

Teaching Farm And Ranch Management In Response To Students' Backgrounds And Career Goals

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Abstract

This manuscript reports the backgrounds and career goals of students in a farm and ranch management course and illustrates how teachers can use such information to improve course content and presentation of content. The class was composed of traditional agricultural students who tend to have interest in farm management and agribusiness careers. Course background varies among students. A large percentage of the students are animal science majors and come from farms that produce traditional products such as wheat, pasture, grain sorghum, hay, soybean, corn, beef, hogs, and horses. Information about students' backgrounds and career goals confirmed that the course content was appropriate and led to changes in presentation of content, such as emphasizing livestock when teaching depreciation and reinforcing management principles by referring to their use in farm management careers.

Introduction

The purposes of this manuscript are to share a process that teachers can use to increase their knowledge of students' backgrounds and career goals, to report information about the backgrounds and career goals of students enrolled Fall Semester 1995, and to illustrate how teachers can use such information to improve course content and presentation of content. The process, report, and illustration are focused on AGEC 308, *Farm and Ranch Management*, a course offered by the Department of Agricultural Economics at Kansas State University.

Within the boundaries imposed by faculty and administrative approval requirements, individual faculty have considerable freedom and responsibility to determine and teach the content of their courses. Based on experience

and observation, the authors believe that two major criteria faculty consider in determining content are their own background (training and experiences) and their assumptions, knowledge, and impressions of their students' backgrounds and career goals.

Literature Review

A literature search using the Educational Resources Information Center database (ERIC), the database of the National Agricultural Library (AGRICOLA), and other sources revealed considerable interest in information about current and former students. A southern regional project surveyed undergraduate agricultural and home economics students to collect information about rural, farm, and educational backgrounds and occupational goals (Adrian et al., 1987; Dunkelberger, 1984; Dunkelberger et al., 1982). Byler (1987) reported information about backgrounds, college experience, and goals of agricultural majors at Tennessee universities. He recommended adjusting teaching methods and techniques to accommodate students who do not have agricultural backgrounds. Numerous studies involved surveys of agricultural graduates. Examples and topics on which they focused include curricular change (Riesenberg, 1988), earnings (Barkley, 1992), skills needed (Barkley, 1991), and marketability (Woods, 1978). Other studies focused on various topics such as characteristics of students in economics courses (Siegfried et al., 1996), impact of calculus on performance in economic theory courses (Butler et al., 1994), and careers in farming (Wise, 1978). These studies illustrate the usefulness of information about current and former students to improve course content, presentation of content, curriculum, and marketability of graduates. However, the authors of this manuscript are not aware of a publication focused on collecting information about students' course and farm backgrounds and career goals as a means of improving the selection and presentation of content of an individual course.

Course Description

AGEC 308 is the first course in a two-course sequence that focuses on farm management. It is an upper level course designed for juniors and seniors. The prerequisite is either *Agricultural Economics and Agribusiness* or *Principles of Microeconomics* (Kansas

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State University). The content of AGEC 308 consists of basic farm management principles and analytical tools such as the decision-making process, cost concepts, profit maximization, farm records, financial statements, measures of performance, enterprise and partial budgeting, and introduction to whole farm planning. This 3-hour course consists of two 50-minute lectures and a 1-hour and 50-minute laboratory. Content of lectures is reinforced by several small exercises and a large farm records exercise. AGEC 308 is required for students majoring in Agricultural Education and Agricultural Economics in the farm management option. Animal Sciences and Industry majors and Agronomy majors in the production option are required to take either AGEC 308 or *Accounting for Business Operations*. Students in other majors may take AGEC 308 as a general elective.

Materials and Methods

During the Fall Semester 1995, a questionnaire (available on request) was distributed in the first class period. The questionnaire was developed by the senior author and had been used in previous classes to collect information about students' backgrounds and goals. Previously collected data have provided useful information. However, the authors have not had time to carefully check previous data input, as was done with the data presented in this manuscript.

Information collected included age, major, class, sex, citizenship, farm background (including farm size and major enterprises), prerequisites completed, number of credit hours and courses completed from various departments, and first three choices of career areas. Questions were designed to minimize writing by listing anticipated responses so that students could check the appropriate response. Most students were able to complete the questionnaire in approximately 10 to 20 minutes. Students could take the questionnaire home to check details. Students not present on the first day of class were asked to complete the questionnaire at other times.

On the first day of class there were approximately 130 students enrolled. However, because some students either dropped or added AGEC 308, the exact number of students who received the questionnaire is not known. The authors defined the sample as the 126 students who received a grade in the course, from whom we received 121 useable questionnaires. In some cases, the authors estimated hours of coursework based on information provided by the students or selected the most reasonable and/or relevant major or farm background when more than one was specified. A computer program was prepared for quick processing of the data.

