Abstracts

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Use of a Partially Decentralized System for Advising Students in a Large Department

C. M. Wood
Department of Animal and Poultry Sciences
3400 Litton Reaves Hall, Virginia Tech
Blacksburg, VA 24061
(540) 231-6936
piglady@vt.edu

The Animal Science Department at Virginia Tech used a centralized advising system for many years. Advantages included one-stop advising, long-term relationships with advisors, and consistency. Disadvantages, however, included less contact between students and other faculty, long lines as enrollment increased, and advisor burnout. In 1989, a "partially decentralized" system was instituted that included a Central Advising Office (CAO) with one staff and two faculty members, plus nine satellite advisors. The CAO handles recruiting and placement. Their faculties advise all new students, teach a mass-advising course, work with other advisors, and help resolve complex problems. There are currently three faculty and two staff in the CAO, plus 14 satellite advisors. Advantages to the system include centralized access by new students, more faculty that advise students, closer relationships with advisors, less waiting by students, and more time for CAO faculty to fulfill other duties. The CAO handles all paperwork, which provides consistency. Challenges include communicating updates to all advisors, ensuring consistency across advisors, and tracking 500 majors. Student satisfaction with advising remains high, and the university recognized the commitment to quality advising by awarding one of three exemplary department awards for advising to the Animal and Poultry Sciences Department.

ACEing the College Transition

Steven S. Waller, Jack L. Schinstock, Fayrene Hamouz, Susan Fritz, Melanie McQuatters, Emily Buescher, and Vicki Miller
University of Nebraska-Lincoln
103 Agricultural Hall, P.O. Box 830702
Lincoln, NE 68583-0702
(402) 472-2201
swaller1@unl.edu

The freshman to sophomore retention rate for four-year institutions averages about 75%. Finding solid academic and social niches in a large university is essential for student persistence, academic success, co-curricular involvement and matriculation. University of Nebraska-Lincoln (UNL) housing officials collaborated with the College of Agricultural Sciences and Natural Resources and the College of Human Resources and Family Sciences to develop a residential learning community that helps first-year students in these colleges live, learn and grow together during that challenging first year. Since 1997, the Achievement, Commitment and Excellence (ACE) program houses about 60 participating first - year students together in one dorm on UNL's East Campus. This is a college-wide learning community with participants representing as many as 13 different majors each year. Program coordination and leadership is provided by eight upper class mentors, each ACE alum and assigned to a group of students with academic interests similar to theirs; two Student Resident Assistants and the Resident Director. Faculty Fellows interact with the ACE students on a regular basis, including dinners, social and athletic events and field trips. Students take two in-hall classes, including leadership and personal development to prepare them to become leaders on campus and in their communities following graduation. The ACE freshman-to-sophomore retention rates averaged 94 percent in the last two years.

ADVISING PLUS: An Advising Program for Incoming Freshmen

L.E. Moser , D.J. Lee, R.P. Waldren, and D. L. McCallister
Department of Agronomy and Horticulture
University of Nebraska-Lincoln,
279 Plant Sciences, P.O. Box 830915,
Lincoln, NE 68583-0915
(402) 472-1558
lmoser1@unl.edu.

An intrusive freshman advising program was initiated in Agronomy in 1993, to improve the advising of incoming freshmen. This program, ADVISING PLUS, uses weekly group meetings during the first 6 weeks of the fall semester to build a relationship among two faculty members and 10 to 12 incoming students. The first meetings provide an opportunity for information exchange regarding adjustment to college life. The later meetings allow the students to learn more about department opportunities, academic programs, and internships. When the meeting schedule concludes students are

assigned to one of the faculty participants as an advisee, but they know the other faculty member equally as well. After nearly a decade of ADVISING PLUS we have found that students feel "at home" and participate more fully in the department. Alumni have indicated that the 6-week program was important in their transition from high school to college. A number of undergraduate advisors have participated in the program, which has been beneficial to new advisors. We believe that 10 to 12 students is a critical number for optimum group dynamics, attendance and participation. The students feel comfortable in the group setting and it takes no more time than individual advising where intrusive methods are used.

Transfer Students Benefit from Group Advising Program

D.T. Walters and S.C. Mason
University of Nebraska-Lincoln,
279 Plant Science, P.O. Box 830915
Lincoln, NE 68583-0915
(402) 472-1506
dwalters1@unl.edu.

During the past decade at the University of NebraskaLincoln (UNL), the number of transfer students from 2- and 4-year institutions who are majoring in the agricultural sciences has steadily increased as a proportion of incoming students. Transfer students are generally more "campus-wise" and "career-focused" than first-year students and therefore have very different advising needs than the traditional first-year student. Our experience has shown that transfer advisees require a significant investment in time and attention early in their residency to insure a successful university experience. Timely evaluation of transfer credits is the most important issue to successful advising and course programming. We have instituted a transfer advising program which begins with pre-arrival phone contacts and two group meetings with incoming advisees and their advisors. The process has been successful in easing the transition to life at UNL and has helped in reducing advisor work loads and resolving bureaucratic problems relating to transfer credit settlements. The program creates a community of transfer students who share their experiences as well as a specialized advising staff who deal exclusively with transfer student issues. Advising loads are shared and faculty/advisor relationships are enhanced.

Academic Advising Evaluation in the College of Agriculture and Life Sciences: A Successful Program

Jeannette A. Moore and Kenneth L. Esbenshade
North Carolina State University, Raleigh
NCSU Box 7621
Raleigh, NC 27695-7621
(919) 515-4010
Jeannette_Moore@ncsu.edu

Advising in the College of Agriculture and Life Sciences (CALS) at North Carolina State University has been evaluated since 1989, and since 1998 advisors have had access to results on a secure website. Students receive a simple, anonymous 12-question form to fill out each spring, and they have the option to include written comments on the back of the form. Questions relate to the advisor's availability and knowledge of the curriculum and related information, and the twelfth question is: "My advisor is effective and should be recommended to other students." Comparison of 1998 to 2001, respectively for Question #12 is: Agree, 84% and 93%; Disagree, 6% and 3%; and No Opinion, 11% and 5%. When the advisor accesses the summary on the web, results can be seen for his/her evaluations alongside the average results for the advisor's department and for CALS. The summary along with the written comments gives the advisor the opportunity to improve in specific areas if necessary. CALS hosts an annual Advising Workshop, and two Outstanding Advisor awards are presented each year. Having access to advising results on the web allows the advisor to include advising data with promotion/tenure materials as well as with nominations for awards.

Graduating Senior Perceptions of Faculty Advising

R. Kirby Barrick & Annie Hernandez
College of Agricultural, Consumer and Environmental Sciences
University of Illinois at Urbana-Champaign
101 Mumford Hall, 1301 W. Gregory Drive
Urbana, IL 61801
(217) 333-3380
kbarrick@uiuc.edu

Over a five-year period, graduating seniors (1,056 respondents) in the College of Agricultural, Consumer, and Environmental Sciences indicated their perceptions regarding the quality of faculty advising received. The typical senior had only one advisor while enrolled in the college and met with an advisor once per semester. Only one-fourth of respondents believed they should have sought more advisor assistance. Advisors were rated as excellent or good for each of the 10 indicators. The highest rated indicator was professional conduct; the lowest

rated indicator was understanding of career opportunities. Differences existed across the seven departments. The greatest difference (range of 35% to 73% rated excellent) was on concern for students. Advising in one department was rated lower than all other departments on nine of the ten response items. Although advising quality was generally rated excellent or good, the need does exist to provide additional assistance for advisor development. Considering differences that exist between departments, professional development of advisors may need to be offered on a departmental basis rather than college-wide basis.

What is Advising - An Alumni Perspective

Michael Mee and Susan Price
School of Agriculture
University of Wisconsin - Platteville
1 University Plaza
Platteville, WI 53818
(608) 342-1393
mee@uwplatt.edu, price@uwplatt.edu

Academic advising of students with declared majors is done by faculty at the University of Wisconsin-Platteville. The School of Agriculture considers advising as teaching outside the classroom. An advisor should have: a sincere interest in students; an open mind; flexibility; and, a willingness to go beyond traditional classroom activities. When we search for new faculty to hire we give serious consideration to a list of criteria, including the demonstration of a caring attitude toward students (candidate-student interaction occurs within our interviews) and an ability to encourage career and life planning vs simple course scheduling. During 1999-2000 a survey was sent to 167 alumni that resulted in a 53% response rate. Alumni were asked "How would you rate your advisor on the following scale (1=excellent, 2=good, 3=neutral, 4=poor, 5=very poor). Seven different questions were asked. The authors, each of whom have greater than 60 advisees per semester, will share how their advising has evolved over a decade of teaching experiences. They will comment on how the results of the survey were implemented and share the next step in the advising assessment process within the School of Agriculture.

