curricula in the department to improve the working relationship with advisees and provide an environment for a better education.

The distribution of responses to the statement "Understands my problems" reveals that almost 63 percent of the respondents felt that their advisors always understood their problems. Graduate students (63 percent), seniors (52 percent), juniors (71 percent), and sophomores (56 percent) left favorably toward their advisors in this area.

On the statement "Lacks information about jobs," only 20 percent of the respondents indicated that their advisors never lacked information about jobs. Generally, it is assumed that in choosing a major, the student knows something about the career opportunities associated with that major. Nevertheless, he looks to his advisor for more specific information about job opportunities. That only one in five respondents perceives advisors as well informed in that area suggests that substantial efforts need to be made by departmental faculty advisors to better inform their advisees of specific jobs available or potential job opportunities in their chosen major. An increased effort in this area should result in students becoming better informed of the career opportunities associated with their major and assist them in developing a program of study which will more adequately prepare them for the future. In many cases, students get so involved in campus activities, classroom requirements, and social activities that they lose focus on the ultimate reason for their education. An increased effort in career counseling by advisors might make career concerns a more important

The distribution of responses to the statement "Helps in planning course schedule" reveals that only 73 percent of the advisees reported that their advisors always helped them in planning course schedules. Percentages of favorable responses ("Always") declined steadily, from 81 to 65 percent, as class levels of respondents advanced. The relatively low favorable response rate of this statement suggests either that advisors were often negligent in helping students to plan course schedules or that a significant number of respondents did not seek advisors' help in schedule planning.

On the statement "Helps you to be aware of university counseling and job placement services," only about 30 percent of the respondents rated this favorably. That low response rate suggests that faculty advisors need to do more to inform their advisees of the services provided by the university's counseling and job placement centers.

Summary

Several broad statements were posed to the students in this survey. Their responses indicate that the quality of advising provided them in the department appears to be quite satisfactory but some improvements are possible. Advisors need to do a better job in informing students about university counseling, job placement services, and careers associated with their major.

The responses to statements concerning the availability of advisors when needed, stimulation of students to reason through their own problems, advisors' attitudes toward students who want to explore other fields of study, lack of knowledge about courses and curriculum, and the lack of advisors' help in planning course schedules indicate that advisors need to develop a better rapport and working relationship with their advisees. An improvement in these areas could improve advisors' working relationships with their advisees and, in turn, should enable advisors to provide their advisees with an environment for a better education.

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Training In Agribusiness For Occupational Choice

Mark R. Edwards and Michael W. Woolverton Introduction

Agribusiness includes the three sectors of the United States' Food and Fiber System — the input supply industries; agricultural production firms; and firms involved in the processing, manufacturing, and distributing of food products. Corporations such as John Deere, Dekalb, Elanco, and Standard Oil manufacture and sell input products to farmers and ranchers. Farms and ranches have become larger and more specialized even though they remain almost totally under the ownership of individuals rather than large corporations. The third sector of agribusiness includes firms such as Cargill, Central Soya, Sunkist Growers, Kellogg's, Anheuser-Busch, Safeway, Southland (7-11), and McDonald's.

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Jobs in Agribusiness

In all, agribusiness provides employment to about 24 million Americans, or 23% of the U.S. labor force (Anderson, 1982). The input supply industries employ 7.6 million people supplying goods and services to agribusiness. The number of people engaged in agricultural production has declined steadily over the years until now only 3.3 million remain. The largest of the three sectors in terms of employment is the processing, manufacturing, and distribution sector which currently employs slightly more than 12.7 million people. In a recent study, U.S.D.A. researchers concluded the total annual demand for college graduates in agribusiness would exceed supply by 15 percent through the mid-1980s (Stanton and Stanton, 1980).

