

FLIPPED LEARNING APPROACH: WHAT AND WHY?

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Abstract

Technological development plays a significant role in the educational system. Flipped learning is one of the innovative technological advancements. In flipped learning, pre-recorded video is provided to the students before actual class time and the class time is used for discussion, analysis, and application of concepts related to that topic. The flipped classroom approach creates an active learning environment that helps to improve the efficiency and authenticity of the teaching and learning process. The present paper discusses the concept, history, advantages, traditional learning versus flipped, four pillars, and the importance of flipped learning and its relevance to the present technological era. The paper suggests flipped classrooms should be introduced into schools and also provided the necessary training to the teachers on how to use this method successfully.

Keyword: Flipped learning.

INTRODUCTION

Education plays a major role in the development of an individual. It helps to move towards the goal set. Nowadays people try to achieve their goals by following clear-cut paths. Education helps the individual not only to achieve a good career but also to help in the betterment of society. In the present teaching method, the teacher illustrates the concept with the help of a blackboard and chalk. The important points of the topic are written on the blackboard and also provided notes to the students. After the lecture, the students try to memorize the topic from the exam point of view. The student's engagement in the classroom may be limited to activities in which students work independently or in small groups on some tasks designed by the teacher, the classroom discussions are typically teacher-centric. The appropriate teaching method in the hands of a competent teacher makes the teaching-learning process better way. So we need a

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better teaching method for a better learning outcome. Flipped learning is one of the innovative approaches experimented with by most in the field of education.

CONCEPT OF FLIPPED LEARNING

Flipped learning is a type of blended learning method. In this method students gain the necessary knowledge before the class in the form of pre-recorded video content and during the class time is used for active student involvement.

History of flipped learning

In the 1990s Harvard Professor Mazur played an important role in the development of flipped learning through his instructional strategy "Peer instruction". In this instructional strategy he provided material to the students before the class and the actual class time is used for the development of critical thinking through peer interaction. Around the same time Lage, Platt, and Treglia published a paper "Inverting the class: A gateway to creating an inclusive learning environment" which discussed the flipped learning strategy at the college level and in the late 1990s, Baker conducted an experiment on the use of this idea and presented a paper to discuss his idea "classroom flip". In the mid-2000s, Two high school teachers Bergmann and Sams recorded their lectures and uploaded them to YouTube, and provided the link to students to watch the video before the class time and class time is used for discussion. The result shows that this method provides a better experience for both teachers and students. In 2011 Greg Green worked with social studies teacher in his school and run two classes one flipped and one conventional. The flipped class is with many failed students and some are more times. After 20 weeks students in the flipped class were outperformed and the traditional classroom showed no change. The same experiment was conducted with the other subjects in the coming years.

Around the same time, Salman Khan taught math remotely to his young family members by uploading the video to YouTube. These videos have reached ten thousand students per month. This popular teaching strategy led to the origin of Khan Academy. This academy is based on flipped learning. Many studies show that flipped learning is an effective method. Komala, (2020) found that students' performance is better in using flipped learning as compared to the traditional method. Viveka., Sagar., &Sudha, (2017) shows that students' perception is increased by using the flipped learning method. Fernandes, R. (2022) shows that flipped classroom is more effective than the conventional method in improving the Academic achievement of the students.



Advantages of flipped learning

- 1. Each student can follow the instructions at their own pace and speed
- 2. There is an opportunity to watch the videos again and again whenever they want
- 3. A flipped classroom provides learning resources to students before the actual teaching-learning process.
- 4. Students have a chance to access the material on 7/24.
- 5. It promotes interactive classroom activities
- 6. Teachers spend less time introducing New Topics.
- 7. Students and teachers use time in the classroom more effectively.
- 8. It creates better contact between parents and instructors, as well as greater transparency for parents
- 9. In flipped learning, the instructor can plan the most appropriate learning activities that lead to better and complete learning outcomes.
- 10. This method gives better learning outcomes as compared to traditional methods
- 11. It develops interest and motivation among the students
- 12. It promotes active student involvement in the teaching-learning process
- 13. More flexibility for teachers in deciding how much time they want to spend on each topic with students.
- 14. It helps to develop Independent Learning Skills
- 15. Teachers can Re-use the content they create
- 16. Students get a chance to develop a deeper understanding
- 17. Students will get more time for collaborative learning
- 18. It ensures a practical approach to learning
- 19. It improves self-confidence among students
- 20. For learning new concepts, there is a possibility of repeating the lesson several times