Holistic Approach to Advising, Retention, Graduation and Employment

James J. Riley and Thomas B. Wilson
Department of Soil, Water and Environmental Science
The University of Arizona
SWES, Room 429 Shantz Building
Tucson, AZ 85721
(520) 591-4019
jjriley@ag.arizona.edu

The Department of Soil, Water and Environmental Science (SWES) at The University of Arizona supervises a university-wide B.S. degree in Environmental Science, and a College of Agriculture and Life Sciences (CALS) B.S. degree in Soil and Water Science. Academic advisors are charged with providing advice to students, leading the departmental recruiting effort in high schools and community colleges, organizing undergraduate extra-curricular activities, identifying appropriate internships, and providing career information by employed graduates of the programs. Enhanced participation by other faculty with upper division undergraduates in their areas of specialization further strengthens the program. Recent inputs from environmental science students have resulted in several changes in the curriculum including the addition of a new course for majors and undeclared freshmen in "Careers in Environmental Science." This course is intended to recruit new students to the major and to illustrate career potential to lower division undergraduates. The program is relatively new, but already appears to have been successful in slowing declining enrollment and increasing the graduation rate. Further improvements are expected due to this holistic approach to advising.

Building Tomorrow's Leaders: Creative Graduate Student Advising

Paul E. Read
Department of Agronomy and Horticulture
University of Nebraska, Lincoln, NE 68583-0724
(402) 472-5136
pread@unl.edu

New graduate students generally are in a mindset reflective of their undergraduate experience, that is, they are focused on attending classes, concerned about achieving maximum grade point averages, often taking large course loads, but not mentally and emotionally ready to bring their talents to bear on the research requisite to achieving a graduate degree. A wide range of approaches to mentoring graduate students have been employed by graduate student advisors, with variable results. The most successful approaches have involved taking measures to enhance the professionalism of the student. It is

important for the advisor to be pro-active in encouraging the student to become involved in professional societies, to take classes that stress teaching or other aspects of professionalism, and to get to know practitioners of the student's specialty, to name a few. In addition, the advisor may become a role model for the student, a counselor and a friend, depending upon the student's needs. Sometimes, the best advisor may counsel a student to leave the graduate program in order to pursue more suitable and/or attainable goals. The ultimate result: a more productive individual that contributes to society as a citizen of the world.

Rewarding Academic Advising: A Case Study Comparison at Colorado State University

Jack R. Fenwick
Department of Soil and Crop Sciences
Colorado State University
Fort Collins, CO 80523
(970) 491-6907
jfenwick@agsci.colostate.edu

How to reward academic advising has concerned faculty and administrators for years. In this study, methods used to reward advising were compared across five colleges, three departments from each college, at Colorado State University. A survey and personal interviews of faculty and administrators were used to assess the value of academic advising and the methods used to reward excellence in advising. Faculty and administrators' responses will be presented.

Avoiding Faculty Burnout with Student Advising

Ron Hanson
Department of Agricultural Economics
University of Nebraska-Lincoln
204A FYH
Lincoln, NE 68583-0922
(402) 472-2055
rhanson1@unl.edu

Advising a large number of students can result in a lot of stress on faculty time. Handling last minute problems or requests (i.e. I need a letter of recommendation tomorrow) can further add to the pressure of working with a large number of students. Faculty can become burned out and lose interest in student advising. I have been advising a large number (between 80 to 90) of students during the past 28 years at UNL. This paper will share ideas of how to remain motivated when advising large numbers of students. Advising with enthusiasm is important in creating a positive and lasting relationship with students. What personal satisfactions can faculty gain from student advising? What motivates faculty to be good student advisers? How many students can a faculty member effectively advise? How do faculty view the importance of student advising in their teaching appointment? How do you develop a philosophy for student advising. Based on student surveys from graduating seniors, this paper will also address the impact of faculty advising on student learning assessment for the Department of Agriculture Economics. Balancing the demands of student advising with the many other demands of being a faculty member is very important in maintaining the energy and enthusiasm for working with students.

Advising In The School Of Agriculture: An Active Approach

Randall J. Andreasen and James B. Hutter
Southwest Missouri State University
901 South National Avenue,
Springfield, MO 65804
rja556f@smsu.edu

Advising is vital to insuring completion of degree programs in the School of Agriculture. However, it can become a low priority for both the advisee and advisor if basic guidelines for advisement are not established. When advising students, five important themes were identified. It is vital that advisees are not intimidated by talking with an advisor. The meeting should occur in a non-threatening environment. Advisors should get to know the advisee. Furthermore the advisor should give the advisee some brief information about himself or herself. The goal is to get students to ask for help from their advisors. Advisors should be very specific about degree programs. All information about the program should be readily available to the advisee with the goal not to surprise students in any way. Let advisees know what is available for them in terms of scholarship, awards, and careers. The advisor needs to work with the advisee in setting goals and helping him achieve these goals. Advisees need to be comfortable with talking to the advisor regarding personal issues. Advisees need to know that the door is open and the advisor is willing to listen and keep information confidential.

Road Rules for Advising Students Going Abroad

Michelle Barclay
Western Illinois University
1 University Circle
Macomb, IL 61455
(309) 298-2100
ML-Barclay@wiu.edu
Kelli Sisler
162 Johnson Hall
University of Guelph
Guelph Ontario N1G2W1 Canada
(519) 824-4120 ext. 4549
ksisler@oac.uoguelph.ca

Studying or traveling elsewhere in the world is often a first step for students who wish to broaden their academic experience. What do you do when a student inquires about going abroad to study, work or travel? How do you prepare the student academically and personally for internationalizing their education? Using Schlossberg's Transition Theory, this program will highlight valuable strategies advisors can use to assist students going abroad. Advising tools that cover pre-departure and post-departure will be provided. Finally, the participants will be given the opportunity to apply Schlossberg's Transition Theory to a case study.

Developing Advising and Transitional Activities from High School to College

Daniel C. Voltz
Division of Horticultural Industries
The Ohio State University
1328 Dover Road
Wooster, Ohio 44691-4000
(330) 264-3911
voltz.5@osu.edu

Promoting agricultural-related majors and careers is becoming increasingly difficult for college admission personnel. In an effort to increase student interest in agriculture programs in general, and horticulture programs in particular, faculty at The Ohio State University, Agricultural Technical Institute have developed an educational program in which they visit high schools to make technical classroom presentations and meet individually with students to discuss college and the transition to college. This new program is designed to enhance students' awareness of the benefits of college education and help alleviate their anxieties and lack of confidence concerning college enrollment and success. The goals of the program are to 1) promote horticulture as a career, 2) provide academic and career advising services to high school students in their current educational environment, 3) assist students in the transition from high school to college, and 4) help students succeed after they have matriculated. This presentation will concentrate on program details and characteristics such as establishing links with the high school instructors and students, the classroom presentation topics and formats, and the nature of the individual advising sessions with students. The discussion will include both successful aspects of the program and areas where improvements are needed.

Teaching for Critical Thinking

Lori Moore and Rick D. Rudd
Agricultural Education and Communication
University of Florida
Room 305 Rolfs Hall, PO Box 110540
Gainesville, FL 32611-0540
(352) 392-0502
llmoore@ufl.edu

Critical thinking is a topic drawing much attention across disciplines in today's education system. Since content-specific knowledge becomes obsolete within a few years of graduation, students' future jobs will likely require them to be able to think through problems and situations rather than simply remember and reuse information they learned in college. It is essential then that students develop critical thinking skills while in school. In order for faculty members to encourage critical thinking in their students, they must have a working definition of critical thinking. Rudd, Baker, and Hoover (2000) offer the following definition: "Critical thinking is a reasoned, purposive, and introspective approach to solving problems or addressing questions, with incomplete evidence and information, for which an incontrovertible solution is unlikely." Once instructors have an understanding of what critical thinking is, they can begin teaching for critical thinking. There are a variety of methods that teachers may use to encourage critical thinking skills in their students. Socratic questioning, article critiques, and a concept matrix and analysis are methods commonly used in the Department of Agricultural Education and Communication at the University of Florida to encourage development and use of critical thinking skills by students. References: Rudd, R., Baker, M, & Hoover, T. (2000). Undergraduate agriculture student learning styles and critical thinking abilities: Is there a relationship? Journal of Agricultural Education, 41 (3), 2-12.

