

PEER REVIEW FOR ONLINE LEARNING

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Faculty Name:

Faculty Reviewer and Rank:

Reviewer's Department or Institution:

Course Name and Number:

Number of weeks shadowing the course:

Email:

Check which type of course:	Type of Course ¹	Approximate % of student time on-line
	<p>WEB COURSE: A FULL WEB COURSE IS A STAND ALONE COURSE THAT CAN BE ACCESSED ANYWHERE ANYTIME VIA THE INTERNET AND A WEB BROWSER. THE WEB COURSE DOES NOT REQUIRE AN ATTENDANCE OR PARTICIPATION IN LOCATION-SPECIFIC SITES AS THERE IS A CHARACTERISTIC SEPARATION OF PLACE AND/OR TIME. <i>EXAMPLE: INSTRUCTIONAL MODULES OR COURSES ARE DELIVERED VIA THE WEB. MAY INVOLVE TUTORIALS OR MULTIMEDIA MODULES. MAY INVOLVE WEB COURSE MANAGEMENT TOOLS AND STUDENT TRACKING. STUDENTS MAY DESIGN THEIR OWN PROJECTS AND LINK THEM TO COURSE CONTENT.</i></p>	75- 100%
	<p>WEB-CENTRIC: THIS COURSE MAKES SIGNIFICANT USE OF WEB TECHNOLOGY TO FACILITATE ACCESS TO CLASS MATERIALS AND SUPPORT COMMUNICATION BETWEEN FACULTY AND STUDENTS, AMONG STUDENTS, AND BETWEEN STUDENTS AND RESOURCES. THE COURSE IS DESIGNED TO SUPPLEMENT TRADITIONAL FACE-TO-FACE INSTRUCTIONAL DELIVERY BY REDUCING THE SEAT-TIME DEMANDS OF THE LEARNER. THE COMMUNICATION HUB OF THE COURSE SHIFTS FROM THE PHYSICAL CLASSROOM TO THE WEB. COURSES CAN BE TAUGHT WITHIN A LIMITED GEOGRAPHICAL AREA, SUCH AS A CAMPUS OR A CITY, BUT ATTRACT MORE STUDENTS WITH NEEDS FOR FLEXIBLE SCHEDULES AND FEWER CLASSROOM MEETINGS, INCLUDING WEEKEND SEMINARS, AND OTHER SPECIAL EVENTS. <i>EXAMPLE: GATHERING STRATEGIES ARE USED, SUCH AS INTENSIVE LOCATION-BASED LAUNCHING OR FOCUS GROUP ACTIVITIES. ON LINE INTERACTION IS AMONG STUDENTS AND INSTRUCTOR. MAY USE ASYNCHRONOUS COMMUNICATION USING EMAIL, LISTSERVS, DISCUSSION AREAS. MAY USE SYNCHRONOUS COMMUNICATION USING CHAT ROOMS. MAY USE COLLABORATIVE, SIMULATED ENVIRONMENTS. ENCOURAGES PROBLEM SOLVING, CRITICAL THINKING, EMOTIONALLY MATURE/ SELF-RELIANT DISPOSITIONS.</i></p>	50-75%
	<p>WEB-ENHANCED: THIS MAKES USE OF WEB TECHNOLOGY AND SERVICES TO SUPPORT DISTRIBUTION OF COURSE MATERIALS AND STUDENT ACCESS TO RESOURCES ON THE WEB. THE COURSE IS DESIGNED TO SUPPLEMENT</p>	25-50%

