Changing Delivery Methods, Changing Practices: Exploring Instructional Practices in Face-to-Face and Hybrid Courses

Cambiando los Métodos de Entrega, Cambiando las Prácticas: Explorando Prácticas De Enseñanza en Cursos Presenciales e Hibridos

Meredith J. Toth
Arizona State University
Phoenix, AZ 85069 USA
Meredith.Toth@asu.edu

Audrey Amrein-Beardsley
Arizona State University
Phoenix, AZ 85069 USA
Audrey.Beardsley@asu.edu

Teresa S. Foulger
Arizona State University
Phoenix, AZ 856069 USA
Teresa.Foulger@asu.edu

Abstract

In this paper researchers investigate the ways in which redesigning a course to be delivered in a hybrid format that blends face-to-face and online course delivery instigated changes in instructional practice. In addition, researchers explored instructor perceptions about the relative strengths and weaknesses of teaching a face-to-face versus hybrid course. Analyses of self-reported instructor practices with respect to seven principles of effective instruction in undergraduate education suggest that integrating face-to-face teaching with online learning provides an opportunity to enrich instructional activities and pedagogical practices. Practical implications for instructors and suggestions for future research are also described.

Keywords: higher education, hybrid course delivery, instructional technology, online learning, distance education

Resumen

En este documento los investigadores estudian las formas mediante las cuales rediseñando un curso que será dado en formato híbrido que mezcla dictar cursos presenciales y online instigó cambios en la práctica de la enseñanza. Además, los investigadores exploraron las percepciones del instructor sobre las fortalezas y debilidades relativas a enseñar un curso presencial versus uno híbrido. Los análisis de las prácticas auto-informadas por el instructor con respecto a siete principios de enseñanza efectiva en educación para alumnos universitarios sugieren que el integrar la enseñanza presencial con el aprendizaje online provee una oportunidad para enriquecer las actividades educativas y las prácticas pedagógicas. También se describen implicaciones prácticas para los instructores y sugerencias para futuras investigaciones.

Palabras claves: educación superior, entrega de curso híbrido, tecnología de enseñanza, aprendizaje online, educación a distancia.

Introduction

Across the United States, institutions of higher education face increased pressure to accommodate rising student populations while maintaining the quality learning environments historically available to those who could afford and access a university education. Researchers and educational organizations have made calls for universities to meet the economic, social, and technological challenges of the twenty-first century (Duderstadt, 2000; Oblinger & Oblinger, 2005). These calls often center on the development of technology-infused, multi- and interdisciplinary learning experiences said to be preferred by the current generation of students (Kvavik, 2005).

Exponential levels of student growth highlight the need to serve more students using existing resources and classrooms, while maintaining relatively small class sizes to keep instructor-student ratios down. These issues present unique opportunities for university leaders to develop innovative ways of providing a high-quality learning environment for an economically and socially diverse student body.

In an effort to address these challenges, administrators and faculty in a college of education decided to investigate hybrid courses that blend face-to-face meetings with the flexibility of online instruction as a delivery method for a teacher preparation program. This study is an outgrowth of the college's commitment to investigating instructional practices and promoting technology integration throughout its academic programs. Researchers employed a single group case study to examine two research questions: 1) What changes in instructional practices did faculty participants report when redesigning a course to be delivered in a hybrid format that blended face-to-face and online course delivery? And 2) What did faculty participants perceive as the relative strengths and weaknesses of each delivery method?

Literature Review

Despite the growing recognition that active involvement in classroom activities and engagement with classmates or instructors enhance student learning and persistence (Astin, 1987; Tinto, 1997), approximately 46% of university faculty members continue to use extensive lecture in the classroom, although this number is decreasing with time (HERI, 2009). Umbach and Wawrzynski (2005) reported that instructional practices such as active learning and student-faculty interaction influence students' learning (Adamson et al., 2003; Lawson et al., 2002); however faculty members at doctoral-research universities are least likely to use certain methods of student engagement such as active and collaborative learning activities and student-faculty contact (Pike, Smart, Kuh, & Hayek, 2006).

The reliance on instructor-delivered content persists when faculty members move from face-to-face instruction to online learning. Many instructors replicate their existing instructional methods (Bonk & Dennen, 2003; Naidu, 2003), resulting in audio capture (e.g., LaRose, Gregg, & Eastin, 1998), video capture (e.g., Berner & Adams, 2004; Campbell & Swift, 2006), or reliance on computer conferencing or online discussions as the primary method of interaction (e.g., Cheng, Lehman, & Armstrong, 1991; Hollandsworth, 2007). Others, however, perceive online learning as an opportunity to focus attention on pedagogical approaches rather than the use of technology to simply deliver content (Bennett & Green, 2001; Buckley, 2002; Reeves, Herrington, & Oliver, 2004; Twigg, 2001).

Although online instruction provides greater learner access and flexibility (Bonk, Olson, Wisher, & Orvis, 2002; Graham, Allen, & Ure, 2005; Kerka, 1996), attrition rates for online courses remain high (Carr & Ledwith, 2000; Martinez, 2003; Simpson, 2004), as do drop-out rates for students during their first experiences with distance education (Chyung, 2001; Tyler-Smith, 2006). In hopes of decreasing the high attrition and drop-out rates endemic to distance learning and, at minimum, maintaining the low attrition and drop-out rates afforded traditional course delivery in higher education (Chen & Jones, 2007), some university programs have explored a hybrid delivery method that combines traditional face-to-face instruction with online technologies (Swenson & Evans, 2003). The potential of hybrid course delivery to merge the best of conventional face-to-face and online learning has received considerable attention, yet how to do this in a way that improves the teaching and learning experiences remains a topic of much discussion and continues to challenge those working in higher education (Garrison & Vaughan, 2007).

For the purposes of this study, researchers define a hybrid course as one that blends face-to-face and online instruction (Allen & Seaman, 2006). More particularly, the model used aligns with Twigg's (1999) hybrid model, which offers a more specific definition referring to the "replacement" of traditional class time with out-of-class activities such as Web-based resources, interactive tutorials and exercises, computerized quizzes, technology-based materials, and technology-based instruction. Rather than treating technology-based activities as forms of engagement separate from the face-to-face experience, instructors might integrate in-class processes with online experiences that enhance the regular classroom experience (McNeely, 2005). In this way, the blending of face-to-face and technology-supported out-of-class activities becomes a "mechanism through which students engage in existing effective educational practices" (Laird & Kuh, 2005, p. 214). Deliberate selection of technology driven by pedagogical considerations (Chizmar & Walbert, 1999) might allow instructors to reinforce face-to-face communication with online interaction (Swan et al., 2000), provide more interactive and personalized learning experiences (Holmes & Gardner, 2006), and help students develop and use their digital literacy, inventive thinking, and effective communication skills (Burkhardt et al., 2003). In addition, appropriate use of technology in hybrid courses can make on-campus students feel more connected with their peers, instructors, and the institution itself (Aspden & Helm, 2004).

