Building Active Learning Applications and Opportunities into a Distance-learning Leadership Course

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Introduction

The growing popularity and acceptance of web-delivered education make it an attractive and desired option for expanding the educational opportunities available to students (Petrides, 2002; Rivera & Rice, 2002; Robinson & Stull, 2006). Not surprisingly, institutions of higher learning are actively expanding web-based distance education offerings as a means of capturing increased course demand and student population (Rivera & Rice, 2002; USDE, 2003; Hunt, 2005). Northern Arizona University (NAU) is no different. The W. A. Franke College of Business (FCB) at NAU developed on-line course offerings to support a state-wide Bachelor of Science in Business Administration degree to meet the needs of Arizona's place-bound students. This article describes the development of one of these on-line courses, MGT311 Leadership.

FCB has offered a successful face-to-face delivery of the leadership course based on adult and cooperative learning techniques for several years. The development of this course was innovative in its use of adult educational techniques that encourage students to actively construct leadership theory and gain practical leadership experience. The course also offered strong student interaction through extensive in-class small group discussion and critical analysis activities. Thus, the challenge was to develop an on-line version of the course that retained as much of the rich, interactive nature of the face-to-face experience as possible. After an extensive literature review seeking guidance to address the challenge, we decided to design the on-line course based on the seven "best practice" design criteria for distance learning (Chickering & Reisser, 1993: DIIA, 2005) paraphrased below:

1. Encourage contact between students and the faculty.

2. Develop reciprocity, interaction, collaboration and cooperation among the students.

3. Encourage active and constructive-oriented learning.

4. Provide prompt feedback.

5. Emphasize time on task.

6. Communicate high expectations.

7. Respect students' diverse talents and ways of learning.

Additionally, course design required following the same master syllabus used to create the "working" syllabus of the face-to-face version of MGT311. FCB requires master syllabi that delineate learning outcomes and expected content to encourage consistency across multiple sections of the same course offered by multiple faculty. It was also decided to adopt the same text used in the face-to-face course, *Leaders & The Leadership Process: Readings, Self-Assessments & Applications* by J. Pierce and J. Newstrom (2006). The text was originally selected for its unique combination of conceptual and empirical readings, coverage of the major leadership research streams, self-assessment exercises, extensive vocabulary and the authors' perception that it helped students move beyond theory and empiricism to the practice of leadership. That said, the authors believe the design considerations discussed below allow the use of alternative text choices. The important consideration is establishing a tight linkage between the text chosen and the design of the on-line course.

Course Design

The challenge, as noted above, was to create an on-line leadership course that provided a learning experience based on leadership theories that also incorporated an active learning environment rich in practical leadership application. To facilitate meeting this challenge we originally selected the WebCT

course management system (an integrated set of web-course development tools) due to its ability to support the creation of both asynchronous and synchronous learning environments. The course management system was later transitioned to Blackboard Vista (Bb Vista) when the university adopted it as its new on-line course management system.

The seven best practices necessitated unique design and instructional requirements for instructor orientation, course management organization and tool use, community building, as well as the development of thematic modules and their associated assignments. Each of these areas is discussed below with the authors' rationale for the design and delivery of the on-line course.

Instructor Orientation

For at least the past ten years the expansion of distance education has necessitated faculty delivering distance education re-examine the way teaching and learning take place. What has evolved, in this alternative to the traditional classroom, is a new paradigm of teaching and learning. The development of this new paradigm was required because many of the established assumptions of teaching and learning practiced in the traditional lecture-based classroom do not hold for successful teaching and learning in the distance education environment (Palloff & Pratt, 1999).

Several key differences between the traditional lecture-based classroom and distance learning exist. These include faculty roles, use of technology, lesson organization, and the need for collaborative learning. In making the transition from the classroom to on-line instruction, faculty must concern themselves with multiple pedagogical, social, managerial and technical issues.

