

INNOVATIVE APPROACHES IN EDUCATIONAL ERA - BLENDED LEARNING AND FLIPPED CLASSROOMS

'MS. SHWETA TRIPATHI & "DR. POOJA GUSAIN

'SCHOLAR, AMITY INSTITUTE OF EDUCATION, AMITY UNIVERSITY UTTAR PRADESH

"ASSISTANT PROFESSOR- II, AMITY INSTITUTE OF EDUCATION, AMITY UNIVERSITY UTTAR PRADESH

Received: March 02, 2020

Accepted: April 03, 2020

ABSTRACT: *An educational institution performs a significant task of providing learning experiences to their students which leads them from darkness of illiteracy to light of knowledge, and the key members of these institutions playing an important role are teachers. Since teaching is considered an art and science, the teacher has to acquire both the knowledge and skills. Teaching is going through a momentum of great transformations, and there has been dynamic changes in pedagogical approaches for efficient teaching-learning process. This paper makes an attempt at providing understanding of professional development of teachers, by use of various learner- centered approaches such as flipped classrooms and blended learning. It is based on the secondary information obtained from various research studies, documents and reports ; aimed at explaining how these approaches helps to provide quality education and create favourable learning environment in the classroom.*

Key Words: *Blended learning , Flipped classrooms, teaching learning process, professional development*

INTRODUCTION

“Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is most important.” - Bill Gates

Teachers are the greatest asset of any education system, as they stand in the interface of imparting knowledge, skills and values to their learners. They are described as the backbone of education system. The Education Commission (1964-66) of India explicitly stated that “No system can rise above the status of its teacher”. Similar sentiments have been expressed by the statements given by Delors report (1996), and UNESCO report on Teacher and Educational Quality. According to the famous poet and educationist Rabindranath Tagore, “A teacher can never teach truly, unless he is still learning himself ; just as a lamp can never light another lamp unless it continues to burn its own flame”. Hence, the most effective way to develop good teachers in a dynamic and changing environment is given by a well developed pre-service teacher education programme, which continues throughout their career with several learning opportunities. Therefore, several provisions are made for the continuous professional development of teachers in order to help them contribute in the growth of society. When teachers discover new teaching strategies through their professional development, they are able to go back to the classroom and make changes to their teaching styles so as to better suit the needs of their students. Professional Development for teachers makes them more efficient in their presentations and course evaluations, as it exposes them to new delivery methods, evaluation styles and record-keeping strategies. Thus, implementing professional education development has benefits for both teachers and students. But most importantly, it helps teachers to become better educators and develop themselves into competent future administrators of the school.

LITERATURE REVIEW

The use of the e-learning methods, such as blended learning and flipped classroom has the potential to be effective and beneficial methods of education. By replacing the direct instruction technique (the explicit scripted presentation or delivery of a lesson or an information) from the class time, with video lectures observed in and outside of the classroom allows for a further increased class-time to be used for active learning. Active learning techniques generally include activities, classroom discussions, student-created content, independent problem solving, inquiry-based learning, and project-based learning (Bergmann, Overmyer, & Wilie, 2012). Such use of class-time creates a classroom environment which uses collaborative and constructivist learning, blending with the direct instruction used in the classroom (Tucker 2012). Constructivist learning takes place when students gain knowledge through direct personal experiences such

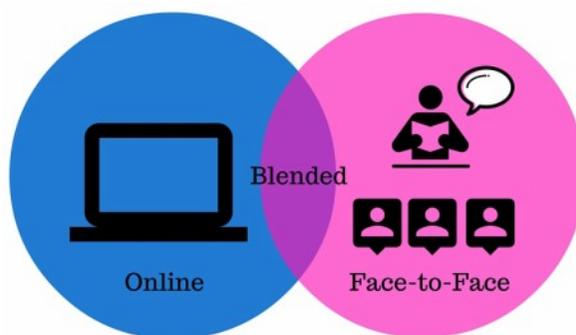
as activities, projects, and discussions. (Ultanir, 2012). The frequency of these constructivist classroom experiences can be increased in a flipped classroom through the use of activities, thus creating students who are active learners (learning by engaging in analysis, synthesis, and evaluation), rather than passive learners (learning by the absorption of information from just hearing, seeing, and reading) (Minhas, Ghosh, & Swanzy, 2012; Sams, 2013). The passive learning of a flipped classroom happens during the video lectures outside a class, thus freeing up in class time for student's active learning and participation (Tucker, 2012). Active learning of the students has been found to produce better grades than passive learning (Minhas, Ghosh, & Swanzy, 2012). Collaborative or cooperative learning takes place when two or more people learn something together, thus holding one another accountable for their learning (Roberts, 2004). Collaborative learning can create students who are more invested in their own learning, desiring to succeed in order to meet the expectations of one's peers (Roberts, 2004). Through group activities, discussions, and group problem solving, blended learning and flipped classroom methodologies can achieve a high level of collaborative learning.