	<p>TRADITIONAL FACE-TO-FACE INSTRUCTIONAL DELIVERY BUT DOES NOT REDUCE THE SEAT-TIME DEMANDS OF THE LEARNER. <i>EXAMPLE: INSTRUCTIONAL MATERIALS ARE PROVIDED ONLINE. THIS INCLUDES HANDOUTS, CD-ROM, WORKBOOKS, VISUALS, ETC. THE COURSE MAY HAVE PRE-DEFINED LINKS FOR STUDENTS TO EXPLORE. THERE MAY BE REQUIRED INSTRUCTIONAL ACTIVITIES AT SPECIFIED SITES OR WITH SPECIFIED MEDIA.</i></p>	
	<p>WEB-PRESENCE: THE COURSE HAS A MINIMUM WEB PRESENCE- AND/OR ALL THE INFORMATION ABOUT A PARTICULAR COURSE THAT HAS BEEN TRADITIONALLY USED IN THE COURSE CATALOG SUCH AS <i>EXAMPLE: BIBLIOGRAPHIES; COURSE SYLLABI; COURSE SCHEDULES; COURSE OUTLINES; ASSIGNMENTS; CONTACT INFORMATION (E.G. EMAIL ADDRESS, TELEPHONE NUMBER)</i></p>	<p>5-25%</p>

¹ Adapted from Boettcher J (October,1999). *Another look at the tower of WWWebble. Syllabus.* P. 50-51.

Learning Outcomes sought: (can be copied and pasted from the course syllabus; the course syllabus outcomes can be attached.)

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		Rating				
Criteria ²	Considerations and Implications	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
		Not Included	Poor	Average	Above Average	Superior
#1. Navigation	Access to the course, information and resources is easy. ³ The navigation system is built around the user requirements and convenience, organized in a logical, easy to follow manner with minimum use of the scrollbar. ⁴	Not included	URL gateway and course are difficult to find. Excessive downloading and wait time hamper user's ability to construct his/her own learning.	Can find the course and resources but the path is cumbersome. Lack of site map and/or sequential learning formats where appropriate.	Can find the course and resources but the path is more than three clicks.	Fewer than three clicks to the course information and resources.
#2. Course Rationale or Introduction to Course	The course rationale or introduction to the course: <ul style="list-style-type: none"> matches the catalog description of the course as published on-line as well as the teaching and learning theories and learning strategies demonstrated by/identified in the course. includes clear identification of course objectives and justification (who should take the course and why).⁵ 	Not included	Catalog description does not match in 90% of the wording. This looks like a new course.	Catalog description does not match in 60% of the wording. This looks like a similar course.	Catalog description does not match in 20% of the wording. This looks like a modified version of the course.	Catalog description matches the wording regardless of the delivery format. This looks like exactly the same course. Rationale clearly identifies the value and uniqueness of the course and its online delivery. relative to the student's needs. ³

² University System of Maryland's Web-Initiative-in-Teaching project (1998). Criteria modified through the Delphi process.

³ Oblinger et al., 2001; Porter, 1997.

⁴ Horton, 2000. Gilliani (1998) describes his own use of "seven buttons on the main page [which] show how the site is organized and constitute the navigational system (p. 197)."

⁵ Higher Education Program and Policy Council of the American Federation of Teachers, AFL-CIO [HEPPC-AFT], 2000 p. 9: *All first-time distance education students should be given a clear statement of course requirements in advance. This should include: (1) all course requirements; (2) the weekly time commitment and specific computer skills required by the course; and (3) a presentation of the practical difficulties of working at a distance and what is needed to manage those challenges successfully.*; Oblinger et al., 2001; Phipps & Merisotis, 2000 p. 25:[T]here was strong agreement that students and instructors each must have clear expectations of their responsibilities which should be no different than for any course, irrespective of its delivery."