One issue is the role of the on-line faculty. The faculty's role has evolved from lecturer in a traditional classroom to a facilitator of instruction in the virtual classroom (Simonson, Smaldino, Albright, & Zvacek, 2003). Lesson organization and design must adapt to a student-centered approach that shifts the focus from the faculty to the student learner. And it must be noted this move is currently in play in the face-to-face section of MGT 311 that inspired the design of the distance learning section.

Organizational issues such as lesson structure, use of visuals, and time allotment become increasingly important. The on-line faculty must be even more concerned with class structure and how to encourage a class to build "community." In addition, faculty must be concerned with student access and use of computer technology essential to the class. Does the student possess the access and knowledge required to be successful in the on-line classroom? It has been the authors' experience, especially in adult education, that this should not be taken for granted.

On-line faculty must be able to establish a collaborative learning environment. For an on-line class to be successful faculty must facilitate the creation of a playing field with equal participation between the facilitator and all students in the class. High levels of interaction among all involved in the virtual classroom insure a rich and powerful experience (Palloff & Pratt, 1999). Thus, there is a need to build a sense of community among participants

Bd Vista Course Management System

The first step in creating (the web-based) MGT 311 was meeting and training with the university staff dedicated to helping instructors create and manage virtual classrooms. This process, which included both one-on-one advice and assistance sessions as well as a series of small classroom training sessions with fellow on-line instructors, encompassed approximately twelve hours over a two month period. Topics that were initially addressed included taking the specific course requirements and creating the virtual classroom using the latest in technology and learning techniques. Once the course website was created, faculty training focused on how to manage the on-line course tools such as grading, testing, on-line communications, and other topics required to create an on-line learning community. However, it must be noted, instructor training did not stop once the course was offered. During the first pilot semester of MGT 311 the instructor continued to use the support staff as a valuable resource for questions and advice as issues came up.

In the Bd Vista course management system the course content is contained within a single course website and contains both synchronous and asynchronous tools to facilitate communication, therefore learning, in the on-line virtual classroom. The synchronous tool allows faculty to easily create and offer a chat room for the students to 'meet' virtually when time was a critical factor in meeting group assignment deadlines. The asynchronous tools include e-mail and discussion boards which allow faculty and students to meet virtually and interact yet provides flexibility in time and space. Thus, the on-line course was not designed to be a passive, electronic correspondence course. It was designed so that students became actively engaged in a transformative experience by learning new technology, working in a web-based environment, communicating in groups and with faculty, and reflecting on leadership as it pertains to their personal experiences. The importance of community to a web-based course cannot be overstated. The Bd Vista toolset allows faculty to create and nurture an active, collaborative approach to learning. The course sought to create a sense of autonomy, initiative, and creativity while encouraging questioning, critical thinking, dialogue, and collaboration.

While we used Bd Vista, there are several course management suites available that provide similar features for instructors preparing on-line versions of their courses. Bd Vista was chosen solely because it is the course management suite used by NAU.

Community Building

The goal in building the course was to simultaneously create a community where learning takes place among students themselves, between students and faculty, and collaboration in learning that will result from these interactions. MGT 311 was designed to foster active interaction involving both course content and communication, collaborative learning, socially constructed meanings, sharing of resources, and support between learners (Palloff & Pratt, 1999). It is this strong learning community that is the signature feature of MGT 311.

Students taking on-line classes using computers miles apart at different times of the day often feel isolated. This feeling of isolation can be overcome by creating an on-line community of learners who support one another. Community building is an important issue in distance learning because it impacts student satisfaction, retention, and learning. Community building refers to creating a sense of belonging, of continuity, of being connected to others and to ideas and values. A community of learners is a group of participants in a course with a shared purpose, good communications, and a climate with justice, caring, and discipline (Brown, 2001).

The expansion in distance education and recent innovations in technology have allowed for increasing interaction between and among learners and faculty. Multiple studies have concluded that increased levels of interaction result in increased motivation, positive attitudes toward learning, higher satisfaction with instruction, deeper, more meaningful learning, and higher achievement (Sutton, 1999).