The Influence of a Cross-Disciplinary Cooperative Learning Project on Development of Critical Thinking and Team Building Skills in Undergraduate Students

K. M. Downs and J. E. Mehlhorn
Middle Tennessee State University
MTSU P.O. Box 5
Murfreesboro, TN 37132
(615) 898-5217
kdowns@mtsu.edu

Educational strategies to develop critical thinking skills and teamwork experiences are paramount to enhance student preparation for entry into today's agricultural workforce. Employers seek employees with problem-solving abilities and interpersonal communication skills. A semester-long collaborative research project was designed and implemented to enhance the educational experience of undergraduates enrolled in an introductory agricultural economics (n=42) and livestock management (n=15) course in the School of Agriculture. Student teams in each class collaboratively conducted a performance and economical analysis of an 84-d steer feeding study designed to evaluate the efficacy of growth promoting implants. Animal management and performance data collection (feed intake and body weight gain) were required of students in the livestock management course. Feed intake and gain data were used to calculate feed conversion, daily gain, and dry matter intake. Students enrolled in the agricultural economics course were required to develop a livestock budget, determine breakeven analysis, and calculate profit-loss margin. To successfully complete the project and develop final performance and economic parameters, team interaction within and among classes was necessary. To enhance concept application, students in each class were required to develop a research manuscript and oral presentation evaluating the economic and productive impacts of the research results to the U.S. beef cattle industry.

Creating a Critical Thinking Website for Faculty Application

Kristina D. Grage and Rick D. Rudd
Agricultural Education and Communication
University of Florida
305 Rolfs Hall
P.O. Box 110540
Gainesville, Florida 32611-0450
(352) 392-0502
blondi57@ufl.edu

"Preparing students to think critically is a goal of many professionals in higher education. Critical thinking is also a quality sought by employers of college graduates." (Rudd, Baker & Hoover, 2000). The need for an accurate, easily accessible web-based resource on the subject of critical thinking was identified by the University of Florida teaching faculty within the Institute of Food and Agricultural Sciences (IFAS). To address this information gap, faculty in the Department of Agricultural Education and Communication developed a website detailing the specifics of critical thinking, through the USDA Challenge Grant for Higher Education. The website http://criticalthinking.ifas.ufl.edu is divided into six categories: Challenge Grant information, video presentations, research papers, teaching ideas, bulletin board, and useful links. The goal of the designers is to help ease the integration of critical thinking into classrooms to prepare students to think critically in and about agricultural and life sciences disciplines. By raising faculty members' awareness of critical thinking the researchers hope to increase faculty interest, facilitate communication, and facilitate curriculum that teaches for critical thinking.

Plants, Pathogens, and People: A Web Site to Improve Student Awareness of Agricultural Science

Darin M. Eastburn, and Cleora J. D'Arcy
Department of Crop Sciences,
University of Illinois at Urbana-Champaign
AW-101 Turner Hall, 1102 S. Goodwin Ave.
Urbana, IL 61801
(217) 244-9632
eastburn@uiuc.edu

The impact of agriculture on everyday life is incalculable. People must make decisions about issues such as food safety, environmental quality, and the use of biotechnology when they purchase food, care for their lawns or gardens, or support a political candidate or a special interest group. However, few Americans have sufficient information to make these decisions soundly. In order to increase students' understanding of agriculture and issues related to it, we have developed a web site that uses plant disease epidemics as case studies. On the site, students can explore text and visual resources on late blight and the Irish potato famine, Dutch elm disease and the decline of the American elm, and crown gall and the use of *Agrobacterium tumefaciens* in genetic engineering. They also can complete virtual laboratory activities that allow them to apply the scientific process and explore methods of experimentation. These experiences introduce students to scientific and societal issues related to agriculture, and increase their understanding of science and the agricultural system. Instructors who use the site can focus on the issues and how they pertain to a particular field of study, such as biology, history, or health, or can focus on the agricultural system itself.

Student Perceptions of Web Enhanced Instruction

T. J. Buttles
University of Wisconsin-River Falls
410 South Third Street
River Falls, WI 54022,
(715) 425-3555,
timothy.j.buttles@uwrf.edu

The Internet is changing many aspects of our culture, including classroom instruction. In recent years, a number of Internet tools and resources have been added to the list of instructional methods available to teachers. This trend has increased the push for inclusion of Web-based or Web-enhanced instruction in university courses. When determining appropriate teaching techniques for a course, student perceptions of technology should be considered. This poster will include student perceptions of Web- based instructional tools across one poultry science and two agricultural education courses. Students were asked to rate their overall perceptions of Web-enhanced instruction and specific WebCT tools used in class. A majority of students were in favor of using these tools in class. At least two-thirds of the students in each class felt the specific tools used were appropriate for tasks required. Fewer than 30% of the students felt that limited access to the Internet restricted their ability to complete tasks as assigned. Overall student perception of web enhanced instruction was positive when used in an appropriate manor.

Supplemental Instructional CDs: A Tool for 2002

Chris Morgan and Rick Rudd
Agricultural Education and Communication
University of Florida
PO Box 110540
Gainesville, FL 32611-0540
(352) 392-0502
acmorgan@ufl.edu

Textbooks, note packets, and study guides have all been helpful in supplementing the learning for the student beyond lecture. Today, in this electronic age, CDs and web pages are the new tool with which to disseminate information. For the past three semesters the Effective Oral Communications class at the University of Florida has used a supplemental CD ROM for supplementing lecture and taking on-line tests.

The students purchase a supplemental CD along with a text for the course. The CD contains all the power point slides used in the class, ten exams that are taken online outside of class, along with "Speech Coach," a tool designed to assist students in preparing speeches for lab exercises. After the initial "learning" phase, the students embrace the CD and like the freedom to take quizzes at their own pace.

We find that the supplemental CD ROM is a useful tool that assists students in the learning and retaining of the course material. The poster explains the advantages and disadvantages of using a supplemental CD, how the CD has enhanced learning for the students, and examines future uses of this technology.

Outreach Distance Education Course in Entomology for Field Professionals

Kenneth A. Sorensen
Department of Entomology
North Carolina State University
Box 7626, 1130 Grinnells Hall
Raleigh, North Carolina 27695-7626
(919) 515-1662
kenneth_sorensen@ncsu.edu

An applied graduate level course in entomology for field professionals (county cooperative extension agents, crop consultants, teachers and master gardeners) demands recruitment and advisement before, after and during course time. Clientele in the field need an opportunity to enhance their understanding and application of skills in insect identification, insect biology, control and management beyond the traditional entomology course in college. Insects and Plants is a course offered through the MCNC network that provides live, interactive on and off campus classes once a week during the fall semester. Remote sites around North Carolina include the University of North Carolina system, community colleges, research and education centers and a Global Transpark. All materials are on line in Wolfware, ® and classes are video taped for those who miss a class or elect to take the class using videotapes. Advertisement of the course is through the North Carolina State University tracks registration, through continuing education, through cooperative extension network, through a leaflet and by word of mouth. Issues of concern are with student recruitment and commitment, with administration and financial support, with remote site facilities, and with scheduling day, time and sites. The poster/display on Outreach Distance Education Course In Entomology For Field Professionals illustrates the template of the course and introduces constraints, limitations and strengths. Course impact, assessment and rewards remain open-ended.

Accessing Experts in the Field: Extension Specialists Share Experiences of Instruction via Polycom (Internet-based Teleconferencing)

K. Dale Layfield, Jim Camberato, Mickey A. Hall, and Julie Helm
Department of Biology Instruction and Agricultural Education
Clemson University
330 Long Hall
Clemson, SC 29634
(864) 656-5676
dlayfie@clemson.edu

As a result of continued financial cutbacks in recent years, leaders in Clemson University's College of Agriculture, Forestry and Life Sciences increased utilization of off-campus research/Extension personnel for instructional purposes by engaging them in teaching activities. The benefits to students were evident, as specialized researchers who offered first-hand access to current issues and trends in specific subject areas taught them. However, distance has historically been a problem for many off-campus personnel who are located within geographic centers of their research, at least 200 miles from campus. In recent times, distance education technologies lacked affordable access and optimal interactivity. Michael Moore, a respected scholar in distance education, recognized the need for optimal interactivity in his theory of transactional distance (1980) and in discussions of the three types of interaction (1989). A rapidly growing Internet-based teleconferencing system, Polycom®, supports Moore's thoughts, providing interactivity within the reasonable cost of equipment and a high-speed Internet infrastructure. Reflecting on recent courses taught with Polycom®, Clemson off-campus personnel and past students discuss benefits and challenges of this new media, offering thoughtful insight for future users. Some challenges addressed by off-campus personnel were transmission problems created by limited Internet bandwidth and complexities encountered when integrating multimedia.