LEARNER-CENTERED APPROACHES

From various pedagogical research, it is evident that what teachers do in the classroom is undoubtedly the key in determining the student learning and achievement. Hence, to achieve the desired learning outcomes of the students, there is a general rejection of traditional teaching methodology, as it is entirely dominated by the teacher, which relegates pupils to a passive role and reduces their classroom activity. It is here that the student-centered learning comes in. Even Swami Vivekananda laid emphasis on self-teaching or self-learning. According to him, the child is regarded as a crucial point of education and thus, education must be based on the needs of the child. In recent decades, the student-centered learning approach has shown important learning gains and has improved teaching styles in many educational institutions globally.

1. BLENDED LEARNING

Proctor defined Blended learning in 2003 as "the effective combination of different modes of delivery, models of teaching and styles of learning". As stated by Chew, Jones and Turner, "blended learning involves the combination of two fields of concern : education and educational technology". Blended learning is an approach to education, that includes incorporating both face to face (or traditional teaching) and teaching supported by ICT. It incorporates direct and indirect instruction, collaborative teaching as well as individualized computer-assisted learning. Figure 1 below illustrates the blending of two instructional pedagogies.



Blending the Best of Two Instructional Pedagogies

Figure 1 : Blended learning

MAIN CHARACTERISTICS OF BLENDED LEARNING :-

- Students in blended learning can have dual option - either the traditional mode of classroom teaching where they can personally interact with the teacher and their classmates ; or they can choose ICT supported learning option. This largely depends on the nature of content and objectives which are being targeted.
- Students get a chance to interact with other students pursuing the same course, personally as well as virtually. Thus their group become very large and so the student's knowledge becomes wide.
- Today all professions demand expertise in ICT. Hence, blended learning is helpful in making student's ICT experience rich.

- The blended learning helps the students to practice major life skills, such as empathy, decision-making capability, communication skills, critical thinking and self-management. Students get familiarized with few skills like love, empathy and patience in classroom through their teachers, classmates ; and few other skills like self-management, decision making, critical thinking, communication etc through the online experiences.
- In blended learning the students get a full opportunity for the holistic development of their personality. All the aspects of their personality- cognitive, affective and psychomotor are developed fully through blended learning which is difficult to achieve in isolation, in either traditional mode or ICT approach of learning.
- Due to physical presence of teachers through the traditional approach, students get that human touch which is very important for balancing their emotional quotient which is crucial up to the secondary level.
- The teachers have a diverse role in blended learning – apart from the traditional role of a teacher in classroom, she acts as a motivator, facilitator, a resource person, an organiser, a developer - when she develops course content to be provided through ICT, and as a guide on the side of students.
- Blended learning also includes constructivism, where the students construct their own knowledge rather than depending on teachers to design teaching-learning strategies for them.

ADVANTAGES OF BLENDEDLEARNING

- This approach combines concept-building and enquiry-based learning, thus retaining the human interaction in education methods, and allows the students to combine traditional classroom methods with ICT or online mediums.
- Blended learning attempts to create a balance between conventional or prescriptive learning and learning at one's own pace.
- Thus it is a win-win situation for students and teachers because the emphasis is on the development of learner's capacity and capability, with the aim of preparing them for the complexities of technological innovations and changing classrooms.
- Since every individual assimilates and comprehends information differently, thus online learning aims to bring a greater and better choice of learning with specific interests.
- Teachers do not get over-burdened with the tedious task of imparting education through information overload; instead, they just focus on an instruction method that synchronises technology with face-to-face learning.
- The automated and personalised learning systems allow teachers to turn into mentors, and free from the pressures of boring formal education.
- For the students, a major advantage is the ability to get access to a warehouse of knowledge that doesn't end with simple classroom instruction.
- Blended learning amalgamates information via various online courses, which are developed by experts from different fields, and help the students to access globally developed and industry-relevant course material.
- Thus, blended learning results in a possibility of practical and experiential learning, where the students can learn at their own pace – both in terms of speed and complexity of information.

