



Flipped Classroom Method in Contemporary Teaching Learning Environment

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ABSTRACT

Keeping in view the present scenario of Education in J&K, we are witnessing certain issues which are affecting our Educational Environment day in and day out. The teaching learning process is severely affected as classroom activities are out of order and the distance between teacher and student increases as no classroom activity takes place for weeks, months or years. It is because our educational system still depends on traditional classroom practices. Even in the absence of teacher, students can be engaged in teaching learning processes even if the existing conditions doesn't permit the normal functioning of educational institutions. For this reason, educational institutions should employ a variety of teaching strategies in an attempt to engage all of their students. One such type of classroom is 'flipped classroom'. The idea of the "flipped classroom" is a relatively new concept in education that has become increasingly popular. Instructors who flip their classrooms reverse the roles of school work and homework by recording video lectures for students to watch before coming to class. Students then work on their homework in the classroom while the instructor is present to help them. The primary objective of this paper is to make stakeholders aware about the use of the new methodological and technological tools for teaching different subjects in Educational Institutions and continuing educational process despite aversive conditions that affect classroom environment. This paper also acts as a policy implication for government or policymakers or teachers to use the flipped classroom as a contemporary model to be implemented in teaching-learning activities for higher education.

Key words: Educational environment, Classroom Practices, Flipped Classroom.

1. INTRODUCTION

The idea of flipped classroom is considered a recent one in the field of education & it has gained much attention and popularity among educators worldwide. The founders of flipped classroom are Jonathan Bergmann and Aaron Sams, they used teacher-created video/video tutorials as an instructional tool to teach chemistry high school in 2007 [1]. Bergmann & Sams developed a non-profit organization & a website viz, flippedlearning.org



where they publicize their research findings and provide necessary help to other teachers and educators in the process of developing instructional content online and flipping their classrooms.

Jonathan Bergmann and Aaron Sams do not give an exact definition of the term flipped classroom. It is difficult to define term flipped classroom because it appears different at every teaching learning situation. A fourth-grade teacher will apply a flipped classroom in a different manner than a high school English teacher. However, some similarities can be seen across the educational field, and we call these similarities as “Flipped Classroom.”[2]. Flipped classroom comprises of outside class activities as well as inside classroom activities. In Flipped Classroom the outside classroom activity like the video tutorials (lectures) are developed by teachers and uploaded online students can watch these video tutorials at any time and place and if they have any query and confusion, they discuss them with their teachers inside classroom on the very next working day.

Lage et al [3] defined the flipped classroom in simplest terms. “Inverting the classroom means that events that have traditionally taken place inside the classroom now take place outside the classroom and vice versa” Thus the flipped classroom only means re-ordering of classroom and home activities. Jacob Bishop & Matthew Verleger [4] defined flipped classroom “as an educational technique that consists of two parts: interactive group learning activities inside the classroom, and direct computer-based individual instruction outside the classroom”. There are synonymous terms with flipped classroom. These terms are ‘inverted classroom’ [5], ‘Just – In – Time Teaching’ (JITT) [6], ‘flipped classroom’ is [6], ‘inverted learning’ [7] and blended learning. The flipped classroom is not the exactly same as blended learning; it is one of the sub-model of blended learning. Blended learning is categorised into four models: 1. The Rotation model, 2. The Flex model, 3. The Self-Blend model, 4. The Enriched-Virtual model [8]. Flipped classroom is one of the sub models of the Rotation-model which enables children to watch video tutorials before the class activities.

Flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom. In a flipped classroom, students watch online lectures, collaborate in online discussions, or carry out research at home and engage in concepts in the classroom with the guidance of a mentor.[9].

Flipped classroom is a student-centred approach where the students actively participate in classroom activities. Here, the instructor plays the role of a facilitator, motivator, guide, and offers instant feedback on students' performance [10].The flipped classroom permits the students to view and examine the video tutorials outside classroom without any bondage of time, need, and place. The students can study and learn at their own pace. In flipped classroom, the students don't have to listen long boring lectures in the classroom, but will get much more time and opportunity to find a solution to problems independently or collaboratively through correspondence learning with peers. Flipped classroom approach enables students and teachers to have a better understanding of technology and apply it in teaching learning activities [11].



In Flipped classroom, the student's first study, learn and comprehend the topic independently outside classroom, by using the video tutorials or instructional materials created or curated by the teachers. Inside classroom, the teacher evaluates whether students have understood the content or not, whether the student's can use the knowledge gained through video tutorial by solving practical problems posed by the teacher. The teacher teaches, instructs and educates the students when they have any query or confusion or misunderstanding regarding the concept or topic. Students clear confusion and misunderstanding asking questions to teachers inside classroom. The teacher remains busy and connected with the students who ask questions especially with those whom some teachers refer as 'silent failers'. Flipped classroom enables them to focus on those students who require and need much more help instead of confident and above average students. Students can also assist one another through peer and collaborative learning thereby helping slow learners. The philosophy behind the such type of classroom is that the teachers can employ enormous amount of time working with students who require their assistance inside the classroom and students can work collaborately to find solution to the problems rather than staying alone at home with the work or problems they might not be in a position to understand and with no one to request and ask for help.