Criteria	Considerations and Implications	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
		Not Included	Poor	Average	Above Average	Superior
#3. Learning and Teaching Theories	The instructor's underlying learning and teaching theories are clearly articulated, incorporated into, and supported to promote effective learning in the course. ⁶	Not included	Reference is made only to teaching preferences and student responsibilities.	A theory was clearly used as a framework for developing the course but was not appropriate for online delivery.	The underlying theory used to develop the course was both evident and appropriate for online delivery.	Underlying theory used to develop the course was evident and appropriate for online delivery AS WELL AS content and the learning styles of students. Concept of self-learning encouraged/supported ⁷ through the identification/easy accessibility of course resources along with the use of project and research-based instruction. ⁸
#4. Instructional Design	Instructional Design—whether linear, one based on constructivist theory, or problem-based—could [sic] be flexible, matching student learning needs and outcomes as well as course assignments. ⁹	Not apparent – what design?!	Linear design with no congruence between objectives and outcomes.	Linear design with congruent student learning outcomes and assignments. Sequence determined solely by instructor.	Multiple ways to portray the relationship between student learning goals and assignments. Sequence determined by student and instructor.	Flexible design which matches student learning needs and outcomes and course assignments. ¹⁰ Sequence determined by the student. ¹¹

⁶ Horton, 2000. *P. 85: notes instructors should identify to students the "Style of Instruction" to be used in the course, although no mention of specific teaching styles is included probably because the resource is trainer-based rather than teacher-based in its focus.*

⁷ Ewing, 2000; Carr-Chellman & Duchastel, 2000; Twigg, 2001.

⁸ Carr-Chellman & Duchastel, 2000; Twigg, 2001.

⁹ HEPPC-AFT, 2000; Twigg, 2000.

¹⁰ Ewing, 2000; Twigg, 2001.

¹¹ Driscoll, 1998; Horton, 2000; Porter, 1997; and Twigg, 2001.

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#5. Goals and Objectives	Goals and objectives are clearly outlined and presented with measurable outcomes which match the teaching and are written from the student's perspective (i.e., "Students will be able to..." rather than "I want you, the student, to...") ¹²	Not apparent—what objectives?	Linear syllabus with objectives from the instructor's view: "I want you to understand the subject matter...." No measurable criteria provided. These are the same as in a F2F course.	Objectives and goals from the student's view: "Students will be able to compare and contrast" from the content with measurable outcomes. Are the same as in a F2F course.	Objectives and goals from the student's view: "Students will be able to know, do and value" the content with measurable outcomes. Same as in a F2F course.	Objectives and goals from the student view and unique to the on-line course: "Students will be able to know the content, and experience new learning styles and new technologies." Includes measurable outcomes with goals of a more general learning intent while the objectives are more specific in purpose to the requirements of the course and the student's learning needs. ¹³
#6. Learning Strategies	Learning strategies should be specific strategies of how content is to be interacted with by the learner with accommodations made for different learning styles (global and linear; visual, verbal, auditory, kinesthetic) in order to meet the needs of all learners. ¹⁴	The syllabus and course materials are posted. However, simply moving course material to on-line delivery does not necessarily mean learning is taking place.	Limited number of online activities—could be done just as well F2F.	Discussions and other instructor-led interactive opportunities attempted. Some accommodations made for different learning styles (i.e., linear/visual/kinesthetic).	Student led opportunities are apparent. Students are able to choose material.	Learning strategies not only accommodate the needs/learning styles of all learners, they are transformational: they include student-led opportunities, student choice of materials and sequence, etc. ¹⁵

¹² Horton, 2000; Harrison, 1999.

¹³ Carr-Chellingham & Duchastel, 2000.

¹⁴ Ferrell et al., 2001; Horton, 2000; Innovations in Distance Education (ide), 1998; Oblinger et al., 2001; Porter, 1997; Twigg, 2001. Ferrell (p. 599), ide (p. 21), and Oblinger (p. 22) specifically address the need to accommodate students with disabilities via the materials and technologies selected. Note: "several respondents" to the HEPPC-AFT's survey of 6 institutions of higher education conducting distance education (Phipps and Merisotis, 2000) felt that designing courses to various student learning styles was not supported by research nor practicable (pp.23-24).

¹⁵ Ewing, 2000; Horton, 2000; Oblinger et al., 2001; Twigg, 2001.

