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John Sener

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Escaping the Comparison Trap: Evaluating Online Learning on Its Own Terms by John Sener

Online learning has entered the mainstream of American higher education. Millions of students are taking online courses, and enrollments are projected to triple over the next several years (Symonds 2001). The majority of American college students are now using the Internet for their course work (Jones 2002), and more than one-third of all college courses use online course management tools (Green 2003). Although its rapid growth and increasing acceptance has somewhat muted the once-loud voices of its critics, online learning still struggles with lingering perceptions that it is somehow inferior, unproven, and limited in application relative to traditional classroom instruction. For this reason, online learning programs and courses receive closer scrutiny than their traditional counterparts. For instance, accrediting agencies often demand more extensive documentation for online degree programs or notifications of substantive change, and online learning programs usually require more detailed financial and assessment plans than traditionally delivered programs. As a result, significant energy has been put into establishing the "equivalent" quality of online courses and programs relative to traditional ones, as evidenced by the compilation of hundreds of distance education studies that document the well-known "no significant difference" phenomenon. Other compilations suggest that online learning is often better than classroom instruction (Hiltz, Zhang, and Turoff 2001).

Beyond establishing a ballpark equivalence, comparing traditional and online learning is problematic on many levels. Applying experimental design is not an appropriate approach because randomly assigning learners to courses is impractical, even unethical, and comparison courses do not exist in many cases. Quasi-experimental design is not a very useful approach either because there are many variables that cannot or should not be controlled (Saba 2000). Most individual course offerings, whether classroom or online, are essentially craft-oriented practices (Saba 2001); each course offering is as different from another as artists' handicrafts. Courses are also participatory experiences shaped by the learners themselves, making each individual offering a unique entity. So even when a significant difference is found, it is likely the result of factors not related to delivery mode, such as the instructor's level of online teaching experience, variation among student cohorts across semesters, or a host of other variables. Trying to establish the superiority of a particular delivery mode assumes a uniformity of practice that simply does not exist.

Besides the logistical problems surrounding equivalence, the comparison of online and traditional instruction also raises philosophical problems. An extreme example of this is the Institute for Higher Education Policy (<u>IHEP</u>) report "What's the Difference?" (Phipps and Merisotis <u>1999</u>), which calls for an absurd level of research verification—randomized experiments, production of predictive outcomes for individual learners, tests with content or construct validity, etc.—before full-scale adoption of online learning would be considered acceptable. The clear implication is that online learning is not good enough and needs to prove its worth before gaining full acceptance in the pantheon of educational practices. This comparative frame of reference is specious and irrelevant on several counts:

- Classroom and other traditional educational practices have not measured up to the IHEP standards either, and they have not been similarly vetted for quality.
- As many practitioners have pointed out, equivalence is a modest standard. Why aim low? Many online learning practices have demonstrated superior results or provided access to learning experiences not previously possible.
- Equivalence is often an irrelevant goal. For example, some online learning programs accept lower retention rates as a tradeoff for increasing access, while others focus on maximizing learner success by being even more selective than traditional campus-based counterparts.

- The rapid adoption of hybrid/blended learning makes direct comparisons moot since courses often combine online and classroom delivery modes.
- Most importantly, the comparative approach takes attention away from a more productive goal: improving practice by focusing on online learning in its own frame of reference.

While comparative research has served a useful purpose in helping to confirm the legitimacy of online learning, it is time to move beyond verifying the well-established "no significant difference" effect and focus instead on more immediately useful outcomes. This idea is not particularly new (see, for example, Brown and Wack <u>1999</u>), but describing some specific strategies may help accelerate the adoption of this approach.

Moving Beyond Comparisons: Evaluating Online Learning in Its Own Frame of Reference

Practitioners often base their assertions about the benefits of online learning on their practical experience (e.g., Kassop 2003). Research and evaluation activities can confirm such assertions and improve the practice of online learning without the need for comparisons with other delivery modes. Fortunately, there now are various alternative approaches to evaluating online learning within its own frame of reference. For example:

- Diaz (2000) focuses on monitoring student characteristics that facilitate or contribute to success.
- Smith and Dillon (1999) suggest that we describe the attributes of key variables based on their possible contributions to learning (the "media attribute theory").
- Saba (2000, 7) uses systems dynamics and discourse analysis as research methods "to provide a more comprehensive understanding of the field" of distance learning.
- Gunawardena's (1995) "social presence theory" is now a commonly used construct for studying online interaction and collaborative learning (e.g., Na Ubon and Kimble 2003; Tu 2002; Rourke et al. 2001).
- Swan (2002a) applies a discourse analysis approach using a content analysis instrument to measure social presence.

These approaches may be used individually; the content analysis instrument, for example, might be applied to demonstrate a significant correlation between perceived social presence and perceived learning (Swan 2002b). They also can be used in combination, as I did recently when evaluating a series of instructor-led online courses (Vignare and Sener 2002). My colleague and I identified three key questions: Is instructor-led online learning an effective way of offering these courses? What are the elements that make it effective? What improvements to the courses would make them more effective?

