2006

The Potential of the Hybrid Course Vis-a-Vis Online and Traditional Courses

Dan Brunner

George Fox University, dbrunner@georgefox.edu

Follow this and additional works at: <http://digitalcommons.georgefox.edu/gfes>

Part of the [Religion Commons](#)

Recommended Citation

Brunner, Dan, "The Potential of the Hybrid Course Vis-a-Vis Online and Traditional Courses" (2006). *Faculty Publications - George Fox Evangelical Seminary*. Paper 23.

<http://digitalcommons.georgefox.edu/gfes/23>

This Article is brought to you for free and open access by the George Fox Evangelical Seminary at Digital Commons @ George Fox University. It has been accepted for inclusion in Faculty Publications - George Fox Evangelical Seminary by an authorized administrator of Digital Commons @ George Fox University.

The Potential of the Hybrid Course Vis-à-Vis Online and Traditional Courses

Daniel L. Brunner

George Fox Evangelical Seminary

Abstract. *Face-to-face, hybrid, and online courses are part of the panoply of course options available to students and teachers in the twenty-first century. This essay tackles the promise of hybrid courses for enhancing student learning in seminary contexts. The author contends that the introduction of hybrid instruction prompts faculty to revisit questions about pedagogy and improves student learning.*

In a 2000 address, Graham B. Spanier, president of Pennsylvania State University, called the convergence of online and traditional face-to-face education “the single-greatest unrecognized trend in higher education today” (quoted in Young 2002). Spanier’s use of the word “unrecognized” is telling. The clash over the relative values of face-to-face, traditional education and online learning has garnered most of the attention in academic arenas, while the promise of the hybrid model has largely slipped under the radar screen. But a shift is taking place. Villanti (2003) states, “In academic circles, this kind of hybrid course has been quietly gaining acceptance as researchers note its structural advantages and pedagogical effectiveness.”

My initial interest in the hybrid model was triggered at an Educause event where I heard a presentation by the staff of the Learning Technology Center at the University of Wisconsin-Milwaukee (UWM). Then, during the spring and summer of 2004 I was given a one-course reduction in my normal teaching load in order to research the hybrid model. My task was not just to gain insights for improving my own teaching, but also to explore the potential of the hybrid model for helping our seminary “think outside the box” in terms of delivering theological education. Part of my initiation into hybrid courses was to spend three days in Milwaukee, interviewing hybrid practitioners in the Learning Technology Center (LTC). Lastly, during the summer of 2004, in

order to implement what I had learned and to try out the hybrid model itself, I taught a church history course that I had overhauled from one I had previously only taught in a face-to-face classroom setting.

As a result of my research, interviews, experimentation, and student feedback from the course, I came to some convictions about the hybrid paradigm. First, all things being equal, hybrid courses have certain potential advantages over both face-to-face courses and online courses that can concretely improve the quality of student learning in theological education. Second, hybrid courses have been around long enough that we are able to delineate certain essential practices for successful implementation. Lastly, hybridization offers stimulating possibilities for re-visualizing the delivery systems of theological education, beyond the paradigms of face-to-face vs. online. Elsewhere, I have addressed my second conviction in an article that sketches out both core practices for creating effective hybrid courses and certain implications for Christian higher education (Brunner 2006). In another article, a colleague and I have tackled the issue of the relationship of hybridization to distance learning models in theological education (Delamarter and Brunner 2005).

The objective of this article, then, is to introduce the hybrid course and some of the potential strengths claimed for it over both face-to-face/traditional and online models. To start with, though, it is necessary to define terms and to clarify the context for our discussion.

Definitions and Caveats

What is a hybrid course? As stated on the “Hybrid Course Website” of the LTC, hybrid courses attempt to integrate the advantages of face-to-face teaching with some of the rewards of Web-based, computer-mediated

learning, resulting in more online learning and less seat time (when students are seated in a classroom) than a traditional course (Learning Technology Center 2004; Garnham and Kaleta 2002). It is possible for certain misunderstandings to arise at this point. Many educational institutions are devoting substantial resources to bring the Web alongside traditional teaching (Wingard 2004, 26). These Web-enhanced courses, though, can be differentiated from hybrid courses, at least for the sake of this discussion, by one factor: the reduction of seat time in a hybrid course. However, it must be noted that hybrid courses vary appreciably in how much seat time is eliminated and in how the ratio of face-to-face to online time is divided (Aycock, Garnham, and Kaleta 2002).

