

## **Curriculum Model for Distance Education AgEdS 315 Leadership and Group Dynamics**

### ***Poster Abstract***

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### **Introduction**

The objective of this project was to restructure an on-campus course, Leadership and Group Dynamics, for distance delivery. It was part of a USDA Challenge Grant Curriculum Project entitled, "A Curriculum Model for Undergraduate Distance Education in Agriculture Using Technology". The Challenge Grant project consisted of converting six courses for distance delivery in the disciplines of agricultural education, animal science, agronomy, agricultural system technology, and economics. In addition to curriculum development, the project included faculty development activities and collaboration with North Carolina Agricultural and Technical State University.

Project activities included developing a course packet of PowerPoint visuals, placing course content on the World Wide Web using WebCT, developing videotapes to enhance discussion of key concepts, and delivering the course to students at a distance.

### **Course Development**

The course was restructured into seven units, plus an introduction and orientation session. The units contained from two to seven topics. Forum discussions, questions to be addressed, references, notes to accompany the course packet, and applications were written for the topics. Internal and external links were added to the web notes.

The content was written using MS Word, which was converted to html and uploaded into WebCT. Student assistants made minor formatting changes in the content after uploading into WebCT to create the desired appearance and permit easy viewing and study.

One concern in teaching on-line was to have interaction with and among students. To provide opportunities for interaction, 13 threaded discussions were created. These consisted of questions, scenarios, and situations in which the students were required to respond to instructor's postings, the postings of other students, or both. In addition to the threaded discussions, virtual teams of students were formed to function together in solving assigned problems. Electronic mail was also used for interaction with students and students were required to submit most of their assignments via electronic mail. Students were required to submit bi-weekly journals and a portfolio at the end of the semester. Seven 2-hour sessions were conducted over the Iowa Communications Network (ICN), with 2-way video/audio capabilities, to apply concepts and answer questions.

## Challenges

The greatest challenge was to plan and develop the web notes. This was the most time-consuming phase of the project. It was difficult to write notes in a concise and coherent manner without losing the personal sharing of experiences and examples, which are part of face-to-face classes. It is much easier to conduct a face-to-face lecture/discussion than it is to convey the concepts in written form.

A second challenge was to develop realistic applications that were appropriate for web delivery. An application was written for each of the 31 topics. The intent of the applications was to help the students internalize the concepts by relating the concepts to real life situations. Several self-assessments and goal setting activities were included in the applications. Students' responses to the application were required as part of their bi-weekly journals.

## Results and Evaluation

The course was offered during the fall semester 1998 with 13 students enrolling. About half of the students were off-campus and were employed full-time. The visuals that were developed as part of the project and instructional information on accessing the web were distributed to the students in a printed course packet. The content was delivered using visuals, web notes and Internet links, the ICN fiber optics network, and the textbook.

Students completed an anonymous on-line course evaluation after grades were submitted. Students were asked to evaluate all delivery modes and activities in the course as to how helpful they were in learning the concepts. On a 5-point scale with '5' representing excellent, mean ratings of 4.08 and 4.46 were attained for the course packet (visuals) and web notes, respectively. The mean rating for an assignment consisting of interviewing a leader and writing an analysis of the individual's leadership tendencies, activities, and philosophy had a mean rating of 4.15. The threaded discussions received a mean rating of 3.46.

The students were also asked to rate factors representing problems that they encountered in completing the course. A rating of '1' indicated that they experienced no problems, with '5' great problems. Of particular interest was to evaluate the use of WebCT and limited face-to-face instructor contact to see if they presented problems to the students. The mean ratings for both of these factors were 1.54, indicating that the students experienced no problems. The mean ratings for all other factors were less than 1.50.

An assessment was made of the students' satisfaction with the course. Factors assessed were whether the content was challenging, met their expectations, had relevant and realistic requirements, and an overall rating. The mean ratings for all factors were above 4.00 (good) with the overall mean rating for the course of 4.08. Student evaluations of the instructor ranged from 4.15 to 4.62 on all factors accessed.

The evaluation asked the students to report the amount of time they spent on the course each week. The mean was 12.96 hours per week, which is above the target of three hours in-class and six hours out of class for a face-to-face 3-credit class.

## **Conclusions**

Based on experiences gained from the project, the following conclusions were reached. Content can be effectively delivered via the web. It is a time intensive process of planning and converting to web-based delivery; however, with WebCT, one does not need extensive programming skills to make the conversion. There are more opportunities available using web-delivery to engage the students in the content and to increase interaction. The interaction with and among students for the web delivered course was estimated to be three times greater than in face-to-face delivery.