Chapter 20
A Practical Guide to Evaluate Quality of Online Courses

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ABSTRACT
This chapter introduces a graphic approach to define quality in online courses. The Decomposition Model (Borich & Jemelka, 1982) is used to illustrate course structure and the salient characteristics of an effective online course. The constraints that influence the success of online courses are discussed. Salient transactions (activities) that occur in online courses are described. And the means-end continuum in the process of online learning is illustrated graphically. The chapter is expected to provide readers with a whole picture of a quality online course through an architectural framework.

INTRODUCTION
During the last decade, the number of online courses has increased rapidly, and online learning has become trendy for all levels of education. Online courses prepare learners to transition successfully through high school, improving high school graduation rates (Southern Regional Education Board [SREB], 2007). In addition to their significance for K-12 education, online courses create diverse learning experiences for learners in higher education and improve their chances of academic success (Phipps, Merisotis, & Harvey, 2000). Well-designed online courses can ensure that students get quality learning and teaching. Thanks to the emergence of online courses, people have a more equal opportunity to gain education, compared to the process involved in gaining education from traditional brick-and-mortar schools (SREB, 2007). In the report of Virtual Schools and 21st Century Skills, published by North American Council for Online Learning [NACOL] (2007a), the 21st skills are defined as follows: global awareness, self-directed learning, information and communications technology (ICT) literacy, problem-solving skills, time management and personal responsibility. There is a growing understanding that online courses can meet academic requirements and provide learn-
ers with the 21st century skills for future career (NACOL, 2007a).

Course management systems are often a popular alternative for instructors to create online courses. Typically, a school or institute purchases a course management system (such as Blackboard) and then invites instructors to attend an overview class. The trainers explain how the software works and how to navigate or access the various features. It is relatively easy for anyone who is familiar with email and word processing to import text into the boxes provided by the course management shell. Course management systems provide a way to avoid building a course site from scratch, but they do not provide a complete foundation for building a high quality online course (Brett, 1999). Instructors need to learn what constitutes a quality online course in order to create an effective online course (Hao & McGee, 2003).

The roles of learner and instructor are being revolutionized in online courses. In online learning environments, online learners and instructors have little physical contact; most interactions take place through text-based communication in synchronous and/or asynchronous ways. Online learners are expected to have the motivation to learn and be self-directed (Palloff & Pratt, 2003; SREB, 2007). People who take online courses need to adjust their expectations and attitudes for learning. Possessing adequate communication skills through text, being able to manage their time wisely, and being willing and able to take responsibility for their own learning, are required to succeed in online learning. Instructors also must adapt their classroom teaching styles to become successful online teachers. Online instructors play the role of activity facilitators and discussion moderators; they provide guidance and direction but they do not instill knowledge into learners. There obviously needs to be a transition for instructors from teacher-centered traditional classroom teaching to student-centered online instruction. Not all instructors are able to make this transition. Although online instruction shares many features of face-to-face teaching, if instructors are to teach well online, they will require a unique set of skills (Salmon, 2000; NEA, 2006) and a new mindset (Barker, 2002).

The Decomposition Model (also called Program Modeling), is a heuristic technique originally developed for program evaluation in the social and behavioral sciences by Borich and Jemelka (1982). The Model was derived from general systems theory, values and decision oriented evaluation, and computer software program design. It can identify and prioritize the needs of students, take into account social and political constraints (environmental factors), and demonstrate how the parts in a mechanism (i.e., a program or a course) are related to each other and contribute to the functioning of the whole mechanism. Thanks to its systematic approach, the Decomposition Model can provide a useful way to analyze online course structures.

This chapter uses the Decomposition Model to illustrate course structure and the salient characteristics of an effective online course. According to a report (Allen & Seaman, 2006) published by the Sloan Consortium, a recognized institution for improving online education, an online course is one where at least 80 percent of the course content is delivered online. The chapter adopts the Sloan-Consortium definition of an online course: where most of or all of the course content is delivered online and there are rare or no face-to-face meetings. The chapter considers the quality standards or benchmarks in the reports published by American Federation of Teachers [AFT] (2000), Institute for Higher Education Policy [IHEP] (Phipps, et al., 2000), North American Council for Online Learning [NACOL] (2007a, 2007b), National Education Association [NEA] (2006) and Southern Regional Education Board [SREB] (2007, 2006a, 2006b), reorganizes and fits them into the Decomposition Model. The purpose of this modeling is to ensure that the outcome of a course is met, by providing a graphical structure to both evaluate and oversee the structure of an online course.