



Concept and Characteristics of Flipped Classroom

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ABSTRACT

In the Flipped Classroom model, work that is normally done in class and works that is normally done as homework is flipped or switched. Before coming to class, students read materials and view videos on the topic assigned and then engage in class in active learning using games, simulations, discussions or experiments with the assistance of the educator. In short, listening to lectures or watching videos is accomplished at home and homework is done in class, hence the term flipped or inverted classroom. This review paper discusses the concept and characteristics of Flipped Classroom as it can be beneficial to newcomers for this method.

Keywords- *Concept of Flipped Classroom, Characteristics of Flipped Classroom.*

1. INTRODUCTION

This review article contains concept and characteristics of Flipped Classroom approach. As this approach of teaching is getting popular each day, this article will be beneficial to newcomers in attempt of trying Flipped Classroom approach.

1.1 Concept of Flipped Classroom

An educator or teacher needs to be aware of the misconception of the Flipped Classroom approach before implementing it in their educational institutions. There are a few misconceptions about the Flipped Classroom approach. Bergmann, Overmyer, and Wilie (2013) stated that educators often think that the Flipped Classroom approach is a synonym for online videos or online courses which replace a teacher's role and students usually work in isolation by staring at a computer screen. Another misconception about the Flipped Classroom approach is that the educator has to stand or sit in front of a camera and record themselves lecturing. For beginners, one could start using the Flipped

Classroom approach by doing so, but there are hundreds or probably thousands of resources available online that could be used as learning material. Bergmann and Sams (2012) have described the Flipped Classroom approach in a wider view. According to them, the Flipped Classroom approach is a setting where students take charge of their own learning and this increases communication and contact time between students and teachers. The Flipped Classroom approach then gives priority to students where all students are engaged in their learning and the teacher becomes the "guide on the side" and not the "sage on the stage" as described by Baker (2000). This description is supported and stated by Pinnelli and Fiorucci (2015), by agreeing that the Flipped Classroom approach is indeed an approach to promote democratization of learning as the autonomy is in students' hands to view the lecture videos anytime and anywhere before coming to class. Subsequently, in the class, students are given freedom by participating in such space that allows

them to voice out their opinion and share knowledge through collaborative and cooperative activities. According to Pinnelli and Fiorucci (2015), the Flipped Classroom approach is not a well-defined epistemology or a teaching model but is an outcome of many types of best ventured practices as a way to fulfil the need of the education world by redesigning student centred learning as suggested by Bloom, Vygotsky or other teaching methods like Peer-Assisted Learning, Collaborative and Cooperative learning to maximize the class time and to consent the autonomy of the student.

Nevertheless, before class and in-class activities are both important. According to Sweet (2012) “a key component to successful blended or flipped classroom practices has been the micro-lecture”(p.1), which means activity before class is as vital as the in-class activity. Hence, giving material in the form of micro-lecture, reading material, online games, or online quizzes in hand before class is important as it gives an overview of the topic to be discussed or analysed in the next day’s class. Since the materials are already given earlier to the students, the contact time with students’ increases and this allows enhancement of students’ learning process. Bergmann and Sams (2012) believe that if an educator implements micro-lecture for his or her class prior to coming to class, the in-class activities can be varied by guiding students in groups or individually, answering questions, mastery learning or giving remediation depending on the students’ progress in the topic.

