

Understand Flipped Learning as an Effective Tool for Enhancing Thinking and Learning

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Abstract: *Recent advances in Science and Technology have changed the structure and the educational systems of societies. The recent years of research explores one of the new Learning strategy i.e. "Flipped Learning Strategy". The Flipped Classroom Model is Receiving increased attention in educational circles. In Flipped Learning, the traditional Practice of spending class time engaged in direct instruction and completing content Related activities for homework is "Flipped", so that students receive initial content Instruction at home, and spend class time working with their peers in a collaborative Setting. This Module discusses the features of flipped classroom in today's generation Where technology has incredibly advanced. How flipped classroom are more beneficial Than the existing traditional classroom is discussed in detail and how it can affect the Students are clearly mentioned. Flipped Learning is an Effective Tool for Enhancing Thinking and Learning among learners and it is Potential Model of Blended Learning. Essential essential elements Of Flipped Learning include flipped environment, Learning culture, intentional content, and professional educator. This lesson details the Different learning strategies for Flipped Classrooms followed by steps of implementing Flipped Learning Strategy. Flipped Classroom Strategies incorporate diverse strategies And technologies toward the broader goal of making learning more participatory, Personal and meaningful.*

Objectives

- To understand the meaning and definition of Flipped Learning Strategies.
- To understand Flipped Learning as an Effective Tool for Enhancing Thinking And Learning.

Keywords: Flipped Learning

I. INTRODUCTION

Flipped learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting groups pace is transformed into a dynamic, interactive learning environment where the Educator guides students as they apply concepts and engage creatively in the subject Matter. (Flipped Learning Network, 2012). The Flipped Classroom Model is receiving Increased attention in educational circles. In this model, the traditional practice of Spending class time engaged in direct instruction and completing content related Activities for homework is "Flipped", so that students receive initial content instruction At home, and spend class time working with their peers in a collaborative setting. The Concept is gaining popularity, perhaps due to the ubiquitous nature of the tools that Teachers use to accomplish the flip such as iTunes, YouTube, and Learning Management Systems (LMS). Recent affordances of technology have made the Flipped Learning Concept more mainstream for educators alike. A flipped classroom is a teaching strategy and a type of mixed learning that Reverses the conventional learning method by delivering the subject related content, Often online, outside of the classroom. (Zainuddin and Halili, 2017). Implementing Flipped learning allows the students to spend more time supporting higher-level learning Tasks such as a group discussion, while lower-level tasks such as knowledge and comprehension are completed independently outside the class. The flipped classroom Learning process is divided into two phases, which are learning in the classroom and Learning outside the classroom. The first learning phase is a self-paced learning, where Teachers provide assignments for students to read about what will be studied in the next Lesson. Hence, during the flipped classroom second phase session, the teachers could Allocate more time and provide more

opportunities for their students. The post class Activity not included the phase, is differ the individual self-evaluation. Interactions between students and teachers could be improved. Therefore, the teachers would find it easier to identify any students 'level of understanding. A flipped classroom is more demanding than the traditional one. Teachers need to identify the individual learning needs of students, making sure they all use the class time engaged with the learning process. Flipped learning is a constructive development in the methods and practices of teaching. Students are motivated to watch online material, which the teacher shared. A flipped classroom is unlike the conventional learning format wherein a pupil receives information through classroom lectures, and then applies that knowledge to assigned work at home. In a flipped classroom, rather, students assimilate content via videos, audio, text, and interactive media at home. Then learners apply that learning in class, in collaboration with peers, and assisted by the teacher. Traditionally, students have received information through lectures in a classroom. While that works for many, it doesn't engage others, and assimilation of knowledge and exam performance have suffered. In a flipped classroom, class time is mainly for understanding and applying knowledge and concepts via discussions, joint exercises, projects and quizzes. The Flipped Learning also involves a transformation of the teacher's role. In a traditional class, the teacher can be described as the "sage on the stage" that presents information in engaging ways in hopes that students will pay attention and absorb the information (Bergmann, Overmyer, & Wilie, 2012). The flipped classroom moves away from this idea, 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 (Bergmann, Overmyer, & Wilie, 2012). The "guide" role can be illustrated using Paulo Freire's idea that education "should not involve one person acting on another, but rather people Working with each other".

II. RESEARCH PURPOSE

The purpose of this study was to examine how students perceive flipped classroom education in a university research methods course. Three particular aspects were considered, namely, (a) the student's general experiences and attitudes of learning through flipped classroom, (b) the student's experiences of using video lectures as a medium for learning, and (c) the student's experiences of using a Learning Management System (LMS) in the frame of the flipped classroom model. Further, this study has also considered differences in experiences and attitudes of low and high achieving students.