Theoretical Framework

When designing courses, instructors rely on a number of interconnected factors to accomplish course and program-level goals. As such, the factors that contribute to successful instructional design and delivery are difficult to pinpoint, whether the delivery method is online, hybrid, or face-to-face (Moore, 1993). Integrating technologies further complicates instruction since quality online education must incorporate learning theory and practices from traditional face-to-face courses as well as effective pedagogical use of technology (Yang & Cornelious, 2004).

Numerous studies have explored indicators of good teaching practices and learning gains for students. An analysis by Kuh, Pace, and Vesper (1997) on mean scores of students on three indicators of good practice as rated on the College Student Experiences Questionnaire (Pace, 1990) revealed that active learning and cooperation among students were the best predictors of gains for students at baccalaureate, master's or doctoral institutions. Hartman, Moskal, and Dziuban (2005) identified six similar traits and argue that students believe excellent instructors facilitate student learning, communicate ideas and information effectively, demonstrate genuine interest in student learning, organize their courses effectively, show respect and concern for their students, and assess student progress fairly and effectively. In addition, changes (mostly increases) in programmatic emphasis on communication skills appear to influence student experiences, as do increased use of active learning pedagogies by faculty members (Lambert, Terenzini, & Lattuca, 2007).

As a predecessor of these studies, the Seven Principles for Good Practice in Undergraduate Education advanced similar characteristics of high quality teaching and learning (Chickering & Gamson, 1987). Rather than focusing on particular learning styles, instructional strategies, course delivery, student demographics, or technology use, Chickering and Gamson outlined seven core characteristics of teaching central to a successful student experience. These principles included the following:

1. Good practice encourages contacts between students and faculty.
2. Good practice develops reciprocity and cooperation among students.
3. Good practice uses active learning techniques.
4. Good practice gives prompt feedback.
5. Good practice emphasizes time on task.
6. Good practice communicates high expectations.
7. Good practice respects diverse talents and ways of learning.

The adoption of this comprehensive framework by the American Association for Higher Education, the Education Commission of the States, and The Johnson Foundation provides evidence of its application to a broad range of undergraduate curricula and learning environments (Chickering & Gamson, 1991). The Seven Principles continue to be used for their predictive validity and probable legitimacy to analyze the value of undergraduate experiences including student satisfaction, teaching practices, and even administrative considerations (Cruce, Wolniak, Seifert, & Pascarella, 2006).

By offering guidelines for instructional design, instructor behaviors, and student expectations while neither highlighting nor negating technology, this framework provides a comprehensive measurement that can be applied across a range of undergraduate education environments that incorporate distance learning techniques (Chickering & Ehrmann, 1996; Ritter & Lemke, 2000; Taylor, 2002). A survey of instructors and students participating in online courses (Batts, Colaric, & McFadden, 2006) also demonstrates an overwhelming degree of agreement with the ability of the Seven Principles to address the needs of distance learners.

The Seven Principles framework aligns with the hybrid delivery method as defined by the college under examination, in that it accommodates a variety of teaching and learning styles, yet highlights key factors critical to student success and learning. Consequently, the researchers of this study felt confident that the framework would allow instructors to reflect on their experiences and help them identify ways in which hybrid course delivery might impact undergraduate student learning experiences.

Methods

To systematically examine the effect of the design, development, and implementation efforts related to hybrid course delivery, the college participated in a three-part research study (see Amrein-Beardsley, Foulger, & Toth, 2007; Foulger, Amrein-Beardsley, & Toth, accepted). These studies provided a

mechanism for both formative and summative evaluation and helped the college advance the hybrid model as a viable and effective method of course delivery.

Participants

Five instructors who had recently revised a face-to-face course to be taught as a hybrid course agreed to participate in an exploratory study to investigate their perceptions about the ways blending face-to-face and online instruction instigated changes in their instructional practice. Each of the five instructors had previously taught their revised course in a face-to-face format and participated in a two-day intensive seminar on designing and developing hybrid courses one year prior to this study. During the year following the seminar, the instructors redesigned a two-week component of one of their face-to-face courses as a hybrid unit offered half online and half face-to-face. All of the instructors were proficient with online technology tools but had never taught an online or hybrid course before. At the time of this study, these five instructors were the only ones scheduled to teach at least one semester-long course in a hybrid format for the college, so all five were asked to participate and comprised the group at the focus of the analysis.

Design

To examine the five participants' perceptions about teaching their courses in a traditional versus hybrid format, researchers employed a single group case study approach. As stated, the single group case was defined as the community or complete set of instructors teaching at least one course in a hybrid format that replaced one day of class each week with online or out-of-class activities. These participants were defined in this case because they were similar although different enough to permit treating them as comparable within the context in which the phenomenon was examined (Ragin, 2000).

Instrument

To explore the ways in which designing a hybrid course instigated changes in instructional practices, faculty researchers developed an online Instructor Hybrid Questionnaire to collect quantitative and qualitative data via Likert-type and open-ended, free response items, all of which were aligned with the theoretical framework used in this study. The case study approach in this instance was used to solicit faculty participants' perceptions about their face-to-face and hybrid courses, as well as their perceptions about the relative strengths and weaknesses of each delivery method.

Part I of the questionnaire prompted participants to reflect on their course design when offered in a fully face-to-face format and prompted them to rate the extent to which they agreed with a series of Likert items derived from Chickering and Ehrmann's (1996) discussion of the most appropriate ways to use technologies to advance the Seven Principles (Chickering & Gamson, 1987). Part II prompted instructors to think about how the hybrid format was different and rate the extent to which they agreed with the same series of Likert items presented in Part I. Parts I and II incited participants to evaluate the extent to which they believed they taught their courses differently in a face-to-face versus hybrid delivery model on a total of 32 instructional, Likert items (4 = Strongly Agree to 1 = Strongly Disagree) aligned with the framework. In Part III faculty participants listed, in order, what they viewed as the three main benefits and the three main drawbacks of teaching in a hybrid format. Additional comments and suggestions were solicited in all three sections.

