Blended Learning in Management Education:
Leveraging Technology to Enhance Classroom Effectiveness

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Abstract

In recent years the term "blended learning" has emerged to describe a hybrid approach to teaching and learning that involves both face to face and electronically mediated interaction. The term blended learning has been used to describe a number of different models and configurations of approaches to teaching and learning. In this paper we describe, analyze and evaluate a particular model of blended learning that is based on enriching and enhancing the traditional classroom experience by utilizing electronically mediated group work to help students prepare for classroom sessions. This approach has been found to increase student engagement, increase effectiveness, and provide positive learning outcomes for undergraduate students enrolled in a Bachelor of Management Program at a Canadian University.

Keywords: management education, blended learning, virtual communication

Traditional and On-line Teaching and Learning

Since the days of Socrates, Plato and Aristotle, teaching and learning have been conceived as face to face conversations between teachers and students. When schools of business and management first emerged in North America in the 1950's and 60's, this traditional model of education was adopted. This model continued to prevail in management education around the globe until roughly 20 years ago when institutions such as Athabasca University, in Alberta Canada, The Open University in the UK, and others, developed on-line management education programs. One of the distinguishing characteristics of the on-line model is that students do not "meet" in the traditional face to face way, but rather learning occurs online in the virtual classroom. A further difference is that courses are not directed by a teacher, instructor or professor in the traditional sense, but rather by a subject matter expert who serves as a "coach" to facilitate the learning process. Some have described this as moving from the notion of the "sage on the stage" to the "guide on the side" (English, 2005). A further feature of this educational model is that students work in groups and are encouraged to develop "learning communities" where collaborative learning is pursued by students through a process of discussing and sharing ideas in an asynchronous on-line learning environment.

Use of Technology

The emergence of on-line learning necessitated the development of on-line learning platforms or Learning Management Systems (LMS). Athabasca University developed its own learning platform for their Executive MBA Program, using Lotus Notes. Other institutions use proprietary software that was developed and licensed by firms such as Blackboard and WebCT (who later merged), SharePointLMS, Moodle, and others. Many traditional brick and mortar institutions have adopted these learning platforms and many professors in traditional face to face universities use them to perform functions such as posting feedback to a grade book where students can review their progress, or using a notice board where messages from the instructor can be sent to the entire class with a few simple key strokes. However, it seems that often only a small fraction of the functionality of the software is utilized, and it is typically used more for administrative purposes than for learning facilitation. In order to increase the efficient and effective use of learning management systems, it is important to understand some of the inherent benefits to online learning and online learning platforms.

Advantages and Benefits of On-line Learning

Students, instructors and administrators have all noted benefits to online learning. From a student perspective, the notion of lifelong learning is essential in order to cultivate the skills necessary for individuals to perform and excel in their field, allowing learners to continue to engage in studies throughout their careers. At the same time instructors continue to seek new and innovative ways to deliver their courses and engage students, whereas administrators attempt to find means to increase access and student satisfaction, while remaining cost-effective.

Electronic communications technology has had a strong influence on lifelong learning. Traditional educational institutions and employers were of the view that self-study is of limited value, and therefore would not give recognition to individualized course work nor would they provide time or financial support for continued distance education. Advances in electronic communications technology have increased remote access to high speed internet connections making way for many new opportunities for involvement in collaborative educational programs and the interaction it provides. Current models of distance and online education can provide great value to the participants, although the design and implementation of online programs is key to their success.

Discourse and collaboration are essential components of critical thinking and learning. Collaborative units in the online environment are often diverse groups of individuals who come together to develop a functional social online learning community through the use of critical thinking and discourse. Merriam (2001) refers to Mezirow's model of transformational learning and discusses the importance of a "'safe, open, and trusting environment' that allows for participation, collaboration, exploration, critical reflection and feedback" (p. 20). Communication is a skill that involves far more than knowing how to speak or write a language. It involves understanding and relating to "body language,