Distance educators have identified four types of interaction: learner-content, learner-instructor, learner-learner, and learner-interface (Hillman, Willis, & Gunawardena, 1994; Moore, 1989). The interaction that takes place between the learner and the content is probably the most basic of the four types of interaction. The change we call learning takes place when the learner interacts with the content. Another type of interaction, learner-faculty, is regarded as essential by many educators, and as highly desirable by many learners (Moore, 1989). The faculty serves as an expert who, in the case of on-line learning, facilitates the instruction to stimulate students' interests and motivate students (Sutton, 1999). Historically, learner-learner interaction has not been a significant part of education. Interaction has been limited to learner-content and learner-faculty. With the development of distance-education technology, this type of interaction has become easier to create and support. Learner-learner interaction can be an extremely valuable resource for learning, and is sometimes even essential (Moore, 1989). The fourth type of interaction that is unique to distance education, learner-interface, was added to Moore's (1989) three types of interaction by Hillman, Willis, and Gunawardena (1994). These authors describe the learner-interface interaction as the interaction that takes place between the learner and the technology. Students must use the technology to interact with the content, the faculty, and other students. In many distance-

education classrooms, without learner-interface interaction, the other three types of interaction cannot take place (Sutton, 1999).

MGT 311 was constructed to facilitate the development of an on-line community that fosters active interaction involving both course content and communication, collaborative learning, socially constructed meanings, sharing of resources, and support between learners (Palloff & Pratt, 1999). In doing so, the course simultaneously created a learning community in which learning takes place between students themselves, between students and the instructor, and in a collaboration of learning that resulted from these interactions (Palloff & Pratt, 1999).

Thematic Modules

The on-line course, like its face-to-face parent, is an introduction to leadership that defines leadership and explores the basic theories and issues related to leadership in the Twenty -first Century. To accomplish this goal the on-line version was organized into six learning and theme-based modules over a sixteen-week academic semester. The course was structured by creating themes as building blocks to allow students to basically crawl, walk and then run as they accomplished the on-line delivery learning objectives. The rationale for the learning module building blocks can be found in the learning environment. A student in an on-line course must first demonstrate a mastery of the computer skills and course web tools required for them to be successful in a virtual classroom. Once this can be instructor-verified by course assignments in the first module, the student can then be allowed to remain in the virtual classroom to fully participate. The six module instructional themes include: introduction to leadership, leadership traits and behaviors for success, leader-follower and situational dynamics, diversity in leadership, divergent thoughts in leadership, and the capstone self-assessment.

In Module One the student logs in and explores the course organization and layout, within a standard Bb Vista course site design. The course home page allows linkage to the virtual classroom with course content, syllabus, communications tools, grades, calendar, and resource support easily available. The students learn their way around the course which, in addition to navigational and course management tools, offers a module introduction, objectives, key concepts and terms, assignments, and an end-of-module quiz. This same organization is also used in subsequent modules. The modules are designed to be accomplished in numerical order. Successful module completion, as determined by faculty-set scores for end-of-module quizzes, allowed students access to subsequent modules.

During the first two weeks of the term Module One introduces leadership theory to the students and sets the stage for course organization and flow. Students are asked: What does the term leadership mean to you? How would you define leadership? How does it differ from management? What processes do we associate with leadership? They then explore and attempt to answer these questions in Module One.

Modules Two to Five are structured along similar lines with required readings, individual papers, group interviews and module quizzes. Module Two focuses on the themes of leadership traits and behaviors for success. Module Three focuses on the leader, follower and situational dynamics. Module Four delves into the relationship between diversity and leadership. Module Five explores several themes concerning divergent thoughts on leadership.

The last module, Module Six, is the capstone module of the course. There are two capstone assignments. One assignment is an individual assignment where the student writes a leadership self-improvement plan based on a personal assessment of their strengths and weakness as a leader. The final group project is to create a group critical assessment paper offering a judgment as to whether or not the group evolved over the process of the semester into a 'team' as defined in the text and its relationship to leadership.

