### **CREATING A COMMUNITY OF INQUIRY USING BLENDED LEARNING**

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### ABSTRACT

The authors begin with a review of the literature on blended learning and discuss how the Community of Inquiry Model should guide the selection of specific pedagogical tools and techniques to create blended learning courses in marketing education. The authors then describe the evolutionary development of a blended Principles of Marketing course, and provide insight and reflection on the benefits of the course design over both face-to-face and online formats.

## INTRODUCTION

Blended learning can be described as "the thoughtful fusion of face-to-face and online learning experiences" (Garrison and Vaughan, 2008). A study found that 94 percent of educators surveyed believed that blended learning is more effective than classroom teaching (Marguis, 2004) and research suggests that higher education institutions demonstrate a growing interest in its potential for improving learning outcomes (Bonk and Graham, 2006). Although marketing educators understand that students benefit from variety in the use of learning technologies and learning formats (Karns, 2005; Sautter, 2007; Steiner and Hyman, 2010; Winsted, 2010), there is less systematic understanding of how alternative learning technologies differentially contribute to the principled design of marketing education in blended learning environments.

This paper explores the implications of the Community of Inquiry (CoI) Model for the design and structure of blended learning models in marketing education. The paper then describes the evolutionary development of a blended Principles of Marketing course grounded in the principles of the Col Model. The authors share exploratory research on the strengths and weaknesses of the course structure.

### COMMUNITY OF INQUIRY AND BLENDED LEARNING

Garrison, Anderson and Archer (2000) originally introduced the Community of Inquiry (Col) framework as a normative model to guide the principled design and improvement of online learning environments. The robust yet parsimonious nature of the framework has since encouraged researchers to adapt its structure to also assist in developing educators' understanding and design of effective blended learning environments. The framework developers contend that a meaningful educational experience creates a community that integrates "two inseparable elements of inquiry reflection and discourse" (Garrison and Vaughan, 2008, pg.31). The Col framework suggests that creation of such community relies on the successful construction of three forms of presence - social, cognitive, and teaching presence. The website for the Col model (Garrison, D. R., Cleveland-Innes, M. Vaughan, N. & Z. Akyol, 2009, http://communitiesofinguiry.com/model) defines each presence as follows:

- Social presence is "the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities." (Garrison, 2009)
- Teaching presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes (Anderson, Rourke, Garrison, & Archer, 2001).
- Cognitive Presence is the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse (Garrison, Anderson and Archer, 2001).

Research suggests that blended learning models which combine asynchronous/synchronous and face-to-face/online learning activities can be designed to promote high levels of each of these forms of presence.

Blending learning is compatible with the needs of today's learners. Many of our traditional students are from the Net Generation/Millennials, and the use of blended formats suits this generation's preferences for visual, exploratory, and participative learning experiences. At the same time, the format can benefit the non-traditional students that are time pressured and require greater flexibility in when and where they learn (Diaz and Strickland, 2009). Advocates hypothesize that blended learning increases the amount of time students spend collaborating, reflecting, and thinking critically about what they are learning. It is this meta-cognition on individual learning that leads to the greatest gains in the overall learning experience (Garrison and Vaughn, 2008).

Principled design of blended learning environments require the instructor to think about how alternative learning activities differentially contribute, both independently and synergistically, to each form of presence. Social presence relies heavily on creating a climate of trust that makes students confident that questions and contributions to discourse will always be valued as contributing to "shared discovery and creation" (Schrage, 1995, p. 4). Theory suggests that face-to-face meetings early in a course are most useful to establish identification with the group. Subsequent face-to-face interactions should be scheduled either in instances when the focus is on creative expression (rather than critical discourse) and/or as a means to intermittently reinforce social presence through more explicit physical presence and proximity.