A perusal of research reveals a variety of terms for the particular merger of face-to-face and online that I am referring to as "hybrid." The University of Central Florida (UCF) calls them "mixed mode" courses. UCF first began exploring mixed mode courses out of necessity; a shortage of classrooms had forced the university to rent space in a theater and a high school. To conserve space the decision was made to offer courses that met half the time in classrooms and half online. Two classes, meeting every other week, could share the same classroom (Young 2002). Today UCF offers *E* courses, *W* courses, and *M* courses. *E* courses meet in traditional face-to-face settings, but are Web-enhanced and include some online technology (though seat time is not reduced). In a *W* course a student takes the whole course on the Web. The *M* course mixes modes: some of it is online supported by technology and some is on campus though class time is decreased (Lago 2001).

"Blended learning" appears to be the language of choice in the world of corporate training. Driscoll (2001) directs attention to the confusion that already exists surrounding blended learning. For some, blended learning means mixing modes of Web-based technology, while for others it refers to integrating various pedagogical approaches. Still others understand blended learning as the combination of instructional technology either with face-to-face instructor-centered training or with actual on-the-job tasks. For Mosher (2001), blended learning makes use of "multiple learning modalities," something he insists was available to companies even before the Internet or e-Learning. The key is how the learner moves in and out of these multiple learning modalities, which include but are not restricted to the Web. The concept of "blended learning" can also be found within academic circles, with examples from an assortment of disciplines (Voos 2003).

However, because the term "blended learning" is elastic, varying from setting to setting, and because it can refer to the whole of the teaching-learning enterprise, rather than just specific courses, which is the aim of this article, I have chosen to use the term "hybrid."

To summarize, then, a hybrid course, in the narrow sense, integrates face-to-face classroom and online learning in such a way that seat time is reduced.

Before cataloging some of the prospective advantages of hybrid courses, a couple of caveats should be made. First, some of these benefits cannot be claimed to be exclusive to hybrid; in other words, some of the individual advantages listed are not necessarily unique to hybrid, but could be applied to either a Web-enhanced face-to-face course or to certain online courses. However, only hybrid courses can claim *all* of the assets put forward here. The strength of my argument, then, lies not in the individual points but in their collective whole.

Second, and most importantly, I am aware that technology is – or should be – just a tool for pedagogy. I am not trying to present the hybrid course as a panacea for challenging pedagogical questions technology is forcing onto those teaching theology and religion. Nor am I trying to imply that this is the first time the teaching-learning enterprise has had to face a new reality; whether the impact of computer-assisted technologies will have as dramatic an effect on teaching and learning as the introduction of the printing press is for others to address. Nor am I trying to suggest that traditional face-to-face courses and online courses cannot be taught effectively or are not usually taught effectively. It is apparent that simply employing technology – whether in online, Web-enhanced face-to-face, or hybrid courses – does not guarantee the creation of a quality learning environment. Technology does not make a good teacher; rather good teaching makes effective use of any tool, including technology, in support of overall pedagogy and course design. It would be absurd and arrogant to claim that in terms of pedagogy neither the traditional classroom nor the online environment can be or are used creatively and effectively. Good teaching will always be good teaching and will ask pedagogical questions critical to student learning in whatever environment. Nonetheless, I am making a rather bold proposition in this article: *all things being equal*, hybrid courses potentially offer a more effective learning environment than either traditional face-to-face or online courses separately.

Strengths Claimed for the Hybrid Model

In surveying published articles and in talking with practitioners, it is possible to discern and enumerate some key advantages that proponents claim for the hybrid paradigm.

Student Performance and Retention Increase

When used in pedagogically effective ways, hybrid courses can produce an overall improvement in student learning. Research at UCF from 1999–2000 shows that

within hybrid – “mixed mode” – courses students usually have “higher success rates” than within both traditional face-to-face courses and online courses (Dziuban 2001, Segment 1; Dziuban and Moskal 2003). The LTC reports similar results. A main reason that faculty participants in a Hybrid Course Project would recommend the hybrid model to other teachers was because of the improvement in student performance (Aycock, Garnham, and Kaleta 2002). From a corporate training perspective, one study shows that students using a blended curriculum (consisting of online, face-to-face, and other modalities) performed learned tasks at a significantly higher level than those receiving online training alone (Kiser 2002).

