Some Observations Relative to Entering First Year Students Majoring in Animal Science

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Introduction

• Assumptions are that lesson content, lesson format, and method of delivery need to be suitably structured in order to maximize learning

• If this is true, then in an ideal world, university instructors should have an appreciation for the general make-up of the students in various courses in order for lessons to be delivered effectively
Introduction

• Two trends have been noticeable in our Department of Animal Science over the past several years:
  • (1) Fewer students from traditional agricultural (farm) situations
  • (2) Higher proportion of females than males in recent years
Introduction

• Do the trends observed influence the animal species preference exhibited by entering students?
• Do the trends observed influence the depth of knowledge exhibited by entering students?
Objectives

• (1) Track the gender make-up of entering first year animal science students
• (2) Get an idea of their preferred animal species of study
• (3) Evaluate their depth of knowledge relative to certain production practices
Method

• Conducted each Fall semester over 12 years
• Students completed questionnaire during the first session of the Introduction to Animal Science course
• Students completed the same questionnaire during the last class session of the semester
Method

• Questionnaires asked students to:
  (1) Select their animal species of preference from a list of 10 provided
  (2) Respond to 10 items designed to evaluate their knowledge of production animal agriculture
Instructions

• Provide the requested information. If you do not know the information, respond “I do not know”
• Your responses will not affect your grade in this course
Requested Information

• Gender
• Major
• Name of academic advisor
• Anticipated occupation (employment) after graduation
Proportion of Male:Female

Gender Breakdown

Male - Start Semester - %
27.8
Male - End Semester - %
25.5
Female - Start Semester - %
72.2
Female - End Semester - %
74.5


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Know Academic Advisor

2004

YES

NO

2009

YES

NO

2015

YES

NO

Male - Start Semester - %

Male - End Semester - %

Female - Start Semester - %

Female - End Semester - %

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Have an Idea of Post-graduation Employment

Know Anticipated Employment

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Species Preference Instructions

• Rank the animal species listed in your order of interest (1 = most preferred; 10 = least preferred)
Species of interest

• Beef cattle
• Dairy cattle
• Poultry
• Pigs
• Sheep
• Horses
• Companion animals
• Exotic animals
• Pet birds
• Other _______________
Production Questions Instructions

• Answer each of the following questions. Do not leave any blank. If you do not know the answer, provide your best guess.
Questions Related to Animal Production

• What is the gestation period for a cow?
• The act of removing the testes is referred to as?
• The incubation period for chicken eggs is (days)?
• From what part of the pork carcass is bacon derived?
• Milk is a rich source of which mineral?
• From which animal is the wool most commonly used in clothing derived?
Questions Related to Animal Production

• What is the meaning of the term “offal”?
• Which state in the U.S has the largest number of horses?
• Currently, per capita consumption is highest for which meat product (beef, pork, poultry)?
• Give a common example of an animal classified as a ‘bovine’.
Correct Response to 10 Production Questions at Start and End of Semester (%)

- '04 Start: 52, '04 End: 45, '09 Start: 60, '09 End: 69, '15 Start: 63, '15 End: 50

- '04 Start: 3, '04 End: 15, '09 Start: 0, '09 End: 1, '15 Start: 2, '15 End: 7

- 4 or Fewer, 5 to 7, 8 to 10
Summary Observations Over Time

• Class size increase
• Ratio of male:female decrease
• Students more aware of identity of individual academic advisor
• Entering male students appear to be more aware of the identity of individual academic advisor
Summary Observations, Cont’d

• At start of semester, most students convinced they know prospective employment
• At end of semester, number who undecided on employment prospects increase
• May indicate a willingness to be more open-minded
Summary Observations Cont’d

• Males tended to exhibit preference for food animals when compared to females
• Male preference for food animals tended to increase by end of semester
• Overall high interest in non-food (exotic and companion) animals
Summary Observations Cont’d

• Fluctuation in knowledge of basic production questions
• Increased knowledge at end of semester compared to beginning