Structuring a Distance Education Program to Attain Student Engagement

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Abstract

Institutions of higher learning are adopting distance education courses to make it easier for students to obtain certificates, minors and degrees. A key aspect in the success of distance education programs revolves around how well the programs engage students during their learning. Developing an online program presents choices in determining appropriate learning strategies in course delivery and student engagement. This reflection discusses organizing a multi-institution distance education certificate program and choices for incorporating student engagement into the courses of an online agricultural and environmental law certificate program. Institutions and instructors may need to expend greater efforts to engage students in activities that will enhance their distance learning courses.

Keywords: communal activities; learning experiences; oversight; student engagement; social presence

Introduction

Students and universities have become receptive to course work being conducted online (Fahy and Steel, 2008). In some cases, students cannot be on campus at the times course offerings are available due to jobs or lack of proximity to a campus (Mayadas et al., 2009). In other cases, online courses can provide instruction in topics for which no on-campus course is available. Budgetary pressures are also leading to more online courses (Murray et al., 2012). Collaborative efforts among institutions have emerged as a way to provide educational opportunities and programs that otherwise would not be possible (Great Plains IDEA, 2003).

Some of today's students expect to be able to engage in online course work (Michael, 2012). Online courses provide better access, convenience and flexibility to learn materials and gather credentials for employment (Conceiçâo, 2006). Furthermore, business firms may lean on distance education as a means for helping employees receive additional training (Fahy and Steel, 2008). Distance education involves different roles for instructors and students than in face-to-face courses

(Berge, 2008; Conceiçâo, 2006). Distance education often involves a partnership of teaching and learning that requires instructors to engage in new kinds of activities (Conceiçâo, 2006).

Institutions offering distance education courses have an obligation to provide meaningful learning experiences to students. Online instruction is more time-intensive than classroom teaching (Mayadas et al., 2009) and distance courses may require extra effort to incorporate student engagement activities. Online instructors are challenged in structuring their courses to provide students valuable educational experiences and training and institutions and faculty need to contemplate how they can create a positive learning environment to encourage students to complete course and degree objectives. Choices accompanying the organization and implementation of distance education courses are important in meeting obligations to students who cannot be on campus.

Distance Learning for Agricultural and Environmental Law

Ten founding universities formalized the Great Plains Interactive Distance Education Alliance, known as "Great Plains IDEA," in 2002 to offer distance education courses to students at member universities spread over vast distances in sparsely-populated areas of the American Midwest (Great Plains IDEA, 2003). By using faculty resources from member universities, students were able to take courses and earn degrees that were not available at their own institutions (Carnevale, 2001). Subsequently, several deans at colleges of agriculture led the development of an alliance of agricultural colleges that culminated in the formation of "AG*IDEA," a consortium of universities desiring to employ distance education courses in agricultural and related sciences. In 2007, AG*IDEA joined Great Plains IDEA as an affiliate (AG*IDEA Bylaws, 2008).

Nineteen universities are AG*IDEA member institutions (AG*IDEA Member Universities, 2012) and nine programs have been established (AG*IDEA Programs, 2012). Students register for AG*IDEA courses

at their home institution and pay a common tuition fee per semester-credit hour. This fee may be higher than the fees for regular campus courses in order to pay for the infrastructure and expenses connected to distance education courses. The fees are divided per agreement among the course's teaching institution, the student's institution, and the AG*IDEA national office. Class size is limited: these are not massive open online courses that have recently garnered considerable attention. This means the courses can be structured to involve student engagement.

A Work Group in Law

Acknowledging that their institutions lack the resources to offer desired training in undergraduate legal materials, several agricultural lawyers from land-grant universities organized a work group in 2009 to develop a distance education program offering a certificate in agricultural and environmental law under AG*IDEA. The efforts of the work group were to make law courses available for students in numerous agricultural and environmental disciplines across several states to better prepare students for employment. The work group consisted of lawyers affiliated with undergraduate legal education rather than law schools. Through gatherings at national conferences, monthly teleconference meetings and two workshops, the work group came to a consensus on the business plan. The AG*IDEA certificate program in Agricultural and Environmental Law was approved in November 2011 (AG*IDEA Business Plan, 2011).