Figure 1. Agribusiness Job Titles: A Sampling

I. Technical and Scientific Professionals:

Agronomist, Animal Pathologist, Arborist, Floriculturist. Silviculturist, Home Economist, Landscape Architect, Meterologist, Food Chemist, Dietitican, Plant Breeder, Forest Ecologist, Range Ecologist, Soil Chemist, Soil Conservationist, Wood Technologist, Forester, Rural Sociologist, Regional Planner, Veterinarian, Toxicologist, Technical Service Representative, Pest Control Fieldman, Pest Control Operator, Lawn Care Service Representative, Entomologist, Agricultural Engineer, Agricultural Economist.

II. Manufacturing and Processing Specialists:

Dairy Bacteriologist, Meat Inspector, Vegetable Inspector, Environmental Engineer, Quality Control Director, Fruit Inspector, Irrigation Engineer, Food Grader, Forest Products Engineer, Lumber Grader, Meat Inspector, Brewmaster, Fermentation Technologist, Wine Production Manager, Quality Control Technician, Process Control Engineer.

III. Sales, Merchandising and Purchasing:

Sales Representative, Grain Merchandiser, Landscape Contractor. Food Buyer, Food Merchandiser, Food Broker, Commodity Broker, Livestock Buyer, Livestock Broker, Purchasing Agent, Tobacco Buyer, Field Representative, Territory Manager, Produce Merchandiser, Meat Products Salesperson, Dairy Products Salesperson, Nursery Stock Salesperson, Farm Real Estate Agent, Agricultural Pharmaceutical Salesperson, Commodity Futures Account Executive, Food Manufacture Representative.

IV. Administration Managers and Financial Advisors:

Elevator Superintendent, Market Forecaster, Commodity Commission Agent, Market Planner, Park Superintendent, Land Appraiser, Agricultural Credit Officer, Agricultural Loan Inspector, Food Brand Manager, Feed Lot Manager, Floral Shop Manager, Farm Store Manager, Kennel Manager, District Sales Manager, Packing Plant Supervisor, Land Use Consultant, Grocery Store Manager, Restaurant Manager.

V. Education:

Vocational Agriculture Teacher, Agricultural Extension Agent, Home Economics Extension Agent, 4-H Extension Agent, Area Extension Specialist, State Extension Specialist, College Professor.

VI. Communications Specialists:

Farm Broadcaster, Magazine Feature Writer, Newspaper Farm Editor, Public Relations Specialist, Information Specialist, Agricultural Advertising Account Executive.

VII. Production Specialists:

Farmer, Rancher, Farm Production Supervisor, Nursery Operator, Greenhouse Superintendent, Herd Manager, Arboriculturist.

VIII. Government:

Agricultural Attache, Peace Corp Volunteer, Commodity Inspector, Commodity Grader, Policy Analyst, Agricultural Program Administrator.

The agricultural industries offer college graduates a vast array of job opportunities. (For a sampling of job titles, see Figure 1). Some positions require detailed technical knowledge in the agricultural and related sciences. Other positions require high levels of knowledge in areas such as marketing, management, and finance as applied to agribusiness. Most jobs require a combination of technical and business knowledge that is increasingly being referred to in colleges and universities as agribusiness.

The Problem Facing Students

The first question a new student in agribusiness is likely to ask is, "What kinds of jobs are available to agribusiness graduates?" Students learn very quickly that their choice of major delimits the career alternatives available to them. Fortunately the field of agribusiness is so diverse that career alternatives are almost limitless.

However, this diversity creates problems for agribusiness students. Faced with a bewildering variety of job titles, students have difficulty comprehending the nature of the positions available and focusing academic programs to specific career choices.

This comprehension problem can be traced to student unfamiliarity with agribusiness and the lack of experience in analyzing job opportunities. As the number of students with urban backgrounds majoring in agribusiness has increased, the problem of unfamiliarity with agriculture has also increased. Even students reared on farms or ranches exhibit unfamiliarity with those agribusiness industries to which they have not been exposed. In general, agribusiness students have no way of knowing what a person in a specific job, a grain merchant for example, does on a day-to-day basis. Even given a job description, students may have a difficult time understanding job responsibilities and assessing long-term career potential.