Traditional method versus Flipped learning

In the traditional teaching method, the teacher is the central focus of instruction and the primary disseminator of knowledge. In this method, instruction is provided to the students in the form of lectures. So student engagement in the classrooms may be limited to activities in which students work independently or in small groups on some tasks designed by the teacher, the classroom discussions are typically teacher-centric. But in flipped learning method students



remember and understand the concepts before their actual class and the classroom hours focus on applying, analyzing, and evaluating the concepts.

Four pillars of flipped classroom method

- 1. **Flexible Learning Environment:** One of the hallmarks of a flipped learning classroom is that it provides the time needed for student work and comprehension. Teachers should adjust the pace of the students in the class.
- 2. **Learning Culture:** Teachers foster a rich environment for students to delve deeper into concepts and provide them with opportunities for self-reflection and independent work.
- 3. **Intentional Content:** Flipped Learning Educators have an idea about how they can use the Flipped Learning model for a better conceptual understanding of the students. They determine what they need to teach and what materials students should explore on their own. Educators use Intentional Content to maximize classroom time in order to adopt methods of student-centered, active learning strategies.
- 4. **Professional Educator:** The role of a Professional Educator is very important and they continuously observe the students and provide valuable feedback.

WHY IS FLIPPED LEARNING IMPORTANT?

Flipped learning is a type of blended learning method, as it is a combination of both online and face-to-face learning. In flipped learning pre- recorded video is provided to the students before actual class time and actual class time is used for discussion, analysis, and application of concepts related to that topic. In this learning method, students are active participants in their own learning. It generates interest and motivation in the mind of the learner. Student engagement in flipped learning is higher as compared to the traditional method. Student engagement is one of the important factors in the teaching-learning process. It is a multidimensional concept. Engagement indicates the students' involvement in school activities. Keeping students engaged in learning helps them to feel more connected to the learning and the teacher. Student engagement has 3 dimensions. They are behavioral engagement, emotional engagement, and cognitive engagement. In conventional teaching, students are passive learners, and teaching is based on the chalk-and-talk method. So students feel difficult to understand the concept when it is in an abstract form. But in flipped learning students are active participants. In this method, the abstract idea can be changed into concrete. Flipped learning



solves the difficult and focal points in interesting ways. It helps to make classroom learning more interactive and also it helps to increase the achievement of the students.

The flipped learning method is a time-saving method. The introduction of new topics at home through the use of pre-recorded class and the class time is used for an in-depth understanding of the topic. This method provided meaningful learning. In this method, students get an opportunity to learn the pre-recorded class many times according to their ability level, it helps to raise the understanding level of the learner. In this new era, technology-wise teaching is more effective as compared to traditional teaching methods, it definitely helps to achieve the learning outcome and this is why flipped learning is a very important method for learning.

In a Flipped classroom students can watch online lectures, interact in online discussions, and thus brainstorm at home and later on can engage in the classroom with more thoughts with the guidance of a mentor. In the actual classroom, students can do in-depth laboratory experiments, original document analysis, participate intensely in discussions, project-based learning, etc. This means actual class time can be used for higher-order thinking skills such as problem-solving, and collaborative learning, and thus more time in spending class activities and constructing knowledge with the help of a mentor. In the case of a teacher in flipped more personalized instruction and less didactic classrooms can be seen.

CONCLUSION

Educators are aware of the impact of using technological innovations in the educational process due to the modern technological revolution of the increasing potential of computers, the Internet, and communicational applications. Flipped learning is one of the modern innovative methods in the field of education. It has a positive impact on student's performance, attitude, skills, and cognitive abilities. In this students' can watch the material at their own pace and there is an opportunity to listen to the concept a number of times as in need of according to their ability level. This method helps to increase the students' achievement and make the teaching-learning process exciting way. The paper suggests a drastic change in modern classrooms with the Flipped approach.

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