tone, vocabulary, level of formality and assumptions about a person's previously held knowledge. Engaging in "small talk" was one of the most commonly identified barriers to building relationships, participating in the workplace and engaging in social activities (Meaney, 2008), actions that form the foundation of language socialization. Bandura (1982) believes that efficacy from interacting with one's environment involves a generative proficiency "in which component cognitive, social, and behavioral skills must be organized into integrated courses of action to serve innumerable purposes" (p. 122). Online discourse does not facilitate the ability to read physical signs of communication; consequently a heavier emphasis is placed on text. Developing relationships and building trust is critical for all teams. Computer mediated communication (CMC) can promote the establishment of relationships, foster cohesion and the exchange of social cues (Lin, Standing, & Liu, 2008). Members of virtual communities are generally connected by a common interest and form social networks to exchange knowledge (Hsu, Lu, Yen, & Chang, 2006). The concept of knowledge sharing self-efficacy (KSSE) (Hsu, Lu, Yen, & Chang, 2006, p. 155) is developed based on social cognitive theory in which individuals who are confident in their own abilities will develop expectations of positive outcomes and experience greater success.

Fenwick (2006) supports the idea that globalization has altered the way organizations operate in the new economy and that change and innovation are necessary to enable organizations and individuals to compete in the marketplace creating a need for ongoing education and training. Jarvis (2006) recognizes the notion of experience throughout one's lifetime that involves actions and responses which in turn influence "the accumulation of previous experiences affects their current ones" (p. 73). Providing individuals with an opportunity to work toward a common good allows them to become aware of the "community beyond our individuality" (Jarvis, 2008, p. 168).

Jarvis (2007) proposed the concept of "glocalization", in which he describes globalisation while considering the local community, a matter of understanding global influences while retaining the unique local identity (p. 43). On-line learning has the ability to create social networks that provide peer support and encouragement for others within the immediate learning community. Each organization develops its own unique community, one that can use its influences to develop a supportive culture and build connections regardless of location. There is a distinct relationship between social capital and community spirit. If people invest in social capital, they can "draw upon it in times of need" Jarvis (2007, p. 120). Often members of on-line learning communities spend as many hours interacting with their colleagues in the learning cohort, as they do with their families.

Life-history has been used by researchers to understand and predict workplace learning, which varies between diverse groups. Fenwick (2006) examined the research of Butterwick (2003) and Billett & Somerville (2004), who studied a number of distinct groups, in order to gain an understanding of the ways in which work culture can shape personal identity. Human nature necessitates the consideration of limitations and the finding of alternatives that tolerate struggles as well as provide flexible opportunities for learning. Fenwick (2006) claims that *"Practice-based (or participative) perspectives of learning are concerned instead with what kinds of learning are embedded in particular*

sociocultural activities, tools, and communities in which people participate" (p. 192). Through active decision making, critical thinking and learning occur. "Individuals' life histories and subjectivities are not abandoned, but theorised in intersection with social patterns of participation" (p. 193), active involvement that can be utilised to integrate life experience and increase intellectual growth.

Knowles (Cercone, 2008, pp. 143-146) identified a number of distinct qualities of the adult learner, the foremost being autonomy. Adult learners are more self-directed and prefer to be more involved in the structure and direction of their learning goals. They also convey a varied range of life's experiences to the learning environment, which enrich the quality and content of critical learning. Adults tend to be goal-orientated and for the most part select educational objectives through which they can realise a goal and see relevancy in their studies. They are often practical and wish to see congruency with its application to their lives.

Virtual communities have the ability to lay the foundation to establish relationships, enable effective communication, the sharing of knowledge and learning in organizations. For instructional faculty this can be enabled in interdisciplinary realms that import, integrate, and expand upon theory. It places an emphasis on positioning a collaborative learning environment into the realm of computer mediated communication. Comprehending how to interact with people on-line is a valuable resource; managing that resource effectively is one of the most important and challenging skill sets to master in this increasingly global environment.

