A Long-Established Extension Education Course Goes On-Line

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Abstract: Technology is applied to an Extension education course. A grant was received to build an e-learning framework for Education 331. Instructor and staff created a learning environment that engaged students in field instruction. The course enhances students' knowledge of Extension, agriculture, and adult/continuing education. Educational program development and design are key content areas. Transition to e-learning frameworks included on-line course materials and class time instruction in technologies for content delivery in the Extension System. Students applied content and technology through delivering on-line in-service for Cornell Cooperative Extension professionals.

Introduction

Cornell University's College of Agriculture and Life Sciences (CALS) offers Education 331 (Careers in Agriculture, Extension, and Adult Education) to students interested in the work of Cooperative Extension, agriculture, and adult education. The course was developed to enhance students' knowledge of Extension, agriculture, and adult/continuing education programs. Key components of the course include methods of educational program design and development, audience identification, and program evaluation.

In 2007, Dr. Glenn J. Applebee, Executive Associate Director of Cornell Cooperative Extension and course instructor, received a grant to build an e-learning framework for Education 331. The grant provided an opportunity to create a flexible learning environment focused on engaging campus-based students in field-based instruction, a crucial component of Extension, agriculture, and adult education work.

While on-line approaches to education are increasing in CALS and the Cornell Cooperative Extension system, distance education offers methods that have not been used extensively in the college's formal courses

of study. The grant provided an opportunity to pilot-test on-line approaches to Extension education, agriculture, and adult education, and to develop practices in distance learning. The distance-learning framework and content for Education 331 provide a new way to capture and document institutional knowledge and history.

To aid in the transition to an e-learning framework, instructor and staff developed an approach that combined on-line course materials with traditional class time for discussion and instruction. This approach represented an evolution of existing practices rather than a radical break with past (Niederhauser & Stoddart, 2001). Students learned more about technology through use within the course and by planning, developing, and delivering a professional development on-line in-service module for Cornell Cooperative Extension professionals in New York State.

Examples of Objectives

- Understand the nature and scope of adult educational institutions, Cooperative Extension, agricultural education, and program areas within each.

- Appreciate the relationship between social settings, diversity of institutional structures, and purposes of adult education, and Cooperative Extension and agricultural education programs.

- Be familiar with developmental issues in adulthood that affect the perspectives of adult learners.

E-Learning and Extension

Several years ago, CCE began using Moodle, an open source course management system, to host on-line courses for internal and public programming. Historically, CCE has relied on face-to-face models for programming and content delivery. The introduction of e-learning to the system reflects the changing nature of Extension work and Extension constituents. Development of the Education 331 course occurred within this context. New content, including video interviews, was developed for the course, and expanded upon existing content. As part of the course development process, issues such as formatting content for use on-line, integration and delivery of video, and introducing users to new technologies were addressed (Cecil & Feltes, 2002).

Students and the New Framework

Students were required to maintain access to a computer system with enough support so that instructional time did not become jeopardized. The task of fixing problems associated with technology in distance education can be problematic and time consuming. To minimize these problems, prior planning included working closely with IT specialists and the course instructor to evaluate course usability. Constant feedback, throughout the course, led to an expansion of an information database of possible issues, and the documentation of effective solutions.

Role of the Instructor

A goal of the grant was to provide access to course materials on-line. There were course-development discussions deliberating the pros and cons of conducting the course completely at-distance. The instructor

felt strongly that a weekly meeting with the students was critical to provide social interaction and a cooperative learning environment. This meant that the actual class meeting time was maintained, with the Web site providing anytime/anywhere access to course content.

An additional goal of the project was to explore and document the training and experience needed to transform a course to an on-line framework. Transitional training needs to be provided to instructors, support from IT specialists is essential, and experience from others who have made the transition is helpful. The pedagogical framework for any changes required by the integration of technology to an existing course must align with, and extend, current practices such that the focus remains firmly on course subject matter (Hennessy, Ruthven, & Brindley, 2005).

Observations and Recommendations

- Ensure that the introduction of technology is compatible with the instructor's expectations and will facilitate student learning (Niederhauser & Stoddart, 2001).

- Take into consideration what students may consider a norm for a framework in their current institution.

After an instructional design specialist reviewed the site, a detailed report on site performance using different connection speeds, operating systems, and Internet browsers was presented. Views and recommendations were provided on the educational benefits of Moodle compared to other approaches often used with Cornell Cooperative Extension educators across the state.

Upon implementation of the course, the IT specialist participated on-line and attended the initial class sessions. The initial use of technology had to be adjusted to provide adequate support to students not accustomed to working on-line. Similar situations were realized when applications were used with off-campus Extension educators. Providing adequate technical support and maintaining the focus on content-not technology-is essential to the successful transition to an on-line environment (Hennessy, Ruthven, & Brindley, 2005).

Though experiencing some issues during implementation of the course, such as limited student and Extension educator knowledge of technologies, the on-line approach was well received. During a final assessment, students singled out the availability of course content anytime/anywhere and the thoughtful use of video as positive contributions of the technology use in education. Ready access to technical support, both in-person and on-line, were also identified as contributing to a positive view of technology. The weekly meetings to engage in face-to-face discussions were also seen as a key element of the course, and integral to its success.

More experience with this approach by instructors, students, and Extension educators in combination with adequate technical support will help build on positive new approaches to instruction and in-service delivery in the Extension system (Hennessy, Deaney, & Ruthven, 2005).

References

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