Use of a Course Journal to Reinforce Chemistry Concepts, and Their Importance to Society

Eric M Shaw
Ohio State University
Agricultural Technical Institute
1328 Dover Road
Wooster, OH 44691
(330) 264-3911
shaw.185@osu.edu

For a two-quarter series of general chemistry courses, use of a course journal was incorporated to 1)reinforce chemistry concepts; 2)emphasize the importance of chemistry and science to society; 3)enhance students' writing ability; 4)enhance students' self-awareness; 5)acquire information from students about the courses that might not otherwise be forthcoming. A detailed set of guidelines describing expectations and requirements for the journal was given to students at the beginning of each quarter. Students were to focus journal entries on aspects of the chemistry courses, or any other science-related topics. Students were encouraged to become informed about current news topics related to science and society, and write about them in their journals. Five journal entries were required to be directed at specific news articles submitted to them throughout the quarters. Journals were collected periodically to assess student performance; evaluation was based primarily on the amount of effort students were devoting to the journal activity (number and length of entries, topic selection). As a final entry, students were required to state their perceptions of the utility of the journal activity, and suggest modifications. In general, students expressed favorable opinions. Many wrote that either their understanding or appreciation of science had been improved.

Evaluation of Students Perceptions and Attitudes Toward Agriculture Before and After Attending the Virginia Governor's School for Agriculture

Dennis W. Duncan and Thomas W. Broyles
Agricultural Technology and Agricultural and Extension Education
Virginia Tech
1060 Litton Reaves Hall
Blacksburg, VA 24061-0334
(540) 231-9663
duncand@vt.edu

The Governor's School for Agriculture is a four-week program designed to provide fieldwork, develop laboratory skills and provide an educational foundation for careers in the agricultural and natural resources arena. The School's mission is to provide cutting-edge, hands-on scientific and academic instruction to high school juniors and seniors. The objectives of this study were 1) assess students' knowledge, perceptions, and attitudes toward agriculture; 2) identify differences in attitudes between students who are currently involved in FFA and/or 4-H activities; and 3) determine if participation in the Governor's School had an effect on students' perceptions, attitudes and interests through

the use of a pre- and post-survey. Part one of the survey consisted of 21 true/false questions that identified the student's general agricultural knowledge; part two consisted of 19 Likert-type questions focused on agricultural issues (i.e. animal rights, biotechnology, groundwater contamination, etc.); and, part three asked a series of demographic questions. The post-survey also asked a series of open-ended questions to identify the overall impact the Governor's School had on each student. This paper will present the results of this study and discuss the benefits and challenges of developing a Governor's School for Agriculture at a land-grant university.

Assessment of Instructional Effectiveness and Delivery of Student Services to College of Agricultural Sciences and Natural Resources Undergraduates

Lloyd C. Bell
College of Agricultural Sciences and Natural Resources
University of Nebraska-Lincoln
310C Agricultural Hall 68583-0709
(402) 472-8739
LBell1@unl.edu

Effective teaching considers and accommodates experiences brought to the learning environment by students. As the student population of colleges of agriculture/natural resources broadens, experiences students bring to their education also broaden and become more diverse. Study objectives were as follows: profile undergraduates based on agricultural/natural resource experiences; assess accommodation for undergraduate experience diversity through the instructional process, student services, and campus atmosphere; and, identify major support items/obstacles contributing to or detracting from college success. Data were collected via questionnaires distributed to a stratified random sample of 300 from a population of 1080 sophomore, junior and senior students; a 45% return rate was attained. The most significant source of agriculture/natural resource experience was active involvement in a farm/ranch operation; 4H/FFA membership and secondary agricultural education were prevalent sources of subject matter experience. Respondents agreed satisfactory accommodation for undergraduate experience diversity was provided in the instructional processes and student services of the college. Major support items contributing to success were campus facilities and services, academic advisement, class-related, peer assistance, living unit, self-management, and family. Major obstacles detracting from success were self-management, institutional-related, instructional-related, and academic advisement. In order to be successful, respondents developed methods or strategies of self-management, managing the educational system, peer/family support, and instructor/adviser interaction.

An Introduction to Experiential Teaching in Agriculture

Mark A. Wade
Food and Resource Economics
University of Florida
2199 S. Rock Road,
Fort Pierce, Florida 34945-3138.
(561) 468-3922, Ext. 135
MAWade@mail.ifas.ufl.edu

Experiential learning is an important element in teaching agricultural sciences at the secondary and post-secondary level. This trend recognizes the importance of “hands-on training” in agricultural education and has evolved from the applied curriculum developed by technical schools throughout the country. Theoretical foundations provide some insight into the science of agriculture, but provide little training that can be transferred directly from lecture to field. Experiential learning, where students learn by doing, bridges the gap between theoretical and actual production of agricultural commodities. However, in order for this bridge to be formed, instructors must be able to demonstrate applied aspects of their respective discipline. This paper examines the importance of experiential teaching as a precursor to experiential learning and the impact of agricultural consolidation on agricultural education. As individuals with production experience and knowledge become scarcer, the ability to teach applied aspects of agricultural production becomes more difficult. In order for the transfer of applied knowledge and skill to occur, it must first exist. Activities for gaining practical experience are discussed including post-doctoral internships, utilization of industry partners and enhanced academic curricula. The suggestion that “those who can't do teach” is not a valid indication of the interactive classroom of today. In a world of experiential learners, experiential teachers can do and can teach.

The Utilization of Industrial Linkages in Agricultural Education

Mark A. Wade
Food and Resource Economics,
University of Florida
2199 S. Rock Road, Fort Pierce, Florida 34945-3138.
(561) 468-3922, Ext. 135
MAWade@mail.ifas.ufl.edu

Methodologies utilized in both “classical” education and vocational or technical education programs recognize the importance of experiential

learning as part of the overall transfer of skills and knowledge from teacher to student. Agriculture in the 21st century is far more complex and interdisciplinary in nature, making the job of developing future agribusiness leaders more difficult. The objective of this study was to examine the formation and development of educational coalitions as a means of providing a link between student education and industry partners. Resources can be utilized more efficiently when members share technical information and develop collaborative efforts. The transfer of knowledge occurs at a faster rate when funds are shared, mentoring programs exist, professional standards are established, and "School-to-Work" programs provide a flow of qualified graduates into the agribusiness sector. A general discussion of the coalition or partnership philosophy was initiated. Three actual coalitions were profiled in terms of membership diversity, plan of development, funding, infrastructure and results. Suggestions for success and potential pitfalls were also discussed. Educational coalitions that become mutually inclusive groups of vested individuals with one goal or mission in common the transfer of knowledge and skill through interaction and hands-on experimentation-benefit all parties involved and lead to a more effective educational experience.

Restructuring of a Poultry Products Technology Course into a Condensed Format.

T. J. Buttles and B. S. Walters
University of Wisconsin-River Falls,
410 South Third Street
River Falls, WI 54022
(715) 425-3555
timothy.j.buttles@uwrf.edu

The Midwest Poultry Consortium is an industry group that sponsors the education of undergraduates in the area of poultry science. The Undergraduate Poultry Center of Excellence summer program includes students from a variety of Midwestern states. The program has condensed 9 semester credits of courses into 6 weeks of instruction (3 credits/ 2 weeks). The Poultry Products Technology course has gone from a format of 2 lecture hours and 3 lab hours each week of the semester to a lecture/discussion time for 3 ½ hours each morning and a 4-hour lab time each afternoon for the 2 weeks. This significant change in instructional format has necessitated a need for different teaching techniques. Internet tools and resources have been added to the list of instructional methods utilized by the faculty. Some of the tools included using the Internet to find current informational material, taking online quizzes, reporting data, and checking on grades. A number of other activities have also been developed for use during the lecture/discussion time to keep the students engaged in the material. A discussion of how these changes were made and the ramifications will be discussed.

An Evaluation of Three Questioning Methods

Julie Adams, Bryan Reiling, and Dennis Brink
Department of Animal Science,
University of Nebraska-Lincoln
C220 Animal Sciences Building
Lincoln, NE 68583-0908
(402) 472-6401
adam7321@hotmail.com

Three questioning methods were examined based on student survey responses in an animal management course. Individual questioning, group response, and web based questions distributed before lecture were evaluated. Individual questioning was used during the first third of the semester, group response second, and web based last. Survey information gathered included student gender and current livestock experience, and responses indicated feelings toward the given questioning methods. Students indicated individual questioning helped them learn and recall information ($\mu=3.80$, 1=strongly disagree, 5=strongly agree). Students agreed individual questioning was an effective teaching tool ($\mu=3.62$). Students with more livestock experience were more comfortable ($P<0.03$) and engaged in critical thinking more often ($P<0.03$) with individual questioning compared to less experienced students. Females and students with more livestock experience indicated greater retention when using individual questioning ($P<0.03$). Group response enhanced retention over individual questioning, especially for students with more experience ($P<0.06$). Students felt group response was more effective than questioning individuals ($\mu=3.73$). Although the web-based method was an effective teaching tool ($\mu=3.82$), students were not likely to prepare more before lecture ($\mu=2.90$). Students were more likely to use web-based questions as study aids (especially males, $P<0.01$). Individual questioning and group response questioning effectively helped students learn/recall information.