According to Bergmann and Sams (2014), once they started flipping the classroom, they were able to use class time to help students go deeper into the content. At the same time educators may reach higher levels of Bloom’s Taxonomy. Bloom’s Taxonomy identifies different domains of learning, from the memorization of facts to the implementation of knowledge which leads to creation of something new. Each domain represents different levels; for example **Error! Reference source not found.**Figure 2.1 shows the revised

version of Bloom’s taxonomy for cognitive learning (R.Krathwohl, 2002). By practicing Bloom’s revised taxonomy in a Flipped Classroom, the lower level of cognitive work such as understanding and remembering are done by students outside of class. Higher form of cognitive work such as analysing, applying, creating and evaluating are done in class with the support of their peers and instructor (J. Brame, 2013). The Flipped Classroom model addresses this in The Flipped Manifest (Bennett et al., 2011) which is as stated below:

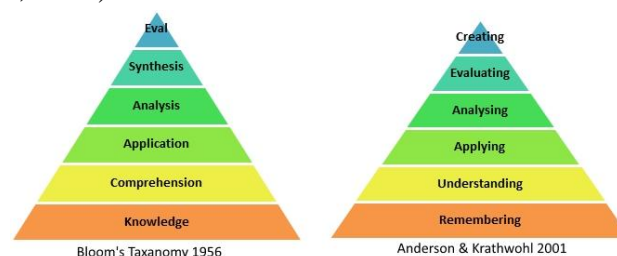


Figure 1: A revised version of Bloom’s Taxonomy

1.2 Characteristics of Flipped Classroom

There are many versions and viewpoints on characteristics of the Flipped Classroom approach. According to University of Minnesota (2013), although there are many opinion for characteristics of Flipped Classroom approach in an educational setting, the most successful Flipped Classroom approach has three characteristics. Firstly, the in-class learning environments are highly structured, which means the educator has to plan for every single minute to keep the students engaged with the lesson. Secondly, the in-class activities need to be designed in such a way that students solve problems, answer quizzes, apply or retrieve the content that they learnt earlier in the flip video. Lastly, students are massively encouraged via grading, in-class activities, and educator expectations to complete out-of-class work and show up for in-person sessions.

However, according to Hamdan et al. (2013), while there is no “how-to” list associated with the Flipped Learning model, there are unifying themes which identified those four Pillars of F-L-I-P, an acronym of Flexible Environment, Learning Culture, Intentional Content, and Professional Educator.

Flipped Classroom educators need to accept that the in-class time will be somewhat noisy and disorganized, as compared with the quiet common type of a well-behaved class during a lecture. King (1993), stated that in the teacher-centred class, the teacher is the main source of information, like “*sage on the stage*”, who gives information to students, generally via lecture mode. In the Flipped Learning model, there is a switch from a teacher-centred classroom to a student-centred approach where class time is determined for exploring content of the topic in greater extent and creating a richer learning environment. Intentional Content means educators maximize classroom time by adopting various methods of engaging activities such as peer instruction, problem-based learning and others. In the Flipped Learning model, Professional Educators are more important than the traditional method of teaching as educators must be skilled and wise enough to convert a lecture-based class into an activity-based class which requires more planning and creativity. In this way, face-to-face sessions between teacher and students can be maximized.

According to Brame (2013), they are four key elements that play a role as Flipped Classroom characteristics. In implementing the Flipped Classroom approach, educators need to provide exposure prior to class. The exposure can be as simple as reading from a textbook to viewing micro-lecture or screencast. Micro-lecture can be recorded by the educator themselves or videos related to the topic can be downloaded from YouTube, Coursera, Khan’s Academy or MIT’s OpenCourseWare. The second characteristic is to provide incentive for students to prepare for the class by giving short quizzes, worksheets and etc. In this way, it actually indirectly makes the students get ready for the next day’s class by watching videos and completing the quiz or worksheet assigned to them. Thirdly, educators must find a way or mechanism to access students’ level of understanding towards the topic by conducting a quick online pre-test. By doing so, educators might get a hint about the area that the students are struggling with that needs to be given focus and attention. Lastly, assuming students gain

basic knowledge outside of the class, educators need to spend the class time for deeper learning. When the students participate in engaging activities such as debates, analysis of data and syntheses type of activities, it promotes critical thinking in the students.

2. CONCLUSIONS

By knowing the concept and characteristics of the Flipped Classroom approach, educators may plan their lesson plan accordingly ahead of the classes so that the approach is meaningful and useful.

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