Module Assignments

The Module One objectives and key terms and concepts focus on verifying the student has the prerequisite on-line skills to take the course. The student demonstrates the ability to successfully use the following WebCT tools: e-mail, topic discussion, assignment drop box, chat, and quiz. The student e-mails the instructor within WebCT stating that she/he has read the course syllabus, understands and will comply with its requirements. The student posts an individual one-page paper on the definition of leadership and responds to at least two other student submissions. Next, the student posts a personal resume to the assignment drop box for review by the instructor. Lastly, the student contacts at least one fellow student and arranges a chat time to discuss perceived differences between leadership and management. At the completion of the module, a quiz is taken to validate that the student understands the module objectives and is ready to move to Module Two. The module quiz is ten questions taken from key words and concepts from the module reading(s). The module quizzes are graded and the student must score at least 80% to move to the next module.

The rationale for Module One individual assignments is clear and critical to a student beginning the course. In Module One, the student is welcomed as a member of the learning community known as MGT 311. The student not only demonstrates the ability to successfully use the WebCT tools, but also the faculty begins to facilitate and encourage contact between students and the faculty, initiates the development of reciprocity, interaction, collaboration and cooperation among the students, provides prompt faculty feedback, emphasizes time on task, communicates high expectations, and lastly, sets the stage for respecting student's diverse talents and ways of learning. Finally, before moving into Module Two, the faculty, at the conclusion of Module One, establishes student working groups.

In Module Two each student individually reads the assigned chapters, writes and posts a two-page double-spaced critical analysis of the readings from each chapter. This paper is not a summary but a critical analysis of the readings as they relate to the module objectives and key terms and concepts. The student will then post the paper to the chapter topic on the discussion board and comment on at least two other student papers from that topic. As noted above, the faculty, at the conclusion to Module One, establishes student working groups. Each group (consisting of four to five students) will then develop a group treatise or code of conduct, posted by each group to the group discussion board, as the first group assignment of the course.

In addition to the individual writing assignments common to Modules Two to Five, group interview assignments begin with Module Three and are conducted thought Module Six. Each group member interviews a leader within their community. The topic for this interview depends on the module as it pertains to that leader's profession. The profession could be business, civic, education or military. On a rotational basis, one group member serves as the leader/recorder to consolidate the individual interviews into a summary paper of the interviews as they relate to the leadership theme of that module. The leader/recorder also includes at least two Internet sources concerning the leadership theme of that module. The group report is no less than four and no more than six double-spaced pages in APA style (APA, 2001) and is posted to the group discussion board for the module. The individuals conducting the interviews gain approval from the faculty for proposed interviewees and interview questions by corresponding in the topic discussion board. A link providing guidance to conducting interviews is provided. Once approved, the interviews are conducted and consolidated by the leader/group recorder into a final product. Each member of the group must provide input and approve the final group report before posting.

The rationale for Module Two to Five group assignments is critical to a student meeting a key pedagogical goal of the course. This goal is the active construction and practical application of leadership theory in an on-line environment. Beginning with Module Two the five member student groups execute group projects and with each new module rotate the group leadership so each group student member will lead a virtual semi-independent working group at least once during the term.

The last module, Module Six, is the capstone module of the course. There are two capstone assignments intended to be a critical analytical discussion encompassing all material and experiences

from the class. The first assignment is an individual assignment in which the student writes a leadership self-improvement plan. This includes an individual self-assessment of the student's own perceived strengths and weaknesses as a leader and their plan to improve as a leader. This assignment reinforces how important it is for a leader to fully understand their self-efficacy before they attempt to learn and understand those they may lead. The assignment also supports two key objectives of the course, being able to identify a student's own perceived strengths and weaknesses as a leader and their plan to improve. The second Module Six assignment is a final group project to create a group critical assessment paper offering a judgment as to whether or not the semi-independent virtual student group evolved over the process of the semester into a cohesive 'team' as defined in the text. The first rationale for this final group project was to have each group member conduct an assessment of their success or failure in evolving into an on-line community that fosters active interaction and communication, collaborative learning, socially constructed meanings, sharing of resources, and support between learners (Palloff & Pratt, 1999). The second rationale for this second module six assignment was to have students identify the challenges of leading a semi-independent working group.