III. METHOD

This study is based on a quantitative analysis of a closed questionnaire addressing undergraduate students' perceptions and experience of learning through flipped class-room in a course preparing students for the bachelor thesis with respect to scientific methodology and communication.

3.1 Flipped Learning as an Effective Tool for Enhancing Thinking and Learning

Lage, Platte, and Treglia (2000) addressed such practices as the "inverted Classroom" (another term for early flipped teaching models) and described the practice As an effective way to better match instructor's delivery preferences while diversifying The models in which students learn best within the classroom. Inverted learning and Instruction strategies allowed instructors to work in and outside of their comfort zone and to encourage students to do the same. Furthermore, inverted learning presented the Opportunity for students to demonstrate an array of knowledge based on the several

Different "ways of learning" activities and challenges set before them as individuals or As groups, as part of classroom applications

Today, flipped learning and instruction has become more intentionally grounded In research and theory (Musallam, 2010). Effective and sustainable flipped learning Environments seek to engage students in lower-order thinking tasks through assigned Readings, screen casts, and basic practice items outside of the classroom, while Classroom time is used to expand students toward higher order thinking tasks that may Include working collaboratively to solve life-like problems, exploring concepts in Greater depth based on teacher-posed challenges or personal interests, and the Development of authentic assessments and presentation tasks. Musallam (2010, 2013) Posed a model referred to as explore-flip-apply where students engaged in initial activities to their background knowledge and perceptions, after

which they participate In the flipped learning through out of class assignments, lecture videos, etc., followedBy in class applications which extend into critical thinking activities and assignments. In this model, the class proceeds beyond a traditional inversion of a lecture and Homework flip, by focusing on more intentional guidance of higher order thinking while Still extending some work beyond the classroom setting once the foundations is Established through the previous steps of explore, flip, and guided practice. In 2003, Bergmann and Sams, teachers from Woodland Park, Colorado, are often Credited with bringing flipped instruction to the forefront of educational practices. They Presented the original model of a screen casted lecture, which students who missed Instruction or those who needed repetitive lessons or reviews could reference any time They liked. Screen casting was defined in the literature as a variety of practices to Produce a digital video or screen capture of basic information or work samples in order To relate key ideas, procedures, or visual and auditory representations of original works (Sugar et al., 2010). Instruction was initially presented in the form of a vodcast, or video Podcast, of classroom instruction. Chemistry content and sample problems were Presented and solved in this virtual environment using video screen casts and screen Captures.

Flipped Classroom – A Potential Model of Blended Learning One element of Blended learning well known as the Flipped classroom is a Pedagogical model in which the lecture used to be class work is delivered outside of Class using social networking at home before the class session, and the assigneProblems used to be the homework such as exercises, projects or discussions etc., isdone during in-class time. This is also known as backwards classroom, flipped Classroom, reverse teaching and the Taylor method. Bergmann &Sams (2012) defined, “The flipped or inverted classroom is an instructional model in which the traditional Lecture is a student’s homework and in-class time is spent on collaborative, inquiry-based Learning”

The two major factors that support the implementation of Flipped classrooms are (Flipped Classroom, n.d.),

- Pervasiveness of online videos, social networks, materials, information and Communication.
- Poor learning outcomes from conventional classrooms

It is emerged as a new teaching learning approach to deliver higher levels of Learning interactivity and higher levels of student engagement. Essential Elements Of Flipped Learning. As well as identifying key methods of learning, experienced educators also Identified four essential elements of flipped learning, or unified themes identified as the “four pillars of F-L-I-P (Joshith, V.P, 2016).

- Flipped Environment Flipped Learning allows for a variety of learning modes; educators often Physically rearrange their learning spaces to accommodate a lesson or unit, to Support either group work or independent study. Furthermore, flipped classes are Flexible in students’ timelines for learning and in the assessments of learning.
- Learning culture: In contrast to traditional teacher-centered model, the Flipped Learning Model Deliberately shifts instruction to a learner-centered approach, where during in-Class time students are actively involved in knowledge construction as they Participate in and evaluate their learning in a manner that is personally meaningful.
- Intentional Content: -Educators use Intentional Content to maximize classroom time in order to adopt Methods of student- centred active learning strategies, depending on grade level And subject matter to help students develop conceptual understanding, as well as Procedural fluency.
- Professional Educator: Professional Educators are reflective in their practice, connect with each other to Improve instruction, accept constructive criticism, tolerate controlled chaos in Classrooms, and continually observe students, providing relevant feedback and assessing students work.

IV. SUMMARY

Recent advances in Science and Technology have changed the structure and the Educational systems of societies. The recent years of research explores one of the new Learning strategy i.e. “Flipped Learning Strategy”. The Flipped Classroom Model is Receiving increased attention in educational circles. In Flipped Learning, the traditional Practice of spending class time engaged in direct instruction and completing content

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