Results and Discussion

Most of the students were traditional students.

Most (99%) were under the age of 27, and 90% were under 23. Animal Sciences and Industry was the predominate major (59%). Other majors with large percentages of students included Agricultural Education--12%, Agricultural Economics--9%, and Agronomy--7%. More than half (51%) were seniors, and 36% were juniors. All were U.S. citizens and 73% were males.

More than half (56%) grew up on full-time farms and 83% had some kind of farm background. In general, students came from farms that had traditional enterprises such as wheat, pasture, grain sorghum, grass hay, soybean, corn, alfalfa hay, beef, hogs, and horses.

Departments in which a large proportion of students had taken coursework included Agricultural Economics (this includes agribusiness courses)--87%, Animal Sciences and Industry--83%, Mathematics--77%, Economics--70%, Accounting--56%, and Agronomy--42%. Few of the students had taken courses in other departments listed on the questionnaires. In a given department, some students had taken a large number of hours, whereas others had not taken a course. A large percentage of students had taken courses in several departments.

Students were asked to select their first, second, and third choices of career goals from a list. The most popular first choices were managing your own farm (33%) and agricultural business and sales (18%). The most popular second choices were managing somebody else's farm (21%) and managing your own farm (19%). The most popular third choice was agribusiness and sales (21%). When percentages for managing your own farm and managing someone else's farm are combined, 41% selected farm management as a first choice, 40% selected farm management as a second choice, and 26% selected farm management as a third choice.

The senior author has collected information about AGEC 308 students' backgrounds and career goals each fall semester since 1984. Although data from previous semesters have not been checked as carefully as the 1995 data reported above, overall summaries of these data have indicated that the students' backgrounds and goals for previous semesters are similar to the 1995 results. So the planned content and presentation of content for 1995 was focused on management tools and concepts that would be useful to students interested in farm and agribusiness management careers and on traditional Kansas farm commodities. The 1995 data confirmed the overall appropriateness of the planned content and presentation of content as summarized in the course description section. However, two changes in the presentation of content were made during Fall Semester 1995. First, being reminded of the large proportion of students who major in Animal Sciences and Industry and/or come from farms that produce livestock, the instructor

emphasized livestock when teaching depreciation. Questions such as "Can you depreciate livestock?" and "Can you depreciate breeding livestock?" seemed to stimulate interest in depreciation and improve students' attentiveness. Second, the instructor tried to reinforce important content by relating it to the farm management career goal. This was done by making statements in lectures such as, "When you are managing your farm, remember your opportunity costs."

Potential adjustments for future semesters also exist. Because a large proportion of the students in future classes will likely be interested in farm-related careers, an optional (not graded) exercise, designed to help students anticipate potential problems in a farm management career, should be required and graded in the future. The instructor has encouraged the students to work together on exercises. If more formal cooperative learning strategies are implemented, the students' backgrounds and career goals could be used to assign students to groups.

Another possibility for increasing the use of individual questionnaires is to focus on unusual responses. For example, one of the three students who checked "other . . ." under livestock and poultry activities listed "catfish and goldfish." An example or illustration of a farm management principle based on catfish or goldfish would provide variety in the presentation of content, would likely enhance the appreciation of the class for the student who listed catfish and goldfish, and might be well received as a potential income-increasing enterprise for other students.

Summary

Backgrounds and career goals of students in a farm and ranch management class indicated that the class was composed of traditional agricultural students with a heavy orientation toward farm management and agribusiness careers. A large percentage of the students were Animal Sciences and Industry majors and/or from livestock farms.

Information about the students' backgrounds and career goal provides valuable insight into the makeup of the class. These insights should influence selection of course content and enrich the presentation of content by making it more relevant to the students. The Fall 1995 information confirmed the overall appropriateness of the course content and presentation of content as planned. It also suggested changes in the presentation of content, such as emphasizing livestock when teaching depreciation and reinforcing management principles by referring to the use of these principles in farm management careers. Potential exists for using information from the questionnaires to encourage and motivate individual students by appealing to their career goals, to group students according to their backgrounds and goals for cooperative learning exercises, and to provide variety in the presentation of content by basing lectures and

exercises on unusual responses.

If the backgrounds and career goals of students are not expected to change much from the previous year, as is likely for most large agricultural classes, then administrators can consider the information in selecting instructors. Knowledge of the students' backgrounds and goals likely would be of most benefit for new faculty members involved in preparing to teach a class for the first time. For experienced faculty, such knowledge can confirm planned content and presentation of content and suggest ideas for improvements.

Once a questionnaire and computer program for analyzing the data are prepared, the costs of collecting and summarizing information about backgrounds and career goals are small. Uses include confirmation of course plans, factual information for improving course content and presentation of content, and potential for further research that identifies trends and/or may relate backgrounds and goals to class performance.

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