Design Considerations for Supporting the Reluctant Adoption of Blended Learning

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Abstract
Blended learning, described as the integration of online and classroom teaching, can range in complexity from the augmentation of traditional instructional methods to transformational course redesign. In this case study, an introductory communication course was redesigned by a team to blend online and classroom learning. Where team design approaches typically involve instructor participation, thereby allowing them to reconceptualize their teaching using technology, this paper examines how various design choices, with little instructor input, affected their ability and willingness to adapt to the blended course environment. Through an analysis of semi-structured interviews with instructors over two iterations of the course design, this paper provides insight into how the instructors, who were experienced with teaching in a traditional setting, struggled with the new format. The analysis reveals three themes connected to pedagogical decision-making – consistency versus flexibility, pedagogical dissonance, and student–instructor engagement – that describe the challenges instructors face in this changing environment. Suggestions are offered for institutions and course designers looking to implement blended learning programs.

Keywords: blended learning, instructional design, undergraduate education

Introduction
The authors of the 2012 New Media Consortium Horizon Report note that "education paradigms are shifting to include online learning, hybrid learning and collaborative models" (Johnson, Adams, & Cummins, 2012, p. 4). Effective online learning design requires knowledge not only of the communicative and educational strengths of various technologies, but of the implications of technology implementation on teaching and learning practices (Ocak, 2011; Power, 2008; Vaughan, 2007). Online and blended learning requires more precise planning prior to course delivery and often demands a team approach to course design and implementation (Power, 2008). Instructors frequently report that the move to blended learning brings with it the need to adopt new roles, learn new technologies, and revisit long-held beliefs about teaching and learning (Gerbic, 2011; Stacey & Gerbic, 2008; Yuen, 2011). Given the pedagogical transformation required when making the transition to blended learning, faculty must be central participants in projects in which blended learning is implemented. However, where blended learning is imposed, faculty may not have the opportunity to make the pedagogical transition to a blended teaching environment and may experience a disconnect between their existing pedagogical approach and the requirements of online instruction. This case study explores the way in which various design decisions worked to engage or distance faculty reluctant to teach in a blended course environment.
Literature Review

Definitions of blended learning tend to vary depending on the demands of context and experience. Ocak (2011) interviewed 117 faculty members from four universities about their experiences with blended learning. When asked about their understanding of the key characteristics of blended learning, faculty suggested a range of definitions based on how they had integrated web-based technologies into their face-to-face teaching. Ocak reports such varied uses to include increasing opportunities for student interaction outside class time, providing meaningful learning activities, helping faculty follow student progress, and providing immediate feedback. Similarly, in their extensive review of blended e-learning in the United Kingdom, Sharpe, Benfield, Roberts, and Francis (2006) observed that the term “blended learning” was used differently in the various institutions they visited. In their study, definitions of the term ranged from the provision of supplementary resources for essentially traditional courses, to transformative course practices in both the classroom and online, to student-driven holistic approaches to learning. Sharpe et al. concluded that it is the flexibility in the definition of blended learning that has allowed it to flourish as a response to a broad range of institutional factors such as increasing class sizes, individual approaches to teaching, and expectations for technology integration with higher education.

Garrison and Kanuka (2004) suggest that e-learning environments fall on a continuum from enhanced learning, characterized by minimal integration of online and classroom strategies at one end, through blended learning with a careful mix of strategies to integrate both environments, to fully online learning at the other end. They note that blended learning is not just layering online strategies onto a traditional classroom format. Rather, blended learning requires careful integration of online and traditional learning designs, a task that requires expert knowledge not only of teaching, but also of the strengths of various technological implementations for learning (Derntl & Motschnig-Pitrik, 2005).

Central to descriptions of blended learning is the intimate relationship between implementations of technology and the pedagogy that it supports. Sharpe et al. (2006) note that, when blended learning is characterized as the mere provision of online supplementary resources, "learning and teaching remains predominantly traditional" (p. 22). However, they observe that blended learning has a transformative effect on course design and on teaching and learning practices when new pedagogical approaches are introduced.