Internal-Consistency Reliability

Using participants' responses, a principal component analysis was conducted from which estimates of reliability were calculated for the Likert items included in Parts I and II of the Instructor Hybrid Questionnaire. All sections of the Web questionnaire yielded acceptable coefficient-alpha estimates of internal-consistency reliability (Cronbach, 1951) and warranted their use for the purposes of this research study (see Table 1). Values below .70 are often considered unacceptable (Nunnally, 1978).

Methods of Analyses

Descriptive statistics were calculated using participant responses to the Likert items in Parts I and II of the survey instrument. Mean differences between responses for each question posed in Part I of the questionnaire (instructors' perceptions of the general face-to-face course delivery model) were calculated using each matching question posed in Part II of the questionnaire (instructors' perceptions of the general

hybrid course delivery model). If, for example, instructors believed that they more effectively put in place mechanisms which helped them support their students' active learning in a hybrid versus face-to-face format, a positive mean difference was calculated and reported in the results. Inversely, if instructors believed that the method of course delivery did not have a differential or had a negative impact, a zero or negative mean difference was calculated and reported in the results respectively.

Table 1. Coefficient Alpha Estimates of Reliability

	Items	Part I Face-to-Face Format			Part II Hybrid Format		
		Mean	SD	α	Mean	SD	α
Overall	35	2.94	0.36	0.74	3.47	0.41	0.92
Encourages contact between students and faculty	5	3.24	0.43	0.72	3.28	0.50	0.77
Develops reciprocity and cooperation among students	6	2.90	0.44	0.78	3.57	0.38	0.73
Uses active learning techniques	3	2.60	0.28	0.70	3.33	0.67	0.83
Gives prompt feedback	5	3.00	0.14	0.75	3.60*	0.37	0.75
Emphasizes time on task	6	2.80	0.46	0.85	3.70*	0.25	0.81
Communicates high expectations	7	3.29	0.40	0.73	3.57	0.32	0.76
Respects diverse talents and ways of learning	3	2.73	0.56	0.71	3.27	0.76	0.72

*Difference is statistically significant at the $p < .05$ level

T-tests using dependent samples were used to test for significant differences between the opinions of faculty participants by item and factor. Although the majority of the factors did not yield statistically significant differences between delivery methods, this is likely due to the fact that statistical, versus practical significance was quite difficult to obtain with five faculty participants. As such, all results regardless of statistical significance are included, and results yielding statistical significance ($p < 0.05$) are noted.

Quantitative results were not expected to generalize given the small size of the group of participants. In this study t-tests were run only to determine if significant differences existed within and between the set of participants. The qualitative results may generalize, however, in more naturalistic ways via the forthcoming presentation of general trends and participants' idiosyncratic responses that might be used to better comprehend or reject the trends of the group (Flyvbjerg, 2006). These are presented to add out of the ordinary yet insightful pieces to help build understandings about this particular instructional approach.

Open-ended questions included within each section of the questionnaire were read, coded, re-read, and categorized into bins by question (Miles & Huberman, 1994). For Parts I and II, analyses aligned with the theoretical framework used in this study. For Part III, general themes were examined qualitatively using the same analytical process. Once bins became focused and mutually exclusive in nature, the items included within each bin were collapsed into categories, quantified, and labeled, after which minor themes per factor and major themes overall were extracted.

Results

Participants stated that the following factors, as aligned with Chickering and Ehrmann's (1996) discussion of the most appropriate ways to use technologies to advance the Seven Principles (Chickering & Gamson, 1987), were most positively impacted when teaching and learning occurred in a hybrid versus traditional format. Participants believed that delivering their courses in a hybrid format helped them emphasize students' time on task and provide more prompt feedback because of the lack of face-to-face communication. Both differences between instructional methods were statistically significant (see Table 1 for mean differences). Then participants reported that using a hybrid course delivery model promoted the use of active learning techniques, helped to develop reciprocity and cooperation among students and helped instructors respect students' diverse talents and ways of learning, in that order. Most negligible,

but still favoring hybrid delivery, were whether the instructional method helped them better communicate high expectations and encourage contact between them and students, in that order.

Participants also stated that the following eight within-factor items (top 25%) were most positively impacted when teaching and learning occurred in a hybrid versus traditional format: (1) using teaching strategies to accommodate their students' school, work, and home schedules; (2) tracking student participation and interaction; (3) providing mechanisms that allowed students to share ideas and respond to those of others; (4) allowing students to be active participants in learning and creating their own knowledge, particularly as applied in real-world contexts; (5) structuring lessons and assignments to help students pace their own learning; (6) providing performance feedback to students promptly; (7) giving students opportunities to communicate with their peers; and (8) providing students opportunities to reflect on what they learned. When participants responded to the free-response item(s) included within each factor they expressed the following.

Encourages Contacts between Students and Faculty

Instructors noted that teaching in a hybrid format generated higher levels of student-instructor communication than in the face-to-face format. Faculty participants believed that teaching in a hybrid format increased students' opportunities to discuss course content and personal issues related to academic success, both during face-to-face sessions and between classes. With less face-to-face time and more "homework" between sessions, the hybrid format required more online communication in order for students to succeed. Although e-mail was available for both the face-to-face and the hybrid classes, instructors noted that the face-to-face students communicated predominately in person before, during, and after class sessions. In contrast, students in the hybrid classes communicated predominantly via e-mail and online discussion boards, yet they still benefited from in-person communications before, during, and after class sessions.

Develops Reciprocity and Cooperation among Students

Instructors noted the hybrid format allowed students to share their ideas and respond to the ideas of others more frequently than in their face-to-face courses. Faculty participants perceived students in the hybrid classes as being more motivated to communicate about academics and personal items with their peers in between face-to-face sessions.

Instructors also noted that hybrid students actively participated in large and small group online discussion boards. When participants compared online rates of participation to the lower participation rates experienced in class, the higher levels of engagement in the hybrid classes were noted as an especially important benefit of the blended delivery method.

Uses Active Learning Techniques

When teaching a portion of the class online, instructors recreated inquiry-type processes online or developed new assignments that actively engaged students. This focus resulted in activities that guided students through a dynamic process of constructing their own knowledge and understanding. For example, one instructor revised a lesson that was traditionally taught by a guest who lectured for most of the time and then demonstrated examples of adaptive technologies. The revised assignment asked students not only to read assigned articles on the features of adaptive technologies and the benefits to students, but to observe a K-12 classroom and take digital photos to document their experience. Then, students created presentations that analyzed the appropriate use of adaptive technologies and areas from their observations that could have been improved.