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#7. Content	Content is the specified material and information to be learned. It should be current, accurate and clear without too much detail. ¹⁶	Not appropriate to Web use.	Content is scholarly; consists of lecture notes replicated online. ¹⁷	Content is integrated into delivery methods (i.e., multi-media and visualization are incorporated to help cover the course content and keep it current/accurate) ¹⁸ .	There is evidence of original conception of content ¹⁹ with copyright issues correctly handled. ²⁰	Original content and original supportive teaching materials were generated and integrated to support student learning. ²¹ All copyright issues have been correctly handled, including written permission from students in using/posting their work (i.e., for samples, integrated content/support materials, etc.) ²²

¹⁶ Oblinger, 2001; Tricker et al., 2001.

¹⁷ Carr-Chellman & Duchastel, 2000.

¹⁸ Porter, 1997.

¹⁹ Ibid.

²⁰ Douvanis, 1997; Horton, 2000.

²¹ Willis, n.d.

²² Douvanis, 1997; Horton, 2000.

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#8. Interactivity	<p>There are built-in tools and opportunities for synchronous and asynchronous communication/ feedback/ interaction between the:</p> <ul style="list-style-type: none"> ▪ instructor and learners ▪ learner and other learners ▪ learner and content.²³ <p>Tools promoting such interactivity can include simulations, group projects, collaborative dialogue and decision-making, web conferencing, message board systems and other multi-media-based systems not to the detriment of plug-ins.²⁴</p>	Not included.	Instructor-led discussions ²⁵ with minimal effort at developing student-led discussions.	Student to student interactions are thoughtful and clearly linked to the learning goals. Faculty monitoring and response time is at least once a month.	Synchronous and asynchronous student-led interaction is central to the learning goals. Faculty monitoring time is at least twice a month.	Synchronous and asynchronous student-led interaction is central to the learning goals and flexible enough to accommodate different learning styles. ²⁶ Faculty monitoring and response time is at least once a week. ²⁷

²³ Arbaugh, 2000; Bradburn, 2002; HEPPC-AFT, 2000; Innovations in Distance Education [ide], 1998; Phipps and Merisotis, 2000.

²⁴ Horton, 2000; Carr-Chellman and Duchastel, 2000; HEPPC-AFT, 2000; Oblinger et al., 2001; Twigg, 2001;

²⁵ Driscoll, 1998. She identifies (p. 9) passive learning [i.e., instructor-directed] as a primary characteristic of poor design of any web-based training.

²⁶ Horton, 2000; Porter, 1997; Twigg, 2001

²⁷ Carr-Chellman & Duchastel, 2000; Driscoll, 1998; Horton, 2000; Oblinger et al., 2001; Phipps and Merisotis, 2000; Twigg, 2001; Vrasidas and Mclsaac, 2000.

The median recommendation is to respond in a “timely” fashion (i.e., as soon as possible) as part of the ongoing interaction and learning process/assessment (Carr-Chellman & Duchastel, 2000, p. 235; Oblinger et al., 2001, p. 37; Horton, p. 278; Phipps and Merisotis, p. 25), with ranges from immediate wherever possible--as in synchronous interactions and where asynchronous software/tools allow (Horton, p.29; Twigg, pp. 11, 14, and 15)—to “several days” for faculty who are “traveling or teaching a traditional class” (Driscoll, p. 106). Stadlander (1998, p. 147) noted that “Although I checked in once a day [on her online graduate seminar course], some students got angry if I did not respond to messages within several hours.” Only Vrasidas and Mclsaac (2000, p. 109) expressed the opinion that “...it is important to contact the students on a weekly basis to check if they are having any problems...and to get their continuous feedback for improving the course.”