Training for Occupational Choice

The objective of training for occupation choice in agribusiness is to prepare students to make career choices by giving them the ability to analyze specific agribusiness jobs. A job analysis is an identification of the various duties, responsibilities, and attributes of a specific job (Kotter et al., 1978). The procedure is not simply to describe the job but to analyze the job in terms of characteristics that are meaningful to job holders (Rim, 1977 and Jergensen, 1978). This is, of course, the job interview process where the normal roles are reversed. Instead of an employer evaluating student attributes, as is normally the case, students evaluate the employer's offering — the job.

The training consisted of a series of classroom exercises and out-of-class assignments given in two courses, Agribusiness Management I and II. Class sizes were 35 and 28, respectively, with a predominance of

juniors enrolled although each class also contained seniors and a few freshmen and sophomores.

The major out-of-class assignment was for each student to develop a single job description with the understanding that several more job descriptions would be required after completing the first. The teaching objective of writing the first job description was for the student to demonstrate an understanding of the procedure to follow in writing a job description and thorough knowledge of job dimensions to be described.

In preparation for completing the assignment students were given instructions on how to develop a job description. They were also given an outline of job description characteristics and job description examples. (See Figures 2 and 3).

Figure 2. Job Description Characteristics: Job Title

Description:	Describe consisely what is involved in performing the job. This should be a brief general over-
	view.
Scope:	What are the boundaries of this job? How does it fit into the broader speciality in agriculture? What are the job objects? (People, animals, plants, chemicals, machines, etc.)
Duties and	
Responsibilities:	What are typical duties that are performed on a regular basis? Include responsibilities for knowledge, skills, supervision, and other appropriate work behaviors.
Location:	Where is the job performed? Consider such possibilities as international, national, regional, local, city, rural, etc. Will the job require relocation?
Works with:	Who are the primary job contacts? Also consider whether the job incumbent works alone, in small groups or large groups.
Working area:	Is the job performed in a lab, outside, in an office, etc.?
Physical	
Requirements:	Are there any special physical requirements that are abnormal in this job such as lifting, travel, or unusual hours?
Salary Range:	What salary is a person entering this job likely to make annually? Estimate a salary range (e.g. \$15,000-\$20,000) What are the fringe benefits?
Working	
Conditions:	Are the working conditions different from an or- dinary office? Are any environmental, chemical, physical or stress hazards associated with the job?
Working time:	Does the job require more (or less) than a normal 40 hour week? Is flexitime possible?
Required:	What knowledge, special training, or abilities are necessary as a prerequisite for becoming a qualified candidate for this job?
Responsible to:	To whom or what is this job incumbent responsible?

Prior experience indicated that many students would have difficulty in writing job descriptions because:

1. They were not familiar with the dimensions of a job description because they had never analyzed a job before.

- 2. They did not know with whom to talk in order to get information about a job. Some students felt shy in asking for information.
- 3. They did not know what questions to ask to get enough information to describe an unfamiliar job.

To help overcome these difficulties, a role playing process was used with one student role playing a person employed in a job known to everyone in the class. The job analyst role was played by another student. The job analyst asked specific questions about the job that would assist in developing a good job description. Several other students used role playing to demonstrate alternative methods of asking job holders about jobs.

After the first job description was written, a class exercise was used to provide feedback for students writing the job descriptions. Specific class members were requested to examine the job descriptions in detail and report to the class whether or not they could make a career decision based on the job description. They were also asked to comment on completeness in relation to the job description characteristics outline. In addition to the in-class comments, each student received individual feedback by means of a letter grade on the job description turned in, plus appropriate comments on needed improvements.