Instructors believed that the hybrid delivery method provided more opportunities for students to discuss what they learned, reflect in writing, and relate new knowledge to past experiences in and outside of the classroom. In addition to holding students more accountable for the assigned readings through comprehension checks and online discussions, instructors felt that the constructivist online activities they designed exposed students to new technology tools and applications.

Gives Prompt Feedback

At a statistically significant level ($p < 0.05$), instructors believed that teaching in a hybrid format led them to provide students with prompt, ongoing feedback about their general academic performance, individual

and group assignments, and tests and other assessments. During face-to-face delivery, instructors usually provided formative feedback to students via oral (individual or whole group) and written means (on assignment drafts or by e-mail); they delivered summative feedback via points for in-class participation, final comments on student projects, traditional or rubric-based assessments of student work, and grades posted via the online grade book.

Instructors noted that students in the hybrid classes received feedback in these traditional ways, as well as through online, automatically-graded quizzes and surveys. By creating self-check comprehension quizzes or online assignment status updates, instructors held all students accountable for online assignments and ensured they were on task with process-driven activities and learning responsibilities. Instructors noted the online grade book as being beneficial for providing students in both the face-to-face and hybrid classes with feedback and grades.

Emphasizes Time on Task

At a statistically significant level ($p < 0.05$), faculty participants agreed that the hybrid delivery model helped students maximize their time on task, particularly because this model accommodated students' school, work, and home schedules (Strambi & Bouvet, 2003; Wingard, 2004). Because the hybrid format adopted by this group of instructors employed only asynchronous communication methods, students could complete coursework at times of their choosing and individually manage their own academic schedule between face-to-face sessions. Students could spend time off task but had to re-engage to complete course assignments and activities. As one instructor participant wrote:

"The way I see it, if the students did the assignments (which they did) they were on task 100% of the time. If they were late to start an activity because of a line at Starbuck's, they spent too much time chatting online with a friend, or began surfing the net during an assignment, they weren't wasting my or anybody else's time...just theirs. But once they were back to the course assignments, they were 100% on task, 100% on their time."

Instructors noted that their ability to hold students accountable for online activities increased students' time on task, significantly more so than during a face-to-face class. If, for example, an instructor assigned an article in preparation for a face-to-face discussion, only students who participated in class could be assumed to have completed the "required" reading. When instructors required students in hybrid classes to read an article, however, they often also required an associated online survey, quiz, discussion forum, or reflection. Working in an asynchronous environment allowed students as much time as they needed to read, study, reflect, and complete assignments and, because they were held accountable for doing so, submit what instructor participants perceived to be higher quality work products.

Communicates High Expectations

All five instructors stated that expectations in their face-to-face courses were very high. Yet all five participants stated that their expectations for students in their hybrid courses increased. Participants reported that they (1) further intensified lectures because of face-to-face time constraints, (2) held students more accountable when outside of class than within their observable distance, and (3) held students accountable for completing more rigorous, applied course assignments and applications.

Respects Diverse Talents and Ways of Learning

Some instructor participants noted that in both the face-to-face and hybrid classes they permitted students to choose assignment topics, complete assignments in varied formats, or submit assignments online or on paper, but that they held all students to the same high standards. In addition, faculty participants mentioned that they provided students in the hybrid classes more extensive online resources and that, as implemented, the hybrid model permitted greater levels of flexibility outside of class, thereby allowing more individualized and self-directed learning.

Absent in the responses of participants was any indication that they believed technology issues impaired student success. It is assumed that students who prefer face-to-face courses did not register for the hybrid classes from which the sample was drawn, and as a result the majority of the student participants were informed about the hybrid model and technology requirements before the semester started. This likely explains why technology issues seemed unapparent.

Open-Ended Responses

The final section of the Instructor Hybrid Questionnaire prompted faculty participants to respond to three open-ended questions. First, they were asked to list, in order, what they perceived as the three main benefits to teaching their courses in a hybrid format. Participants maintained that the most significant benefit was the flexibility the hybrid delivery model afforded them as instructors. In part, the instructors valued being able to present course material in different ways and freeing up time to spend on research and other professional responsibilities. The second most significant benefit was the flexibility the hybrid delivery model afforded students, particularly since instructors permitted students to engage in, direct, and pace their own learning while holding them accountable for out-of-class assignments, discussions, and team collaborations. Lastly, instructors felt that students in hybrid classes were better prepared for face-to-face class sessions than the students in the traditional face-to-face sections, mostly because instructors held students accountable for their academic activities outside of class and instructors knew they could "hit the ground running" during each face-to-face session.

Second, faculty participants were asked to list, in order, what they believed to be the three main drawbacks to teaching their courses in a hybrid format. Participants stated that the most significant drawback was the amount of time spent developing and preparing to teach a hybrid course before the semester started. Secondly, participants noted that time management was an issue in terms of monitoring individual student progress, communicating with individuals versus groups of students, and holding individual students accountable for completing course requirements and activities. With increased individualism came inefficiency. Lastly, participants mentioned the challenge of helping students become self-directed learners, particularly when they wanted constructivist instructors to "hold their hands" through non-traditional, hybrid course processes.

Finally, the questionnaire solicited additional comments from faculty participants. Instructors expressed only the desire for continued professional development activities to help them develop and enhance their online course components and better assist students with using more advanced technologies.

Practical Implications for Instructors

During the process of analyzing the participant responses to the free-response item(s) included within each factor (Chickering & Gamson, 1987) of the Instructor Hybrid Questionnaire, researchers noted patterns and correspondence in the respondents' comments. These statements were developed as practical implications for hybrid instructors and maintained alignment with the Seven Principles (Chickering & Gamson, 1987) used for the analysis. The following suggestions for implementation address the interplay between teaching methods and student outcomes, especially with respect to the role of technology in teaching and learning. Addressing these recommendations will affect the success of the hybrid course design and student learning.

Encourage Contacts between Students and Faculty

To help students understand assignment expectations and deadlines, instructors should initiate more direct communication and "check-ins" with their students during class and online. Because online communications are arguably more individualized and directed, these efforts require more time and are less efficient. However, interaction between students and faculty remains important for student learning (Pascarella & Terenzini, 1998). The use of discussion boards and e-mail extends communications between face-to-face meetings, provides additional opportunities to communicate and build community, and increases levels of individual communication between students and instructors.