2. Flipped classroom in Contemporary Teaching Learning Environment

- 2.1, Helpful in understanding of Difficult Topics: In conventional classroom, instructions were carried out through lecture method, after finishing their school work; students go to their homes and try to apply what they have learned without any assistance. At home they can often get stuck and fail to complete the assigned task. At this juncture the students are left with few options. Under such conditions, they usually waste lot of time and energy on the task for which they are not prepared. They may give up, call a friend for assistance, seek the teacher's help the next day, or in most awful case cheat to complete the assigned task. But the flipped classroom has an added advantage that the work to be done at home is simply to watch a video tutorial at home and come back to school next day and discuss the complexities of the topic with his teacher and in long run these discussions promote higher-order thinking among the students of the class.
- 2.2, Self paced learning strategy: In a flipped classroom, students can have better command over their own learning. By offering students online recorded video lectures at home, they get more freedom to learn at their own pace and ability. Students can repeatedly watch the online lectures of their teachers from different disciplines and write down queries related to any content they watched and discuss those queries with their teachers and peers in class. Such practice provides students more time to comprehend certain concepts and get more time analyse the material/content without being left behind, and receive instantaneous support from teachers and classmates. As a matter of fact this method can not only improves student's achievement, but improve their behavior & attitudes in class as well.
- 2.3, Student centric and collaborative learning: Flipped classroom encourages students to teach and learn concepts by seeking collaboration and cooperation among each other and their teachers. Allowing students to partake in their own learning, they are able construct their own knowledge, which in turn boosts their self



confidence. Moreover, the teachers also gain the insight to spot the errors in thought process and concept application.

- 2.4, Viable in absence of the Teacher: Very often teachers because of their professional & personal engagements like professional development courses like workshops, orientation, refresher courses, illness & meetings, Curfew and restrictions in conflict areas and so on make it difficult for them to attend their regular class work and the administration feels handcuffed to continue the regular class work or arrange the qualified substitute. Flipped classroom comes to the rescue of the students by creating instructional videos tutorials, Podcasts, e- content which seems to be a viable alternatives to save the precious time of the student which otherwise they may lose due to said constraints.
- 2.5, More accessible with no time constraint (provided there is tech access): By creating video tutorials and allowing the students to have access to those video lectures at any place, time of their choice and feasibility, students who miss their classes due to illness, sports, vacations or emergencies, can learn at par with their counterparts quickly what they missed by accessing the online content.
- 2.6, From “sage on the stage” to “guide on the side: The flipped classroom transforms the teacher’s role from “sage on the stage” to “guide on the side. In a conventional classroom, the teacher acted as the “sage on the stage” and used to present information by engaging to listen to his long lectures in a hope that students will pay attention and grasp the information [12]. The flipped classroom replaces the conventional ides of “sage on the stage” by placing the teacher in the role of the “guide on the side” who works with the students to guide them through their individual learning experiences. The “guide” role can be exemplified using Paulo Freire’s idea that education “should not involve one person acting on another, but rather people working with each other,”
- 2.7, No Budget constraint: Flipped classroom does not necessitate the use of expensive apparatus, nor does it entail every student to have a computer or a device issued by school authorities. In reality, most students are already in possession of appropriate technical gadgets in their pocket or backpack in the form of a smart phone, iPod, or tablet through which they can easily access the online course content. Students who don’t have one of these devices can easily access content at their district library, school library, or local cyber cafes.
- 2.8, Easier Access for parents: Unlike conventional classroom models, flipped classrooms provide parents complete 24/7 access to the video lectures which their wards needs to watch and understand. This makes it easier for parents to be better equipped and prepared while they attempt to assist their children and also provides them an insight into the quality of instruction their children are receiving.
- 2.9, More efficient: In a flipped classroom, kids can have more time to be kids, which may mean more free time, or more academic practice. Most of us can bring to mind our own childhood experiences in which a significant amount of time was spent each week outside the classroom doing homework. In fact, our children on an average spend at least 9 extra hours per week in tuitions i.e., 1 ½ hours per day for doing



homework. This extra burden is not only students, but on teachers as well, who are constantly engaged in assigning and evaluating homework of the students. Flipped classrooms reduces the outside workload of homework with an alternative of watching an online video tutorial/ lecture that is usually of a shorter duration, this makes it easier for the students and teachers to have more time outside of class to focus on other interests like friends, families, and hobbies.

