Chapter 2.1
Systems Model of Educational Processes

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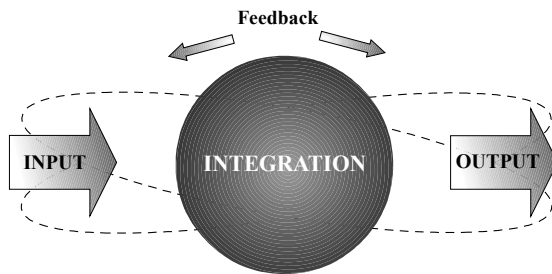*University of Colorado at Denver, USA*

INTRODUCTION

Distance education involves a wide range of elements, including students, instructors, institutions, classroom technology, state agencies and accrediting boards. The educational process model provides a conceptual framework to integrate these diverse elements. The following discussion begins with a brief background on the systems and communication basis of the new model. Then it elaborates the model's elements, including the inputs (resources and philosophy), purpose (intentions and audiences), methods (technological genre and educational process); integration (pedagogy); outputs (product and interpretation); and assessment (institutional and research).

BACKGROUND ON PREHENSIVE MODELS

While distance education has expanded rapidly over the past few decades, academic study is just beginning to address this phenomenon. To organize research, Shih et al. suggest a starting point based on recent history (2003). Watkins and Schlosser examine the educational foundation of such research, defining guidelines for the alternative research approaches (2003). Lihua and Smaldino use instructional design elements as a means of organizing research in distance processes (2003). Toward a comprehensive model, Willis and Locke outline a pragmatic design model (2004). However, these approaches lack
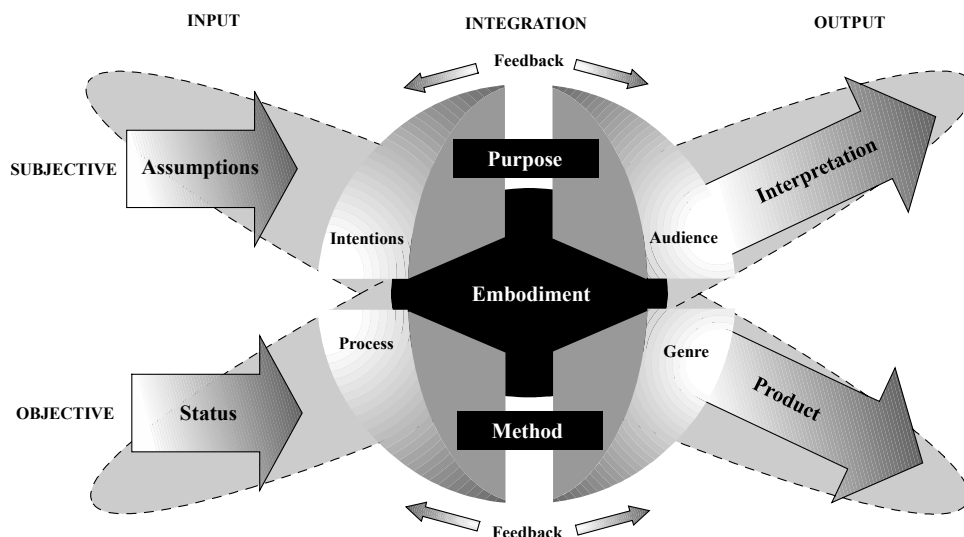
Figure 1. Basic systems model

With distance education as a human communication process, the new model builds on the rhetorical process model, shown in Figure 2.

The rhetorical process model divides the systems model horizontally into subjective and objective domains (Beck, 1999). It also elaborates the process into purpose (intentions and audience) and method (genre and process). These elaborations convert a mechanical basic system into a purposive human process.

EDUCATIONAL PROCESS MODEL

Building on the rhetorical process, the educational process model consists of inputs, an integrative process, outputs and feedback. The objective process includes resources, method and experiences; the subjective process involves philosophy, purpose and outcomes. The integration elements of purpose and method further divide: objectives and audiences; and instructional technology and methodology. These four integration elements

a comprehensive means of integrating the elements of distance education. Although Chien et al. present a "model-based system" for distance education, their model serves as a template for course development rather than a comprehensive system.

The educational process model integrates theoretical, research and practice in distance education by creating a new model that begins with a basic systems model (Figure 1).

Figure 2. Rhetorical process model

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