Enriching the Lives of Students and Animals-Bringing the Two Together

Pamela Reed and Rebecca Hughes
Delaware Valley College
700 E. Butler Ave.
Doylestown, PA 18901
(215)489-4958
reedp@devalcol.edu

Animal Enrichment program, open to all majors,

was begun in Spring 2000 to provide students additional access to farm animals while providing grooming and activity benefit to the animals. Students volunteer at least one hour/week to work with pigs, dairy calves, horses and llamas. Activities include brushing, halter training, walking, and introduction of toys and new activities. Time can count towards Employment Program hours and gives students more time working with large animals, helping them to more accurately determine career goals. Students are asked to define personal goals for the program and are trained to handle various species at the beginning of each semester; additional training sessions for specific techniques are scheduled as needed. Meetings to discuss the program take place at monthly intervals. Students experienced in handling the different animals can then elect to serve as "TA's" to assist other students. The program is also available as a Selected Topics Course with additional requirements of reading and completing questions on assigned articles, participating in one of three projects (foal imprinting, showing animals at A-Day or a pig toy study), and completing behavior observation sheets on each species. The program has been popular with students who are highly self-motivated, although some volunteers drop out after a few weeks.

Learning Communities as an Advising Tool

Lance Gibson, Sherry Pogranichniy, and Mary Wiedenhoeft
Department of Agronomy
1126 Agronomy Hall, Iowa State University
Ames, Iowa 50011-1010
(515) 294-2143
lgibson@iastate.edu

Iowa State University has developed learning communities to foster a greater sense of belonging, improve success among new students, and reduce student attrition. The Agronomy Department first established a freshman learning community in the fall of 1998. Students enrolled in the learning community are grouped in the same sections of a suite of required courses. These include Fundamentals of Agronomy, Introduction to Meteorology, First-Year Composition, College Algebra, and Principles of Biology. The two organizing activities for the learning community are a pre-semester field trip and a weekly orientation seminar. Successes of the Agronomy learning community include improved academic performance and a positive perception among faculty about the value and usefulness of the learning community. Several learning community activities enhance student advising. Students make contact with advisers early in their first semester. They are required to formulate a grade point goal in consultation with the adviser as their initial assignment in the orientation seminar. Course scheduling is improved because each learning community student develops a four-year plan for graduation and a course schedule for the second-semester learning community. Faculty mentors to the learning community provide additional support to new students that complement the formal advising program in Agronomy.

Incorporation of Various Student Centered Learning (SCL) Techniques into an Introductory Plant Identification Course

Laura Deeter
The Ohio State University
1328 Dover Rd.
Wooster, OH 44691
(330) 264-3911 x1238
Deeter.7@osu.edu

Introductory plant materials courses have traditionally been taught utilizing the lecture method. A plant identification course was adapted to include several SCL techniques including having students assist in syllabus development, assignment development and assessment, development of a student and instructor "code of conduct", and the use of students as teachers of various subjects. Students also participated in the creation of study materials for exams, writing exam questions, group projects and discussions. Although there was some initial apprehension, all students eventually responded well to the changes. Attendance was excellent through the entire quarter and student participation was greatly increased. Students reported learning more, enjoying the class more and feeling a sense of responsibility toward the class, which increased their intrinsic motivation to succeed in the course. It was difficult to give up control of many aspects of the course and the inclusion of these techniques vastly increased the amount of time spent on daily preparation as well as assessment of assignments; however, the overall level of participation and satisfaction reported made it worth the time and effort.

Student Perceptions of Their Roles and Responsibilities in the Learning Process: Considerations for More Effective Teaching

Steven N. Rodie
Department of Agronomy/Horticulture
University of Nebraska-Lincoln
Lincoln, NE 68583-0724
(402) 554-3752
snrodie@unomaha.edu

Amy Risch Rodie
Department of Marketing
University of Nebraska at Omaha
Omaha, NE 68182
(402) 554-3982
arodie@mail.unomaha.edu

Traditional learning typically requires the efforts of at least two people the instructor and the student if students are to master the knowledge and skills in a particular field of study. While the instructor's efforts and responsibilities for teaching are evaluated on a regular basis, the student's role and responsibilities are less commonly documented or evaluated. Yet, the perceptions and efforts of students relative to their involvement in the learning process can have a significant effect on the learning that ultimately occurs. Data was collected from seven students enrolled in a summer section of a plant identification course. The major objective of the seven-week course was to correctly field identify approximately 150 trees, shrubs and flowers, using the correctly spelled genus, species, and common name of each plant. The students participated in a focus group approximately halfway through the course, and completed a written survey at the end of the session. The information gathered provides a qualitative assessment of perceived student roles and responsibilities for learning, and indicates students' perceptions of the importance of their own efforts (versus instructor efforts and other factors) in ensuring successful course completion and mastery of the course information.

Measuring Critical Thinking Skills in a Discipline-Specific Context

John C. Ricketts and Rick D. Rudd
Agricultural Education and Communication
Room 310 Rolfs Hall, PO Box 110540
University of Florida
Gainesville, FL 32611-0540
(352) 392-0502
jcr@ufl.edu

Critical thinking has become a buzzword in civic, industrial, and educational arenas. Critical thinking skills are one of the most important tools we can teach our students, for "knowing is only part of being educated; thinking and reasoning with what we know completes it" (Shauble and Glaser, 1990). Too many scholars have tried to teach and evaluate critical thinking skills without concern for the knowledge necessary to think with. They focus on interdisciplinary or liberal education methods of critical thinking instruction and assessment instead of discipline-specific critical thinking training. Tindal and Nolet (1995), and other critical thinking experts believe that as students' content and domain knowledge increases, improvements in their critical thinking skills flourish. Teaching students to think critically in and about their discipline is more important than ever, but methods of assessing students' specific critical thinking skills in agricultural and life sciences are virtually non-existent. The purpose of this presentation is to demonstrate the design and development of discipline-specific critical thinking skills assessments that can be used by educators throughout colleges of agricultural and life sciences. Discipline-specific critical thinking skills assessment tools allow educators to enhance student development through their teaching and advising.

Incorporating Service Learning into an Agriculture Course

Jean A. Gleichsner
Agriculture Department
Fort Hays State University
600 Park Street
Hays, KS 67601
(785) 628-4023
jgleichs@fhsu.edu

Service learning is a teaching tool that enables students to perform a community service, while practicing the theories learned in the classroom. The goal of service learning is to benefit both the community and the student. Service learning gives hands-on experience to students and encourages students toward lifelong civic involvement. It helps students to become active members of their community while changing society's view of education and service. Effective service-learning consists of four elements: 1) preparation stating competencies to be achieved and planning projects so they contribute to learning at the same time work gets done; 2) experience encountering the real life problem; 3) reflection the participant attempts to analyze and draw lessons from the experience; and 4) assessment - determine the extent to which the desired competencies have been achieved. A service-learning project was incorporated into AGRI 301 Home Horticulture. This course provides an overview of many areas of horticulture: houseplants, flowers, vegetables, fruits,

nuts, lawn, and landscaping. The project addressed the community concern of downtown beautification. Concrete planters were purchased and placed along Main Street. Students selected the plant material based on information learned in class and then installed the plantings. Students then discussed and wrote about their experience.

A Model for Student Academic Advising and Advisor-Advisee Relationship Development.

Mark C. Starrett
University of Vermont
Hills Science Building, 105 Carrigan Drive
Burlington, VT 05405-0082
(802) 656-0467
Mark.Starrett@uvm.edu

Over the past five years, I have developed a model system for advising students and for which I was named, "University of Vermont Advisor of the Year" in 2000. Considerations for "first year" students include: initial student contact during summer orientation, "move-in" day, and advising strategies during the critical first weeks. Novel approaches to enhance advising include digital photos for display in the Department Showcase, linking advising sessions with a college-wide course designed for first-year students ("New Beginnings"), development of electronic "list-serves" to reach all advisees regarding important issues (academic deadlines, internships, jobs, scholarships, and seminars), and development of an electronic calendar to acknowledge birthdays or other special events in the life of an advisee. Issues concerning maintenance of advising records, replying to e-mail inquiries, maintaining regular academic advising sessions, making "the most" out of advising sessions, and creating an "open-door" policy will also be addressed.