One of the criticisms of online programs is that they tend to have higher dropout rates and less “persistence” than traditional face-to-face programs. Carr (2000, 39-41) has stated that dropout rates for online courses are sometimes 10–20 percent higher than for comparable traditional courses. Data indicate, though, that hybrid courses improve retention considerably over online courses and have at least equivalent retention to face-to-face courses (Dziuban 2001, Segment 2; Villanti 2003).

Time Flexibility for Students Is Greater

An almost universal reason that students report high levels of satisfaction in online courses and programs is time flexibility and convenience (Rovai 2002b, 320; Dziuban 2001, Segment 1). At UCF, mixed-mode courses result in even higher student satisfaction than for comparable online courses (Dziuban and Moskal 2003). Similar to online learning, students value the time and space flexibility offered through hybrid learning. At UWM the convenience and freedom of hybrid outweighed any technological hassles. Commuter students indicate that this freedom is only significant if it means that they can do work at home and not in a computer lab (Aycock, Garnham, and Kaleta 2002). Increased time flexibility, though, does not translate into less time spent in coursework – although this can be a common student misperception. With increasing numbers of students seeking seminary education without relocating – or at least while engaged concurrently in ministry – the time flexibility of the hybrid course gives seminaries structural options that involve something less than boosting their cadres of fully online courses.

Colors on the Teaching Palette Multiply

Hybrid learning provides teachers more alternatives for accomplishing course goals. Certain teaching-learning tools unique to either the classroom or online environment are now available to the teacher-facilitator. Succinctly put, “the hybrid model gives instructors more

flexibility with their classes” (Garnham and Kaleta 2002). Moore has stated that the main weakness within distance education programs is “their commitment to only one type of medium” (Moore 1989, 5). Mosher (2001) challenges organizations (and teachers) to break away from long-established views of “siloe learning” in order to adopt the multiplicity of options at their disposal. A benefit of the hybrid course is that it compels faculty through a reduction in seat time to introduce varied ways of learning into their face-to-face classes, and allows them to do so gradually.

Both face-to-face and online modalities offer something to the teaching-learning enterprise; hybrid learning allows the instructor to draw on the strengths of both. For example, online courses have shown themselves particularly adept, when used well, at developing the written communication skills of students, whereas the face-to-face experience can give students more practice in speaking and listening skills. Hybrids permit both the “reflectiveness” of asynchronous, online communication and the “immediacy” of verbal interaction (Villanti 2003). An expanded teaching palette simply gives students more options for finding their unique voice in learning. Augmenting the number of learning modalities for students – which includes but is of course not limited to hybrid courses – enables “better learning outcomes” overall than the use of a single medium (Dede 2002, C.2.).

Depth of Community Enhances the Learning Environment

When conversations turn to online education, the question of community arises. Whatever definition of community one adopts, the issue is whether the Web-based environment can provide the same depth of community as the face-to-face classroom. This issue is nuanced; both face-to-face and online settings are able to contribute to the building of community. Not surprisingly, hybrid courses can take advantage of the strengths of both. One thing is acknowledged on all sides: a strong sense of community has a positive influence on student performance and their perceived level of cognitive learning (Rovai 2002a, 43; Rovai 2002b, 330). As seminaries explore options for distance learning and as corresponding questions about depth of community surface, the distinct prospective benefits of the hybrid course ought not to be ignored.

Rovai (2002a) has looked carefully at the differences in community between the classroom and the asynchronous learning network (ALN). He defines community in terms of four components: spirit, trust, interaction, and learning. His research then compares similar courses taught both in traditional settings and through a course management system. Some of his conclusions are worth noting. Evidence points to the fact that there is “no

significant difference" in the general perception of classroom community between face-to-face and ALN courses, "provided the courses are designed and taught by experienced instructors." However, this sense of community is "more sensitive" in the online environment and the potential for failure is higher; more is at stake in the ALN community-wise and therefore greater attention by both learners and instructors is needed. Furthermore, when the variables of community used in the study were broken down, both traditional and ALN had certain advantages over the other: traditional courses, for example, showed greater adeptness at improving aspects of the spirit component of community, while ALN courses allowed for more critical and thoughtful analysis of content and interaction.