Develop Reciprocity and Cooperation among Students

Instructors who regard the online component of a hybrid course as an opportunity to rethink their traditional teaching practices may develop new, innovative processes that foster students' abilities to collaborate on assignments and group projects. If desired, collaborative activities such as large and small group discussions, peer reviews, and think-pair-shares can continue to take place during face-to-face class sessions. Rather than perceiving hybrid delivery as providing less time with the students, instructors should reflect on ways to enhance instruction through online media that extend communication beyond classroom walls. Students can collaborate, review, and edit each other's work via e-mail, online group areas, or online discussion boards, with the goal of developing a strong sense of community among the students (Rovai & Jordan, 2004).

These online communication methods provide instructors an opportunity to "observe" student activity and participation in ways not usually tracked in face-to-face sessions. Even in smaller face-to-face classes, instructors do not usually verify that every student actively participates during each class period, leading students to peripherally participate and passively engage during in-class discussions. By holding students accountable for online communication and collaborative activities, instructors can expect increased participation rates and engagement from students.

Use Active Learning Techniques

To support active learning in hybrid courses, instructors may choose to focus in-class time not on content presentation, but on activities such as large and small group discussions, oral and written reflections, think-pair-shares, jigsaw discussions, and peer teaching. These types of activities foster a classroom community that can be continued in the online environment and also bridge the face-to-face and online portions of the course by making connections between the two (Aycock, Garnham, & Kaleta, 2002).

The increased accountability associated with self-directed online activities also requires students to actively take charge of their learning outside of class (Niklova & Collis, 1998). Although students often assume that online courses will be easier or require less work, structuring out-of-class activities appropriately and maintaining accountability for that work can help students apply content knowledge through projects embedded in real or potentially real settings.

Give Prompt Feedback

Because the hybrid model increases the need for students to manage their own time (Collis, Bruijstens, & van der Veen, 2003), instructors may need to "check in" on the progress of students more often to keep them on task. These checks can take place during face-to-face time via question and answer sessions and during online time via group and individual e-mails. Decreasing the number of face-to-face meetings in the hybrid format may reduce the amount of time spent on group and whole-class interaction, but interaction between instructors and students must be maintained during online time (McGiven, 1994). Although the time spent on correspondence in hybrid courses may be construed as inefficient in terms of instructor time, this communication provides important feedback for students on their progress (Rovai, 2004). Online tools such as tests and anonymous surveys also increase students' opportunities to provide instructors with formative feedback about their instructional methods and students' conceptual understanding.

To alleviate the time spent responding to repetitious questions about class procedures and assignments, instructors can establish discussion boards that address frequently asked questions and also provide students with peer and instructor feedback on written work. Comments posted online can be read and revisited by students at any time, thereby increasing students' knowledge retention and focus on critical course content, especially when studying for course exams.

Emphasize Time on Task

Because hybrid courses reduce the number of face-to-face meetings, instructors may need to strategically organize, focus, and intensify their in-class sessions. By utilizing the available face-to-face time for active learning activities and clarification of advanced concepts instructors can increase students' on task behaviors during these sessions. The expectation that students should take this time seriously must be clarified early on so that students understand daily and weekly agendas and take advantage of available opportunities to clarify concepts and upcoming assignments.

In hybrid courses that require out-of-class work as "replacement" activities for face-to-face meetings, instructors need to provide clarity and consistency in course design (Swan, 2002) by clearly describing expectations, steps, processes, and required products. Rather than spending in-class time describing the components and requirements of assignments, instructors may find this time to be better spent on other activities. This will require that instructors revise and clarify the written descriptions of assignments so as to reduce student confusion and increase the likelihood of student success and comprehension. Instructors can also help students stay on task with lengthier assignments by helping them learn to closely self-monitor (Zimmerman, 2002), providing relevant resources, implementing periodic checkpoints, and supporting the efficient and effective use of technology.

Communicate High Expectations

Courses delivered via the hybrid model may integrate a number of tools not used as frequently in face-to-face courses, including online discussion boards, surveys, quizzes, tests, and peer collaboration. By strategically integrating these tools in ways that ensure students complete the readings and other assigned activities, instructors can hold students accountable for their assignments and higher standards of learning. This may increase the workload and cognitive demand on students who might otherwise behave more passively in a face-to-face course (Lefoe & Hedberg, 2006). By helping students generate criteria to evaluate their own work and by designing activities whereby peers review and critique each other's work (Ertmer et al., 2007), instructors can communicate high expectations to their students and also actively engage them in the learning process.

Respect Diverse Talents and Ways of Learning

By structuring hybrid lessons and assignments to help students individualize and pace their own learning, instructors can respect their students' diverse talents and ways of learning and applying knowledge. When redesigning a course to be taught in a hybrid or online format, instructors may find that the increased accountability also places higher demands on student time and cognition. Although it is possible to develop a hybrid or online course that focuses largely on knowledge comprehension and uses online testing features to automatically grade and assess student achievement, instructors should be encouraged to develop activities that provide students with an opportunity to individualize their learning experiences. In addition, instructors should consider the ongoing need to explore the intersections of culture and teaching, and culture and learning (Ladson-Billings, 1995).

Conclusions

In recent years, attention has shifted from the technology itself to the need to evaluate and explore successful pedagogical approaches (Buckley, 2002). Instructional processes by which students can learn with technology (Jonassen & Reeves, 1996) should be considered before making claims about student learning and differences between face-to-face and hybrid delivery (Reeves et al., 2004). Although measuring changes in students' basic knowledge and comprehension remains important, researchers must also examine additional indicators of effective teaching to better conceptualize the differences between face-to-face and hybrid course delivery in higher education (Twigg, 2001).

As it becomes more common for institutions to develop and offer distance education courses as a means of extending their existing offerings and increasing student access (Bray, Harris, & Major, 2007), this should not preclude programs from conducting analyses to determine whether such delivery methods align with their students' interests, needs, and academic or technical preparation. This study represents an ongoing effort to investigate the ways in which blending face-to-face and online technology instigates changes in instructional practice. As a model that allows instructors to enhance face-to-face instruction with interactive course materials, activities, and processes, the hybrid delivery model presents a viable alternative for personnel in institutions of higher education who want to explore alternative, innovative methods of course delivery.