Although these are simple questions, none of them requires a comparison to other forms of instruction. Based on an evaluative approach that focused on student characteristics, applied media attribute theory, and social presence theory, we developed an end-of-course student survey. Applying each of these theoretical approaches produced a set of key evaluation questions (<u>Table 1</u>) from which we derived 25 survey questions. For example, the courses were designed to target busy, time-stressed adult learners who volunteered for the learning experience; their motivation levels were not known, but some had a low comfort level with online learning. We used these attributes to produce related evaluation questions: Do the courses improve access for such learners? What were students' motivation levels? How did that affect their course participation? Did the courses make students feel comfortable with online learning? Our survey yielded useful information on the key elements of overall course effectiveness, individual effective elements, and needed improvements.

Our evaluation also employed Swan's content analysis instrument to assess the effectiveness of creating social presence in course discussions. Designed to analyze written language, this instrument uses Rourke et al.'s typology (2001) to classify social presence indicators (SPIs) into three types: affective (personal expressions of emotion, feelings, beliefs, and values); interactive (verbal immediacy behaviors—such as acknowledgement, [dis]agreement, and [dis]approval—that indicate attention to others' contributions); and cohesive (verbal immediacy behaviors that support group commitment or presence).

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Within each general type are specific indicators, each of which has a supporting reference to recent or emergent research. SPIs document how learners create a sense of social presence via written language in online courses (Swan 2002a). I reviewed each discussion transcript for a selected course several times, and then coded and recorded instances of SPIs. In this case, content analysis also yielded useful information about instructor effectiveness, other effective elements, and needed improvements.

Another approach to evaluating online learning involves applying one or more of the numerous "standards sets" for excellence in distance education; these sets have been devised by accrediting commissions and other organizations. For instance, in another recent study of online student services provision (Sener and Baer 2002), a colleague and I utilized student and administrator surveys; each survey question was derived directly from a principle or standard in one of the following sets:

- the American Distance Education Consortium's Guiding Principles for Distance Teaching and Learning
- the National Education Association's Quality Benchmarks
- the Southern Regional Educational Board's <u>Principles of Good Practice</u> and <u>Criteria for Evaluating</u> <u>Online Courses</u>
- the Western Interstate Commission for Higher Education's <u>Best Practices for Electronically Offered</u> <u>Degree and Certificate Programs</u>

Surveys based on standards sets are valuable not only for the data they provide, but also as something that participating institutions can use during their interactions with the regional accrediting agency. For example, institutions have reported that demonstrating the linkage between distance learning program quality standards and commonly accepted standards sets has been looked upon favorably during accreditation or substantive change notification visits.

While commonly accepted standards sets are highly useful as a superstructure of principles or guidelines, they often lack sufficient detail for use as specific indicators of quality. The development of more specific tools (e.g., instruments, protocols, and rubrics) and criteria to indicate how the standards are met is warranted, and several institutions have taken that step. Consider the following sample:

- The <u>Michigan Community College Virtual Learning Collaborative</u> rates online courses with a variety of criteria and a qualitative four-point scale contained in its <u>Online Course Development Guidelines and Rubric</u>.
- <u>California State University-Chico</u> provides a similar three-tiered framework in its <u>Rubric for Online</u> <u>Instruction</u>; the framework is tied into the university's reward and promotion structure.
- The <u>University System of Maryland</u>'s Web Initiative in Teaching (<u>WIT</u>) developed a Peer Course Review for Online Learning Rubric. These guidelines accommodate both fully online and hybrid courses, and they identify considerations and implications for each measure, linked directly to relevant research supporting the criteria on which the measure is based.
- Among others, <u>eTech College</u> in Wisconsin as well as <u>Howard Community College</u> and <u>Prince George's</u> <u>Community College</u> in Maryland have incorporated Chickering and Gamson's seven principles for good practice (<u>1987</u>) into their own rubrics (for example, see Prince George's <u>online course assessment</u> <u>process</u>).

The collection of effective online learning practices by organizations such as <u>EDUCAUSE</u>, the <u>Sloan</u> <u>Consortium</u>, and the <u>Western Cooperative for Educational Telecommunications</u> also supports ongoing improvement within the field. Such compilations give practitioners a sampling of demonstrably effective practices while providing benchmarks for evaluating and/or improving one's own practices.

Conclusion

The original terms used for new technologies—"iron horse," "moving pictures," "computer," and so on—belie our tendency to assess the new in terms of the tried and true. Online learning is no different, and efforts to compare it with traditional forms of instructional delivery are not going away anytime soon. But we can escape the comparison trap by using some or all of the approaches described here, or by identifying other effective approaches.

The real "proof" of online learning is not in sterile comparisons with previous delivery forms, but in using research and evaluation to demonstrate effectiveness and to improve practice. In fact, just as many online learning practices have found their way into classroom instructional delivery, perhaps we can look forward to the day when some of the evaluative approaches outlined above are applied more frequently to evaluating classroom learning as well.