The overall student reaction to the modular organization of MGT 311 was favorable. The students indicated the organization of the course supported their needs and expectations for a leadership course. These student reactions are highlighted in the next section.

Student Reaction

Conducting a case study of MGT311, Griffin (2007) offered clear evidence students believed the on-line course lived up to their expectations and met their needs for an on-line leadership course. When presented the statement "I would rate my overall experience in this class as a positive one." 92% of the students responded, 'they strongly agree" (Griffin, 2007).

> *"As we wind down this module, and this course for that matter, I feel we are all better leaders and followers because of this class" (Griffin, 2007).*

Based on their course experience they would take another on-line course at FCB, and recommend MGT 311 to someone interested in leadership instruction. Finally, students rated their overall experience with the course as a positive one. The following responses represented the common themes "working together with my group helped me gain a better understanding of leadership and gave me much needed experience on assuming a leadership role," and, "great experiences throughout the course, I found myself thinking about and applying the theories and ideas throughout my work day" (Griffin, 2007).

The student feedback related to their perceptions, experiences and success in the course was supported by the literature. On-line courses and programs continue to increase in frequency in higher education. Students are increasingly demanding on-line access, and universities and colleges are working to meet the demand. With the increasing prevalence of Internet-based courses, it is important to examine students' experiences in order to provide an improved learning environment (Singleton, Hill &, Koh, 2004; Howland & Moore, 2002).

Students have identified several factors contributing to successful on-line courses. These included excellent course design, convenience, flexibility, learner motivation, time management, and comfort with on-line technologies (Singleton, Hill &, Koh, 2004; Howland & Moore, 2002).

The implications are clear. The on-line students of MGT 311 believed theoretical and practical leadership instruction can be offered effectively in a totally web-based learning environment. And based on the vast majority of student feedback, the MGT 311 students will both take more on-line courses and recommend this course to students interested in leadership instruction. As one representative student of the on-line section of MGT 311 put it, "we learned through hands-on experiences, living the chapters of the text, in a well structured course." MGT 311 will potentially open the door for many place-bound and time-bound students of leadership. However, the course may not be for everyone as noted earlier by the

student who offered, "I feel I would have been able to gain much more from the class had it been offered in person" (Griffin, 2007).

Pedagogical Lessons Learned

Central to the pedagogical course design was the incorporation of Chickering and Reisser's (1993) seven best practices/principles in learning. The first principle recommended the course design should encourage contact between students and the faculty. The course communications modes were chosen to encourage student contact and interaction. The communications modes included a discussion board, e-mail, and a chat capability. The discussion board served as the primary classroom communications vehicle for posting comments and discussions related to text materials, self-assessments, chapter readings and required papers. Each student was required to not only post a total of sixteen analytical and critical chapter papers, but also post at least two responses to fellow student's postings. Students also used the chat and e-mail modes for synchronous and asynchronous communications within their groups to support intra-group interaction and engagement. Student feedback from the two capstone assignments indicated these modes of communications played a significant role in encouraging student engagement in the course. One student offered, "What helped us achieve such cohesiveness was constant good communication. We were able to bond with each other, which made our team work well." A second student described how as communications improved, so did engagement,

> In the beginning of the semester working together was a little rough. We didn't really know each other and we were all apprehensive about expressing our true feelings to one another and giving an honest opinion. As the semester progressed we were able to work together more and our communication skills improved (Griffin, 2007).

Group projects helped support the second principle of developing reciprocity, interaction, collaboration and cooperation among the students. As reported above, students indicated group projects were the primary vehicle for gaining practical leadership experience in the course. The following statements voice what was consistently reported by the students; "Working together with my group helped me gain a better understanding of leadership and gave me much needed experience on assuming a leadership role." And, "Today it is in a collaborative work group that true leaders immerge. It has become evident that all people have some leadership qualities that can be drawn from and used to make the whole group run smoother" (Griffin, 2007).

