# Chapter 33 Defining Multimedia: A Toolkit for Online Education

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#### **ABSTRACT**

Multimedia systems have revolutionized the traditional means of communication that have ultimately enhanced the learning styles in online education. With the advancement of technology, online education has become available to students who would like to pursue a higher education. It has also played an important role in how humans consume, transmit, and process information to one another in the online classroom. This chapter analyzes the importance of integrating multimedia in online education and how it can create students to pursue media entrepreneurship. Consequently, this chapter will show its support of the integration of multimedia tools in communication education by discussing the benefits of these systems and how they are used as a stepping stool to the phenomenon, entrepreneurship.

#### INTRODUCTION

Multimedia is an evolving, shape-shifting concept that is integral to our day-to-day activities, whether intentionally or unintentionally. Multimedia simply can be define as using various forms of mediums to exchange information. These mediums may include audio, photos, video, text, movies, podcasts, and animations. Education psychologist, Richard E. Mayer, who posited the Cognitive Theory of Multimedia, defined multimedia as "...presenting both words (such as spoken text or print text) and pictures (such as illustrations, photo, animation, or video)" (2005). The various forms of multimedia has made it easier to consume, transmit, and process information for human beings. Through the advances of technology, the usage of multimedia has become an integral part of our lives, which has led to an increase in learning. Fletcher and Tobias concur stating, "The multimedia principle states that people learn better from words and pictures than from words alone" (2005).

This chapter will explore multimedia as a fundamental concept that includes various forms to produce types of communication that can be essential to online learning. Also discussed in this chapter will be the importance of how integrating multimedia in the online classroom can possibly produce future entre-

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#### **Defining Multimedia**

preneurs. The current advances in technology has made great impact in the various ways human beings consume information, as well as how they interpret information. Studies have shown that other forms of technology (computer-based, voice, and telecommunication applications) that are popular among current college students (whether traditional or non-traditional) helps increase engagement, interaction and retention. This too can create a toolkit for future entrepreneurs who are interested in making a change through digital media education.

With the development of multimedia, it is necessary to reevaluate the common approaches to teaching that may not be as conducive as before (Boggs, Bolliger, and Supanakorn, 2010). The upward trend in technological applications should prompt such an evaluation, (particularly in the field of communications) of pedagogical methods in order to enhance the students' education. In this chapter, I will provide an analysis that encompasses:

- 1.) A tangible definition of multimedia as a fundamental concept that includes various forms of medium to produce some type of communication and a literature review of multimedia,
- 2.) discuss the advantages of multimedia in online education (including convenience, fostering interaction and engagement, flexibility, cost-effective, increasing independency, learning from different perspectives, and controlled environment),
- 3.) discuss how the aforementioned topics can enhance students route into media entrepreneurship.

Ultimately, this chapter will offer a critical overview of multimedia and its need in the classroom and how it contributes positively to student learning outcomes. Through the critical overview of multimedia and its related research, I will address two questions:

- 1.) What technological (i.e., multimedia) tools are used and how are these related to the program's student learning outcomes in online education?
- 2.) What steps are taken to assess the student learning outcomes and experiences for the purpose of continuous improvement?

Consequently, this chapter will show its support of the integration of multimedia tools in communication education using the appropriate pedagogical methods to make the transition transparent across the realm in higher education. I also assert that it is important to bring light to the disadvantages of multimedia in education. The mass communication teacher must know how to combat those issues and propose solutions that will ultimately alter the stigma. Additionally, I argue that multimedia tools and education (specifically online education) can come together and bridge a pipeline to make education more accessible and beneficial.

#### **BACKGROUND**

### **Multimedia: Fundamental Concept**

The newspaper was considered the first form of mass communication. Invented in the 17<sup>th</sup> Century, newspapers were originally used as "information sheets for merchants." Newspapers were the main source of information using text then expanding to include pictures. Later, during the 20<sup>th</sup> Century,

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