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Blended and Flipped: Exploring New Models for Effective Teaching and Learning

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Abstract

The rapid growth in the use of learning technologies, particularly the use of the web based technologies and communications have offered educators with many more opportunities to investigate the most suitable learning environments for their students' learning. The purpose of the present study was to effective teaching and learning and their views on blended and flipped learning. At the heart of both blended learning and flipped learning is a learner-centered curriculum that changes the traditional roles of instructor and student. In the article, Flipped classrooms replace passive lecturing with active student-centered learning that enhances critical thinking and application, including information retention. The blended learning option will become a sensible step on the path toward cutting delivery costs, while making graduate education available to increasingly debt-averse students.

Keywords: *Flipped classroom; curriculum design; blended learning.*

Introduction

In recent decades, the student-centered learning approach has shown significant learning gains and has reformed teaching styles in many higher educational institutions globally. The teacher-centered learning approach uses lecture-based instruction which is economical and viable for teaching a large number of students at a time. Lecture-based instruction is where the teacher takes the active role of dispensing knowledge in a classroom. Technology in education can be used as an approach that focuses on student-centered education and is a step in the right direction as we move forward in the 21st century. Flipped classrooms also draw on concepts such as active learning, student engagement, hybrid course designs, and course podcasting (Educause, 2012). It overlaps other instructional tools, such as reverse instruction, inquiry learning, blended learning, and online instruction, through the use of podcasting or screen casting, Web 2.0 resources, and inquiry activities (Bennett, et al., 2011)

Blended Learning

Blending learning involves using a combination of face-to-face interactions and online interactions in the same course. Students still regularly meet in the classroom in a blended course, but the frequency of those meetings is usually decreased. The goal of blended learning is to facilitate greater student learning and could thus fit within a learner-centered paradigm.

Purposes

In the traditional classrooms and rigid curriculums shaped by capitalist hegemony and their political and cultural aegis, few professor-learners experience the reality of democratic participations in their everyday lives. Learning, therefore, must be a boarder concept than formal conventional education. With today's prevalence of cutting-edge technologies in higher education, BL merges diverse traditional resources and e-learning with other educational resources. On the other hand, there is a need for a critical curriculum design for effective BL in higher education. To develop a

common vision of social justice, this new curriculum must involve professors and learners in an egalitarian decision-making process.

Academic Advice, Support and Training

Academics are encouraged to take advantage of the wide range of professional development events, support, training and resources that are available to them, including:

Griffith Institute for Higher Education (GIHE)

- Professional development programs
- Blended learning elective course (7018GIH), which can be completed as a stand-alone professional development course or part of the Graduate Certificate in Higher Education
- Resources, Case Studies and Issues Papers on blended learning
- GIHE Blended Learning Consultant – John Bourke

Blended Learning Support site, which includes

- User/help guides for both staff and students on a range of tools and technologies
- Information regarding training and advice on the practical use of ICTs for learning and teaching

Blended Learning Advisors (BLAs)

- Arts, Education and Law (AEL) – Karin Barac
- Griffith Business School (GBS) – Catherine Hodgson
- Health – Ganeshan Rao
- Science, Environment, Engineering and Technology (SEET) – Nicole Wall

Educational Designers

- GBS Educational Designer – Vikki Ravaga
- Information Services (Learning and Teaching)

Flipped Classroom

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.

Student Learning and the Flipped Classroom

The flipped classroom promotes an environment which increases the interaction between the students and teachers and engages the students in learning through application and practice. In this aspect, flipped classrooms use a student-centered approach as it focuses on student learning and it places the responsibility for learning more on the shoulders of students than teachers while giving them a greater impetus to experiment

The Flipped Classroom promotes personalized learning as students can pause, re-wind and rewatch the online video at their own pace - one of the major, evidence-based advantages of the use of video is that learners have control over the media with the ability to review parts that are misunderstood, which need further reinforcement, and/or those parts that are of particular interest (Gerstein, 2011). This has a positive effect on student learning and achievement.

Advantages of the Flipped Classroom approach

There are various advantages of the FC approach. Firstly, it allows students to be exposed to the Constructivist (inclass) and the behaviorist (outside the class) principles of learning (Hawks, 2014). This is because students outside class get the foundational accredited content that is required in the behaviorist learning theory which should include lectures, tutorials and drills which are all teacher controlled (Hawks, 2014). On the other hand, the Constructivist learning principle is based on cascading on the students' previous knowledge and their taking responsibility for their own learning so that a teacher is no longer as King (1993) described a 'sage on the stage', but he/she becomes a 'guide on the side'. Other

learning theories that the FC pedagogy builds on as Lowell and Verleger (2013) maintained include student-centered learning, problem-based learning and peer-assisted learning (as cited in Elliot, 2014).

