Active Learning and Flipped Classrooms

Yelana Thomas

Research Scholar (EPT) School of Social Sciences and Languages VIT, Vellore Tamil Nadu 632014 India-91

Dr R Srinivasan

Associate Professor School of Social Sciences and Languages VIT,Vellore

Abstract: Advancements in information technology have made the world very competitive .Gone are the days when knowledge alone was considered as power . The present scenario in job markets demands not just knowledge but Leadership and social skills to help an individual acquire a job . Thus, according to the demands of Gen Z ,the faculty members should think of ways to help students not only acquire knowledge but also enhance their Problem Solving ,Critical Thinking and Leadership skills . These can be achieved by making students engage in active learning . An environment for active learning can be created through the Flipped classrooms which are now gaining prominence owing to their borderless nature .

Key words: Active learning, Flipped Classrooms & Gen Z.

Date of Submission: 01-07-2024

Date of Acceptance: 12-07-2024

I. Introduction

Information technology has brought a sea change in every sphere of life . It has ushered in a revolution in information gathering and global communication . From the education point of view teachers are now able to teach students from anywhere and at anytime. As knowledge and technology are readily available the attitude of the students to the traditional teaching methods has changed . One major problem faced by teachers in the classroom is in getting the attention of Gen Z students . The present generation needs a variety of learning styles . One way of making classroom teaching interesting to the Gen Z students is by helping them engage in Active Learning.

Flipped Classroom – An Overview

Flipped classroom is a type of classroom that inverts the traditional teaching methods. It focuses on doing the classwork at home and the homework in the class. Such classrooms are student- friendly and help them develop the art of communication. Students listen to lectures at their own pace and try to understand the subject through online discussions . This is in contradiction to a traditional classroom environment where students have to sit passively and collect information given by the teacher .This does not help in concept building . Moreover, the present day employers are not interested in students who merely have only knowledge but not the wisdom of applying the knowledge to real life situations . The art of acquiring knowledge through active learning can be made successful through Flipping the classrooms .

Genesis of Flipped Classrooms

Flipped classrooms also termed pre-broadcasting and inverted classrooms, originated in 2007 with a software that recorded lectures at Colarado high school by the two science teachers Jan Bergmann and Aaron Sams. They began to use technology to improve face-to –face time with students .Many teachers imitated their style of teaching and combined it with models like project –based learning .

Flipped Classroom – Advantages

There are many advantages to a flipped classroom .When the lecture is given as homework students have the advantage of listening to it on a one-to –one basis and this helps them to understand the lesson at their own pace . Students can also identify areas that they find difficult to understand . In a traditional lecture ,they listen to the lecture only once but in a flipped classroom they can listen to the lecture any number of times that they want to .Later, brainstorming the content in the class helps them understand the concept in depth, and such discussions also help them in critical thinking , problem solving and creativity. Above all, students who are sick or unable to attend the classes can gain access to the actual content in the Flipped classroom mode. Thus Flipped classrooms facilitate in active learning as well as learning at one's own -pace .

Active Learning

The term 'active learning' was introduced by the English scholar RW Revans. Active learning is a kind of learning where students are actively involved in the learning process (Weltman, p. 8). According to the Association of the students for higher education report (Bonwell & Eison 1991) Active Learning relates to the three domains namely Knowledge, Skills and Attitude and these learning behaviours are considered as the goals of the learning process (Bloom 1956). Active learning has now replaced rote learning and is 'Purposive ,Reflective , Negotiated ,Critical, Complex, Situation-driven and Engaged'. (Barnes,1986). Retention rate is much higher in Active learning than for Passive learning .According to Blooms Taxonomy of retention of learning, Audiovisual, Reading and Lecture methods helps in retaining only 20% of the information whereas Play,Exercises, Discussion and Demonstration help to retain 20-75% of the information. Above all the most effective means would be learning by doing under the supervision of a teacher and practicing the same would help students to remember above 75% of the content. (Bloom,1956)

Flipped Classrooms and Gen Z students

Generation Z students are those born after 1995. For them technology is an integral part of their lives .As they prefer visually enhanced technologies to learn they have zero tolerance for the lecture style classrooms. The goal of teaching is not mere knowledge acquisition . It has moved from mere knowledge acquisition to a deeper understanding of the concepts ,which has become the focus in education .Apart from concept building Gen Z students prefer to develop social skills and networking . They prefer teachers to serve as guides in the journey of their lives .Thus, Flipped learning and Flipped classrooms are the ideal means for them to evolve as well-rounded personalities.