Even so, further research is needed to promote discussion regarding the methods of inquiry that should be used to evaluate distance education, as well as its broader impact on undergraduate student learning. Additional areas of future investigation might include the enhanced abilities for students to be creative and innovative; communicate collaboratively; gather, evaluate, and use digital information; think critically, problem-solve, and make decisions; conduct themselves in a legal and ethical manner in a world where they co-exist with information technology; and continually learn and adopt new technology (International Society for Technology in Education, 2007). Researchers in this study believe learning environments that address these standards can provide powerful opportunities, and look forward to expanding the literature base of technology-enriched learning in the undergraduate setting.

References

Adamson, S. L., Banks, D., Burtch, M., Cox, F., III, Judson, E., Turley, J. B., Benford, R., & Lawson, A. E. (2003). Reformed undergraduate instruction and its subsequent impact on secondary school teaching practice and student achievement. *Journal of Research in Science Teaching, 40*(10), 939-957.

Allen, I. E., & Seaman, J. (2006). *Making the grade: Online education in the United States, 2006.* The Sloan Consortium. Retrieved from http://www.sloan-c.org/publications/survey/pdf/Making_the_Grade.pdf

Amrein-Beardsley, A., Foulger, T. S., & Toth, M. (2007). Examining the development of a hybrid degree program: Using student and instructor data to inform decision-making. *Journal of Research on Technology in Education*, *39*(4), 331-357.

Aspden, L., & Helm, P. (2004). Making the connection in a blended learning environment. *Educational Media International, 4*1(3), 245-252.

Astin, A. (1987). *Achieving educational excellenc*e. San Francisco, CA: Jossey-Bass Publishers.

Aycock, A., Garnham, C., & Kaleta, R. (2002, March). Lessons learned from the hybrid course project*. Teaching with Technology Today,* 8(6). Retrieved from http://www.uwsa.edu/ttt/articles/garnham2.htm

Batts, D., Colaric, S. M., & McFadden, C. (2006). Online courses demonstrate use of seven principles*. International Journal of Instructional Technology and Distance Learning,* 3(12) Retrieved from http://www.itdl.org/Journal/Dec_06/article02.htm

Bennett, G., & Green, F. P. (2001). Student learning in the online environment: No significant difference*? Quest, 5*3, 1-13.

Berner, E. S., & Adams, B. (2004). Added value of video compared to audio lectures for distance learning*. International Journal of Medical Informatics, 7*3(2), 189-193.

Bonk, C. J., & Dennen, V. P. (2003). Frameworks for research, design, benchmarks, training, and pedagogy in Web-based distance education. In M. G. Moore, & W. G. Anderson (Eds.), *Handbook of distance educatio*n (pp. 331-348). Mahwah, NJ: Lawrence Erlbaum Associates.

Bonk, C. J., Olson, T. M., Wisher, R. A., & Orvis, K. L. (2002). Learning from focus groups: An examination of blended learning*. Journal of Distance Education, 17*(3), 97-118.

Bray, N., Harris, M., & Major, C. (2007). New verse or the same old chorus?: Looking holistically at distance education research*. Research in Higher Education, 4*8(7), 889-908.

Buckley, D. P. (2002). In pursuit of the learning paradigm: Coupling faculty transformation and institutional change*. Educause Review, 3*7(1), 28-38.

Burkhardt, G., Monsour, M., Valdez, G., Gunn, C., Dawson, M., Lemke, C., Coughlin, E., Thadani, V., & Martin, C. (2003). *21st century skills: Literacy in the digital ag*e Retrieved from http://www.ncrel.org/engauge/skills/engauge21st.pdf

Campbell, C. R., & Swift, C. O. (2006). Perceptions of compressed video distance learning (DL) across locations and levels of instruction in business courses*. Journal of Education for Business, 8*1(3), 170-174.

Carr, R., & Ledwith, F. (2000). Helping disadvantaged students*. Teaching at a Distance, 1*8, 77-85.

Chen, C., & Jones, K. (2007). Blended learning vs. traditional classroom settings: Assessing effectiveness and students perceptions in an MBA accounting course. *The Journal of Educators Online,* 4(1), November 14, 2007. Retrieved from http://www.thejeo.com/Volume4Number1/JonesFinal.pdf

Cheng, H., Lehman, J., & Armstrong, P. (1991). Comparison of performance and attitude in traditional and computer conference classes*. The American Journal of Distance Education,* 5(3), 51-64.

Chickering, A. W., & Ehrmann, S. C. (1996). Implementing the seven principles: Technology as a lever*. AAHE Bulletin, 4*9(2), 3-6.

Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education*. AAHE Bulletin, 3*9(7), 3-7.

Chickering, A. W., & Gamson, Z. F. (Eds.). (1991). *Applying the seven principles for good practice in undergraduate education (New Directions for Teaching and Learning, no. 47)*. San Francisco: Jossey-Bass.

Chizmar, J. F., & Walbert, M. S. (1999). Web-based learning environments guided by principles of good teaching practice*. Journal of Economic Education, 3*0, 248-264.

Chyung, S. Y. (2001). Systematic and systemic approaches to reducing attrition rates in online higher education. *American Journal of Distance Education, 1*5(3), 36-49.

Collis, B., Bruijstens, H., & van der Veen, J. K. (2003). Course redesign for blended learning: Modern optics for technical professionals. *International Journal of Continuing Engineering Education and Lifelong Learning, 1*3(1/2), 22-38.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 1*6, 297-334.

Cruce, T. M., Wolniak, G. C., Seifert, T. A., & Pascarella, E. T. (2006). Impacts of good practices on cognitive development, learning orientations, and graduate degree plans during the first year of college. *Journal of College Student Development, 4*7(4), 365-383.

Duderstadt, J. J. (2000). *A university for the 21st centur*y. Ann Arbor, Michigan: University of Michigan.

Ertmer, P. A., Richardson, J. C., Belland, B., Camin, D., Connolly, P., Coulthard, G., Lei, K., & Mong, C. (2007). Using peer feedback to enhance the quality of student online postings: An exploratory study. *Journal of Computer-Mediated Communication, 1*2(2), 412-433.

Finkelstein, M. J., Seal, R. K., & Schuster, J. H. (1998). *The new academic generation: A profession in transformatio*n. Baltimore: Johns Hopkins University Press.

Flyvbjerg, B. (2006). Five misunderstandings about case study research. *Qualitative Inquiry, 1*2(2), 219-245.

