy. During the Covid 19 pandemic digital education has emerged as a new pedagogy. The key contributing factor to promote digital education is online learning. In this predicament when schools colleges and universities are shut down there is only one connection that is still alive and that is the connectivity of teachers with their students. In this paper we will throw light on the factors that have really triggered online learning to emerge as a game changer during Covid 19 pandemic to make the students remain connected with their respective teachers and keep the knowledge sharing activity alive. In today's era the fast changes in technology and an increase in student expectations is a key factor that is motivating faculty acquires new tools for enhancement of teaching methods. The pandemic has changed the market landscape. Pure online players are fast capturing the market.

Key words: Student Learning, Quality of education, online learning. Blended Learning.

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1. INTRODUCTION

An online teaching is not rocket science. It's just teaching your subject through a new channel or a new medium. To deliver through that channel you need toolsets or certain up gradation of certain skill sets. Online teaching is mainly made up of four modules. The tutor, the tools, the experience and last the content. Both experience and content need to be modulated for online teaching. Teaching must take care to teach its students to learn, to take initiatives and not to

become book worms only. Technology today is undergoing rapid metamorphosis and students are bound to keep their knowledge updated with the changing technological environment so that their employability is not at stake. The students expect that keep themselves updated with the latest changes in technology will make them acquire new skills. Even the most idealistic students after completing their several years of study want to apply the knowledge they acquire into their jobs to earn a reasonable income. Activity based learning is what the student of today demands so that he can apply his knowledge to the corporate world. With the advancement in digital technologies, social the end user, the student expect that the process of knowledge creation and sharing should be controlled by them. The faculties have therefore got a big challenge of creating a knowledge base that is accessible to a student whenever he or she has a desire to learn.

2. CONTRIBUTING ELEMENTS TO THIS NEW PEDAGOGY

The acquaintance of faculty and instructors with digital technologies for teaching and learning are emerging. Teaching can be structured to make learning happen without time and geographic boundaries through seven developments listed below:

2.1. Blended Learning

A teaching practice that combines or blends classroom and online learning [1]. The instruction of a teacher occurs with both teaching interaction and computing devices also known as Hybrid Learning. For example a person named Thomas learns about algebra from his teacher and after learning all algebra operations goes to the computer laboratory to practice algebra questions using a mat lab program. Blended Learning has many advantages which are as follows:

- Provides personalized training experiences
- Round the clock access to training resources
- Track employee performance and skill development
- Reduction in Training costs
- Blended communication and collaborative learning

Blended learning can be implemented in many unique ways generally using a combination of one or more of the following models [2]

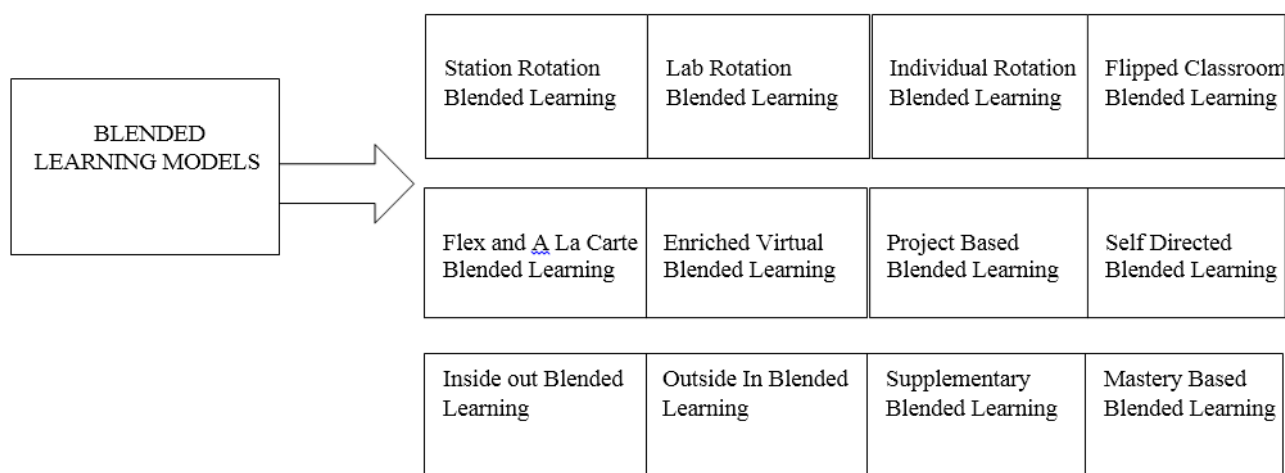


Figure 1 Learning Models

2.2. Collaborative Approaches to the Construction of Knowledge/building Communities of Practice

Online learning in its very inception focused on making students learn through discussion cross questioning. Social Media has helped to offer platform to the students where they can carry out peer study to make learning fun and enjoyable. In India prestigious institutes such as the IITs have started a series of online technical lectures through NPTEL program where students that are not studying in IITS can enroll in these courses and take the advantage of studying from IIT professors without paying any fees.

2.3. Use of Open Educational Resources and Multimedia

Digital media such as you tube [4], learning management systems such as moodle, google classroom have really helped to make learning more interesting through animations, simulations so that students access and apply knowledge in different ways. Open Educational Resources can be provided as core course content for helping students to widen their technical skills. Open educational Resources are helpful to provide reading content to those students that fall below poverty line. They don't have enough money to purchase expensive textbooks but have intelligent brains.

