Chapter XLIII
What We Know about Assessing Online Learning in Secondary Schools

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ABSTRACT

In this chapter, the authors examine past and current efforts in evaluating the quality of online high school courses. They argue that policy organizations in the United States have made recommendations to guide the design and delivery of effective high school online courses. However, past efforts at determining the quality of online courses have focused primarily on broad-based program evaluations and the development of standards lacking specific evaluation criteria. They propose the development of evaluation processes and instruments based on solid theoretical foundations which embody learner-centered instructional practices, communities of inquiry, and a proven record of empirically-based research results. They suggest that a history of research evaluating instructional effectiveness using the Seven Principles of Effective Teaching combined with the inclusion of principles of cognitive presence in assessing deep learning may provide a useful framework for establishing empirically-based guidelines for evaluating the quality of online instruction.

ONLINE LEARNING IN THE K-12 CONTEXT

Web-based instruction is becoming a viable alternative for delivering coursework to high school students across the United States. Led by national policy initiatives supporting the use of the Internet for learning (Hassell & Terrell, 2004; U. S. Department of Education, 2004; Web-Based Education Commission, 2000), it
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has been estimated that 700,000 elementary and secondary students were enrolled in some form of online coursework for 2005-2006 (Picciano & Seaman, 2007) with 42 states having either supplemental online programs, full-time online programs, or both as of September 2007 (Watson & Ryan, 2007). The convenience of Web-based course offerings has attracted many students to virtual high schools. Students favor this form of instruction because it allows them to complete coursework that would otherwise be impossible to accomplish because of time, geography, financial considerations, family obligations, work requirements or other constraints which limit their opportunities to attend face-to-face classes (Richards & Ridley, 1999). Web-based learning offers possible solutions to public schools where budgets are tight and resources are limited for offering students the curriculum and the opportunities they desire (Chaney, 2001). The Internet is particularly well-suited for providing students enrolled in small, rural or low socioeconomic status school districts access to specialized courses not normally available to them.

The literature suggests that Web-based high school courses may be one solution to address a number of issues such as chronic teacher shortages, student drop-out rates, student disinterest, and low learner achievement (e.g., Chaney, 2001; Mupinga, 2005; Setzer & Lewis, 2005; Tucker, 2007). Online instruction provides greater educational opportunities for students from small rural schools who want to take more advanced math, science, foreign language and advanced placement courses that their districts typically are incapable of offering. Distance high school programs offered via the World-Wide Web also offer alternatives to traditional graduation pathways for students who are hospitalized or homebound, experience severe behavioral problems or have single parent responsibilities.

FRAMEWORKS FOR ASSESSING THE QUALITY OF K-12 ONLINE EDUCATION

During the past 10 years the technology available for offering online courses to high school students has improved dramatically (Southern Regional Educational Board, 2006). The new generation of electronic course tools has expanded the array of instructional activities that online instructors can use to create quality distance learning environments. The new technologies that are now available suggest that the factors which have been previously identified as contributing to effective online teaching need to be reexamined. Early online course development efforts focused on transferring content from traditional face-to-face to electronic learning environments (Sims, Dobbs & Hand, 2002). The first online courses in many cases could be likened to “online correspondence study” with little thought to developing meaningful electronic discourse. Evaluations of the quality of these initial efforts were based on how the course looked rather than how the course was planned to create an interactive learning environment. However, electronic course management systems have evolved to include more sophisticated interactive learning components such as the use of Web-cams, virtual conferencing tools, Web-based collaboration tools (i.e. shared application tools, wikis, blogs, and social networks) and 3D virtual worlds. The continued development and use of new technologies suggests that evaluation efforts must examine how these technologies are used by online instructors to create virtual leaning environments that are interactive and that promote deeper levels of understanding. The complex issues surrounding the evaluation of Web-based distance courses suggest that judgments relevant to the quality of courses and programs must be guided by specific and measurable benchmarks (Stella & Gnanam, 2004). The dramatic increase in Web-based, distance education courses and programs has compelled K-12 policy and accrediting...
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