Regardless of the degree of technology use in blended learning, the process of developing online materials requires planning that considers the course as a whole. Cowie and Nichols (2010) indicate that academics report that the process of developing a blended course diverged substantially from that expected when planning a classroom-based course. Academics' experience of classroom-based course planning was often week-by-week with the expectation that content or activities might change as the course progressed. The integration of online materials and activities with classroom instruction required substantial upfront and systematic planning in support of pedagogical aims (Garrison & Kanuka, 2004; Littlejohn & Pegler, 2007; Rovai, 2007; Tallent-Runnels et al., 2006). Cowie and Nichols describe this as a transition from a teaching/pedagogical culture of "independence, autonomy and self-reliance" to that of "coordination, transparency and consultation" (p. 82).

Much of the research examining the implementation of blended learning has tended to focus on projects in which the course instructor takes a lead role in adapting the course design (Cowie & Nichols, 2010; Ocak, 2011; Power, 2008; Sharpe et al., 2006). Reports of these projects demonstrate the transformative effect the design process has on teaching when instructors are centrally involved; however, less is understood about how the process affects the teaching experiences of instructors who take up a blended design after the design process is complete. Through an analysis of semi-structured interviews with instructors teaching across two iterations of a blended course in professional communication, we explore how design decisions and contextual factors affected instructors who were not part of the design process and examine their conclusions about the value of blended learning.

Background

The course at the center of this case study is a multi-sectioned introduction to professional communication. Historically, the course was delivered in a three-hour workshop format with 28 to 30 students per class, with both sessional and full-time instructors teaching the course. While there is a consistent textbook, instructors determined their own teaching and assessment methods. Assessment typically involved a combination of written assignments, quizzes, and an oral presentation. The course was required for a number of undergraduate programs, and approximately 1,200 first and second year
students enroll in it each year. In the face of increasing enrollment and institutional pressure to move to larger class sizes and to introduce consistency across sections, the course was redesigned in a blended format, with the equivalent of one online hour and a two-hour face-to-face workshop per week.

After initial consultation with course instructors, a team consisting of an instructional designer, an experienced course instructor, and a departmental administrator developed a pedagogical and technological structure for the blended course. Seven online modules were developed with the goal of preparing students with introductory knowledge that could then be developed in the classroom. Assignments were standardized in terms of theme and weighting, and teaching assistants were hired to assist with the online elements of the course. The course was implemented for the first time during Winter 2011, and was subsequently modified for the Fall 2011 and Winter 2012 semesters.

In the first iteration (I1) of the course (Winter 2011), the structure included six blended activities to provide students with the opportunity to prepare for in-class work. In four of these activities (a skit, a grammar game, a visual poster design presentation, and chapter quizzes) students were expected to work together online to prepare material that was to be delivered in-class. An online forum was available for group work. The other two blended activities required students to prepare draft assignments outside of class time that were then reviewed in class. The other online-only activity asked students to write four online journal entries about textbook and module content. In addition to the blended activities and assignments, there were three course-wide one-hour lecture-style class meetings. There was some initial resistance to the blended course format on the part of the instructional staff; therefore, a goal of this initial design was to preserve some instructor autonomy in the classroom, while attempting to connect online and face-to-face learning for the students.

In the second iteration (I2) of the course (Fall 2011 and Winter 2012), the primary design maintained the focus of using the online space to prepare students for in-class activities and assignments; however, blended activities that used class time – like the skit and the grammar game – were eliminated. The course-wide meetings were reduced from three to one, and the single meeting was used to orient the students to the course.

Method

This paper discusses data obtained through semi-structured interviews with instructors of the blended course. Interviews took place following the first iteration of the course, and in Spring 2012 after the second iteration. All 16 instructors teaching the course in the three semesters were invited to participate in the interviews. Overall, seven interviews were completed with instructors who were finishing or had just finished teaching the blended course. Of these participants, three taught the first iteration (P1, P2, and P4) of the blended course in Winter 2011, and four participants (P5, P6, P7, and P8) taught during the semesters of Fall 2011 and Winter 2012 (I2). One instructor taught both versions of the course design. Instructor experience with the course ranged from one year to several years. Participant experience with web-based technologies was similarly varied.

The interview protocol included five questions with a focus on evaluating the format and materials of the course, as well as inquiring into how the course could be revised or improved. A research assistant conducted the interviews, which were recorded, transcribed, and confirmed by participants prior to analysis by the research team. Identifying information was removed to protect respondent anonymity.

