Is FLIP enough? Or should we use the FLIPPED model instead?

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ABSTRACT

The flipped learning model, which "flips" traditional in-class lectures with collaborative activities, has gained many followers and converts in K-12 education. However, a review of previous studies shows that the flipped model is still underutilized and underexplored in the higher education context. Research and design models for flipped learning in higher education are also insufficient. This study attempts to fill this gap by developing a model that can provide a foundation for further research and practice for flipped learning in higher education. Building from the four pillars of F-L-I-P™ (Flexible Environments, Learning Culture, Intentional Content, and Professional Educators), the proposed research and design model named "FLIPPED" adds three extra letters—P-E-D (Progressive Activities, Engaging Experiences, and Diversified Platforms)—to the F-L-I-P™ acronym. This model was implemented in a "Holistic Flipped Classroom" environment and evaluated based on a student survey, interviews, and an analysis of computer system logs. Findings demonstrated that the proposed model was effective; students reported that they were satisfied with the course, their attendance improved, and their study efforts increased. Results also suggested that the transactional distance changed during the learning process: highly motivated students performed much better than less motivated students. However, some students retained their former passive learning habits, and this resulted in an obstruction to full adoption. Reflections on the achievements and challenges of the "FLIPPED" model have culminated in various examples, guidelines, and suggestions for practitioners as they consider their own design, implementation, and adoption.[1]

1. Introduction

The flipped classroom has become a popular new instructional model (Barseghian, 2011; Bergmann & Sams, 2012; Tucker, 2012). Unlike the traditional classroom, where instructors lecture in-class and students take notes and complete their homework at home, the flipped classroom "flips" in-class lectures with collaborative hands-on activities. In a flipped classroom model, students watch recorded video lectures at home and do their "homework" exercises in school. Flipped learning can also be referred to as "reversed instruction," "blended learning," or the "inverted classroom" (Bergmann & Sams, 2012). Today, as the flipped classroom is mostly practiced in K-12; many flipped learning models are being developed and debates on their pedagogical values continue (Ash, 2012). Can higher education adopt flipped learning? A comprehensive review of previous studies reveals some gaps in this area of pedagogical inquiry. These gaps include the lack of a comprehensive research model, insufficient discussion of digital learning platforms, and lack of design guidelines for course activities (Baker, 2012; Bergmann & Sams, 2012; Driscoll, 2012; Fulton, 2012; Gerstein, 2011; Herreid & Schiller, 2013; Marshall, 2013; Miller, 2012; Parry, 2012; Staker & Horn, 2012). The purpose of this research is to develop a more robust model for flipped learning in higher education. Investigation into the four pillars of the F-L-I-P™ (Flexible Environments, Learning Culture, Intentional Content and Professional Educators) schema has also revealed several inadequacies, and a revision will be needed. For example, the current F-L-I-P™ schema lacks a "learner experience" perspective, a solid definition of diverse learning platforms, and underestimates the importance of learning activities (Hamdan,

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[1] The Holistic Flipped Classroom is abbreviated as HFC; Cyber-Face-to-Face is abbreviated as Cyber F2F.