[Editor's note: This article was modified from a presentation at the Learning and Training Week conference in Washington, DC, April 2003.]

References

Brown, G., and M. Wack. 1999. The difference frenzy and matching buckshot with buckshot. *The Technology Source*, May/June. <u>http://ts.mivu.org/default.asp?show=article&id=459</u> (accessed December 1, 2004).

Chickering, A. W., and Z. F. Gamson. 1987. Seven principles of good practice in undergraduate education. <u>http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/7princip.htm</u> (accessed December 1, 2004).

Diaz, D. P. 2000. Carving a new path for distance education research. *The Technology Source*, March/April. <u>http://ts.mivu.org/default.asp?show=article&id=648</u> (accessed December 1, 2004).

Green, K. C. 2003. Tracking the digital puck into 2004. *Syllabus*, December. <u>http://www.syllabus.com/article.asp?id=8574</u> (accessed December 1, 2004).

Gunawardena, C. 1995. Social presence theory and implications for interaction and collaborative learning in computer conferencing. *International Journal of Educational Telecommunications* 1 (2-3): 147-166.

Hiltz, S. R., Y. Zhang, and M. Turoff. 2001. Studies of effectiveness of learning networks. <u>http://www.alnresearch.org/Html/aln_study_contents.htm</u> (accessed December 1, 2004).

Jones, S. 2002. The Internet goes to college: How students are living in the future with today's technology. Pew Internet & American Life Project. <u>http://www.pewinternet.org/pdfs/PIP_College_Report.pdf</u> (accessed December 1, 2004).

Kassop, M. 2003. Ten ways online education matches, or surpasses, face-to-face learning. *The Technology Source*, May/June. <u>http://ts.mivu.org/default.asp?show=article&id=1059</u> (accessed December 1, 2004).

Na Ubon, A., and C. Kimble. 2003. Supporting the creation of social presence in online learning communities using asynchronous text-based CMC. In *Proceedings of the 3rd International Conference on Technology in Teaching and Learning in Higher Education*, 295-300. Heidelberg, Germany, July. http://www-users.cs.york.ac.uk/~adisornn/Research/TTLHE.pdf (accessed December 1, 2004).

Phipps, R., and J. Merisotis. 1999. What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education. Institute for Higher Education Policy. <u>http://www.ihep.org/Pubs/PDF/Difference.pdf</u> (accessed December 1, 2004).

Rourke, L., T. Anderson, D. R. Garrison., and W. Archer. 2001. Assessing social presence in asynchronous

Sener: Escaping the Comparison Trap: Evaluating Online Learning on Its O text-based computer conferencing. *Journal of Distance Education* 14 (2): 50-71. http://cade.athabascau.ca/vol14.2/rourke_et_al.html (accessed December 1, 2004).

Saba, F. 2000. Research in distance education: A status report. *International Review of Research in Open and Distance Learning* 1 (1): 1-7.

Saba, F. 2001. Message posted to Distance Education Online Symposium listserv. October 21. <u>http://lists.psu.edu/cgi-bin/wa?A2=ind0110&L=deos-l&F=&S=&P=13804</u> (accessed December 1, 2004).

Sener, J., and B. Baer. 2002. A gap analysis of online student services: Report on administrator and student surveys. <u>http://www.marylandonline.org/about/sponsored_research/gap_analysis</u> (accessed December 1, 2004).

Smith, P. L., and C. L. Dillon. 1999. Comparing distance learning and classroom learning: Conceptual considerations. *American Journal of Distance Education* 13 (2): 6-23.

Swan, K. 2002a. Content analysis of course transcripts: Social presence. <u>http://www.alnresearch.org/JSP/Resources/resources_frame.jsp</u> (accessed December 1, 2004). [Editor's note: Access to this article requires free registration to the ALN Research site.]

Swan, K. 2002b. Immediacy, social presence, and asynchronous discussion. In *Elements of quality online education*, ed. J. Bourne and J. Moore, 157-172. Needham, MA: Sloan Center for Online Education.

Symonds, W. C. 2001. Giving it the old online try. *Business Week Online*, December 3. <u>http://www.businessweek.com/magazine/content/01_49/b3760072.htm</u> (accessed December 1, 2004).

Tu, C-H. 2002. The measurement of social presence in an online learning environment. *International Journal on E-Learning* 1 (2): 34-45. <u>http://dl.aace.org/9188</u> (accessed December 1, 2004). [Editor's note: Access to this article requires free registration to the AACE site.]

Vignare, K., and J. Sener. 2002. Fighting bioterrorism with instructor-led online learning. Paper presented at the 8th International Conference on Asynchronous Learning Networks, Orlando, FL, November. <u>http://www.sloan-c.org/conference/proceedings/2002/ppt/1273.ppt</u> (accessed December 1, 2004).

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