Secondly, FC strategy allows students to access content 24/7 allowing them to learn new concepts on their own time. In the traditional class some students would be too shy to stop the teacher if he/she is going too fast, but in the FC mode students can pause and rewind the video until they master content (Bergmann and Sams, 2012). Moreover, if a student registered late, we can view the videos and be able to follow up with the rest of the class or in cases when students are sick or are unable to attend class for one reason or the other, they could easily grasp the course content from the videos and material that they have at their fingertips on e-learning.

Thirdly, teachers could easily monitor students' progress from the e-learning dashboard which will show the questions that most students were unable to answer correctly which will enable teachers to identify the knowledge gap that needs more clarification, so that they could address these problems and misconceptions in class via hands-on activities and thus students' incorrect notions are alleviated.

Fourthly, class time is spent in engaging in content at a deeper level, thus creating "learning connected communities" (Garrison and Kanuka, 2004; So and Brush, 2008). In other words, in class students will be involved in applying the content they learned before class via active learning tasks that include as Davis (2013) stated "collaborative activities and peer learning, which is reflective of how the systems analysis and design process is conducted in a real world environment" (as cited in Elliot, 2014).

Last but not least, the FC pedagogy addresses students' differentiation with regards to language competence, learning style, language learning pace, as they will differ in their ability to grasp the content material of the module and also in fulfilling assignments. Therefore, the FC mode

will give students the "opportunities to choose the tempo, speed and the volume of the content that they need to study" (Evseeva and Solozhenko, 2015). All the above mentioned advantages motivated universities and schools to adopt this FC mode.

Implementing the Flipped Classroom

The process of just flipping a classroom will not transform students' learning. According to a study by Houston and Lin (2012), a successful implementation of a flipped classroom would need the videos to be relatively short (no longer than 20 minutes) and teachers should briefly review the course content before in-class activities to answer any questions and to make sure that the majority of the students have sufficient understanding of the material. Kachka (2012) recommends that during the in-class activities, the teacher must be deliberate to guide and increase the interaction with the students. In addition, the instructional design using technology needs to be carefully planned to ensure the students' learning experience is enhanced, where students identify learning as their goal. Ramsey Musallam, who began flipping his classroom in 2006, stressed this, saying, "(a) flipped classroom is a thing you do in the context of an overarching pedagogy [and is] not the pedagogy itself" (Ash, 2012). The Flipped Classroom has a comprehensive instructional model that includes direct instruction, inquiry, practice, formative and summative assessment and many more elements (Bennett, et al. 2011). These instructional techniques give a focus to the process of learning. It is aimed to enable students to be more actively engaged with the course material and, ultimately, empower them to construct knowledge through their understanding.

Conclusion

Students with different backgrounds, experiences, year of study, discipline, circumstances and learning styles will necessarily require different support mechanisms to take

advantage of new approaches to teaching. We need to guide our students not only on how to use the technologies and learning resources available, but when and why specific tools would best assist them in achieving academic success. The model and framework included here recommends a structured approach to assuring that all voices are heard and integrated in the flipped and blended design and delivery cycle, and that all parties are supported to assure learning and teaching success in this mode. Adherence to this or a similar framework will assure that students' needs, learning requirements and feedback, as well as course coordinators' and learning designers', are soundly integrated into a successful strategy for the design or conversion of courses in flipped and blended modes.

Reference

1. Brenda Danker (2015) Using Flipped Classroom Approach to Explore Deep Learning in Large Classrooms, The IAFOR Journal of Education, Volume III - Issue I - Winter 2015.
2. Akkoyunlu, B., & Soyulu, M. Y. (2008). A Study of Student's Perceptions in a Blended Learning Environment Based on Different Learning Styles. Educational Technology & Society, 11 (1), 183-193.
3. https://en.wikipedia.org/wiki/Flipped_classroom
4. Ike Shibley (2014) Blended and Flipped: Exploring New Models for Effective Teaching & Learning, A Magna Publication.
5. Flipped classroom strategies from the "Turn to Your Neighbour - Peer Instruction Blog" and "7 Myths about the Flipped Classroom Debunked"