Chapter 20
Instructional Design for the Technological Learning Environment

Demetrick Williams
Rowan University, USA

ABSTRACT

Education is constantly changing to not only meet the ever changing needs of the global business environment, but to also meet the needs of the students. The needs of the students are constantly changing because of technology and increasingly diverse backgrounds and cultures that change the ways education occurs. Studies have shown that the demands continue to grow for education to continue to transform to meet the needs of today’s diverse technological learners. Faculty, teachers, and instructional designers must adapt to the evolution of the learning environment. The purpose of this chapter is to aid faculty and teachers in the design of curriculum for tomorrow’s students, by adding them with the trial and error of the development phase. The two objectives are to aid in the development of instructional design along with further meeting the needs of our students and to help remove some of the trial and error in the development process.

INTRODUCTION

Instructional design is the intangible manuscript used to develop instruction. The design usually includes analysis, development, implementation, and evaluation (Magliaro & Shambaugh, 2006). Kennedy (1994) explained that teachers and instructional designers in the classroom tend to view instructional design differently. Research has shown that instructional design is a key intellectual process that influences the development and design of effective learning settings in the field of instructional technology (Nelson, Magliaro & Sherman, 1987; Magliaro & Shambaugh, 2006). Instructional design models that describe the process have been used by teachers and designers in the development of technological products and instruction (Branch & Gustafson, 2002; Magliaro & Shambaugh, 2006). The way in which the instructor presents the instructional design process can have a positive or negative effect on the student. The initial presentation of the instructional design process can have a powerful influence on understanding for students and help to determine if the student will use the design. Norman (1983) labeled this theoretical...
Instructional Design for the Technological Learning Environment

Instructional design is the practice of design instruction, delivering the curriculum, and evaluating student knowledge (Skowron, 2006). Educators must remove themselves from the mind-state of the classroom walls when developing strategies for instructional design. Ryder (2010) defines instructional design models as an optical representation or framework of the process. Studies have shown that instructional design is taught in more of a procedural manner during teacher preparation; however, in actual practice instructional design aligns more with a form of complex problem solving for the designer (Hardre, & Thomas, 2006; Jonassen, 2000; Perez, & Emery, 1995; Silber, 2007). Instructional design and technology tend to take more of a constructivist perspective in American education (Fox, 2006). Observing knowledge not as “something we acquire but something that we produce,” (Mautner, 1996, p.83), constructivists have dared the field to scrutinize more carefully its philosophical and epistemological assumptions (Fox, 2006). The instructional design model should show us how the students learn; it is the guide for the instructional designer to develop instruction (Gustafson, & Branch, 2002). Models support us in the understanding of a practice or system, placing complex real world circumstances into easy steps that are mobile in application (Gharbaghi, Hamdani & Sharifuddin, 2011).
Related Content

Navigating 21st Century Multimodal Textual Environments: A Case Study of Digital Literacy
Muriel Wells and Damien Lyons (2016). *Handbook of Research on Global Issues in Next-Generation Teacher Education* (pp. 43-61).
[www.igi-global.com/chapter/navigating-21st-century-multimodal-textual-environments/146293?camid=4v1a](www.igi-global.com/chapter/navigating-21st-century-multimodal-textual-environments/146293?camid=4v1a)

Transforming Preservice Mathematics Teacher Knowledge for and with the Enacted Curriculum: The Case of Digital Instructional Materials
[www.igi-global.com/chapter/transforming-preservice-mathematics-teacher-knowledge-for-and-with-the-enacted-curriculum/150798?camid=4v1a](www.igi-global.com/chapter/transforming-preservice-mathematics-teacher-knowledge-for-and-with-the-enacted-curriculum/150798?camid=4v1a)

Teaching Large Classes: Engaging Students Through Active Learning Practice and Interactive Lecture
[www.igi-global.com/article/teaching-large-classes/217459?camid=4v1a](www.igi-global.com/article/teaching-large-classes/217459?camid=4v1a)

Teaching English Language Learners: A Mainstream Response to Rural Teacher Preparation
[www.igi-global.com/article/teaching-english-language-learners/196556?camid=4v1a](www.igi-global.com/article/teaching-english-language-learners/196556?camid=4v1a)