Continual developments in communication technology and the growth of a global economy have provided a level of homogeneity in worldwide method and practice, which has transformed the way people interact. Many of the new jobs that have been created in North America are low paying, part-time jobs that require minimal skill. Workers who want to advance from entry level positions must take the initiative to seek higher levels of education and training. Fenwick (2006) stresses that workers are forced to be self-sufficient, taking charge of their own personal growth and development and that the human oriented principles of the late 20th and early 21st century have diminished. Technological advances have allowed us to simulate real life experiences in order that we may better prepare ourselves for the true experience, though no simulation can recreate the mind and body experience in its entirety (Jarvis, 2006, p. 75). In order to thrive in the increasingly competitive economy, learners structure their educational pursuits to enable personal career advancement. With increased intellectual growth, individuals are given a greater personal sense of freedom. They are no longer bound by their existing occupation or career path but have the freedom to choose alternate employment venues, and also the liberty to restructure their life path toward lifelong learning in ways that enhance their lives wholly, not only within their position of employment. They may seek a greater quality of life rather than simply a higher income to provide for their domestic needs.

A study by Kolowich (2011), indicates that overall enrollment in online courses has seen a 10% increase since 2006. The growth in the use and popularity of online learning courses and programs suggests that they are here to stay and not likely to disappear

anytime soon. This is mainly due to the flexibility and autonomy offered by on-line learning.

Blended Learning

For a number of years, beginning in the 1990's, traditional and on-line learning models were in direct competition, with proponents of each model trying to subvert the other. Proponents of the traditional face-to-face model ridiculed on-line learning as lacking in rigor and substance, while proponents of face-to-face learning question the level of engagement. As with many competing models or approaches a middle ground was found in the concept of "blended learning". Through blended learning, students could be exposed to some aspects of both the traditional face to face model and the more avant-garde electronic learning platforms. In 2008, Watson suggested that blended learning was "likely to emerge as the predominant model of the future and to become far more common than either on-line or face-to-face instruction alone" (Watson, 2008, p. 3).

Unfortunately, the term "blended learning" has no clear definition or parameters (Halverson, Graham, Spring, & Drysdale, 2012). Some on-line based programs, such as those offered by Athabasca University and Royal Roads University, have primarily web-based programs with a residency requirement that provides a face-to-face component. Many traditional brick and mortar institutions supplement their traditional classroom sessions with webinars, pod casts, and other techno-wizardry. However, many of these programs lack a clear pedagogical basis or a set of well-defined learning objectives for the various components of the program.

It is suggested here that for blended learning to be effective, it must begin with clear strategic objectives as well as specific learning objectives for each aspect of the course. The remainder of this paper shall be dedicated to describing, analyzing and evaluating one approach to blended learning that is strategic in nature, deliberately design, and effective in purpose. In outlining this model this paper is responding to the call by Graham and Dziuban (2008, p. 274) that: "Currently there is only a small (but growing) body of research related to the blended learning environment. We need more research on the design of learning environments and how instructors and learners engage in the acts of teaching and learning in these environments." To this end, this paper will first outline the philosophical and pedagogical underpinnings of the proposed approach. Next the paper describes the nuts and bolts of a course that can be set up and delivered using the proposed approach. Finally, a discussion of evaluation criteria and an agenda for further research in this area are provided.

Philosophical and Pedagogical Underpinnings

One of the most common complaints of professors in traditional face to face classrooms is that students do not come to class prepared. Readings from journals, textbook chapters, case studies and other assignments are typically assigned to prepare students for a classroom session. However, if students do not read the material in advance and/or are not engaged with the subject matter, the classroom sessions can be ineffective. Thus, the

basic strategy underpinning the proposed approach is to use technology as a way to engage students and to help them to prepare in advance of face to face sessions in order that the time spent together in the classroom can be more engaging and effective.

A second pedagogical issue is that in traditional classrooms there are keen students with Type A personalities that sometimes dominate the discussion, while students who are less assertive, or perhaps introverted or shy, do not speak up and are driven to the sidelines. Of course, it is the role of the professor or instructor to monitor and control the dominant students and to try to reach out to engage the less assertive students however, these are not always easy tasks.