The law work group faced the problem of developing a program that provides a service to various degree programs without credentialing for a degree or employment situation. An initial major decision involved whether all students should take a basic law course that would serve as a prerequisite for additional specialized law courses. Conceptually, a mandatory prerequisite made sense: students could learn the basics in one course and proceed with more specialized topics in subsequent courses. Logistically, a prerequisite would require major adjustments in existing courses being taught and in scheduling courses. All of the existing law courses, including some that were already being taught as distance education courses, were stand-alone courses without a prerequisite. The work group decided that if faculty could not convert their existing courses to distance education courses, they would not teach in the program. Thus, it was decided not to adopt a prerequisite law course.

A second issue was whether the certificate should include two-hour courses or only three-hour courses. Two-hour courses were appealing for several specialized legal topics dealing with agriculture and the environment. However, incorporating two-hour courses into the program would require more courses to be taught to meet the 15-hours of the certificate program. The work group decided that all course work should involve three-hour courses. Courses include Agricultural Law, Environmental Law, Food Law, Ethics in Ag Business, Public Health Law, Agricultural Policy and Resource and Environmental Economics.

Implementation Issues

With the adoption of the certificate program, five institutions commenced offering AG*IDEA courses in 2012. However, issues surfaced about instructor credentialing, listing of courses, course content and program assessment. Significant challenges needed to be addressed by the work group to achieve a successful program. An initial hurdle was the credentialing of faculty from other institutions prior to offering AG*IDEA courses. At least one university had a policy under which every distance education course must be taught by a faculty who has been accepted as an adjunct faculty. This required faculty to apply for adjunct status and be accepted by the faculty of a department before their AG*IDEA courses could be offered at the credentialing university.

Some institutions had difficulties listing AG*IDEA courses due to the need to develop new courses. In many cases, the development and adoption of new courses required two semesters. Due to time lags in getting AG*IDEA courses listed at each participating institution, not enough students enrolled in some scheduled courses so the courses were not taught. The program is dependent on the voluntary efforts of individuals at participating institutions in getting courses adopted.

Enrollment in scheduled distance courses has also been low due to the decision by an institution to forgo offering a course that does not meet the needs of its students. Adoption of AG*IDEA courses is voluntary. A related problem is getting information on scheduled courses to students to enable them to register. At least one institution has experienced difficulties in communicating information to students that has severely limited enrollment in AG*IDEA courses.

While the AG*IDEA concept involves accepting any course offered by a member institution, concerns exist about course content. Given the potential discord that could accompany a discussion about course content, the AG*IDEA work group has not addressed the issue. This raises the possibility that a particular AG*IDEA course may not be comparable to the same face-to-face course of an institution and may not cover materials desired for students. While this may be a problem, it is no different from a face-to-face university course in which multiple instructors use different texts and different materials are taught. For AG*IDEA courses, if a problem with course content is observed, an institution can decline to offer the deficient course thereby resolving the issue.

Student Engagement

The development and implementation of a distance education certificate by a work group in agricultural and environmental law raise concerns about adequate oversight to ensure that students are sufficiently engaged in a positive social environment. In the development and delivery of distance education courses, the work group

made choices that impact the scope of materials and delivery mechanisms. In some cases, these choices were made without full consideration of how the decisions would affect students' social presence and engagement in learning experiences. By examining the efforts of the work group, ideas may be identified to foster a social presence that encourages learners' efforts and maintains a hospitable atmosphere for opinion and feedback (Sung and Mayer, 2011).

Law involves the consideration of tradeoffs, compromises and the imposition of beliefs by legislative bodies, regulators and courts. Teaching law needs to capture the principles and beliefs that contribute to legal proscriptions. A dialogue among students is important in raising principles and beliefs, displaying divergences of opinions (Chen et al., 2010) and recognizing the difficulties of prescribing norms for business and social issues. Thus, for the AG*IDEA agricultural and environmental law program, it is important that students be able to engage in a discourse of contemporary controversial issues rather than simply reading established written laws. Students need to become engaged with their instructor and each other and have opportunities to express themselves (Steinman, 2007). This may not occur in an online course if opportunities for engagement are not purposefully incorporated into the course's requirements (Hege, 2010).

Social Environment and Retention

The importance of learning within a social environment has been recognized by educational theorists (Pate et al., 2009). Students benefit from hands-on participation in practicing and gaining skills (Gordon and Edwards, 2012), and peer learning can be an important component of course work (Schonfeld, 2005). Instructors may be challenged in developing an online course that integrates aspects of community learning and provides meaningful skills (Cameron et al., 2009). Online courses may not provide these experiences due to the absence of nonverbal signals (Gordon and Edwards, 2012) and insufficient collaborative strategies in projects and problem-solving components (Williams et al., 2011). Yet online courses can be structured to incorporate group-based tasks with student collaboration that can foster engagement and augment learning skills (Ituma, 2011). Transactional distances can be reduced to engage students in an interactive learning environment (Steinman, 2007). This involves activities that require students to share their personal opinions, values and beliefs with others (Black, 2005).