Foulger, T. S. Amrein-Beardsley, A., Toth, M. (Accepted). Students' roles in exposing growing pains: Using the "Dean's Concerns" to refine hybrid instruction. Manuscript accepted for publication in *International Journal of Teaching and Learning in Higher Education.*

Garrison, D. R., & Vaughan, N. D. (2007). *Blended learning in higher education: Framework, principles, and guideline*s. San Francisco: Jossey-Bass.

Graham, C. R., Allen, S., & Ure, D. (2005). Benefits and challenges of blended learning environments. In M. Khosrow-Pour (Ed.), *Encyclopedia of information science and technolog*y (pp. 253-259). Hershey, PA: Idea Group.

Hartman, J., Moskal, P., & Dziuban, C. (2005). Preparing the academy of today for the learner of tomorrow. In D. G. Oblinger, & J. L. Oblinger (Eds.), *Educating the net generatio*n (pp. 6.1-6.15). Washington DC: Educause. Retrieved from http://www.educause.edu/educatingthenetgen/

Higher Education Research Institute (2009). *The American College Teacher: National Norms for the 2007-2008 HERI Faculty Survey.* Los Angeles, CA: Higher Education Research Institute, University of California at Los Angeles.

Hollandsworth, R. J. (2007). Managing the podcast lecture: A hybrid approach for online lectures in the business classroom. *TechTrends, 5*1(4), 39-44.

Holmes, B., & Gardner, J. (2006). *E-learning: Concepts and practic*e. London; Thousand Oaks, Calif.: SAGE Publications.

International Society for Technology in Education. (2007). *National educational technology standards for students: The next generation.* Retrieved June 27, 2007, from http://cnets.iste.org/students/

Jonassen, D. H., & Reeves, T. C. (1996). Learning with technology: Using computers as cognitive tools. In D. H. Jonassen (Ed.), *Handbook of research on educational communications and technolog*y (pp. 693-719). New York: Macmillan.

Kerka, S. (1996). *Distance learning, the Internet, and the worldwide we*b. Columbus, OH: ERIC Clearinghouse.

Kuh, G. D., Pace, C. R., & Vesper, N. (1997). The development of process indicators to estimate student gains associated with good practices in undergraduate education. *Research in Higher Education, 3*8(4), 435-454.

Kvavik, R. (2005). Convenience, communications, and control: How students use technology. In D. G. Oblinger, & J. L. Oblinger (Eds.), *Educating the net generatio*n (pp. 7.1-7.20). Washington, DC: Educause.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal, 3*2, 465-491.

Laird, T. F. N., & Kuh, G. D. (2005). Student experiences with information technology and their relationship to other aspects of student engagement. *Research in Higher Education, 4*6(2), 211-233.

Lambert, A., Terenzini, P., & Lattuca, L. (2007). More than meets the eye: Curricular and programmatic effects on student learning. *Research in Higher Education, 4*8(2), 141-168.

LaRose, R., Gregg, J., & Eastin, M. (1998). Audiographic telecourses for the web: An experiment. *Journal of Computer-Mediated Communication,* 4(2), March 2, 2007.

Lawson, A., Benford, R., Bloom, I., Carlson, M., Falconer, K., Hestenes, D., Judson, E., Piburn, M., Sawada, D., Turley, J., & Wyckoff, S. (2002). Evaluating college science and mathematics instruction: A reform effort that improves teaching skills. *Journal of College Science Teaching, 3*6, 388-393.

Lefoe, G., & Hedberg, J. G. (2006). Blending on and off campus. In C. J. Bonk, & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local design*s (pp. 325-337). San Francisco, CA: Pfeiffer.

Martinez, M. (2003, July). High attrition rates in e-learning: Challenges, predictors and solutions. *The eLearning Developers Journal.* Retrieved from http://www.elearningguild.com/pdf/2/071403MGT-L.pdf

McGiven, J. (1994). Designing the learning environment to meet the needs of distant students. *Journal of Technology and Learning, 2*7(2), 52-57.

McNeely, B. (2005). Using technology as a learning tool, not just the cool new thing. In D. G. Oblinger, & J. L. Oblinger (Eds.), *Using technology as a learning tool, not just the cool new thin*g (pp. 4.1-4.10). Washington, DC: Educause. Retrieved from http://www.educause.edu/educatingthenetgen/

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourceboo*k (2nd ed.). Thousand Oaks: Sage Publications.

Moore, M. (1993). Is teaching like flying? A total systems view of distance education. *American Journal of Distance Education,* 7(1), 1-10.

Naidu, S. (2003). Designing instruction for e-learning. In M. G. Moore, & W. G. Anderson (Eds.), *Handbook of distance educatio*n (pp. 349-365). Mahwah, NJ: Lawrence Erlbaum Associates.

Niklova, I., & Collis, B. (1998). Flexible learning and the design of instruction. *British Journal of Educational Technology, 2*9(1), 59-72.

Nunnally, J. C. (1978). *Psychometric theory (2nd edition*). New York: McGraw Hill.

Oblinger, D. G., & Oblinger, J. L. (Eds.). (2005). *Educating the net generatio*n EDUCAUSE. Retrieved from http://www.educause.edu/educatingthenetgen

Pace, C. R. (1990). *College student experiences questionnaire,* 3rd edition. Los Angeles: University of California, The Center for the Study of Evaluation, Graduate School of Education.

Pascarella, E. T., & Terenzini, P. T. (1998). Studying college students in the 21st century: Meeting new challenges. *Review of Higher Education, 2*1(2), 151-165.

Pike, G., Smart, J., Kuh, G., & Hayek, J. (2006). Educational expenditures and student engagement: When does money matter? *Research in Higher Education, 47*(7), 847-872.

Ragin, C. C. (2000). Cases of "what is a case?". In C. C. Ragin, & H. S. Becker (Eds.), *What is a case? Exploring the foundations of social inquiry* (pp. 1-17). Cambridge, UK: The Press Syndicate of The University of Cambridge.

Reeves, T., Herrington, J., & Oliver, R. (2004). A development research agenda for online collaborative learning. *Educational Technology Research and Development, 52*(4), 53-65.

Ritter, M. E., & Lemke, K. A. (2000). Addressing the `Seven principles for good practice in undergraduate education' with internet-enhanced education. *Journal of Geography in Higher Education, 24*(1), 100-108.

Rovai, A. P., & Jordan, H. (2004). Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *International Review of Research in Open and Distance Learning, 5*(2). Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/192/274

Rovai, A. P. (2004). A constructivist approach to online college learning. *The Internet and Higher Education,* 7(2), 79-93.