In most if not all management education programs these days, there is some component of group work. This inevitably leads to issues related to equitable distribution of workload and fairly evaluating the contribution of various group members. When students meet outside of classroom time, or even during classroom time, it is difficult for an instructor or professor to carefully monitor the contribution of each individual student to their respective groups. However, in the on-line environment, LMS courseware tracks and provides a clear record on all the interactions that take place. There is an element of "big sibling is watching" but the reality is that the professor or instructor can "see" and readily call up a report on the contributions of various members.

Nuts and Bolts of the Approach

The Faculty of Management (FofM) at the University of Lethbridge (UofL) has grown substantially since the inception as a publicly funded university in 1966. Population demographics continue to evolve and post-secondary administrators strive to adjust to public and market demands in order to remain competitive. Students enrolled in full or part-time post-secondary studies seek alternatives to traditional classroom instruction for a variety of reasons, to enable them to fulfill academic program requirements. One of the missions stated by the FofM is to "advance knowledge, and develop scholars and principled leaders who think globally, act insightfully and make a difference to their organizations and society" (Faculty of Management). In its drive for increased student engagement and success, the FofM is considering the augmentation of an online component within the Bachelor of Management (BMgt) degree program. Different professors and instructors were encouraged to develop different approaches and to leverage the technology available. In 2000 the university purchased proprietary rights for the use of Web-CT LMS. In 2011, the university discontinued its relationship with Web-CT and entered into an agreement with Moodle. A basic Moodle template is provided to all instructors for all courses. This paper outlines one particular approach that has been used for the past four years, using Moodle to supplement traditional face to face classroom sessions in two senior levels courses in the BMgt degree program.

To provide a complete understanding of the approach, it is necessary to begin with the overall structure. First, the courses, like most, are built around an accepted textbook and/or a series of readings. However, the main difference is that on the first meeting of the class, all students are assigned to discussion groups and are required to complete on-

line discussions in their groups weekly, prior to the classroom sessions. The classroom sessions are then used to review some the key ideas, theories and concepts from the week's readings, and different groups and individuals are called upon to report upon, elaborate on, or share insights from their group discussion with other groups.

The on-line group discussions can be used to engage students in a number of ways. For example, some weeks all groups are given the same discussion questions and then if different groups take different positions or approaches, the professor can use these differences to stimulate further discussion and debate during the classroom session. Another approach is to distribute a reading and assign each different group discussion questions pertaining to different components or ideas in the reading. Subsequently the professor can move through the material sequentially and call on various groups to share their insights and interpretations of the various topics. Yet another approach is to ask different groups to take a certain position on a particular topic and then have groups on different sides of the issues engage in a debate during the classroom session.

Another highly effective approach is to include application questions in the group discussions. For example, when teaching a session on trait theory of leadership, the pre-session discussion questions might be:

  1) Outline the key strengths and weaknesses of trait theory and compare it to the behavior approach.
  2) Think of an effective leader you have worked with or for, and describe the traits you observed that made them effective.

This approach ensures that students have read and understood the reading, but also requires them to apply the theories and concepts. There are often substantial differences in responses both within and between groups, which adds to the depth, breadth and richness of the classroom discussions.

The workload for the instructor when using this blended learning model is somewhat greater than that of the traditional role, because in order to use this model effectively, the professor must stay abreast of the various group discussions in order to incorporate into the classroom sessions some of the comments, controversies and examples that are used in the online discussions. The knowledge and insights gained through the on-line discussion aid greatly in the engagement in the classroom setting as the professor can leverage them during the discussions. For example, if the instructor observes that a particular student is active and insightful online but shy and withdrawn in the classroom, knowledge gained in the online environment can be used a tool to draw them out: "Sean, in the on-line discussion this week you provided an excellent example from your family business. Would you be comfortable in sharing it with the rest of the class?" By using the knowledge and insights gained through monitoring the online discussions, the instructor has greater insights into the students' thought processes and experiences and can draw these out during classroom discussions.