2. FLIPPED CLASSROOMS

As said by Bishop and Verleger (in 2013), "flipped classroom is student-centered learning method consisting of interactive learning activities during lesson, and individual teaching bases on computer out of lesson". In 2012, Mull defined it as a " model that let the students prepare themselves for the lesson by watching videos, listening pod casts and reading articles". Hence, it is simply a concept wherein the home work is done at school and the school work is done at home by the students. Also known as the "inverted classroom" , **flipped classroom is a pedagogical approach where the short videolectures are viewed by the students at their home itself before the class session ; while the class time is devoted to exercises, projects, or discussions. Figure 2 below illustrates the difference between a Traditional and Flipped classroom model.**

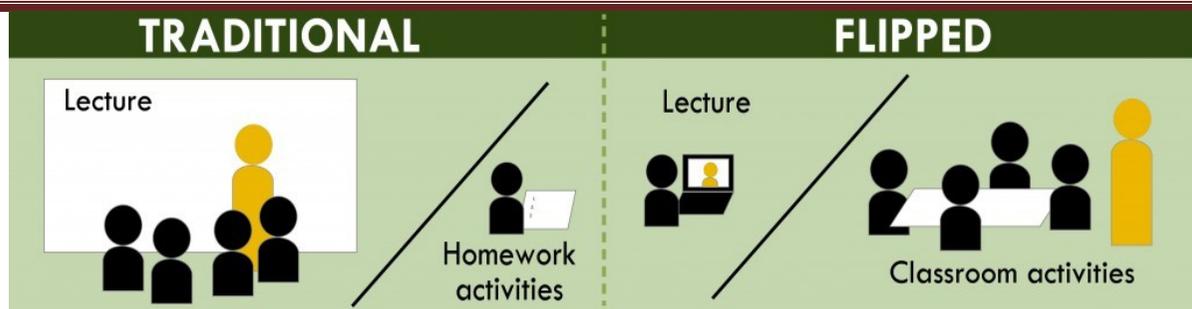


Figure 2 : Flipped Classroom

In this method, teachers record their lessons using various video capture softwares, share them amongst the students through internet and assign the recordings to them for online viewing prior to the class. In this way, the classroom teaching hours can be used for collaborative activities. Therefore, this shift in the teaching-learning process allows the students to become active participants, rather than being passive listeners.

The approach of Flipped Classroom gives priority to the students as all of them are engaged in their learning, and the teacher becomes the “guide on the side” and not the “sage on the stage” as stated by Baker (in 2000). This statement is supported and described further by Pinnelli and Fiorucci (in 2015), by agreeing that the Flipped Classroom concept is indeed an approach to promote democratization of learning, because the autonomy is in the student’s hand to view the lecture videos anytime and anywhere, before coming to the class.

MAIN CHARACTERISTICS OF FLIPPED CLASSROOMS

- 1 The most successful Flipped Classroom approach has three major characteristics :
 - (i) Firstly, the in-class learning environments are highly structured, which implies that the educator has to plan for every single minute so that the students are engaged in the learning.
 - (ii) Secondly, the in-class activities need to be designed in such a way that the students are allowed to solve problems, answer quizzes, apply or retrieve the content that they learnt earlier in the flip video, or get involved in discussions.
 - (iii) Lastly, the students are massively encouraged via grading and in-class activities to complete their work on time.
- 2 As described by Hamdan et al. (2013), while there is no “how-to” list associated with the concept of Flipped Learning, there are certain unifying themes which identified those four Pillars of F-L-I-P, an acronym of Flexible Environment, Learning Culture, Intentional Content, and Professional Educator.
- 3 In the Flipped Learning approach, there is a switch from teacher-centred classroom to a student-centred classroom, where the class time is considered for exploring content of the topic and creating a richer learning environment.
- 4 The classroom time is here maximized by the use of various methods of engaging activities such as peer instruction, problem-based learning etc.
- 5 In the model of flipped learning, professional teachers are more important than the traditional ones, as they must be skilled and wise enough to convert a lecture-based class into an activity-based class, which requires more planning and creativity than a conventional classroom.