2.4. Increased Student Independence, Choice and Control

The development of Learning Management System such as Moodle, github and the creation of virtual classroom such as Google Class [5] have provided fast access to relevant data on their smart phones without any timing constraint by simply connecting to internet. They can now submit assignments online download notes shared by their instructors with a single click. The instructors too can keep a record of the assignments submitted and assignments pending on real time basis [6] and can even assign grades to the ones submitted. Thus student monitoring by faculty becomes easy and paperless. Moreover this approach gives choice to the student to access his/her class whenever they have the mood to study specially in their primetime.

2.5. Anywhere, Anytime, Any Size Learning

Students in this mode of learning can attend a course at anytime from anywhere. This means that parents can attend to their children and then sit down to class. Moreover working students can attend classes despite of their work schedule. Online learning promotes teaching that caters for the student's total development [6]. Every student has his /her own way of learning. Some learn by visuals and others learning by doing practical sessions. Course materials are accessible 24 hours and 7 days a week. Students have the ability to read and reread literatures discussions explanations and comments. Often spoken material in the classrooms are missed by students due to distractions, boredom and tiredness

2.6. New Forms of Assessment

Digital learning brings out new forms of assessment. Assessment that aims not to create fear factor among students[7]. Assessments that target students to do their exams without any invigilation. Assessments that appear in the form of open book exams aimed to test certain concrete parameters and then carry out skill mapping of every student based on those parameters. Learning is made easier in this approach and more scalable. Student feedback is flexible and can be taken at any point of time by sharing link of online feedback form with the students of a particular course after course completion. Assessments can be given to the students at any point the instructor wants. Moreover instead of a giving a single subjective exam after course completion, short objective questions can be given to the students after completion of relevant topics taught to them.

3. FOUR EMERGING PEDAGOGICAL TRENDS

1. An online instructor comes with practical knowledge and may be from any location across the globe. This promotes flexible and accessible learning, making learning no longer classroom centric and students get access to how class concepts are applied in real business solutions [8].
2. Group study is another thing that can be achieved through online learning. Focus groups or teams can be created among students and team assignments can be shared with each group by planning a small competition among the different groups [9].
3. The usage of internet to make teaching style appear more effective in the form of illustrations graphs and pictorial presentations.
4. To design online assessments for students where students are free to express their thoughts by means of open book exams. Participating online is much intimidating. Online environment contributes for round the clock development of student and fosters team learning [10].

4. CONCLUSION

The COVID-19 pandemic has no doubt identified the need to develop a good infrastructure and sound online and blended learning model for the country so that the delivery of education does not come to a standstill if any other virus strikes the motherland. The only challenge to implement online learning model fully in our country is the establishment of powerful internet connectivity in the remote areas. Online learning is only localized to the urban India and it has to extend its reach towards rural India also. The Indian government is now coming with new education policy to transform the delivery of education so that education becomes more jobs oriented and students can pursue subjects based upon their skills and area of interest. This new education policy should incorporate blended learning as a critical component so that the effectiveness of education and its dispersal should reach the masses. The only challenge that lies before the government in execution of this task and the establishment of a strong IT network in all the remote areas of India where intellect minds are waiting to be enlightened through this game changer in the field of education.

REFERENCES

- [1] Ahmed H, Allaf M, Elghazaly H. COVID-19 and medical education. *Lancet Infect Dis.* 2020. Jul; 20(7):777-778
- [2] Murphy B. COVID-19: How the virus is impacting medical schools MAR 18, 2020 [<https://www.ama-assn.org/delivering-care/public-health/covid-19-how-virus-impacting-medical-schools>]
- [3] Brown M, McCormack M, Reeves J, Brook DC, Grajek S, Alexander B, et al. 2020 Educause Horizon Report Teaching and Learning Edition. Louisville, CO: EDUCAUSE; 2020.
- [4] Ahmed S, Shehata M, Hassanien M. Emerging Faculty Needs for Enhancing Student Engagement on a Virtual Platform. *MedEdPublish.* 2020;9(1).
- [5] Marshall AL, Wolanskyj-Spinner A. COVID-19: Challenges and Opportunities for Educators and Generation Z Learners. *Mayo Clin Proc.* June 2020; 95(6):1135-1137
- [6] Iwai Y. Online Learning during the COVID-19 Pandemic What do we gain and what do we lose when classrooms go virtual? March 13, 2020.
- [7] Taylor D, Grant J, Hamdy H, Grant L, Marei H, Venkatramana M. Transformation to learning from a distance. *MedEdPublish.* 2020; 9(1):1-12.
- [8] Johnson B., *Making a difference by leveraging polarity, Paradox or Dilemma – Volume One: Foundations*" HRD Press (2020).

- [9] Ebrall P. Clinical Reasoning in the Health Professions. 3(rd) Edition. J Chiropr Educ 2008; 22(2):161-162.
- [10] Muhammad Raihan S, Abrar Fatima L, Fayha A, Yezan S, Dina A, Obeidat A. Can blended learning and the flipped classroom improve student learning and satisfaction in Saudi Arabia? International Journal of Medical Education. 2016; 7. 11.
- [11] Smith EE. 5 ways to keep human connections when moving learning online due to corona virus 2020[<https://theconversation.com/5-ways-to-keep-human-connections-when-moving-learning-online-due-to-coronavirus-134351>]