In his comparison of face-to-face and computer-mediated communities (CMC), Etzioni (1999) makes similar observations. His research demonstrates that, as systems, both face-to-face and CMC have their merits for building community. For instance, CMC provide better memory and retrieval capabilities for a system, while the face-to-face community creates a higher level of interpersonal knowledge. Hybrid allows for the strengths of each system to make up for the weaknesses of the other. Communities with a mixed communication system "would be able to bond better and share values more effectively" than communities relying on only one mode of communicating. Etzioni concludes that the proper combination of face-to-face and CMC – that is, hybrid – "promises to meet more of the prerequisites of community than either of them could separately." As teachers gain experience with the hybrid course, they will be better able to discern what that proper combination looks like for them.

The Breadth of "Interaction" is Enlarged

In an editorial on interaction within distance education, Moore (1989) suggests the educators agree on the importance of and distinctions between three kinds of interaction: learner-content, learner-instructor, and learner-learner. Hybrid courses offer the possibility of improving interaction in all three arenas over both face-to-face and online learning. With regard to learner-content interaction, hybrid expands the opportunities for exposure to content. In the traditional classroom the primary means for the delivery of content has often been lecture, combined with reading outside of class. The hybrid course usually has less lecturing, but supplements the lecture-discussion of the classroom with other ways of engaging content. In my course, I took some of the material that I had traditionally presented in lecture-discussion format and put it online, requiring students to engage it before coming to class. The classroom interaction following their preparation was improved over

previous times I had taught the class. Aycock (2003) suggests the learners' first contact with content should ideally be outside of the face-to-face setting. Admittedly, this kind of student preparation has always been possible in the traditional class, but it took the reduction of seat time to force me to examine my pedagogy and to seek to discover how students can best engage content and how face-to-face time in the classroom can most wisely be utilized.

Contrary to fears that learner-instructor interactions lessen with decreased face-to-face time, research shows that those interactions can become deeper in hybrid courses (Aycock, Garnham, and Kaleta 2002). The classroom setting has been shown to provide greater teacher "immediacy" and to lessen the psychological distance between instructor and learner, through the use of both verbal and non-verbal immediacy behaviors (Swan 2002, 24). The online environment of hybrid courses allows instructors to increase their immediacy behaviors by providing personal feedback to students through email, a weekly chat, and/or a regular presence in asynchronous discussions. The "immediacy" of this learner-centered feedback by instructors is a major predictor in both affective and cognitive learning (Martyn 2003, 21–23). Swan suggests that "an instructor who interacts frequently and constructively with students" (2002, 11) is one of three essential factors to the success of online courses. One teacher, who redesigned a large lecture course into a hybrid format, commented on his enhanced interaction with students: "I have never felt more acquainted with students enrolled in a large enrollment course than I do teaching this course in a hybrid format" (Johnson 2002). In fact, many instructors think that they get to know students better through the online component of a hybrid course because of the additional information and forums necessary for that format (Moskal 2001).

In addition, learner-learner interaction can be enriched in the hybrid course. Interaction between learners is a recognized benefit of online courses, when carefully managed and structured; students appreciate the equality and democracy of the online discussion (Swan 2002, 3–4). Because the Web has a unique "interactive quality," the networking connections between students provided by technology are changing the nature of learning (Meyer 2002, 74). The advantages of online, learner-learner interaction can then bleed over into the classroom of a hybrid course. Moskal (2001) reports that the amount and the quality of student interaction *in class* were increased through the hybrid model over a comparable face-to-face section of the same class. At UWM, when faculty participants gave reasons for how the hybrid model improved their courses, they listed the increase in "student interactivity" as one of the most important (Aycock, Garnham, and Kaleta 2002).

It Allows for a Gradual Transition from Face-to-Face to Online Learning

One of the conclusions Meyer deduces from her study of quality in online learning is that "there are probably institutions, faculty, and students who are not suited to on-line learning" (Meyer 2002, 102). With regard to students, differences in learning styles, motivation, and ability to function independently make it difficult to elevate either face-to-face or online learning over the other. Sometimes, however, students hesitate to engage online learning simply because of a fear of technology. Here hybrid offers the possibility of introducing technology in a face-to-face setting. The LTC encourages instructors to spend initial face-to-face class sessions carefully orienting students to technology and then to post complete and clear how-to instructions online; when they do, students do not find technology to be a barrier to learning. In fact, students appreciate the opportunity to learn new skills (Aycock, Garnham, and Kaleta 2002). Driscoll (2001) states that hybrid allows a shift from traditional to e-learning "in small steps, making change easier to accept."