The third principle encourages active and constructive-oriented learning. Two examples of active learning were the rotation of leadership responsibilities and the conduct of the leadership interviews within the group projects. The students stated they actively learned leadership by practical application, "Leadership was learned through group work when each member became a leader at some point, and the other times worked with the leader to accomplish our goals." The conduct of three leadership interviews also proved to be an excellent example of active learning.

> Specifically, one way I plan to improve my leadership abilities is by learning from the experienced leaders that I interviewed. I feel that one of the most interesting aspects of this course was the vast amount of knowledge I obtained from conducting my interviews. I was also able to learn from the interviews that were conducted by other students. I found that leaders with more experienced were far more understanding leaders and they exerted different leadership styles that were dependent upon the situation (Griffin, 2007).

The fourth principle encouraged faculty to provide prompt feedback. Course grading expectations were set in the first week of the course by providing the course syllabus. No student was allowed to continue in the class until each had e-mailed the faculty stating they had read, understood and was

prepared to comply with the course syllabus. In addition, each student received a course grading rubric that explained the grading expectations for the course.

Principle five, emphasize time on task, was supported by setting suspense dates for both individual and group related work and assignments. In addition, the instructor managed when and how long a student could be in an individual module, keeping the student on task, by setting module time windows through the instructor controlled Web CT virtual classroom calendar. By controlling student module and assignment times the instructor could emphasize time management, a key leadership skill for these students of leadership.

The communication of high expectations was principle six. This was spelled out in the 'expectations for success' section of the course syllabus. This section of the course syllabus provided the students detail on such key topics as grading standards and scale, professionalism, virtual class attendance, and group and individual work. In addition, each student received a course grading rubric, for both individual and group assignments, that explained the writing expectations for the course. The grading rubrics specifically provided expectations related to paragraph construction and mechanics, grammar and spelling, quality of information, sources and citations and style of writing.

Lastly, principle seven called for respecting student's diverse talents and ways of learning. This was facilitated by the content of the course being presented in organized, manageable, and easily navigated segments known as modules. Student feedback validated that the course structure did facilitate learning, "It was a well-structured class and it allowed us to work in teams which is a big part of today's leadership" (Griffin, 2007). The first module was organized to initially insure each student could successfully work in an on-line course. Then the modules progressively built upon previously presented leadership theory and practical leadership application. The last module was a capstone project in two parts, a group and an individual self-assessment and plan for improvement.

Summary and Recommendations

In summation, it was found in MGT 311 that the pedagogical approach did play an important role in the overall effectiveness of offering leadership in a totally on-line format. The findings of the post-course study (Griffin, 2007) supported the incorporation of Chickering and Reisser's (1993) guidelines and suggestions for "best practices" in on-line learning. These included: encouraging student-faculty interaction through e-mail and discussions, encouraging student cooperation through collaborative learning, applying real-world work to course content through the use of group projects, providing prompt, comprehensive feedback by the faculty, recommending completion times for each module, communicating high expectations, and respecting the diverse talents and ways of learning that each student may bring (Chickering & Ehrmann, 1996; DIIA, 2005).

We offer our experience in developing the on-line version to guide the future development of leadership instruction in the on-line learning environment. The expansion of distance education requires faculty delivering distance education to re-examine the way teaching and learning takes place (Palloff & Pratt, 1999). What has evolved in this alternative to the traditional classroom is a new paradigm of teaching and learning. The development of this new paradigm was required because many of the established assumptions of teaching and learning commonly true in the traditional classroom do not hold for successful teaching and learning in the distance-education environment. There are several key differences between traditional classroom and distance learning that include instructor roles, lesson organization, use of technology and the need for collaborative learning. In making the transition from the classroom to on-line instruction, faculty must concern themselves with these pedagogical issues (Palloff & Pratt, 1999).

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