

## Chapter 10

# A Comparative Analysis of Blended Models at Tertiary Level

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### **ABSTRACT**

*In this research study, the learning outcomes of a blended learning course in an ESL classroom is reported. Although previous research studies have adequately addressed the effect of blended instruction on learning outcomes, there is a dearth of research on the effectiveness of flipped and online model. A review of current literature on online and flipped models revealed that both these models positively impact the learning outcomes. Since this study aims to measure the impact of these two models, an experimental research design was chosen. Two homogeneous groups with a sample size of 22 from each were randomly selected for the study. The instructional method for Group A was the flipped model, and the instructional method for Group B was the online lab model. The t-test results indicated that the the flipped group outperformed the online group.*

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## **INTRODUCTION**

There is a constant emphasis on improving learning outcomes using technology. Recently technology-aided instruction is gaining prominence in higher education. Sitzmann et al., have stressed on the importance of webbased classrooms. (2006). The Ministry of Human Resource Development (2016) Government of India has mandated the need for technology integrated pedagogies. The global report of Commonwealth Nations (2017) has also emphasised the need for technology integrated learning for maximizing the learning outcomes. Garrison and Kanuka (2004) hypothesize that blended approaches are highly effective for achieving the learning outcomes in higher education. Although blended learning cannot be narrowed down to a single definition, Graham (2013), defines blended learning as a combination of face-to-face and technology-mediated instruction.(p.2)

Since the advent of blended learning pedagogies, many blended models have been used to enhance course delivery. According to Blended Learning Universe (2016) there are four broad classification of blended models. They are: i) the rotation model ii) the flex model iii) the á la carte model and iv) the enriched virtual model. Among these models, research on rotation model is well documented. The two versions of the rotation models are the flipped model and the online lab model. Previous research studies have reported on the pedagogical aspects and learning outcomes of both these models. (Han and Ellis, 2019; Halverson and Graham, 2019; Cheng, Ritzhaupt, & Antonenko, 2019.)

Boelens, Voet and De Wever (2018) investigated the strategies used by teachers to augment the learning outcomes in blended courses. They used semi-structured interviews to know about the effectiveness of blended approaches. Their findings revealed that most of the instructors used blended learning approaches to provide additional support to their learning. But they were not clear about the pedagogical principles of these models.

Despite a growing body of literature on the flipped and online lab model, teachers in the blended classrooms are grappling with pedagogical issues for leveraging instruction..Given the paucity of research on blended models and the emerging interest in blended learning, the present study aims to investigate which of these models is more effective for achieving the learning outcomes.

### **Review of Flipped and Online Model**

The purpose of this section is to systematically review the existing literature on flipped model and the online model of instruction. Articles published in web of science and Scopus for the last five years were taken for the study. The recent studies were chosen to understand the current trends. The articles selected for the study

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