When discussing the transition from face-to-face to Web-based learning environments, though, the primary issue is often not the reluctance of students but of teachers. Indeed, developing a hybrid course is more work than creating either an online course or a face-to-face course (Moskal 2001; Garnham and Kaleta 2002). Meyer states, "Faculty will increasingly be called upon to be content experts and instructional designers, and adept at understanding pedagogy, the new technology, and learning in an online environment" (Meyer 2002, 55). Statements like this make it easy to understand why so many teachers are fearful of diving into computer-mediated education. The hybrid course can be a promising resource for the institution that wants to reach out to a broader array of students through distance education but faces a recalcitrant faculty. Developing hybrid courses allows faculty to "ease into distance learning formats" (Gould 2003, 21), and to supplement existing course material designed for face-to-face learning without replacing it (Driscoll 2001). When the LTC takes faculty through a process for redesigning face-to-face courses into hybrid courses, one of their first recommendations is to "start small and keep it simple" (Aycock, Garnham, and Kaleta 2002; Sands 2002). In the beginning of transitioning courses into hybrids, Aycock (2003) advises that teachers adopt a "7 percent solution" whereby they take a small chunk of their syllabus and move it into an online learning opportunity, reducing seat time accordingly. Rather than trying to re-visualize a whole course, faculty can move into the hybrid course incrementally.

Expectations Are Higher

Chickering and Ehrmann (1996) suggest that new technologies, in and of themselves, "can communicate high expectations explicitly and efficiently." When faculty at a variety of institutions enhanced their courses through the Web – although not all of them reduced seat time as a result of these enhancements – one of the unexpected discoveries was that many instructors developed higher expectations for their students. Because students showed responsibility for independent learning, some faculty introduced more challenging teaching into their classes (Wingard 2004, 32). Hybrid courses, because they make greater use of the Web and technology, let faculty increase expectations for their students. This insight is particularly important for seminaries, because of the preponderance of adult learners. Data from UCF suggests that more mature learners – including adult learners – have greater success in hybrid (M or mixed-mode) courses and online (W or Web-based) courses because of the self-initiation required (Dziuban and Moskal 2003; Dziuban 2001, Segment 1). It stands to reason, then, that mature or adult learners, if they can be coddled through the ominous world of technology (preferably through face-to-face contact), can thrive in the hybrid environment and will respond favorably to high expectations from instructors.

Conclusion

In this article my specific goal has been to introduce the hybrid course and to set down some of its potential advantages over online and face-to-face, traditional courses. But as a friend of mine often says, "The devil is in the details." In order to get a more complete picture of hybrid instruction one would need to include some of the essential practices for successful implementation. The confines of this article do not allow for those details. Elsewhere (Brunner 2006), I have spelled out six of those fundamental methods, many of them collected from face-to-face conversations with practitioners and from my own (admittedly limited and anecdotal) experience: (1) the teacher must transition from primarily being a dispenser of knowledge to being a facilitator of learning, (2) hybrid courses must be re-imagined from the ground up, (3) the online and face-to-face elements of the course must be intentionally integrated, (4) socialization must be given priority, (5) course design must incorporate clarity and consistency, and (6) both students and instructors must be provided training and support.

In closing, allow me to draw a few general observations from my exposure to the hybrid course. First, preparing a hybrid course pushes the issue of pedagogy. On this point, hybrid is a step-child of online learning. The hybrid model provides an important avenue for

seeing and thinking beyond the alleged gulf between face-to-face and online. By its very nature it transcends the either-or mentality. In order to use hybrid effectively, the instructor asks which student learning objectives can best be accomplished in a Web-based environment and which in a traditional setting. In so doing, the hybrid environment opens the door to considering multiple learning modalities. Whether lecture, online interactions, research papers, simulations, exams, mentoring, role playing, collaborative learning projects, field experience, and so on, hybrid learning pushes the pedagogical question: which learning modality proves most useful in realizing the student learning outcomes of a course? Furthermore, by extension, which learning modalities best bring about the student learning outcomes of a *program*? As pointed out above, one of the advantages of hybrid learning is that it encourages the gradual exploration of multiple learning modalities, such as through 7 percent solutions.