To a large extent, cognitive presence depends on whether or not a medium encourages or restricts effective communication that supports the construction of meaning in a systematic way. Text based media allow the receiver to think about the message at a deeper level, thus computer based technologies appear to support a deeper level of thinking. In addition, students are often hesitant to critically respond to other students' contributions in face-to-face settings so moving such discourse to online environments is seen as less erosive to the climate of trust in the community (Abrams 2005). The trade-off is that text based discourse does not encourage the diversity of thinking nor the volume of interactions that traditional face-to-face communications provide (Newman, Johnson, Cochrane, & Webb, 1996; Newman, Webb, & Cochrane, 1997).

Teaching presence has drawn more recent focus in the research on the Col framework. This element deals with the leadership required to integrate the design, direction and facilitation of the total learning experience. Balance must be sought between textbased interactions and more interactive verbal exchange. It is only through effective teaching presence that students are guided through the learning process in such a way that encourages metacognition on their own learning processes and ultimately inspires them to higher order learning experiences.

## The Blended Principles of Marketing Course Design

Lessons learned from a three semester evolution of a Principles of Marketing course provides some limited quantitative and more extensive qualitative and reflective feedback on successful design of a blended learning experience. The class technology actually provided the option for students to take the class blended or entirely online (i.e., regularly scheduled class sessions were streamed and archived using MediaSite). There were 100 students in the blended format class and 200 in the online class. As this paper focuses on blended learning, the discussion will be restricted to only the blended learning format and requirements<sup>1</sup>. Table 1 provides a description of basic elements of the class and Table 2 outlines the current structure of the course and the relationships between pedagogical tools/techniques and the levels of the various forms of presence.

The course included a significant lecture element with a traditional face-to-face class delivered one night a week for 75 minutes for fourteen weeks of the semester. Two weeks of the term were reserved for proctored midterm and final examinations. The Blackboard learning management system was used extensively for all students in the course. There were four mandatory elements of the course: mandatory viewing of the weekly lecture delivery, proctored midterm objective examination, proctored cumulative final examination, and completion of a video cover letter assignment. Students were required to view the face-to-face class content delivery, but students

<sup>&</sup>lt;sup>1</sup> The grading components were virtually identical for both sections. The only deviation was that the "online" section did not earn credit for attending class. This point is added to note that this course design can accommodate very large numbers as either a blended and or blended/online option design.

could choose to attend in person, or view the lectures as recorded Mediasite presentations in a synchronous or asynchronous environment. The inclass content delivery featured various elements such as lecture, question and answer, and multimedia content such as videos and PowerPoint. All students' grades were calculated under two different grading options. One was a simple distribution across the midterm (40%), final (45%) and video cover letter assignment (15%). The second included a participation component that shifted the weighting slightly (midterm 30%, final 35%, video cover letter 15%, participation 20%). Students could earn a maximum of 200 participation points though roughly 350 point opportunities were typically available. Final semester grades were calculated under both options and the student received the higher of the two scores thus there was no risk by attempting participation and subsequently choosing not to complete the participation component. Table 2 includes a column that indicates the distribution of points for the participation activities.

# Evaluations and Reflections of the Course Design

Much has been learned through the evolution of the course, through collection of formal/ informal feedback and quantitative/qualitative data. Preliminary empirical research has included both behavioral data (Blackboard tracking tools, scores on objective examinations) and attitudinal data (e.g., ratings of social and cognitive presence, perceived learning performance, instructor and course satisfaction, and pedagogical affect). Data is currently being collected to more closely examine the relationships between the tools and the alternative forms of presence. Insights are offered regarding critical components and design issues in building a community of inquiry and suggestions for future study and development of blended learning in marketing education.

We begin with evidence concerning the importance of presence in learning. Regression analyses suggest that variables such as cognitive presence and social presence significantly affect students' preference for the teaching methods (i.e., pedagogical affect) and perceived learning performance but do not affect performance on objective examinations. The lack of significance between presence and objective assessment of learning may not be surprising given that the Col model aspires to promote higher level learning goals. Success on objective examinations reflects only the most basic levels of learning (i.e., knowledge acquisition and comprehension).

