### Chapter 52

# Formal, Non-Formal, and Informal E-Learning Experiences With Emerging Technologies:

A Case Study of a Graduate Educational Technology Program

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#### **ABSTRACT**

In this case study, a group of graduate students in an Educational Technology Program were surveyed in their use of emerging technologies. The purpose of this survey was to examine the extent of emerging technology use and investigate how they aligned with students' formal, non-formal, and informal e-learning experiences. Suggestions for new technologies and tips for implementation are also provided.

#### BACKGROUND

As more and more higher education institutions embrace e-learning, it is critical to better understand how emerging technologies can support instruction. With new technologies emerging almost daily, online instructors can get overwhelmed with the choices available. The students demand that increased multimedia and visual components are added to the courses, and administrators require inexpensive course development given the current budget retrenchments.

In an attempt to produce policies for lifelong learning, the European Centre for the Development of Vocational Training (2007) proposes three types of learning: formal, informal and an intermediate

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category, non-formal learning. "With increased public and private investment in adult education, there is a growing interest in developing a more comprehensive understanding of how adult education works (Rubenson, 2011, pp. 8-9). At the same time, a comparison between the types of learning would result in better assessments that inform society. In the context of e-learning, all three learning activities provide invaluable experiences for the e-learning students.

This chapter provides an in depth examination of the effects of formal, non-formal and informal learning experiences using a case study of graduate educational technology students. It also proposes suggestions for faculty members who strive to enhance student experiences with the use of emerging technologies.

#### **ORGANIZATION**

The study described in this chapter surveys graduate students enrolled in an online Educational Technology Masters' Program in a Southwestern University. Located on the southern border, the University has a high non-traditional student population as well as students from minority groups. The College where the Educational Technology degree is offered is a branch campus of a large land-grant research University that was founded for outreach border communities in various locations and campuses. Most students in this College have access to Internet and computer technologies. However, taking online courses and pursuing an online graduate degree is a new experience to most of the students. The majority of the students are first-generation college graduates in their families. Since the College is serving students in multiple locations on the Southern border, online formats and Interactive TV (ITV) systems are regularly used by most faculty members and programs. Emerging technologies are not commonly utilized throughout the college programs, with the exception of a few faculty members and the aforementioned Educational Technology program.

The Educational Technology Program is offered fully online using an open source course management system, Moodle. In addition to Moodle, all instructors in the Program regularly use various technologies to deliver their synchronous and asynchronous meetings. Some of these technologies are Skype, Elluminate, Wordpress, Drupal, and Second Life.

For the purpose of this study, the Educational Technology Program students represent a good example of students using emerging technologies on a regular basis. The students are asked about their use of emerging technologies and how this usage aligns with their formal, informal, and non-formal e-learning experiences.

#### THEORETICAL BACKGROUND

#### Formal, Non-Formal, and Informal Learning Experiences

Colley, Hodkinson, and Malcolm (2002) conducted a comprehensive literature review on the definition of formal, non-formal and informal learning and concluded that there are no clear distinctions between these terms because "there is little agreement about how these terms should be defined, bounded or used" (Executive Summary, para. 1). In addition, their report showed that most definitions either overlap or disagree, depending on the authors. For these reasons, in this chapter we will not provide definitions of these three terms but will describe them in the context of e-learning environments and emphasize that

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