Students were able to develop effective job descriptions with the training described. Individuals tended to investigate jobs they were considering as a career. Nearly every student commented on how much different the job descriptions were compared to their preconceived ideas about the jobs. Most students knew the general description of a particular job, but few actually understood the scope of the job or the typical duties and responsibilities associated with it.

The job descriptions were placed in an indexed looseleaf notebook so that students could examine any job description in which they were interested. The file of job descriptions is now available for any agribusiness student in the program. It has proven useful for briefing new and prospective students on careers in agribusiness.

Summary

While agribusiness offers a wide range of job opportunities to students majoring in agriculture curricula, students are ill-prepared to evaluate career opportunities. Information conveyed by professors and guest speakers and even exposure to jobs on field trips may not provide students with the information necessary to evaluate fully specific jobs.

Training for occupational choice can give students the analytical skills necessary for job evaluation. The job analysis procedure can be useful in allowing a student to break a specific job into understandable dimensions. Such dimensions include job scope, working conditions, salary range, and job responsibilities. Other important factors include job location, working associates, work objects such as ideas, equipment, plants, or animals and other job related requirements, for example, physical strength or overnight travel. The experiential learning that occurs as students gather and investigate information for writing job descriptions is excellent preparation for the real job search process. The long-term benefit of training for career choice is more effective individual career choice for agribusiness students that can lead to career success and life satisfaction.

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Figure 3. Job Description: Agricultural Loan Specialist

Description:

Interviews loan applicants and completes follow-up inquiries in determining eligibility of applicants and soundness of loan requests.

Scope:

Within delegated authority, approves or recommends for final approval, direct and insured loans, releases, subordinations, requests for adjustment or cancellation of accounts, leases, transfers, foreclosures, and other similar actions in making and servicing loans. Involved with people, ideas and large amounts.

Duties and Responsibilities:

Advises applicants and borrowers on the selection of livestock, equipment and farmland, land development, soil and water improvement, adoption of improved farm management practices, organization of farm management practices, organization of farm and other agribusiness enterprises, construction, repair and maintenance of rural buildings, record keeping, and related matters.

Makes periodic visits to borrowers' property to inspect and ascertain progress of planned farming operations, construction, land development, and other loan security requirements.

Provides technical advice and instruction to borrowers on farm and business matters, in addition to guiding planning for their long range goals.

Participates in rural development activities. Conducts correspondence and, as required, performs or directs the maintenance of records, the compilation of reports, the coordination of field

and office functions.

Location:

Rural farm areas within the geographic boundaries of the financial institution.

Works with:

Farmers, ranchers and rural families. Senior loan officers and bank loan committees. Associates with other members of the financial community, elected county officials, and other individuals of influence in the community. Office, with occasional on-farm visits.

Working area: Physical Requirements: Salary range: Working Conditions:

Ability to travel. \$14,000 - \$22,000.

Normal office environment with occasional traveling. May feel tension from the anxiety involved in assisting people with loans.

Working time:

Required:

Forty (40) hour week, 5 day working week, 8 hours a day.

A knowledge of loan program objectives, policies, applicable regulations and established procedures. General knowledge of the living conditions, credit problems and basic needs of rural families of the area with an understanding of the function of other agencies and organizations in the community.

A working knowledge of major crop and livestock enterprise operations common in the area. Ability to determine credit needs, analyze financial statements, appraise credit worthiness and make decisions that may have great impact on borrowers.

Knowledge of legal instruments, documents and analytical procedures used in the appraisal, purchase, sale, lease and management of rural property.

A working knowledge of construction principles, specifications and cost estimates applicable in the area, with ability to plan and advise on construction of durable structures, water supplies, and drainage layouts.

Ability to organize work, effectively use records, make decisions and assist in the coordination of the work of others.

Ability to recognize, analyze and evaluate problems of rural families, to guide them in carrying out successful farm and home operations, and to provide reliable credit counseling service.

Responsibility to:

Rural and farm loan recipients. Senior bank officials and stockholders.

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