Simpson, O. (2004, February). The impact on retention of interventions to support distance learning students. *Open Learning, 1*9(1), 79-95.

Strambi, A., & Bouvet, E. (2003). Flexibility and interaction at a distance: A mixed-mode environment for language learning. *Language Learning and Technology,* 7(3), 81-102.

Swan, K. (2002). Building learning communities in online courses: The importance of interaction. *Education, Communication, and Information,* 2(1), 23-49.

Swan, K., Shea, P., Fredericksen, E., Pickett, A., Pelz, W., & Maher, G. (2000). Building knowledge building communities: Consistency, contact and communication in the virtual classroom. *Journal of Educational Computing Research, 2*3(4), 389-413.

Swenson, P., & Evans, M. (2003). Hybrid courses as learning communities. In S. Reisman (Ed.), *Electronic learning communities issues and practice*s (pp. 27-72). Greenwich, CT: Information Age Publishing.

Taylor, J. (2002). *The use of principles for good practice in undergraduate distance educatio*n. Blacksburg, VA: Virginia Polytechnic Institute and State University.

Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education, 6*8(6), 599-623.

Twigg, C. A. (1999). *Improving learning & reducing costs: Redesigning large-enrollment course*s Center for Academic Transformation. Retrieved from http://www.thencat.org/Monographs/mono1.pdf

Twigg, C. A. (2001). *Innovations in online learning: Moving beyond no significant differenc*e. Taylor, NY: Pew Learning and Technology.

Tyler-Smith, K. (2006). Early attrition among first time eLearners: A review of factors that contribute to drop-out, withdrawal and non-completion rates of adult learners undertaking eLearning programmes. *MERLOT Journal of Online Learning and Teaching,* 2(2), 73-85.

Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education, 4*6(2), 153-184.

Wingard, R. (2004). Classroom teaching changes in web-enhanced courses: A multi-institutional study. *Educause Quarterly, 2*7(1), 26-35.

Yang, Y., & Cornelious, L. F. (2004, October). Ensuring quality in online education instruction: What instructors should know? *Paper Presented at the Association for Educational Communications and Technology Conference,* Chicago, Illinois. doi:ERIC Document Number: ED484990

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice, 4*1(2, Becoming a Self-Regulated Learner), 64-70.

Appendix: Instructor Hybrid Questionnaire

Part I of the Instructor Hybrid Questionnaire asked faculty participants to reflect back to when they taught all of their class sessions in a face-to-face format and rate the extent to which they agreed with the following statements. Part II asked faculty participants to think about how the hybrid unit of instruction (or the hybrid format in general) was different than teaching the class in a fully face-to-face format, then rate the extent to which they agreed with the same set of statements. Items marked with an asterisk (*) represent open-ended items.

Part I: 100% F2F CLASSES -- AND -- Part II: HYBRID CLASSES	Strongly Agree	Agree	Disagree	Strongly Disagree
ENCOURAGES CONTACTS BETWEEN STUDENTS AND FACULTY				
1. I gave students opportunities to discuss personal items with me.				
2. I gave students opportunities to discuss academic items (content and assignments) with me.				
3. I gave students opportunities to communicate with me during instructional time.				
4. I gave students opportunities to communicate with me outside of class.				
5. My students initiated communication more often than I.				
*6. In what ways could students communicate with you and what methods did you use to communicate with them?				
DEVELOPS RECIPROCITY AND COOPERATION AMONG STUDENTS				
7. I gave students opportunities to discuss personal items with each other.				
8. I gave students opportunities to discuss academic items (content and assignments) with each other.				
9. I gave students opportunities to communicate with their peers during instructional time.				
10. I gave students opportunities to communicate with their peers outside of class.				
11. I gave students opportunities to collaborate with each other.				
12. I provided mechanisms that allowed students to share ideas and respond to those of others.				
*13. What mechanisms did you put in place for students to interact with each other?				
USES ACTIVE LEARNING TECHNIQUES				
14. Students were passive recipients of knowledge (sat in class listening to the instructor, memorized prepackaged assignments, spit out answers, etc.).				
15. Students were active participants in the learning process (talked about what they learned, wrote reflectively, related to past experiences, etc.).				
16. Students were active participants in creating their own knowledge situated in real-world contexts (application of knowledge, simulation, synthesis, etc.).				
*17. What mechanisms did you put in place to support active learning?				

GIVES PROMPT FEEDBACK

18. I used my assessment of student knowledge to inform my instruction.				
19. I used student feedback to inform my instruction.				
20. I provided academic feedback to students (results on tests and assignments, grades) promptly.				
21. I provided performance feedback to students (group processes, student interactions, student leadership skills) promptly.				
22. I provided students opportunities to reflect on what they learned.				
*23. What type of feedback did you provide your students?				
*24. In what ways did you provide feedback?				

EMPHASIZES TIME ON TASK

25. I allocated appropriate amounts of time for instructional activities.				
26. I maximized students' time on task.				
27. I tracked student participation and interaction.				
28. I used teaching strategies that allowed students to learn outside of class.				
29. I used teaching strategies that accommodated school, work and home schedules.				
30. I provided materials that allowed students access to important resources without requiring they be on campus.				
*31. In what ways did you emphasize students' time on task?				

COMMUNICATES HIGH EXPECTATIONS

32. I held students accountable for meeting high standards.				
33. I taught lessons which were cognitively demanding for students.				
34. I assigned activities which were cognitively demanding for students.				
35. I helped students apply what they learned.				
36. I helped students generate their own criteria to evaluate their own work.				
37. I encouraged students to reflect on or evaluate their own work.				
38. I encouraged students to critique or evaluate peers' work.				
*39. In what ways did you hold students accountable for meeting high standards?				

RESPECTS DIVERSE TALENTS AND WAYS OF LEARNING

40. I used students' diverse talents and styles of learning to individualize instruction.				
41. I individualized course activities permitting students to have different learning experiences.				
42. I structured lessons and assignments to help students pace their own learning.				
*43. In what ways did you accommodate diverse learners?				

Part III: OVERALL Questions		
In order, what do you see as the THREE main benefits to teaching your courses in a hybrid format?		
1.	2.	3.
In order, what do you see as the THREE main drawbacks to teaching your courses in a hybrid format?		
1.	2.	3.
If you would like to add any additional comments, please do so.		

Manuscript received 25 Feb 2010; revision received 16 Jul 2010.