ADVANTAGES OF FLIPPED CLASSROOMS

- Inside the class, students are given liberty by participating in such a space, which allows them to voice out their opinion and share their knowledge through various collaborative and cooperative activities.
- As the learning material is already provided to students in the form of micro-lecture, reading material, online games, or online quizzes ; the contact time of teachers with the students increases and hence it allows the enhancement of student’s learning.
- Through implementation of this approach, the lower level of cognitive work, such as understanding and remembering are done by the students outside of class, while the higher levels of cognitive tasks such as analysing, applying, creating and evaluating are done in class with the support of their peers and the instructor.

- When the students in the class participate in engaging activities such as debates, analysis of data and synthesis sort-of activities, it promotes critical thinking skills in the students.
- When the students have a basic knowledge about their subjects, they are able to explore deeply their learning material.
- Students can follow certain courses where the teachers put on homework, that they have to solve. In this way, teachers are able to track the progress of students and view their results.
- Using this model, it is possible for the teachers to get a clear idea of what are the struggles of their students, thus allows them to identify errors in their thinking or concept application.
- Flipped classroom model provides a transparency to the parents too, as it gives them a chance to take a look into their children's video lectures. Also, they are able to help them if the students fail to understand a particular topic or a phenomenon.

DISCUSSION AND CONCLUSION

The professional development of teachers in gaining new knowledge and raising the quality of teaching is considered a necessity of time, because of dynamic innovations and development in the technology. Hence, it should occur at any stage and continue throughout the life of educators. At this point, keeping in view the professional development of teachers and use of new methodologies in the learning process, this paper discussed some of the learner-centered approaches, such as blended learning and flipped classrooms. As blended learning supports more flexible, efficient and varied learning experience for both the instructor and the students; its power lies in the adaptation of technology-aided learning methods in addition to the existing traditional-based learning. This paper also discussed about the approach of flipped classrooms and how it is being gradually getting more popular among the students as well as teachers of various domains. It has the potential to be proved as a novel and effective teaching approach for secondary and higher education. The format of the flipped classroom **provides** more opportunities for students to develop skills like critical thinking, independent learning and even collaborative learning.

REFERENCES

1. Agarwal, R (2015) Role of the teacher in quality education, International journal for Quality in Education, Vol 2(4), April, 2015
2. Johnson, C.C., (2007). Whole-School Collaborative Sustained Professional Development and Science Teacher Change: Signs of Progress.
3. Lalima, Kiran Lata Dangwal (2017) Blended Learning: An Innovative Approach
4. Bonk C.J., & Graham, C.R. (2006). The handbook of blended learning environments: Global perspectives, local designs
5. Epic (2009b) White Paper – Blended Learning in practice
6. weblearning.psu.edu/blended-learning.../what_is_blended_learning
7. <https://www.coursera.org/course/blendedlearning>
8. <http://www.necsi.edu/research/management/education/teachandlearn.html>
9. Sara Arnold-Garza, The Flipped Classroom Teaching Model And Its Use For Information Literacy Instruction; Communications in Information Literacy; Volume 8, Issue 1, 2014
10. Kumar Shiva Gubbiyappa, Ankur Barua, Biswadeep Das, C. R. Vasudeva Murthy, and Hasnain Zafar Baloch Effectiveness of flipped classroom with Poll Everywhere as a teaching-learning method for pharmacy students; Indian J Pharmacol. 2016 Oct; 48(Suppl 1): S41-S46
11. Fezile ozdamlı, Gulsum asiksoy (2016) Flipped classroom approach
12. Krasnova T. A paradigm shift: blended learning integration in higher education
13. Savita Kushal – professional development of teachers in higher education in India
14. NCERT : National Curriculum Framework
15. Singh H. Building Effective Blended learning programs. Educational technology, 2006
16. Jamaludin R. Osman SZ. (2014). The Use of a Flipped Classroom to Enhance Engagement and Promote Active
17. The Four Pillars of F-L-I-P™, Flipped Learning Network (FLN).
18. (2014) www.flippedlearning.org/definition.
19. The Four Pillars of F-L-I-P™, Flipped Learning Network (FLN).
20. (2014) www.flippedlearning.org/definition.