Data analysis relied on inductive content analysis (Hsieh & Shannon, 2005) in which the transcripts were reviewed for emerging themes and categories. Analysis focused on categorizing the overall issues and experiences of the instructors, allowing the themes to emerge from the words of the instructors (Miles & Huberman, 1994). Themes were then corroborated through a second coder. In the following we outline three thematic challenges instructors identified in light of their experiences with the blended course: consistency and flexibility, pedagogical dissonance, and changing teacher–student engagement. Together these themes depict instructor reflections on their understanding of their own teaching when required to adapt to a course design that implements an alternative pedagogical orientation.

Results and Discussion

Challenge #1: Consistency versus Flexibility

Following a traditional instructional design model (Rothwell & Kazanas, 2008), initial analysis of the course prior to implementing the blended design involved reviewing the existing course syllabi with a focus on assignments, topics, assignment weightings, and timing. While there tended to be some
variation in weighting, implementation, and order of delivery, the course assessments typically included a number of small writing assignments, one oral presentation and a final report. Although the assignments varied according to focus, there was conceptual consistency in terms of the topics being assessed, thus, consistency across sections was achieved by developing a shared syllabus outlining assignment topics and grade weights.

With the assessment structure determined, the team identified the topics that would be introduced online in support of in-class student learning. Online modules organized around the key topics were designed to align with the assignments and activities to provide students with the opportunity to apply their learning either in class or online. The content developed for the online modules included textbook chapters, supplemental material, and links to online resources.

An initial goal for the design of the blended course was to ensure that instructors had some flexibility in terms of topic order and assignment focus while maintaining consistency across course sections. Although instructors were able to design their own assignments, the topic order became relatively fixed. As one instructor observed following the first term (I1) "I tried to change the whole thing and I couldn't, I tried to change a little bit and I couldn't, so I changed nothing" (P4). Another instructor noted: "I remember puzzling over the course schedule that was given to us. I mean we could change it around but it was very hard to do too many changes because of all the things we had to do" (P2). The elements of the course that were used to introduce consistency across sections such as the assignments and the integration between the assignments and the online modules appeared to create structural complexity leading to a lack of flexibility for the instructors.

Frameworks for effective blended learning tend to outline the principled movement between online and offline spaces (Garrison & Vaughan, 2008; Littlejohn & Pegler, 2007; Power, 2008). Power, for example, describes a horizontal course syllabus model that breaks down a course into discrete units, based on learning objectives, each of which describes a sequence of before-class learning activities (individual and/or team) and in-class learning activities designed around a particular content element. Key to design frameworks is the development of strong integration between the two environments (Garrison & Vaughan, 2008; Stacey & Gerbic, 2008) where learning activities in one environment support learning in the other. In practice, this integration can be difficult to achieve. Littlejohn and Pegler observe that "while the word 'blended' implies a seamless integration or intermingling of e-learning and conventional teaching approaches and environments, this is not usually what is offered in colleges and universities" (p. 30). Instead, they suggest that e-learning is typically introduced alongside traditionally taught course elements resulting in a "lumpy" (p. 30) blend with new online and conventional classroom components existing side-by-side. This type of "lumpy" blending was reaffirmed after I1 as one respondent observed, "I think my concern is that as I said there appear to be two parallel courses. And most times the hybrid had very little to do with what was going on in the class" (P2).

Instructors had to ensure that their students were clear about assignment due dates and requirements not only for the in-class elements, but also for the online assignments that fed into the classroom activities. As one instructor observed about the students "The first half of the course, they were so dizzy, they didn't know what they were doing minute-to-minute" (P4). In the first iteration of the course design, there were many small assignments that straddled the online and classroom environment. There were also four online-only assignments worth one mark each. Therefore, although the students were kept busy, the complexity introduced by the attempts at integration added to the managerial workload of the instructors (Kaleta, Skibba, & Joosten, 2007). In the revised format (I2), the design team made an effort to simplify the structure by reducing the types of activities that required integration between the online activities and the in-class activities, and by increasing the value of the online assignments. An instructor teaching the course in its blended format for the first time in the course's second iteration (I2) observed that:

