# Chapter 8 Blending Face-to-Face and Technology: Implementing Flipped K-12 Classrooms

### Philip G. Pulley

Fieldcrest High School, USA

### ABSTRACT

Flipped or inverted learning is a type of blended learning that involves the use of educational technology to switch or flip what is traditionally done in the classroom with what is done as homework. With the flipped model, lectures are often recorded for students to watch at home while traditional homework, or projects that involve application, are done in the classroom with the teacher available as a guide and resource. Like any new teaching method, with the flipped learning model there is a need for the instructor to evaluate its use and determine whether changes will be required with each implementation. In this chapter, an overview of the history of the flipped model is presented. In addition, an outline of methods like universal design that can be implemented for learning in flipped classrooms is provided.

### INTRODUCTION

Even in the face of the current educational era of accountability with its high stakes testing and scripted curriculum, K-12 teachers and higher education instructors are searching for ways to incorporate technology in order to provide more classroom time for discussions, projects, and student inquiry. All of these techniques are ways to make the classroom more student-centered and move instruction from a transmission model of knowledge to a cooperative, collaborative style of teaching that builds on what students know. Flipped or inverted classrooms have become a hot grassroots topic in education as the model provides an instructional tool that can be adapted to help classroom teachers accomplish all of those student-centered activities. Some teachers may have already heard about the Flipped Classroom model and have decided that it is something they would like to try in order to enhance their teaching as well as improve their students' interest, involvement, and learning.

A flipped classroom is one in which the traditional roles of homework and lecture have been reversed or flipped (Lage, Platt, & Treglia, 2000). That is to say that traditional homework is done in class, allowing the teacher to be available for assistance and guidance, while recorded lecture videos are watched at home. In this manner lectures, usually designed to transfer large amounts

DOI: 10.4018/978-1-4666-4912-5.ch008

of information to students, are completed outside the classroom allowing valuable classroom time for application of that information in the form of homework, discussions, projects, or creating connections involving higher order thinking. This model allows for the completion of less engaging activities, that is lectures, at home and the more engaging activities, that is homework, discussions, etc., in the classroom and in the presence of the teacher. Such uses of classroom time might include the use of Universal Design for Learning (UDL) ideas, project based learning, mastery learning, inquiry based learning, and other methods of helping to move students beyond basic knowledgebased learning.

The goal of flipped classrooms is to make the educational process more student-centered and to provide more classroom time for students to engage in meaningful learning while giving teachers more individualized face-to-face time with their students. For those instructors that like the ideas, concepts, and possibilities made achievable by the flipped classroom model, the logical next question is where does one start? The process of implementing a flipped classroom model might vary from one educator to another but there are several steps to consider. This chapter will look at the following questions as steps to consider for putting a flipped classroom into practice.

- 1. Evaluate why you want to flip your class, what are your goals, what do you hope to gain by flipping your instruction?
- 2. Evaluate your current teaching style. Do you do a lot of direct lecture with notes or do you use project-based learning, mastery learning, Universal Design for Learning (UDL) methods, inquiry based, scaffolding, etc.? These methods will also be briefly defined and examples provided.
- 3. What technology resources and skills do you, your school, and your students have

in place? This question will address video production, school technology (including one-to-one technology), skills needed, resources available, Learner Management Systems (LMS), and things to consider for flipping a classroom.

- 4. How much time and patience do you have? With technology things will go wrong so this question gets at how to avoid problems, how to deal with problems that arise, and about being realistic. Be realistic about what you can get done in the time that you have and ask to what extent do you plan to flip? Will it be a lesson, a unit, a class, or even all of your classes?
- 5. How willing are you to evolve as a teacher and a flipped instructor? This question is related to the question of patience and the fact that the flipped classroom itself will not change who you are and how you teach, but it is a tool that can allow you to teach in drastically different ways.

In the process of answering these questions the experiences and personal insights of the author will be included to provide real world examples from my experiences in flipping my social studies classes. I have taught high school for over fifteen years, taught as an adjunct at the community college level, and currently teach high school social studies, video production, and a dual-credit communications basic course. I have flipped most of my classes in the past year and plan to expand my use of the model in the future. I will continue to include more application of knowledge on the part of my students and to make the classes and my subject area lessons more relevant to their lives. We will begin with looking at a brief history of the flipped classroom movement, then we will answer the questions posited above, while looking at practical considerations and tips to remember in applying the flipped classroom model.

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/blending-face-to-face-and-technology/92969

### **Related Content**

Blended Learning: History, Implementation, Benefits, and Challenges in Higher Education Kwesi Tandoh, Nidia Flisand Joseph Blankson (2014). *Practical Applications and Experiences in K-20 Blended Learning Environments (pp. 18-27).* www.irma-international.org/chapter/blended-learning/92962

## Use of Mobile Applications for Hospital Discharge Letters: Improving Handover at Point of Practice

Bridget Maher, Hendrik Drachsler, Marco Kalz, Cathal Hoare, Humphrey Sorensen, Leonardo Lezcano, Pat Hennand Marcus Specht (2013). *International Journal of Mobile and Blended Learning (pp. 19-42).* www.irma-international.org/article/use-of-mobile-applications-for-hospital-discharge-letters/99678

#### A Meta-Analysis on the Effects of Learning with Robots in Early Childhood Education in Korea

Sung-Deok Park, Eun-Jung Kimand Kyung-Chul Kim (2019). International Journal of Mobile and Blended Learning (pp. 55-63).

www.irma-international.org/article/a-meta-analysis-on-the-effects-of-learning-with-robots-in-early-childhood-education-inkorea/227717

## Situation-Based and Activity-Based Learning Strategies for Pervasive Learning Systems at Workplace

Amel Bouzeghoub, Serge Garlatti, Kien Ngoc Doand Cuong Pham-Nguyen (2011). *Models for Interdisciplinary Mobile Learning: Delivering Information to Students (pp. 87-102).* www.irma-international.org/chapter/situation-based-activity-based-learning/52830

#### Advantages and Disadvantages of Personalized Learning

(2020). *Evaluation of Principles and Best Practices in Personalized Learning (pp. 176-198).* www.irma-international.org/chapter/advantages-and-disadvantages-of-personalized-learning/255684