# Chapter 53 A Comparative Study of Business and Engineering Students' Attitude to Mobile Technologies in Distance Learning

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### ABSTRACT

Mobile technologies are widely employed in distance learning in higher education to provide students with an opportunity to learn regardless of time and place in order to obtain a higher education degree. However, little attention has been paid to a comparative study of business and engineering students' attitudes toward mobile technologies. The aim of the chapter is to compare business and engineering students' attitudes toward mobile technologies in distance learning, underpinning elaboration of a hypothesis. The meanings of the key concepts of distance learning, blended learning, and attitude are studied. Moreover, the study demonstrates how the key concepts are related to the idea of mobile technologies and shows how the steps of the process are related: students' attitudes toward mobile technologies in distance learning  $\rightarrow$  empirical study within multicultural environments  $\rightarrow$  conclusions. The results of the present research show that both business and engineering students' attitudes toward mobile technologies are positive.

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Figure 1. The relationship between distance learning and mobile technologies



#### INTRODUCTION

Many universities throughout the world have already adopted or are planning to adopt mobile technologies in many of their courses as a better way to connect students with the subjects they are studying (Ferreira, Klein, Freitas & Schlemmer, 2013). Particularly, mobile technologies in distance learning of higher education have already become an indispensable tool in both university staff and students' daily life. Mobile technologies are widely employed in distance learning of higher education to provide students with an opportunity to learn regardless of time and place in order to obtain a higher education degree. In distance learning, mobile technologies allow students to access content anywhere/anytime to immerse himself/herself into that content (alone or interacting with educators or colleagues via web communication forms) and to interact with that content in ways that were not previously possible (via touch and voice recognition technologies, for instance) (Ferreira et al., 2013). Therein, mobile technologies and distance learning are closely inter-related as depicted in Figure 1.

Evaluation of the educator/student acceptance and adoption of mobile technologies has been carried out (Ferreira et al., 2013). Against this background, students' attitude to mobile technologies in distance learning plays a two-fold role within the institutionalized blended educational process of higher education as shown in Figure 2.

- On the one hand, students' attitude to mobile technologies influences students' distance learning, and,
- On the other hand, students' attitude to distance learning shapes students' application of mobile technologies.

Thus, application of mobile technologies in distance learning is driven by students' attitude to mobile technologies in distance learning.



Figure 2. The relationship between students' attitude, mobile technologies and distance learning

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