"I think the course did a reasonable job of balancing the creation of a standard template while still allowing some flexibility among the different instructors using it. There's also the opportunity to shape the course somewhat towards individual instructors' interests and assignments and things like that. So that's tough to do. So I think that was a reasonable balance between conformity, uniformity, and individual instructor preference." (P5)

As this instructor notes, a tension existed in a course design that introduced consistency while maintaining opportunities for flexibility. Overall, instructors suggested that the course was too complex where integration was overly prescriptive, through the use of numerous small assignments designed to
direct students from the online to the classroom activities. In the future, as the course develops, design will focus on balancing the points of consistency with the need for instructor flexibility in their use of in-class time. In doing so, the goal was that instructors would retain an important sense of autonomy in the classroom at the same time that students interact with consistent online activities.

**Challenge #2: Pedagogical Dissonance**

The blended design of the first iteration (I1) of the course focused on the attempt to integrate online and in-class teaching. As much as possible, all online content was connected with an activity that required the students to demonstrate or apply learning in class. There were four assignments that included an integration of the online and in-class environments: an interactive competitive grammar game, a collaboratively developed skit demonstrating a key concept in the course, a group presentation of visual design concepts and textbook reading quizzes. All of these activities required students to prepare online, either individually or collaboratively, for an assignment or activity that took place in-class. Because instructors had lost one hour of contact time with their students, the overriding intention of the design was to ensure that students arrived to their classes familiar with the concepts that were to be discussed, thereby reducing the need for in-class content delivery.

In interviews following the first semester (I1), instructors indicated that they encountered challenges teaching the course using the new blended course design. These challenges included: the erosion of in-class teaching time by in-class activities that, in their view, failed to help students learn; a focus of the online content that was inconsistent with what they believed was necessary for the course; and an inability to teach topics in a preferred order. When considered together, these comments suggest that instructors experienced distance between their pedagogical approaches to teaching the course and the materials and activities implemented within the blended course. One instructor suggested that the design team "get rid of all the fluff stuff" (P2). Another instructor considered the in-class activities as not only a waste of class time, but also that they reduced the reputation of the course: "... to waste your class – your precious time that you are trying to actually teach things, doing these kinds of things, I think could have lowered the credibility of things" (P4). The underlying message was that the activities introduced through the blended course materials were not considered to have pedagogical value by the instructors. Indeed, a prominent finding in all the interviews from I1 can be described as a kind of pedagogical dissonance displayed by the instructors when faced with the need to teach using the activities and structure of the blended design.

Following the first semester, changes were made to the design of the course and three of the blended activities that used in-class time were eliminated. These activities, originally inspired by pedagogical methods used by the lead instructor on the design team, were not consistent with the way that instructors taught the associated topics. Because instructors had not integrated these activities into their teaching, they were left with the perception that their in-class time was not only outside of their control, but was also not pedagogically valuable.

Overall, there were fewer concerns expressed by instructors in the second round of interviews (I2) about wasted time in the classroom. Instructors felt they had more time to teach in a manner consistent with their personal pedagogical approaches. For example, one participant observed: "I think the workshop portion of the course is really quite a strength as well, so being able to interact with the instructor and having smaller class sizes is really nice" (P6). However, an instructor experienced with the course, but new to the blended design, expressed frustration over the lack of time available for lecturing, noting that "in many ways, I sort of found myself, and of course the class time was limited too. Though I did manage to get in some lectures, at least truncated versions" (P7). There remained a sense that instructors were struggling against the course design in terms of pedagogical approach, and more than one participant from both rounds of interviews (I1 and I2) indicated that they felt more like a teaching assistant who was supervising the class than an instructor with primary responsibility for teaching:

"I had to drop all my lectures and I like to emphasize specific aspects of the course. And in this case, basically I am just sort of functioning as a workshop supervisor and I answered wherever questions were there and, you know, mark the assignments." (P7)

**Gerbic (2011)** observes that university teachers have "strong historical and personal experiences of face-to-face teaching and learning and these are reflected in their beliefs about teaching and deeply embedded in their practices" (p. 222). Research examining the transition to adopting technology in teaching repeatedly finds that the process requires that instructors re-examine their often-tacit beliefs and
practices about learning and teaching (Davis & Fill, 2007; Kaleta et al., 2007; Kirkwood, 2009; Littlejohn & Pegler, 2007). In order to avoid simply bolting technology onto classroom instruction blended course design calls for an understanding of how various technologies can support specific learning objectives. Instructors discover that they must not only learn to use technological tools, but more importantly, they find that they are required to learn new methods of teaching in the online environment (Kaleta et al., 2007). Kaleta et al. interviewed instructors to explore their experiences with the transition to blended learning and find that instructors needed “to leave their previous constructs of what a teacher is behind and to anticipate how the new model redefines them, their course, and their students. Instructors are no longer just ‘teaching’; they are facilitators of the learning process” (p. 2).