Second, hybrid learning pushes the issue of integration. Whether in individual courses or from the macro-perspective of a program, the danger of the face-to-face vs. online dichotomy is "siloe learning," in which course or program elements function independently, in parallel universes. Often what happens in both hybrid and Web-enhanced courses is that instructors simply add online activities onto an already established course, without either genuinely considering the impact on students – the "course and a half syndrome" (Kaleta 2003) – or integrating what happens online with what takes place in the classroom. Effective integration takes place when teachers "close the loop" by taking classroom time to follow up on an online assignment (Aycock 2003). Such integration is essential not only for individual courses, but for hybrid models of distance learning.

Lastly, getting ready to teach a hybrid course raises the issue of sacrifice. There is no escaping the reality that the transition to hybrid learning is costly, both individually on the part of teachers and institutionally. As discussed above, reconfiguring a traditional course into a hybrid demands more time than either designing the original face-to-face course or developing a comparable online course. Teaching a hybrid course often involves more time than a similar classroom course. Even willing faculty – let alone the recalcitrant – need motivation from administration in the form of release time, summer contracts, mini-grants, and so forth. These financial ramifications may strike a death knell to any lofty hybrid aspirations.

So why even consider it? Those who teach hybrid courses, including this author, report recurrently that the risk is worthwhile. Even though hybrid courses involve more work from start to finish, faculty satisfaction for those courses is higher than for equivalent face-to-face or online sections of the same course. What teachers learn

pedagogically preparing hybrid courses in turn affects the way they teach other courses, including face-to-face courses (Moskal 2001; Aycock, Garnham, and Kaleta 2002). Admittedly these benefits are internal – matters of the teaching soul, if you will – more than they are external. As institutions and faculty investigate options for distance learning, including the hybrid course, we can hope that both teachers and institutions will reap some external rewards for their inevitable sacrifice.

It is hoped that this introduction to the potential within hybrid learning will help further reflection and conversation around pedagogy, integration, sacrifice, and other issues arising from the hybrid model.

References

- Aycock, Alan. 2003. Interviews by Daniel L. Brunner. October 6–7. Milwaukee, Wisconsin.
- Aycock, Alan; Garnham, Carla; and Kaleta, Robert. 2002. "Lessons Learned from the Hybrid Course Project." *Teaching with Technology Today* 8, no. 6 (March 20), <http://www.uwsa.edu/ttt/articles/garnham2.htm>.
- Brunner, Daniel L. 2006. "Using 'Hybrid' Effectively in Christian Higher Education." *Christian Scholars Review* (forthcoming).
- Carr, Sarah. 2000. "As Distance Education Comes of Age, The Challenge is Keeping the Students." *Chronicle of Higher Education* (February 11), <http://chronicle.com/free/v46/i23/23a00101.htm>.
- Chickering, Arthur W. and Ehrmann, Stephen C. 1996. "Implementing the Seven Principles: Technology as Lever." *AAHE Bulletin* 49, no. 2 (October), <http://www.tltgroup.org/programs/seven.html>.
- Dede, Chris. 2002. "The Role of Emerging Technologies for Knowledge Mobilization, Dissemination, and Use in Education." Commissioned by the Office of Educational Research and Improvement, U.S. Department of Education (January), <http://www.virtual.gmu.edu/EDIT895/knowmob.html>.
- Delamarter, Steve and Brunner, Daniel L. 2005. "Theological Education and Hybrid Models of Distance Learning." *Theological Education* 40, no. 2:145–61.
- Driscoll, Margaret. 2001. "Blended Learning: Let's Get Beyond the Hype." *LTI Magazine* (March 1), <http://www.ltimagazine.com/ltimagazine/content/printContentPopup.jsp?id=11755>.
- Dziuban, Charles. 2001. "Overview of UCF's Distributed Learning Impact Evaluation." Research Initiative for Teaching Effectiveness Website, University of Central Florida, video presentation, <http://pegasus.cc.ucf.edu/~ritel/>.
- Dziuban, Charles and Moskal, Patsy. 2003. "The Impact of Online and Mixed-Mode Courses on Faculty, Students, and Universities." Presentation at Educause 2003. Anaheim, California (November 5), <http://pegasus.cc.ucf.edu/~ritel/>.
- Etzioni, Oren. 1999. "Face-to-Face and Computer-Mediated Communities, A Comparative Analysis." *The Information Society* 15, no. 4 (October–December), <http://www.gwu.edu/~ccps/etzioni/E31.html>.
- Garnham, Carla and Kaleta, Robert. 2002. "Introduction to Hybrid Courses." *Teaching with Technology Today* 8,