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#9. Use of Mediated Resources and the Web	There is innovative and extensive use of a variety of available online resources and materials in support of the learning. ²⁸	Not included.	90% instructor-selected, mostly non-web-based. Links worked.	90% instructor-selected. A variety of resources used, including web-based ones. Links worked and search was efficient.	Both faculty and students could evaluate and post resources including web-based ones.	Both faculty and students could evaluate and post resources used, not just web-based ones—i.e., CD-ROM, print, video, DVD, real-time streaming of video, slides presentations and/or handwriting on the web. ²⁹
#10. Assessment and Evaluation	These determine whether the learner has met the goals and objectives of the course. As such, they match the stated course goals and objectives. ³⁰	Not included.	Traditional instructor-designed and led evaluation – not closely linked to course outcomes.	Traditional instructor-designed and led evaluation – linked to course outcomes.	Instructor-and student-designed and led evaluations – linked to course outcomes.	Instructor and student designed evaluations – linked to course outcomes. ³¹ Variety of techniques/approaches accommodating special needs of individual learners. ³²

²⁸ Driscoll, 1998; Ewing, 2000; Horton, 2000; Innovations In Distance Education, 1998; Porter, 1997; Twigg, 2001.

²⁹ Carr-Chellman and Duchastel, 2000; Ewing, 2000; Porter, 1997; Twigg, 2001; Vrasidas and Mclsaacs, 2000.

³⁰ ide, 1998; Twigg, 2001.

³¹ Carr-Chellman and Duchastel (2000, p. 239) note the use of peer evaluations, although primarily “as a way of decreasing (and potentially improving([sic] student-instructor interaction while increasing student-student interaction (with potential benefits as well) [sic].” Twigg (2001, p. 14) includes a brief discussion of the student-designed learning contracts used in Ohio State’s online learning program as well as the use of “longitudinal graduate follow-up studies including self-reported outcomes and evaluations by students’ employers and graduate school advisors” at Virginia Polytechnic Institute and State University (p. 27) as part of the assessment and design/evaluation of distance education courses. Vrasidas and Mclsaacs (2000, p. 110) note their evaluations of the students and course come from a variety of sources, including: “students’ moderations of online discussions...postings in online conferences...face-to-face discussions with students.”

³² Innovations In Distance Education, 1998; Oblinger et al., 2001; Twigg, 2001; Vrasidas and Mclsaacs, 2000; Willis, n.d.

Criteria	Considerations and Implications	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
		Not Included	Poor	Average	Above Average	Superior
#11. Internal Organization and Consistency	There is an obvious internal consistency among the following five areas: (1) course catalog description; (2) common (approved) course goals; (3) course objectives; (4)course content; and (5) assessments.	Matched 1/5.	Matched 2/5.	Matched 3/5.	Matched 4/5. There was a kind of "template" used which was recognizable for each portion/ module/ lesson. ³³	Matched 5/5. Instructor encouraged and utilized sequential or logical processing of learning strategies such that the student can easily progress and matriculate through both the respective assignment and the course as a whole. ³⁴

³³ Driscoll, 1998.

³⁴ Horton, 2000; Innovations In Distance Education, 1998; Twigg, 2001.

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#12. Responsiveness to Learner Needs	The instructor encourages and frequently interacts with the student(s) to promote effective learning and problem-solving ³⁵ .	Web presence does not support interactivity.	Set schedules for online office hours.	Set schedules for 1:1 meetings, online office hours – all announced online.	Flexible accommodation based on student schedules and work demands. ³⁶	Fully online with 1:1 available as resources permit, including video conferencing as well as other communication tools both synchronous and asynchronous. ³⁷
#13. Instructor's Role	This is to deliver the course material to students in the most effective manner to facilitate learning and is clearly defined at the beginning of the course.	Not explained.	Explained as Content expert.	Explained as Content expert and process facilitator. ³⁸	Explained and practiced as Content expert and manager of learning (coach).	Explained and practiced as Content validator and manager of learning, available to answer students' questions and concerns in a timely fashion as mentor, expert, facilitator, mutual colleague, etc. ³⁹

³⁵ Ewing, 2000; Horton, 2000; Twigg, 2001;

³⁶ Horton, 2000.