Student engagement is also important for retention of students in courses. Some evidence suggests that distance education programs experience difficulties in retaining students as documented by higher dropout rates (Park and Choi, 2009; Steinman, 2007; Willging and Johnson, 2004). Although it may be unfair to compare these dropout rates, the problem should not be ignored. Faculty teaching distance education courses

need to exert efforts to enhance student satisfaction with their courses.

The external factors that contribute to students dropping out of courses are difficult to control. Working students often experience difficulties juggling their dual loads (Willging and Johnson, 2004). The absence of support from family (Park and Choi, 2009) or the lack of a definitive career motive (Willging and Johnson, 2004) may lead some students to discontinue distance courses. However, institutions do have some role to play in making sure that distance course work is enticing (Willging and Johnson, 2004). Research suggests that students are less likely to drop out if they are satisfied with their courses and the courses are relevant to their lives (Park and Choi, 2009). While satisfaction and relevance may come from many sources, a positive social presence can contribute to student decisions to complete courses (Borup et al., 2012; Willging and Johnson, 2004). This suggests that greater student engagement should be encouraged so that greater numbers of students complete distance courses.

Promoting Student Engagement in Distance Courses

The quality of student interaction contributes to the success of learning and teaching online (Mayadas et al., 2009; Nandi et al., 2012). When students interact with each other, they can bring their opinions, values and beliefs to the conversation (Steinman, 2007). Academic engagement by students affects their perceptions of academic quality (Richardson et al., 2003). Various asynchronous and synchronous technologies exist to augment student interactions (Nandi et al., 2012). These technologies play a role in student engagement and assist instructors in supporting academic engagement.

One idea for early student engagement is to create an online space for students to introduce themselves (Hege, 2010). Students can be requested to share something about themselves or why they are taking the course. Other students can see with whom they will be associating and contemplate commonalities. Adding pictures increases the sense of community.

The most common method for student interaction is to require regular postings on a community bulletin board or discussion forum so that others in the class can be connected to the materials being covered (Hege, 2010; Maushak and Ou, 2007; Philip and Nicholls, 2007). Student reflections and interpretations of course materials can force them to read the materials for greater insight. By having an allocated time frame for postings, students can be required to keep up-to-date with the course (Philip and Nicholls, 2007). This engagement also helps students support each other in their learning and quest for knowledge (Pate et al., 2009).

A third engagement activity involves the formation of groups to complete a project (Maushak and Ou, 2007). Groups can use various communication tools for sharing ideas, facilitating collaboration and discussing how to

complete the assignment. In this manner, each student develops skills in interacting and communicating with a few other individuals in collectively responding to an activity.

Video sessions by the instructor allow students to view their instructor and can send important messages to students (Borup et al., 2012; Hege, 2010). Students can visualize their instructor, detect a personality, view enthusiasm for the materials and better gauge the instructor's expectations (Borup et al., 2012). Students may also be required to post videos for a course, such as project reports.

Another idea is for an instructor to utilize a live chat program with individual students (Hege, 2010). Research has shown that the role of teachers in supporting academic engagement is important (Richardson et al., 2003). A personal connection between a teacher and each student enhances students' learning experiences and retention (Sitzman and Leners, 2006).

The AG*IDEA work group has not interjected itself into the interaction and engagement activities of instructors for individual courses. It is assumed that the instructor's institution is responsible for monitoring its courses and the success of its instruction programs. Yet, given the issue of retention in distance education programs, greater efforts might be expended by the work group in helping instructors design and deliver courses that are relevant to learners' needs (Park and Choi, 2009).

Options for Reaching Students

Many faculty and students assume that online courses should be asynchronous learning so that students have the flexibility of completing course work after hours and on weekends. However, two other options are available. First, a course can be delivered synchronously through video technology. Second, a blended course consisting of some synchronous sessions and mostly online work offers a compromise that may maximize student engagement.