This transition to teaching in a blended environment often occurs through a process of redesigning a course with the support of educational technologists and instructional designers. Instructors work with others to think through the design of their courses, develop activities to match objectives, and plan and develop content, often far in advance of course delivery. Cowie and Nichols (2010) note that this process can have a profound effect on the way that instructors think about course development, technology, and their role as facilitators of student learning (in opposition to deliverers of content). While much of the research examining the transition to blended learning focuses on instructors and/or teams who redesign courses that will be taught by the instructors themselves, in this case study, the instructors were not a direct part of the development process. Instead, instructors were provided with packaged assignments, activities, and online materials without the opportunity to examine their teaching or the role of technology in instruction. The course design, in effect, represented the design team’s pedagogical methods and values, leaving the instructors to integrate the activities and approaches into their existing teaching methods. The results provided a significant pedagogical dissonance for the instructors, whereby they struggled to adapt a more traditional understanding of teaching to an alternative, blended classroom format.

Challenge #3: Changes to Student–Instructor Engagement

The implementation of the blended course introduced a number of changes that challenged instructors’ perceived ability to establish student–instructor interaction. Respondents expressed this perception in the interviews as a sense of lost connection with the students, a disconnection with what students were doing online, and a lack of clarity about the role of the teaching assistants within the course.

Prior to the implementation of the first iteration and in response to initial instructor resistance to the blended course approach, the design team made an effort to ensure that instructors were not required to engage with students online. While this decision was expedient, it had a profound effect on instructors’ sense of connection with their students. Not only did instructors feel disconnected from the online elements of the course, they expressed a perceived lack of connection with their students in class as well. One instructor (P4) felt this loss most deeply, observing: “I didn’t get to know the students” and “Students came to see me less.”

In its traditional workshop format, the course was focused on skills development with regular student–instructor interaction and the curriculum design tended to scaffold student writing through a series of increasingly complex genres. Instructors and administrators fiercely protected small class sizes (no more than 28 students per section) and, in fact, the move to a blended design was made to sustain the workshop format (albeit, reducing face-to-face time from three to two hours per week). Graduate teaching assistants (TAs) were integrated into the management of the course to take over a portion of the marking load and to assist instructors and students with the online elements of the course. Under the supervision of a course coordinator, the TAs marked one major assignment and all the online assignments. The TAs were also available weekly for office hours.

The relationship between the TAs and the workshop instructors was not clearly delineated in the beginning. Some instructors made the choice to engage with the teaching assistants around marking standards and student issues, while other instructors maintained a distance from the online elements of the course, which included the TAs. As one participant observed:

“We didn’t even know who was going to be in charge of – like if there is a problem, do they go to the coordinator, do they come to us. Well, I don’t think so because we had nothing to do with the assignment. So we didn’t—and so, we were totally out of that mix. I can’t tell you what happened. You’d have to ask the TA. So I think that’s wrong.” (P4)
Another instructor acknowledged the possibility for this gap, and noted their attempts to preemptively avoid the divide between online and in-class, TA and instructor:

"The only thing is I try to speak with my particular [TA] so that I know, you know, how the class is doing in the hybrid section just so I get a holistic understanding of the class and where they're at. ... So really the root is that I try to stay informed with the [TA], like I try not to separate it too much." (P6)

Vaughan (2007) reports that faculty find that "increased student engagement in learning" (p. 87) is a key benefit for adopting a blended learning approach. This case study indicates that direct instructor involvement, in both the classroom and online, is necessary to establish and maintain engagement in a blended course. Elements of the blended course design accentuated the disconnection experienced by the instructors. Relying on teaching assistants to manage the e-learning aspects of the course meant that instructors could teach a blended course without involving themselves with the online part of the course. Instructors were unaware of the learning that was occurring online and this disconnect reverberated into the classroom as instructors found themselves unable to answer questions about some elements of their own course.