A second area of interest is the role of alternative teaching tools in promoting different forms of presence. The authors are currently conducting an empirical examination of these relationships, but data and feedback on these and related attitudinal variables suggest promise in the proposed design relationships. Specifically, evidence supports that online discussion significantly affects students' perceived learning performance. Earlier iterations of the class included a series of three short paper options for participation points. When compared, the online discussions were more effective in affecting the students' learning experience than were the completion of the short written papers. This supports the Col theory that only the online discussions provided the advantages of both text based activities and collaborative discourse.

Other activities included to promote greater cognitive presence were the Connect learning activities and the online guizzes. The Connect learning activities typically involved short video vignettes developed by the publisher of the text, with embedded objective questions relating to the conceptual content. Across the iterations of the course, students responded very positively to the currency and "real world" relevance of the material. The guizzes were developed using a pool of questions from the test bank as well as a pool of questions developed expressly from the content of the material covered in the lecture. In both the quiz activities and the Connect activities, students were allowed to review previous attempts but only knew if they succeeded in answering questions correctly. This iterative process on both the guiz and Connect activities required more selfdirected study consistent with fundamental knowledge acquisition and cognitive presence.

Effective stimulation of social presence can be complex but clearly the role of collaborative dialogue is central to building a sense of trust and community. In the context of the blended class, social presence is dependent on successful facilitation of in class discussion though the authors have learned that this can be significantly enhanced by the success of the online discussion. Though not yet tested empirically, the authors hypothesize that bringing the content from the online discussions into the face-to-face classroom creates an increased sense of social presence. Those students whose examples are highlighted are validated in their understanding of the material, and the other students benefit from the currency and perspective of experience offered by other students' original contributions. This in turn promotes more creative brainstorming of other current relevant examples, a benefit to cognitive presence as well. It also tends to pique the curiosity of those that did not originally participate in the online discussions. Since implementing this technique, students asked that previous discussion be re-opened for viewing (not contributions) so that they could explore additional details related to the example.

A relationship currently under study by the authors is the impact of the video cover letter assignment on students' sense of social presence. The video cover letter assignment can be turned in either as a file attachment to a class bulletin board or burned to a CD. The purpose of the assignment is twofold: 1) encourage the development and assessment of students' oral communications skills and 2) assess the extent to which students can effectively develop a targeted message to a selected audience. Those students that post the video to the online board often receive constructive (mostly positive) feedback from other students. It is hypothesized that this process of constructive critique can, in the future, be used more actively to prompt interaction and contribute to a greater sense of social community. Regardless of submission choice, the majority of students commented on the value of the experience in forcing self-critique and improvement of oral presentation skills.

The last form of presence, teaching presence, is somewhat more difficult to directly measure as it is by definition a function of the two other forms of presence. At a most basic level, the mere physical presence of the student may remind students of the instructor's pivotal role as the designer of the course and the facilitator of the process. Comparison of student opinions in the online versus blended learning experience of the class is being studied to examine if this holds true. Though the instructor does intermittently comment in the online discussions, the review in the follow-up class is likely more effective in demonstrating to students that the instructor is following the discussions.

One important note should be added here. The authors do not in any way suggest that simply recording lectures and making them available through archived means should be seen as an appropriate approach to the effective design and development of online courses. Indeed, the literature is replete with evidence that this is the worst case (Granitz and Greene 2003; Peltier, Schibrowsky, and Drago, 2007). Still, the fact that this blended class expressly seeks to balance the strengths and weaknesses of alternative delivery formats makes this approach perhaps a more palatable alternative for educational environments that are facing continuing dwindling resources.

The fact remains that much more research needs to be done to fully understand and optimize the value of blended learning in marketing education. This paper provides the most fundamental beginnings for the study of blended learning in marketing education. The intent is to spark greater curiosity in the potential of this learning format and to set forth a research agenda that can better elucidate the unique contributions of this learning format to marketing education.

#### **References available on request**