- no. 6 (March 20), <http://www.uwsa.edu/ttt/articles/garnham.htm>.
- Gould, Thomas. 2003. "Hybrid Classes: Maximizing Institutional Resources and Student Learning." *Proceedings of the 2003 ASCUE Conference* (June 8–12), <http://fits.depauw.edu/ascue/Proceedings/2003/p54.pdf>.
- Johnson, John (Jack). 2002. "Reflections on Teaching a Large Enrollment Course Using a Hybrid Format." *Teaching with Technology Today* 8, no. 6 (March 20), <http://www.uwsa.edu/ttt/articles/jjohnson.htm>.
- Kalet, Bob. 2003. Interview by Daniel L. Brunner. October 6. Milwaukee, Wisconsin.
- Kiser, Kim. 2002. "Is Blended Best? Thompson Learning Studies the Question." *LTi Magazine* (June 1), <http://www.ltimagazine.com/ltimagazine/content/printContentPopUp.jsp?id=21259>.
- Lago, Mary Ellen. 2001. "The Hybrid Experience: How Sweet It Is!" *Converge* (January 30), <http://www.centerdigitaled.com/converge/?pg=magstory&id=3340>.
- Learning Technology Center, University of Wisconsin-Milwaukee. 2004. "Hybrid Course Website." <http://www.uwm.edu/Dept/LTCHybrid/> (accessed August 5, 2004).
- Martyn, Margie. 2003. "The Hybrid Online Model: Good Practice." *Educause Quarterly* 26, no. 1, <http://www.educause.edu/ir/library/pdf/eqm0313.pdf>.
- Meyer, Katrina A. 2002. *Quality in Distance Education: Focus on On-Line Learning*. ASHE-ERIC Higher Education Report: Vol. 29, No. 4. San Francisco, Calif.: Jossey-Bass Publishers.
- Moore, M.G. 1989. "Editorial: Three Types of Interaction." *The American Journal of Distance Education* 3, no. 2.
- Mosher, Bob. 2001. "Blended Learning: What Does It Really Take to Make It Work?" elementk, "Training Advice" (September), http://www.elementk.com/training_advice/html/09-01-blended_learning.asp.
- Moskal, Patsy. 2001. "Findings: UCF Online Faculty, Segment 1." Research Initiative for Teaching Effectiveness Website, University of Central Florida, video presentation, <http://pegasus.cc.ucf.edu/~ritel/>.
- Rovai, Alfred P. 2002a. "A Preliminary Look at the Structural Differences of Higher Education Classroom Communities in Traditional and ALN Courses." *The Journal of Asynchronous Learning Networks* 6, no. 1 (July).
- . 2002b. "Sense of Community, Perceived Cognitive Learning and Persistence in Asynchronous Learning Networks." *The Internet and Higher Education* 5, no. 4.
- Sands, Peter. 2002. "Inside Outside, Upside Downside: Strategies for Connecting Online and Face-to-Face Instruction for Hybrid Courses." *Teaching with Technology Today* 8, no. 6 (March 20), <http://www.uwsa.edu/ttt/articles/sands2.htm>.
- Swan, Karen. 2002. "Building Learning Communities in Online Courses: The Importance of Interaction." *Education, Communication, and Information* 2, no. 1 (May 1).
- Villanti, Cynthia. 2003. "Making the Pedagogical Case for Blended Learning." *On Campus* (October), http://www.aft.org/publications/on_campus/oct03/technology.html.
- Voos, Richard. 2003. "Blended Learning – What Is It and Where Might It Take Us?" *Sloan-C View: Perspectives in Quality Online Education* 2, no. 1 (February), <http://www.sloan-c.org/publications/view/v2n1/blended1.htm>.
- Wingard, Robin C. 2004. "Classroom Teaching Changes in Web-Enhanced Courses: A Multi-Institutional Study." *Educause Quarterly* 27, no. 1, www.educause.edu/ir/library/pdf/eqm0414.pdf.
- Young, Jeffrey R. 2002. "Hybrid Teaching Seeks to End the Divide Between Traditional and Online Instruction." *The Chronicle of Higher Education* 48, no. 28 (March 22), <http://chronicle.com/free/v48/i28/28a03301.htm>.