Practices to Consider in Blended Course Redesign

There have been innumerable learning opportunities in tracing the shift of this communication course from a face-to-face to a blended learning format. Provided here is a summary of the key practices the authors feel are important in order to move forward with a blended learning project where instructors may be reluctant participants.

1. Involve Instructors in Course Redesign

The findings from this case study illustrate the importance of a team approach to the design and implementation of blended learning where instructors are fully involved from the start.

The primary weakness of the blended course stemmed from the separation of the instructors from the design process itself. As Sharpe et al. (2006) observe, "course (re)design is a critical success factor" (p. 25) in the implementation of blended learning and that transformation takes place not just from the adoption of new technologies, but from the re-examination of teaching approaches and beliefs. Across the interview findings, it was apparent that the instructors in this case study experienced distance from their traditional conceptions of their role as teacher, including the ability to design and implement curriculum that aligned with their understanding of the course, as well as with their teaching approaches. Although the second version of the design increased the autonomy of the instructors in terms of their use of in-class time, distance remained as the instructors continued to note a disconnection from the online elements of the course. Involving instructors throughout the redesign process can serve to reduce this distance by encouraging a more integrated understanding of the course as it develops and provide instructors with the opportunity to reflect on their own teaching in light of the transition to online learning methods.

2. Consider the Blend Carefully

The experiences of the instructors in this project suggest that the balance between pedagogical prescription and flexibility in the classroom was a key factor in determining their perception of the effectiveness of the course design. When a course is designed by a team and then provided to a group of instructors to teach, the place of flexibility becomes essential. In this case, instructors needed control over how they were expected to use their classroom time while working toward consistent assessment forms. Where the attention of blended learning design tends to focus on the mix of online and in-class learning, it is also important to consider the balance between prescription and flexibility of learning activities, structure, and assessment across contexts. In this project, instructors found change easier to accommodate when in-class time remained flexible while maintaining consistent assignments, weightings, and online activities.

3. Move Slowly Toward Transformative Course Design

Much has been said about the transformative potential of technology for teaching and learning in higher education contexts, but as Selwyn (2007) observes, radical changes to pedagogical practice are yet to be realized on a scale beyond that of early adopters. The integration of technology into teaching requires an understanding not only of a range of pedagogical approaches, but also of the relative strengths and
weaknesses of various technologies for teaching. Given the complexity of technology adoption within higher education settings, it is no surprise that studies tend to find that the majority of blended courses can be classified as supplementing classroom instruction (Sharpe et al., 2006) where in-class teaching remains relatively unchanged. However, based on our experience, we would suggest that although technology promises the potential for innovative, active, and student-centered instruction (Garrison & Kanuka, 2004), the move toward this transformation should be slow and measured. Instructors gain an understanding of the benefits of educational technology through experience and reflection, leading to change. Therefore, although the end goal of blended learning might be transformed course design, the starting point should be supplementing existing classroom practice, with incremental steps toward innovation and change, supported by opportunities for reflection and evaluation.

4. Plan for Iterative Improvement

In this case study, there were two iterations of the blended learning design, with the possibility of more to come. It is not reasonable to expect that a blended learning design will be fully effective the first time. Sharpe et al. (2006) offer that one key to successful implementation of blended learning is the opportunity for two or three iterations of design for each course. For this reason they assert the need for a strong administrative vision to support the process. Ongoing course development can be costly, with continuing evaluation, sustained content development, and course restructuring, but for instructors it can also be risky. Vaughan (2007) notes that instructors who are new to blended learning express concerns about lower student evaluations. As with any innovation, adaption can take time, and instructors need administrative support while the course is being refined.

Conclusion

Although the move to blended learning can be precipitated by a variety of reasons, often external to teaching concerns, blending online and traditional in-class learning will affect important shifts in pedagogies and technology skills. Based on our findings, we advocate a gradual move to a blended learning program, with extensive instructor participation throughout the design process with time allocated for iterative development as the course structure settles and matures. Fundamentally, it is important for all involved – instructors, designers, and administration – to acknowledge that the integration of technology through blended learning necessitates a renegotiation of what it means to teach, and by extension to learn.

References


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