Asynchronous Delivery

Asynchronous delivery may result in a low level of social presence that can negatively affect a course (Liu et al., 2007). Yet this method of delivery does not have to be static. Several opportunities exist to use technology so that students become engaged with other students. These include student collaboration, breakout groups, chat rooms and group projects (Oliveira et al., 2011). Asynchronous videos that are archived can also help students develop a connection to the instructor and provide opportunities for instructors to interject enthusiasm and encouragement (Borup et al., 2012). By employing Google Hangouts or other software, students may be able to engage in extemporaneous discussions that are important for group-interaction skills (Roseth et al., 2013).

Synchronous Delivery

An instructor may select synchronous learning where students participate in live presentations online at scheduled times. Synchronous learning environments have some major advantages including presence, time management and socialization (Haughey, 2007). For many undergraduate students (18-22 years of age), sessions involving a simultaneous video helps them develop an emotional connection to their instructor (Borup et al., 2012). Synchronous learning allows student participation during online sessions, which is enhanced if students are required to connect via video when they are speaking. With visual images of their classmates, there is a social presence that may include students' facial images that can emotionally connect them to the group.

Synchronous learning also helps students maintain a schedule that generally precludes them from waiting to cram materials into a few days or weekends (Schonfeld, 2005). With the adoption of live video sessions, synchronous learning involves communal activities that may be significant in engaging online students in meaningful learning experiences. Furthermore, synchronous learning can include archived lectures for students who occasionally have conflicting obligations or experience technology failures. These students can view the lecture and hear contrasting viewpoints at a later time, but this asynchronous delivery is accompanied by less engagement.

Blended Learning

In addition to asynchronous and synchronous pre-sentation techniques, blended learning with face-to-face interactions and online experiences is a third possibil-ity (Garrison and Kanuka, 2004; Garrison and Vaughan, 2013; Roseth et al., 2013; Vaughan, 2010; Vaughan and Garrison, 2005). Blended learning can create dynamic and vital communities of inquiry for students to be engaged with each other (Vaughan, 2010). By strengthening social, cognitive and teaching presence, a community of inquiry enhances learning (Akyol et al., 2011). Some feel that blended modes of distance education are able to maximize the best elements of online and face-to-face learning (Murray et al., 2013).

Blended courses can be effective in offering students meaningful preparation experiences and discussion possibilities (O'Brien et al., 2011) as well as meeting student expectations for a distance education course. The face-to-face time of a blended learning approach for interactive instructor-led problem-solving tutorials is highly valued by students (Edginton and Holbrook, 2010). Yet these courses also offer flexibility to students for fitting online materials into their schedules. A redesign of a synchronous class with fewer synchronous sessions and additional online course work can augment learning approaches to realize increased effectiveness, convenience and efficiency (Vaughan, 2010).

Given the minimal oversight of AG*IDEA courses being offered, concerns exist whether the learning

experiences incorporated in asynchronous courses are sufficient. The AG*IDEA work group needs to become involved in the quality of the learning activities in support of active learning and interactions (McNaught et al., 2012). Until the work group institutes a course assessment procedure, some courses may fail to incorporate student engagement mechanisms that support learning outcomes of knowledge and skills, mental models and higher-order thinking skills (McNaught et al., 2012). While the newness of the certificate program precludes any data on retention, it does not foreclose actions to address issues that have been found in other distance education programs such as encouraging greater engagement.

Concluding Thoughts

Experiences in an AG*IDEA work group that implemented a multi-university law certificate program highlight a need to do more with engaging students in distance education courses. Institutions that want to reach additional students through online courses need to recognize the commitments required to provide students a quality education. Online courses including massive open online courses that decline to require student engagement are simply specialized lessons away from campus. They are not imparting the engagement skills desirable for jobs and careers. Institutions need to provide support for the development and delivery of online course offerings so that students develop skills in interacting with others. Student engagement skills are needed to provide a quality education that is satisfying to students (Murray et al., 2012).

Instructors might resort to blended learning where students are occasionally present in a synchronous classroom so that visual interactions can take place. To develop a presence, students can be required to have video capabilities so others can see them when they contribute to a discussion. Students also can be required to form breakout groups and interact via distance communications. Through these techniques, students can experience being together and engaged with classmates.

Online courses can involve a meaningful community of inquiry that provides students a quality learning experience. Because of the physical separation of students and the instructor, conscious efforts are required to engage students. The experiences of the AG*IDEA work group implementing a distance certificate program disclosed that faculty need to remind their administrators of their institution's obligations to online students. The goal of distance education is not simply to offer off-campus courses but to reach additional students and impart skills for their employment and careers. Institutions, administrators and faculty who decline to be concerned about the learning experiences incorporated into online courses are failing their students.

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