Flipped learning is about creating the right environment . Flipped classrooms and Flipped learning are not interchangeable because, for a flipped classroom the teacher needs to incorporate the following learning environment .A flipped classroom environment should be flexible and allow students the freedom for doing pair or group work. The environment should facilitate knowledge acquisition that is personally meaningful for the students .As students learn, they should develop the concept and should be under the supervision of a professional educator under whom the entire activity takes place Feedback is also given to the students which will enable them to check their progress in learning Therefore Flipped classrooms can help students to achieve the objectives of the Active learning process. Some of the activities that might be used for active learning in a classroom are;

II. Discussion

Discussions help students think critically on the subject that they have listened to and also may require them to use logic to evaluate their position and the position of other members in the group .

Think-pair-share -This is an activity where learners reflect on what they have learnt and then make a formal discussion out of it.

Learning Cell- This is an activity where two students ask and answer questions alternatively on lessons that they have commonly watched or read.

One Minute paper –This is an activity where students reflect on what they have read and write it on their paper. They also take some time to give a feedback on what they have listened to.

Collaborative Learning Group- This is an activity where an assignment is given to groups of 3-6 members and they work on it and finish the task. A leader and a timekeeper is selected to check the time of progress.

Debate Debates help students develop the art of critical thinking and problem solving .As they have to present their points in a convincing manner they also learn the art of presentation.

Group Discussions Group Discussions helps them discuss and analyse on a topic

Class games .This is an interesting way of learning and revising on the lessons that they have learnt

Seminars –Presenting seminars helps students to learn the topic and present them to the entire class

Apart from creating an active learning environment, the Flipped learning classrooms also has its negatives . Students lack the feeling of authenticity when they listen to the lessons from a video . As students differ in the

style of learning ,auditory and kinesthetic learners may not be much benefitted from such classes. Such - classroom also create a digital divide among students . Students who are well equipped with technology may form a group and those with no acess or knowledge of technology may be left behind and they may not also be actively involved in the homework assigned in the classrooms.Flipped classrooms are good for highly motivated students but those with less motivation may not learn or get involved in the classroom. Social skills are the need of the day .Flipped classroom may further reduce the chance for social interaction for students who are basically introverts . Inspite of all these flaws the Flipped classrooms are becoming popular as they help in getting the present generation engaged .

III. Conclusion

Todays children are digital natives for whom Multitasking is natural skill. Most of the time we find them doing their homework while texting their friends and at the same time listening to music . Moreover access to information is easy for them but what they lack is focussed knowledge which can be complimented by the Flipped Classroom style of learning .Hence the present day teachers exploit different technologies to make their classes interesting and effective. In particular students need to work in teams ,build leadership qualities and have a sense of values in harnessing the benefits of the Flipped classrooms. Flipped classrooms may thus provide an ideal environment for knowledge, and personality development of Gen Z because it is in tandem with the skill set that we are familiar with.

Works Cited

- Barnes, C. P. (1983). Questioning in the college classroom. In C. L. Ellner & C. P. Barnes (Eds.), Studies in college teaching (pp. 61-81). Lexington, Massachusetts: Lexington Books.
- [2]. Bergmann, J., & Sams, A. (2012). Flip your classroom: reach every student in every class every day. Washington, DC: International Society for Technology in Education.
- [3]. Berrett D (2012). How 'flipping' the classroom can improve the traditional lecture. The Chronicle of Higher Education, Feb. 19, 2012.
- Bonwell, Charles; Eison, James (1991). Active Learning: Creating Excitement in the Classroom (PDF). Information Analyses p. 3.ISBN 978-1-878380-06-7. ISSN 0884-0040.
- [5]. Bloom, B. S., 1956, Taxonomy of Educational Objectives:Book 1 Cognitive Domain, Longman, New York, NY.
- [6]. David Weltman, A Comparison of Traditional and Active Learning Methods: An Empirical Investigation Utilizing a Linear Mixed Model, PhD Thesis, The University of Texas at Arlington, 2007, p.7.
- [7]. The Impact of Information Technology on Work and Society. Available from:<http://www.benmeadowcroft.com/reports/impact/>. [6 February 2014].