Using Professional Industry Partnerships for Advising Students

At a Two-Year Technical College

David A. Willoughby
Department of Horticulture Industries
The Ohio State University
1328 Dover Road
Wooster, OH 44691-4000
(330) 264-3911
Willoughby.18@osu.edu

Providing effective student advising helps students make critical decisions ranging from course selections to choosing a career path. College advisors must possess in-depth knowledge of complex curriculum paths, along with a thorough understanding of present and future trends in industry and employer expectations. College student success is often measured as a result of gaining employment in their major field of study soon after graduation. For many years colleges and universities have successfully required students to participate in industry internships to gain valuable on-the-job experience. Providing industry-related advising opportunities for students is another means of using these same valuable resources to enhance student success. In an effort to strengthen and broaden relationships between higher education and industry, and support student success, an industry partnership program for advising Turfgrass Management students at The Ohio State University Agricultural Technical Institute was introduced three years ago. Golf course superintendents from a regional chapter of the Golf Course Superintendents Association of America were recruited to form advising teams to complement and support college faculty in providing quality student advising services. This presentation will focus on the implementation and early assessment of this pilot program.

An Integrative Lab Exercise for Turfgrass Management and Weed Science

Daniel C. Voltz and David A. Willoughby
Division of Horticultural Industries
The Ohio State University
1328 Dover Road
Wooster, Ohio 44691-4000
(330) 264-3911
Voltz.5@osu.edu

Students enrolled in turfgrass management programs typically are required to complete introductory courses in turfgrass management and weed science. Unfortunately, the responsibility for integrating the concepts and principles covered in each of these courses and collectively applying them to real world scenarios has historically been placed on the students. In order to address this shortcoming, we have developed a hands-on learning activity that is incorporated as a common laboratory exercise in both the turfgrass management and weed science courses (students are enrolled in both courses simultaneously). The major objective of the laboratory assignment is to help students learn about the interrelationships that exist between turfgrass establishment and weed competition. This integrated interactive laboratory exercise has enhanced student interest in, and knowledge of, the complexities of turf establishment and the dynamics between turfgrass and weed science. The presentation will concentrate on details of the laboratory activity, student interest and feedback, and recommendations for changes and improvement.

Grazing Livestock Systems: An Interdisciplinary Undergraduate Major.

L.E. Moser, W.H. Schacht, D.R. Brink, G.H. Pfeiffer, and B.A. Reiling
University of Nebraska
279 Plant Sciences, P.O. Box 830915,
Lincoln, NE. 68583-0915.
(402) 472-1558
lmoser1@unl.edu

Sustainable production from grazing lands results from economic integration of grassland and livestock management. Grazing Livestock Systems (GLS) is a non-traditional major that integrates core material from Animal Science, Agronomy (Range and Forage Sciences), and Agricultural Economics. This newly-developed major at the University of Nebraska-Lincoln (UNL) provides a balanced education focusing on interrelationships of ruminant livestock production, grazing land ecology and management, and business management. The goal is to prepare students to be skilled grazing livestock managers and advisors, as well as responsible stewards of natural resources. A required internship is tailored by the individual student and faculty advisor to match the student's goals and background. Internships are with ranchers, governmental agencies, the extension service, or other groups or industries associated with grazing livestock. The major is coordinated by a five-member committee from the Departments of Animal Science, Agronomy, and Agricultural Economics, and is administered through the UNL Center for Grassland Studies. An advisory board of stakeholders from the ranching community, public agencies, and agribusiness, contributed to the development of the major and guide the major and internship program. As complexity of agricultural careers increases, interdisciplinary majors managed by a team of specialists in each related discipline will be important to add both breadth and depth to academic preparation. For further information see: http://gls.unl.edu

Experience Agriculture: An Innovative Approach to Career Development

Kelli M.Sisler
University of Guelph
OAC Dean's Office
162 Johnston Hall
Guelph, Ontario
N1G 2W1
Canada
(519) 824-4120
ksisler@oac.uoguelph.ca

Leadership, problem solving and visioning are skills necessary for graduates entering the agri-food sector. However, how does one teach these skills in an agriculture curriculum? The University of Guelph has tackled this problem through the development of an innovative co-curricular program. In the early 1990s, the Ontario Agriculture College completed a major curriculum transformation for the Agricultural Science program. Termed "Vision `95," this curriculum was meant to provide a breadth of knowledge on the agriculture sector. In addition to new courses, a career development program was integrated into the core curriculum. The program is based on skills that employers and alumni have said are essential for the agri-food industry. Students are therefore exposed to a variety of learning experiences beyond the classroom and ultimately have an edge in the career marketplace. The "Experience Agriculture" Program includes:

- A series of career development modules
- Student portfolio
- Experiential learning opportunities
- Faculty Advising
- Validation Interview

This poster will present the program components, highlight the evaluation thus far and discuss the student outcomes. Finally, the future direction of the program will be outlined. The presenter was a student in the program, an evaluator and currently is the program coordinator.

An Interdisciplinary Approach to Leadership Development in the Animal Sciences

Hilary Maricle, Linda Moody and Dennis Brink
University of Nebraska
310E Ag Hall
P.O. Box 830709
Lincoln, NE 68583-0709
(402) 472-0439
hmaricle2@unl.edu

A program which merges the technical science skill sets within animal science with the social science skill sets of leadership and interpersonal skills to create an integrated holistic curriculum is in the first year of implementation in the College of Agricultural Sciences and Natural Resources at the University of Nebraska-Lincoln. Animal science majors, who are nominated by faculty, participate in a two-year program combining course work with service and experiential learning activities. Coursework includes interpersonal skill development, leadership development for small and large groups in organizational settings, presentation strategies and the core curricula in animal science. Experiential and service learning activities include career exploration work-

shops, shadowing experiences, professional development activities, and internships. Students will work one-on-one with faculty and business and industry mentors applying what they are learning in the classroom to their career goals including addressing gaps in technical and social sciences preparation. Initial response to the program has been excellent. Students, faculty, administration and key animal industry leaders have been extremely cooperative and willing to give above and beyond the expected amount of time and creative energy to the success of the program.

Best Practices for Articulation between Community Colleges and Universities

W. Wade Miller
Iowa State University
217 Curtiss Hall AGEDS
Ames, IA 50011
(515) 294-0895
wwmiller@iastate.edu

Articulation has a long history in education. For the purpose of this report, an articulation agreement is defined as an agreement by and between educators of postsecondary courses and degree programs that facilitates the transition of students between the community college and university and allows students continuity without hindrance through the levels of education. This report examines the concept of articulation and highlights some of the "best practices" for articulation agreements from colleges across the United States. Best practices are relative among the specific institutions involved and should be measured and judged according to the results that the articulation agreements and processes have demonstrated. Agreements should:

- be developed for degrees
- be developed for individual courses
- be developed along professional and industry standards
- be specific and clearly defined
- address grading and evaluation policies
- address financial aid and scholarships
- address the issue of transcripts
- address the issue of "advanced credit"
- address the issue of attendance at multiple colleges
- address the issue of continuous enrollment
- address transferring before finishing the degree
- address the issue of taking distance education courses
- be a cooperative venture between and among colleges and universities.

Student Perception of the Student Evaluation of Instruction Form As a Tool for Assessing Instructor's Teaching Effectiveness

Shahrokh Rahnema, Frank Jennings,and Philip Kroll
The Ohio State University
Agricultural Technical Institute
1328 Dover Road
Wooster, OH 44691
(330) 264-3911
rahnema.1@osu.edu

Literature regarding student evaluation of instruction primarily addresses the generally divergent views of either faculty or administrators. Because students are the primary stake-holders in this process, the objectives of this study were to determine students' perceptions regarding their willingness as participants, qualifications as evaluators, and belief in effective-ness of the evaluation instrument. A survey instrument was developed and administered to 123 students in seven different classes across the institute during the 2001 academic year. Questions were designed to one, gather demographic information and two, address the stated objectives of the study. Prior to administering the survey, standardized instructions were provided to students. Completed surveys were collected and later tabulated for descriptive statistical analysis. Of the 122 students who completed (99.2%) this survey, 91% were under 25 years of age and 68% were male. On a scale of one (strongly disagree) to five (strongly agree) students indicated: a willing-ness (4.0±1.0) to evaluate their instructor, felt well qualified (4.4 ± 0.9) to evaluate their instructors, and were neutral in considering SEI a valid (3.3±1.2) instrument for evaluation. In conclusion, although students were willing participants and felt qualified to evaluate their instructors, they appeared indecisive regarding the effectiveness of the process.

