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#### **Chapter I**

# Planning for Multimedia Learning

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#### **Abstract**

Multimedia tools, applied with awareness of the realities of organizational culture, structures and finances, have been shown to enhance the performance of learning systems. If some predictable pitfalls are avoided, and proven pedagogical design principles and appropriate vehicles (including the Internet) are used effectively, multimedia can permit greater individualization, in turn fostering improved learning, learner satisfaction, and completion rates.

#### Introduction

Effective uses of multimedia in open and distance learning (ODL) depend upon various factors, some intrinsic to the media themselves, and others related to the differing pedagogic tasks and organizational environments into which these tools are introduced. For those planning use of multimedia, it may be valuable to consider the likely impacts of these tools on teaching and learning practices and outcomes, and on organizational structures and processes, as they are likely to be different in scope and magnitude from those of traditional instructional innovations.

This chapter discusses some of the characteristics of multimedia in relation to basic pedagogic tasks and organizational realities. The goal is to alert new users to issues that often arise in multimedia implementations and to assist experienced users in assessing their strategies, by outlining some fundamental considerations commonly affecting implementation of multimedia. Both new and experienced technology users will hopefully find the discussion useful for reflecting on options, and anticipating potential pedagogic and administrative challenges, as they move from simpler to more complex combinations of media for teaching.

The chapter begins with a discussion of the term *multimedia*, including a review of some of the characteristics (including common pedagogic benefits and potential issues) of specific media. Based on this analysis, some of the conditions under which multimedia might readily support learning tasks are explored. Finally, the impact of multimedia as an innovation on aspects of organizational culture (including structure and finances) are addressed.

#### **Defining Multimedia**

While the term "multimedia" has not always been associated with computers (Roblyer & Schwier, 2003, p. 157), there is no doubt that it is the merging of increasingly powerful computer-based authoring tools with Internet connectivity that is responsible for the growing interest in and use of multimedia instruction, in both distance and face-to-face environments. This trend is encouraged by growing evidence that well-designed online delivery, regardless of the media used, can improve retention, expand the scope and resources available in learning situations, and increase the motivation of users (Fischer, 1997; Bruce & Levin, 1997; Mayer, 2001). For these reasons, the term "multimedia" is now firmly associated with computer-based delivery, usually over the Internet and accompanied and supported by interaction provided via some form of computer-mediated communication (CMC).

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