2.10, Time and Understanding: In conventional classroom, time is constant and understanding is a variable. The students have to proceed through a fixed time table for teaching learning process and focus is on time not on understanding of the students. But in Flipped classroom, understanding is constant and time is variable. Here the students can watch video tutorial at any place and time. And teacher can evaluate the student's achievement on the very next day in the classroom by giving problematic situations, practicals problems and asking questions to the students.

3. Methodology

Keeping in view of the availability of the resources and feasibility of the present research paper, the author conducted his research studies on the basis of secondary sources of data. Secondary data has been collected from various Journals, research articles, books, thesis and dissertation etc. The methodology of the study also includes the thoughts and writings of various authors in the stream of academic, and research fields. Thus, the author utilized all resources available and carried out exhaustive studies for the present research paper.

4. Conclusion

The learning environment has changed with the introduction of computers, internet, World Wide Web, ICT and other educational technologies into our lives. The flipped classroom approach boosts these changes into our learning environment where subject matter or instructional material or content can be taught outside classroom in other words at home or at any other time and place. These changes must be adopted by those individuals who have a significant role to play particularly in the field to teaching and learning and contribute to the educational environment by the use of flipped classroom.

In states like J&K, the learning environment and academic activities are very often challenged by Curfews, strike calls, shutdowns, encounters etc which disrupts daily classroom activities and teaching learning process. In such learning environment, flipped classroom is the best alternative method of teaching where a teacher can deliver through online platform and students can watch and comprehend the content at home. The flipped classroom "flips" theoretical lectures delivered by teachers inside classroom with in a fixed time period with online uploaded video tutorials developed by teachers which can be watched repeatedly and understood thoroughly at home or any other place at any time by students.

In a flipped classroom, students watch and examine the recorded video tutorials uploaded and developed by teachers at home, comprehend the content and concept and do their assignments, projects, daily homework exercises inside the classroom with the assistance of the teacher [13]. Therefore the flipped



classroom proves helpful as an alternative method of teaching where teaching learning is severely affected. It appears to be future standard of educational pedagogy. Flipped classroom has the capability to be an efficient and beneficial pedagogical method of education. It can replace conventional direct instruction inside the classroom where students are passive learners with video tutorials watched and understood outside class room and discussed with peers and teachers inside classroom to solve problems, hence promotes active and collaborative learning. Collaborative learning occurs when two or more students learn about some topic together; hold each other responsible for their learning and development. Flipped classroom can be used to engage students to solve practical problems by indulging them in various activities outside and inside classroom. It provides ample opportunities to students to gain a better understanding of how the technology and ideas can be used in the actual world. The Learning outcomes of Flipped classroom are excellent and positive as compared to conventional classroom. The academic performance of students and job satisfaction of teachers can be improved by the help of Flipped classroom approach. It also increases face to face personalized interaction between students and teachers thereby cater individual needs. A research study has shown that there is a positive change in student's perceptions towards flipped classroom approach.

The flipped classroom proves helpful to the students academically and motivationally, the students can learn at their own pace and speed and develop confidence while interacting with peers and teachers inside the classroom. In short, flipped classroom approach has played a great role in enhancing students' learning, motivation achievement, interaction, and engagement.

5. Suggestions/Recommendations

- **Keeping** in view the present scenario of Education in J&K, the teaching learning process is severely affected as classroom activities are out of order and the distance between teacher and student increases as no classroom activity takes place for weeks & months. It is because our educational system still depends on traditional classroom practices. Even in the absence of teacher, students can be engaged in teaching learning processes even if the existing conditions doesn't permit the normal functioning of educational institutions. For this reason, educational institutions should employ flipped classroom as a an alternative teaching method.
- Workshops/seminars for teachers must be organized in order to acquaint them about the concept and use of flipped classroom while organizing their classroom instructions.
- The provision for recording of video lectures and organizing of instructional material online must be made available to the teachers who are to use flipped classroom as an alternative teaching strategy.
- Students must also be made familiar about the concept of flipped classroom and its use and importance for their academic benefit.
- Pilot studies/field studies may be carried out in certain areas where infrastructure is already available in order know the relative effectiveness of the flipped classroom strategy.



- The department of teacher education in collaboration with departments of computer science, information technology, electronics and various other departments may chalk out a joint project on progress of the flipped classroom strategy.
- Further studies may be carried out about examining the flipped learning processes in informal and non-formal learning environments as well as for part-time students who have limited time to prepare the contents outside the class.
- This strategy can also be a useful method for teaching students who belong to the far flung areas and have limited road access to schools, colleges & Universities.
- Can be used as an inclusive educational strategy for those children who because of their disability may not be able to attend regular class work.
- Government & policymakers in J&K should determine the flipped classroom as an alternative strategy to be implemented in contemporary teaching-learning environment.

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