A Delphi Study on Determining and Prioritizing the Current Needs of Illinois Beginning Agriculture Teachers

Andrew J. Baker and Kevin Bacon
Western Illinois University
1 University Circle
314 Knoblauch Hall
Macomb, Illinois 61455
(309) 298-1246
aj-baker@wiu.edu

Retention of beginning teachers is a key issue in today's educational environment. Understanding

their needs is a critical component in the retention of beginning teachers. The purpose of this study is to determine and prioritize the current needs of Illinois beginning agriculture instructors. There were 27 first year agriculture instructors that participated in this study. This study used a Delphi approach in the collection of data. Perceptual data were collected utilizing three different survey instruments. The first round survey instrument consisted of seven open-ended questions that collected 160 items to be rated in the second round instrument. Participants rated the second round items on a five-point Likert-type importance scale. Items that received an approval rating of "very important" or "important" from 60% of the respondents were included in the third round survey instrument. The third round survey included two five-point Likert-type rating scales, which included 56 items from the second round instrument. The first scale was an importance rating and the second scale was a priority rating. Classroom management and the FFA were two of the highest rated areas or concerns with Illinois beginning agriculture teachers. Findings will be recommended for use in developing future in-service programming for beginning teachers.

Student Success in UNL□s Agribusiness Program

Ron Hanson
Department of Agricultural Economics
University of Nebraska Lincoln
204 FYH
Lincoln, NE 68583-0922
(402) 472-2055
rhanson1@unl.edu

The University of Nebraska-Lincoln Agribusiness Program was the first nationally recognized joint degree program in agribusiness between a College of Business Administration and a College of Agricultural Sciences and Natural Resources. The underlying success of this Agribusiness Program has been the outstanding students that this major has attracted over the years. The role of faculty advising and the numerous student involvement activities have contributed greatly to this result. This poster presentation will highlight the development and enrollment growth of this program. The various student oriented activities will be identified and described. The importance of faculty advising and its positive impact on the success for student graduating with this Agribusiness major will presented as well. Also the importance and role of both the Agribusiness Program director and coordinator will be established. The networking with agribusiness firms and their support of this program will be a part of the presentation to identify the internship/career opportunities created for students. This poster will showcase the success and national recognition of the Agribusiness Program for the Department of Agricultural Economics and the College of Agricultural Sciences and Natural Resources at UNL.

Students' Perceptions of Career Paths in Agricultural Education

Gregory A. Cummings, Traci E. Tooley and Gary J. Wingenbach
Texas A&M University
2116 TAMU
College Station, TX 77843-2116
(979) 845-5198
GCummings@aged.tamu.edu

Agricultural students should be knowledgeable about professional opportunities in their major if they want to have successful careers in the agricultural industry. Texas A&M University's Department of Agricultural Education prepares students for six professional career paths, derived from five common knowledge bases. Agricultural education graduates find careers in extension education, agriculture science teaching, leadership education, distance education, agricultural communications, and international agricultural development. Agricultural education knowledge bases include planning and needs assessment, learner-center instructional design, delivery strategies, evaluation and accountability, and research measurement and analysis. "Topics in Agricultural Education and Leadership" is a course designed to help students explore and increase their awareness of the career opportunities in agricultural education. Results of this study showed students' knowledge of the professional opportunities in extension education, leadership education, and international agricultural development increased significantly over the course of the semester. Respondents' understanding of the knowledge bases in planning and needs assessment, learner-center instructional design, and research measurement and analysis increased significantly also. The results of this study help agricultural educators at Texas A&M University in teaching and advising students on their selected professional career paths. Strategic advising programs assist undergraduates in selecting degree plans and professional career paths.

Advising Students on Careers in Agricultural Education

Gregory A. Cummings, Traci E. Tooley, and Gary J. Wingenbach
Texas A&M University
2116 TAMU
College Station, TX 77843-2116
(979) 845-5198
GCummings@aged.tamu.edu

Do undergraduate students and faculty members differ in their perceptions of professional career paths? Agricultural students should be familiar with their disciplines' knowledge bases and professional applications if they want to have successful careers in the agricultural industry. Texas A&M University's Department of Agricultural Education provides opportunities in six professional applications which are derived from five knowledge bases. Agricultural education graduates find careers in extension education, agriculture science teaching, leadership education, distance education, agricultural communications, and international agricultural development. Agricultural education knowledge bases include planning and needs assessment, learner-center instructional design, delivery strategies, evaluation and accountability, and research measurement and analysis. "Topics in Agricultural Education and Leadership" is a course designed to help students explore and increase their awareness of the discipline's knowledge bases and professional applications. Students agreed with the department's definition of knowledge bases and professional applications, identifying their future career paths most with Leadership Education (n=69) and least with Distance Education (n=1). Significant differences existed among subgroups when examining the data by gender and race. The results of this study help agricultural educators at Texas A&M University in teaching and advising students on their selected professional career paths. Strategic advising programs assist undergraduates in selecting degree plans and professional career paths.

A Model for Advising the Agricultural Education Undergraduate

J. Cano, J. Connors, N. Knobloch & S. Whittington
The Ohio State University
203A Ag Admin Bldg
2120 Fyffe Rd
Columbus, Ohio 43210

We believe that teacher confidence is an invaluable characteristic that is partially developed in the preservice teacher education program. Therefore, we developed a model for advising the agricultural education undergraduate whereby the undergraduate coordinator, freshman/transfer advisor, faculty advisors, and peers work collectively to instill teacher confidence at the preservice level. The model begins with admission to the university. Undergraduates in the college are then required to enroll in a freshman orientation class. However, our students, rather than enrolling in the general course, enroll in our personalized course. Students gain an understanding of their options, and then write individualized four-year plans designed to strengthen individual weaknesses, thus building confidence. We also purposefully begin their peer collaboration process at this time. We provide the services of a freshman/transfer advisor who works individually with undergraduates for one full year. This model guarantees that every student receives equivalent information and can therefore be confident that they are getting a sound start to their college experience. At the end of one year, students are assigned a faculty advisor with expertise in the option that each student has chosen. With peer collaboration occurring throughout the process, we believe that our agricultural education undergraduates are ready to graduate as a confident first year teacher.

Advising Preservice Agricultural Education Teachers: The Total Plan

James B. Hunter and Randall Andreasen
Southwest Missouri State University
201 Karls Hall, 901 South National Avenue
Springfield, MO 65804
jbh198f@smsu.edu

Advisement is an integral component in student degree programs, although it is often taken for granted by both the advisee and the advisor. All degree programs have unique aspects that must be addressed to insure those programs are completed in a timely manner. Advisement for preservice agricultural education teachers is extremely vital because course work is only a single component. Proper advisement must also come in the areas of course sequencing, qualifying examinations, grade point average requirements, proper health and wellness documentation, personal background checks, portfolio completion, and student teaching internships. Proper advisement of preservice agricultural education teachers must include a total plan from the time the students enter the degree programs. This includes year-one advisement: initial contact with the student and understanding the goals and objectives for his degree. Year two advisement includes introducing students to professional education, technical agriculture, and introductory agricultural education courses. Year three advisement should include initial portfolio preparation and a review of degree requirements with advisees. The fourth year is the capstone year. Checks should be made of course work, specific degree requirements, placement for student teaching internship, and finally job availability.

Ecological Agriculture Education: An Active Learning Model from the Nordic Region

Charles Francis
Department of Agronomy & Horticulture
225 Keim Hall
University of Nebraska
Geir Lieblein, Lennart Salomonsson, and N. Sriskandarajah, Nordic Forestry, Veterinary and Agricultural University
Lincoln, NE 68583-0910
(402) 472-1581
cfrancis2@unl.edu

Current focus in most university courses including agroecology is on the in-class lectures and discussion as well as other instructor-led activities. Readings from the literature and instructor lectures are valued more than personal student experiences. Evaluation takes place through exams, papers, and student presentations. We propose a shift from this conventional lecture-dominated paradigm to one that promotes experiential learning, an approach that could be called action education. Built on the premise that there is a much smaller gap between ignorance and knowledge than between knowledge and action, we shift the emphasis to practical applications, informed action, and student responsibility. More time spent on readings and discussion, incorporating prior student experience, and priority time for meaningful reflection all contribute to higher order problem solution and synthesis of content information. Relating the principles to real world problems, working in group projects, and reporting results to interested clients in agriculture outside the university all contribute to more in-depth and comprehensive learning experiences. The NOVA University program in agroecology is putting these ideas into action in the Nordic Region.