³⁷ Horton, 2000.; Twigg, 2001.

³⁸ Ewing, 2000.

³⁹ American Federation of Teachers [AFT], 2001; Brandon and Hollingshead as noted in Arbaugh, 2000, pp. 14-15; Driscoll, 1998; Porter, 1997.

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#14. Teaching Effectiveness	<p>This is determined when a consensus of learners can:</p> <ul style="list-style-type: none"> ▪ demonstrate course objectives have been met in all areas, and ▪ express positive reactions to the learning experience.⁴⁰ 	Online learning outcomes are not assessed.	Course objectives were met in 1-2 areas.	Course objectives were met in all areas.	Course objectives were exceeded in most areas with an online final evaluation soliciting course-focused rather than content-focused feedback.	Course objectives were exceeded in all areas with course-focused positive input from students collected at various points in the course which may allow for changes to be made in the course. ⁴¹ Such consensus indicates the instructor's ability to build community as well as knowledge. ⁴²

⁴⁰ Twigg, 2001. The following also note the importance/influence of teaching effectiveness with most of us only doing the first level, some including the second, but rarely do we look at 3 and 4.: Kirkpatrick, D. L. (1998). *Evaluating training programs: the four levels*. San Francisco: Berrett-Koehler.
 Lesh, S. G. (2000). Developing Effective Online Assessment. Conference Proceedings from Learning in HealthCare: Focus on Technology, St. Louis, Missouri, September 30, 2000; Lesh, S. G. (2001). *Web-based Learning: A Kirkpatrick's Multilevel Evaluation of Effectiveness*. Published doctoral dissertation, Capella University, Minneapolis, MN. Available from UMI Microform #9991683 www.umi.com.

⁴¹ Jegede, 1995; Twigg, 2001. Note: Jegede (p.299) notes that students in his study—based on “a systemic random sampling technique [of] 600 students [from the] University of Southern Queensland distance education [program]” (p.296) —“agree that objectives are mainly statements of *minimal* expectations” (my italics) (p.299). A consistent theme in the institutions/courses used for Twigg’s study was that students in the distance learning courses equaled and, often, exceeded the course performance objectives as compared to those students taking the same course *but via the traditional classroom venue* (pp. 17, 18, 25).

⁴² Horton, 2000; Oblinger et al., 2001; Twigg, 2001; Vrasidas and Mclsaac, 2000.

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#15. How to Get Help	The instructor provides support for students in all courses by guiding them to campus resources/ support.	Not included.	Technical support only.	Technical and study skill support only as related to the course.	Technical and study skill support in general for all courses.	Technical, career and study skill support for all courses. ⁴³
#16. Aesthetics	The online course is both pleasing and easy to view.	Not included.	Pages were too “busy” and difficult to read – not enough white space available/colors used in fonts and/or backgrounds were wearing on the eyes.	Most material was easy on the eyes, pages were not too busy, text was organized into manageable chunks of information rather than solid mega-blocks. ⁴⁴ Minimal use of distracting graphics.	Clever use of design/graphics; pages were easy on the eyes.	Clever use of design/graphics to support and underscore the learning for a variety of learning styles. ⁴⁵

⁴³ Innovations In Distance Education, 1998; Twigg, 2001. Note: Phipps and Merisotis (2000) include “student support benchmarks” which call for “information about programs...and student support services” to be provided to students along with “hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services and other sources,” as well as “access to technical information” (p. 26). Yet, the authors do not specify the delivery method for these services to online students. The primary problem with this appears to reside in the questionnaire itself, which dismisses/ignores the possibility of supplying students with information through electronic links or other online options (p. 33: “*Written information is supplied to the student about the program.*”) or is too vague on the subject (see Questions #31, 32, 34, and 35 pp. 32-33).

⁴⁴ Porter, 1997; Twigg, 2001.

⁴⁵ Harrison, 1999; Horton, 2000.