Student Rewards and Incentives
In order for the online discussions to be effective in preparing students for the classroom sessions, it is of course necessary to have a high participation rate. Motivation is one of

the keys to student engagement. Motivation can be intrinsic for many students who have the desire to achieve and be successful. However, not all students have natural intrinsic motivation, and rewards such as grades are forms of extrinsic motivation that can incent students to participate. Based on experience, it seems that participation grades are one of the keys to making on-line discussions successful. It is a challenge to strike the right balance in this regard, but it seems that a weighting of about 20 – 30% of the overall course grades is sufficient to get and keep their attention throughout the semester.

There are other, more subtle forms of incentives as well, and peer pressure – both perceived and actual - appear to be very strong motivators. If students are not able to, or chose not to, participate in online discussions prior to classes, they are accountable to their team as well as to the instructor. It has been found that encouraging and reinforcing participation early in the semester leads to commitment and desirable work habits throughout the semester.

Evaluation Criteria

As with any new approach to learning, it is crucial to have a method of evaluation in order to assess the effectiveness of the approach. Lorenzo and Moore (2002) propose that there are five criteria for evaluating the effectiveness of blended learning. These are: learning effectiveness; student satisfaction; faculty satisfaction; cost effectiveness; and access. This framework is employed to provide the basis for a discussion of the various aspects in relation to experiences to date with the model of blended learning being experimented with at the University of Lethbridge.

Learning effectiveness - would ideally be measured by having a controlled experiment to compare traditional learning and the blended approach. However, there are far too many variables to control such as student commitment, mix of student abilities, instructor motivation and so forth. Based on recent experiences, and having the same instructor teach similar groups of under graduate students using both models, a number of observations and anecdotal insights can be offered. The first and most noticeable difference is that when using the blended approach the students come to class much more prepared and engaged and the classroom discussion are much more interactive and free-flowing than in a traditional lecture format. Secondly, in comparing examination scores in traditional learning and blended learning, the blended class had a significantly higher average score and a much more narrow range of score suggesting that a great number of students were learning and understanding the course material.

Student satisfaction - once again there was some consistency in comparing student course evaluations for the traditional learning model and the blended learning model for the same courses. The student evaluations for the blended model consistently mentioned that the workload was demanding but the level of learning was higher than in other courses.

Faculty satisfaction – although the evaluation of this component was primarily based on a sample size of one, there are some interesting and meaningful insights to be drawn.

From an instructor point of view the blended model requires more work than the traditional model, but is more engaging, and rewarding. One of the positive outcomes that contributes to higher faculty satisfaction is getting to know the students better. In reading the online postings weekly there is more background and substance to the relationship and many students continue to interact with the professor even after the course is complete. This created a feeling of making a difference for the student, which is more rewarding than in the traditional model. Evaluations of the professor by students were also higher than those for the same professor in a face to face version of the same course, which of course is useful for salary, tenure and promotion process. Finally, one of the great benefits of being involved in this model was the fun and excitement of being on the leading edge doing something creative and innovative!

Cost effectiveness - for the University of Lethbridge, offering courses using this model is cost and revenue neutral. In this particular case the instructor is a tenured faculty member and the number of students allowed in the course is exactly the same for the traditional learning model and the blended learning model. In terms of investment in technology, the university has already invested in the technology and the licensing fees are the same regardless of how the Moodle LMS is used.

Access – may be seen as one area that could use some improvement. The university offers the BMgt Program on three different campus and the course taught using the blended model is a core course offered on all three campuses every semester. The blended model described here was used for two sections per year taught by only one professor, meaning that only a limited number of students have access to this model. However, in the university calendar it is noted that these sections involve blended learning, and therefore students may self-select into this section based on their personal preferences and learning style. Given the success of the model so far, it likely that it will be adopted by other professors across the three campus thus providing greater access in the future.

Conclusions

There are many approaches to blended learning. This paper has outlined one approach that has been effective in the hope that others can learn from the insights shared. The main advantages of the model described are increased level of student engagement, which leads to better preparation, learning and knowledge retention. By being required to interact with their classmates outside of the classroom in advance of each classroom sessions, students develop group cohesiveness and are more prepared and engaged during classroom sessions. When compared with the tradition face to face learning model, the blended learning model described is inexpensive to develop and use, and creates many positive outcomes.

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