Teach for Learning and Learning to Teach

Mark E. Headings
The Ohio State University
Agricultural Technical Institute
1328 Dover Road
Wooster, OH 44691
(330) 264-3911
headings.1@osu.edu

It is probably safe to say that most faculty in colleges and universities in the U.S.A. have never enrolled in a course on "teaching methodology." The instructor's mastery of subject material is essential; however, it is only one piece of the puzzle called effective teaching and learning. Instructional delivery styles are also an important piece of the puzzle. A key element in effective teaching is to discover how your students learn best. An effective teaching style becomes the vehicle to facilitate your students in acquiring knowledge. One of the basic principles of effective teaching is to discover and understand what the best learning styles of your students are and to then tailor instructional methodology to fit the way they learn best. Therefore, I conducted a survey of 179 of my students to see how they think they learn best. The results indicated that 47.5% of the students ranked "hearing, seeing, and doing" as the best way they gain and retain knowledge. Just "doing" alone was ranked second best by 37.4% of the students. The least effective way they learn is through "speaking" at 21.8%, and the second least effective way is by "reading books and other publications" at 31.8%.

A Possible Solution to the Shortages of Graduate Teaching Assistants in Undergraduate Agriculture Courses

Jerry M. Williams
Department of Horticulture
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061
(540) 231-5655
williamj@vt.edu

Over the past few years, some agriculture departments at Virginia Tech have experienced a shortage in assignment of Graduate Teaching Assistants (GTA's), requiring faculty to teach additional class sections. To help relieve the shortage, a plan has been implemented in the Horticulture Department to utilize undergraduate students to meet GTA needs in a high attendance lecture/laboratory course. The criteria in selecting students to fulfill these needs are as follows: Student must be a senior and have a cumulative GPA of at least 3.0/4.0; student must have earned a grade of at least "A-"when enrolled in the course, and demonstrate a strong desire to undertake the teaching responsibilities; student must participate in our 3-day summer GTA Training Workshop; and student receives only Independent Study credits in compensation. Two students have participated thus far in this program, with a third scheduled next semester. In addition, a few undergraduate students have participated as GTA's in laboratory-only sections of other courses prior to the initiation of this specific plan. Class performances and data from Student Perceptions of Teaching evaluation forms will be presented to compare outcomes of first-time teaching graduate students versus first-time teaching undergraduate students.

Cutback Management for Academic Programs in Colleges of Agriculture

Larry J. Conner
College of Agricultural and Life Sciences
2001 McCarty Hall
University of Florida
Gainesville, FL 32611
(353) 335-4806
LDAC@ufl.edu

The national conference of State Legislatures has reported 43 states are experiencing revenue shortfalls, and half are considering budget cuts in 2002. Agricultural colleges experienced major budget cuts approximately every decade over the past thirty years because of national recessions. The objects of this paper are 1) to clarify cutback management with respect to simple budget reductions versus downsizing; 2) specify the conceptual process for downsizing in agricultural colleges; and 3) appraise the cutback management implications for agricultural academic programs. The cutback distinctions between simple budget reductions versus downsizing are first discussed. Simple budge reductions versus downsizing options are next analyzed with respect to their relative use, effectiveness, and time required for implementation. The need for simultaneously handling teaching, research, and extension is stressed. Because of its complexities, downsizing is discussed in its various facets. The conceptual basis is explained through identifying major underlying considerations. College leadership needs for downsizing are detailed, and how they differ from conventional agricultural leadership. Finally, a proposed downsizing process for colleges/units, including likely participants, is presented. The cutback management implications for agricultural academic programs, particularly for downsizing, are then appraised. Major programmatic/administrative actions and outcomes associated with downsizing are listed and evaluated.

Effects of Concurrent Enrollment on Student Progress and Performance in the College of Agriculture at Kansas State University

Kevin J. Donnelly and Dana J. Minihan
Ag Academic Programs and Department of Agronomy
Kansas State University
117 Waters Hall
Manhattan, KS 66506
(785) 532-6151
kdonnell@oznet.ksu.edu

The Kansas Board of Regents passed the Kansas Challenge to Secondary Schools Pupil Act in February 2001. The Act encourages concurrent enrollment in postsecondary courses while in high school. Entering freshman in the College of Agriculture with concurrent enrollment credits has risen from 40% to 60% since 1996, while hours completed remained stable at 11 to 12. Concurrent enrollment is promoted to save students time and money and to accelerate degree progress. This study evaluated how concurrent enrollment influenced academic performance and degree progress of freshmen entering agriculture majors. Although freshmen with concurrent hours averaged slightly higher first semester and final GPA, the differences are not necessarily attributed to concurrent enrollment. These students also entered with slightly higher ACT scores which are strongly related to GPA. From 1996 to 1998, entering freshmen with 15 or more concurrent credits were more likely to graduate early, but only about 20% did so. Over 50% finished on time (4 years), compared to about 25% for those without concurrent credits. With less than 15 hours, on time graduation only increased to about 35%. All groups had similar final graduation hours, thus it appears most students utilize concurrent enrollment hours to allow lighter class schedules. This may permit greater involvement in activities or part-time employment. Good advising at the high school and collegiate level plus careful scheduling is needed to insure that students realize any anticipated advantage toward degree completion.

Trends in Learner Characteristics and Program Related Experiences Associated With Two Off-Campus Agriculture Degree Programs

Greg Miller and W. Wade Miller
Iowa State University
217 A Curtiss Hall
Ames, Iowa 50011
(515) 294-2583
gsmiller@iastate.edu

Iowa State University began offering an off-campus master of agriculture degree in 1979 and an off-campus bachelor of science degree in 1991. In the fall of 1993 a follow-up study was conducted to assess the degree programs and to gain an understanding of the off-campus learning experience. Seven years later another follow-up study was conducted. Data were obtained from 46 of 53 persons who graduated by fall 1993 and from 34 of 54 persons who graduated from spring 1994 to fall 2000. When compared to 1993 respondents, a smaller proportion of 2000 respondents were male and employed in farming. A greater proportion of 2000 respondents were employed in agribusiness and "other" occupations. Graduates in both follow-up studies took about five and three

quarter years to complete the program, but respondents in 2000 traveled to campus more often for reasons associated with their degree program. Year 2000 respondents perceived thirteen challenges to off-campus study as less significant than 1993 respondents. Respondents in 2000 perceived they had significantly greater access to instructors and that instructors understood their needs more than did respondents in 1993. The two most significant challenges faced by graduates in both studies was the limited number of course offerings and the difficulty in balancing school, personal and work responsibilities.

Ten Years of Student Leadership Conferences: Lessons Learned

David M. Agnew and Bert Greenwalt
Agricultural Economics and Agricultural Education
Arkansas State University
P.O. Box 1080
State University AR 72467
(870) 972 2087
dagnew@astate.edu

The problem of weak leadership among student leaders and their organizations is recurring as older leaders graduate or move on. Weak leadership among new officers and members is sometimes rooted in a lack of awareness of the possibilities and opportunities. In an attempt to overcome these problems, a new leader orientation session was planned for one organization. As the idea was shared with another organizational advisor it became apparent that the need was college wide. The idea of a college wide leadership conference was proposed to the dean with the suggestion that the college host the event and that student leaders from all student organizations associated with the college be invited to participate. The dean agreed and paid for the meal and incidental cost, which was about $300. So the event began in 1992 as the first "College of Agriculture Student Leadership Conference" with 24 student leaders participating. From the beginning the consensus was that this should be continued as an annual event. Through 10 years of conferences with formal and informal evaluations some general guidelines emerge to aid in planning and conducting a successful conference.

Developing a Personalized Student Evaluation of Advising Survey Instrument

Allen Zimmerman, Professor
The Ohio State University
1328 Dover Road, Wooster, OH 44691-4000
330 -264-3911-1263
zimmerman.7@osu.edu

Colleges and universities typically require that faculty obtain feedback about their courses and teaching performance from students via student evaluation of teaching (SET) survey instruments. When combined with other measures such as peer and self-evaluation, student input can be very valuable in improving the teaching process.

Often, a standardized SET instrument containing a number of individual items is developed at the college or university level. Obviously, the items selected have been identified as important characteristics of effective teaching. Therefore, the SET instrument can also serve as a guideline and reminder of the key attributes of good teaching.

Systematic collection of student input would appear to be just as important for improving advising as it is for improving teaching. However, few colleges and universities require that faculty obtain feedback about their performance as advisors or provide survey instruments to do so.

Participants in this workshop will develop a personalized student evaluation of advising (SEA) survey instrument. During this process, attendees will be actively involved in writing and sharing their ideas about advising. The expectation is that the SEA instrument developed by each participant will be used to obtain student feedback and serve as guideline and reminder of the key attributes of good advising.