Peer Review Study for Online Learning – Rubric Reference List

- Arbaugh, J. B. (December 2000). How classroom environment and student engagement affect learning in Internet-based MBA courses. *Business Communication Quarterly*, 63, 4, 9-26.
- American Federation of Teachers. (May 2001). *A virtual revolution: Trends in the expansion of distance education*. Washington, D.C.: Author.
- Boettcher J (October,1999). *Another look at the tower of WWWebble*. Syllabus. P. 50-51.
- Bradburn, E. M. (2002). Distance education instruction by postsecondary faculty and staff: Fall 1998 (Report No. NCES 2002-155). Washington, D.C.: U.S. Department of Education, National Center for Education Statistics. Project Officer: Linda Zimbler.
- Carr-Chellman, A., & Duchastel, P. (2000). The ideal online course. *British Journal of Educational Technology*, 31, 3, 229-241.
- Douvanis, G. (1997). Copyright law and distance learning technology: Fair use in far classrooms. *International Journal of Instructional Media*, 24, 4, 229-304.
- Driscoll, M. (1998). *Web-based training: Using technology to design adult learning experiences*. San Francisco: Jossey-Bass.
- Ewing, J. (December 2000). Enhancement of online and offline student learning. *Educational Media International*, 37, 4, 205-17.
- Ferrell, K. A., Persichitte, K. A., Lowell, N., & Roberts, S. (October 2001). The evolution of a distance delivery system that supports content, students and pedagogy. *Journal of Visual Impairment & Blindness*, 95, 10, 597-608.
- Gillani, B. (September 1998). The web as a delivery medium to enhance instruction. *Educational Media International*, 35, 3, 197-202.
- Harrison, N. (1999). *How to design self-directed and distance learning programs*. New York: McGraw-Hill.
- Higher Education Program and Policy Council of the American Federation of Teachers. (May 2000). *Distance education: Guidelines for good practice*. Washington, D.C.: American Federation of Teachers AFL-CIO.
- Horton, W. (2000). *Designing web-based training*. New York: John Wiley & Sons.
- Innovations in Distance Education. (1998). *An emerging set of guiding principles and practices for the design and development of distance education*. [Online] www.outreach.psu.edu/de/ide/ [February 10, 2002].
- Jegade, O. J., Walkington, J., & Naidu, S. (1995). An investigation into students' disposition to the use of objectives in distance learning materials. *Educational Research*, 37, 3, 293-304.
- Oblinger, D. G., Barone, C. A., & Hawkins, B. L. (2001). Distributed education and its challenges: An overview. *ACE/EDUCAUSE*, 1, 1-46.

Phipps, R., & Merisotis, J. (with Harvey, M.) (2000). *Quality on the line: Benchmarks for success in internet-based distance education*. Washington, DC: The Institute for Higher Education Policy.

Porter, L. R. (1997). *Creating the virtual classroom: Distance learning with the internet*. New York: John Wiley & Sons.

Stadtlander, L. M. (1998). Virtual instruction: Teaching an online graduate seminar. *Teaching of Psychology*, 25, 2, 146-48.

Tricker, T., Rangecroft, M., Long, P., & Gilroy, P. (April 2001). Evaluating distance education courses: The student perception. *Assessment & Evaluation in Higher Education*, 26, 2, 165-77.

Twigg, C. A. (2001). *Innovations in online learning: Moving beyond no significant difference*. Troy, NY: Center for Academic Transformation at Rensselaer Polytechnic Institute.

University System of Maryland's Web-Initiative-in-Teaching project (1998). Criteria modified through the Delphi process.

Vrasidas, C., & Mclsaac, M. S. (June 2000). Principles of pedagogy and evaluation for web-based learning. *Educational Media International*, 37, 2, 105-11.

Willis, B. (n.d.) *Instructional development for distance education* (No. BBB14619). Syracuse, NY: ERIC Clearinghouse on Information Resources. (ERIC Document Reproduction Service No. ED351007)