



Computer Usage and Perceptions of Incoming Students at a 2-year Agricultural School¹

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Abstract

Many college professors assume incoming students are technologically savvy and have the appropriate computer skills for college. This research was conducted to determine if students perceive themselves to have appropriate computer skills upon entering college. A survey of incoming freshmen at the Ohio State University Agricultural Technical Institute (OSU ATI) was conducted in orientation classes during Autumn Quarter, 2010. Students were asked to rate their perceived level of computer competence in several areas including: email, digital photo editing, Internet research, word processing, spreadsheets and database usage. Most students felt their skills to be intermediate in the areas of email, Internet research and word processing. Skills in digital photo editing and spreadsheets were perceived as between beginner and intermediate, indicating less confidence and/or experience in these areas. Almost all of the students felt that computer skills would be helpful in college and that college would only add to their skills. Additionally, almost 90% of the students brought a computer to campus. Intriguingly, fewer than 8% of students reported that computers would not be helpful in their college careers, nor would they be helpful in their future careers.

Predictors of Performance in an Animal Nutrition Classroom

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Abstract

Animal Nutrition is a required course in animal science curriculums nationwide. Typical of required courses, the class is diverse in previous academic and animal experience. The objective of this research was to gather information about accurate student performance predictors to improve advising and course design. Data from 443 students, representing four semesters (Fall 2007-2010) of Animal Nutrition students, were statistically analyzed to determine predictive relationships between SAT scores, residency, transfer status, animal experience, major,

gender, grade in a recommended Cornell general chemistry prerequisite (Cornell Chem) and performance in an introductory animal nutrition course (Animal Nutrition; Cornell University). In addition, an optional survey was administered to the 2010 Animal Nutrition class. In the survey, 27% of students self-identified animal experience level and 48% of transfers identified transfer status as influencers of their grade. Transfer status, residency, SAT scores, gender and grade in Cornell Chem were identified as significant predictors of performance in Animal Nutrition. The highest correlation for a predictor was Cornell Chem grade; completion of Chem was associated with significantly higher Animal Nutrition grades. Gaining information about accurate student performance predictors can assist advisors in making course recommendations as well as instructors in designing the course to best enable corporate learning regardless of the diversity in student preparation.

Evaluation of a Community Nutrition Service-Learning Program: Changes to Student Leadership and Cultural Competence.

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Abstract

Faculty at the University of Connecticut introduced an advanced service-learning course in community nutrition with the goal of delivering nutrition education and enhancing students' leadership skills, cultural competence, and understanding of contributing factors for childhood overweight in minority, low-income populations. Prior to enrollment, students completed a pre-requisite community nutrition service-learning course. A mixed-methods design was used to evaluate perceptions of self-growth in leadership and cultural competence. Students demonstrated statistically significant improvement from pre-to-post semester on the overall score and several measures from the Student Leadership Practices Inventory (SLPI) and the Cross-Cultural Adaptability Inventory (CCAI). The significant changes to SLPI suggest improvements in teamwork, inspiring support, recognizing others' contributions, and collaboration. Analysis of reflections and discussion group transcripts suggest the students' opportunity to overcome obstacles and find affirmation in their growing capability played an



important role building confidence. Students' noted self-growth in flexibility, adaptability, teamwork, risk-taking, self-confidence and the importance of being open-minded. They became aware of lifestyle differences and similarities with the multicultural children they served. Students made new connections about family food choices and childhood obesity. They realized sometimes their assumptions about the lives of the children were correct and other times they were not. Findings informed curriculum modifications.

Understanding Perceived Short-Term Outcomes from a Faculty Travel Abroad Experience in Ecuador

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Abstract

In an attempt to facilitate internationalization of undergraduate curriculum, eight faculty members from a land-grant institution participated in a short-term study abroad. Upon their return from the experience, participants were asked to reflect on changes from initial attitudes or beliefs, perceived benefits gained from participation in the program, and anticipated impacts on academic activities. Responses were analyzed using four variables: knowledge gain, change in attitude, increased skills, and aspirations. Two themes emerged concerning knowledge gain: change that occurred regarding the context of the research process, specific to research opportunities and knowledge gained from travelling with a diverse faculty group, and informational details about Ecuador, specifically regarding social systems, current issues, culture, and environment. Responses concerning a change in attitude were focused on the people of Ecuador, exhibiting shifts from a stereotypical to a broader mindset. Few participants described any opportunities to increase skill sets within their post-trip reflection activity, citing only opportunities to increase communication skills. However, numerous participants cited new aspirations, focused around the three areas of land-grant academe – teaching, research, and extension. These results suggest that participating faculty aspire to integrate global activities into their on-campus courses and research endeavors as a result of participating in this program.

The University of Georgia Avian Biology Study Abroad Program in Costa Rica

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Abstract

Students enrolled in the College of Agricultural and Environmental Sciences (CAES) at the University of Georgia traditionally had not participated in study abroad programs at a rate similar to the rest of the student body at the University. This lack of study abroad involvement by students in the College was related to the shortage of study abroad opportunities with content geared towards them. Therefore, an Avian Biology Study Abroad Program in Costa Rica was created in 2008 to complement and enhance the avian biology major offered through the Department of Poultry Science within CAES. Student participation has reached the targeted goal each year of 15, 18, and 20, for a total of 53 students. Testing and survey results indicate that student learning objectives have been met and that students have been very satisfied with the overall experience of the program. Pre/post-test results show a 43% gain in knowledge from the study abroad experience. The mean overall rating of the course by students for years 2008-2010 was 5.0 out of 5.0 and the mean rating of overall quality of the program, for the same period of time, was 4.8 out of 5.0. All but 5 of the participating students have been fulltime enrolled CAES students. In addition, 19 of the participants were avian biology majors and 7 more became avian biology majors after participating in the program. Thus, the Costa Rica Avian Biology Program has provided a capstone opportunity to avian biology majors and increased the study abroad participation of CAES students.

The Equine Anatomy Project: Program Development and Student Opinions of a Necropsy Laboratory Compared to a Necropsy DVD

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Abstract

As part of the growing equine science major at North Dakota State University, a junior-level equine anatomy and physiology course was developed in 2009. Subsequently, The Equine Anatomy Project was created to secure equine cadavers that would provide undergraduate students with the opportunity to participate in a necropsy lab. Prior to the necropsy



laboratory, a detailed prosection DVD was shown to prepare students for the experience. In an effort to gauge the utility of the DVD, as well as the necropsy lab, an opinion survey was administered to the 2010 and 2011 classes. Results include responses from 39 of 48 students (81.3% response rate). Overall, 92.2% of the students strongly agreed or somewhat agreed that watching the DVD prior to the necropsy lab better prepared them for the experience, 87.2% strongly disagreed or somewhat disagreed that the DVD could replace the lab, and 89.7% strongly agreed or somewhat agreed that future classes should watch the DVD prior to the lab. From these results it was concluded that students regarded the DVD as helpful in preparing them for necropsy lab; however the majority felt the DVD could not replace the necropsy experience.

Best Practices for Teaching Equine Reproduction in an Online Learning Environment: A Delphi Study

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Abstract

The purpose of this study was to describe the best practices for teaching equine reproduction in an online environment. A Delphi method was used to reach a three-round consensus of suggested best practices employed for teaching lecture- and laboratory-type topics, as well as recommended assessment techniques. The expert panel was formed by an exhaustive worldwide search for instructors currently teaching an online equine reproduction course. Consensus resulted in the following best practices for teaching equine reproduction lecture-type topics: assignments, multiple exams over the course of the semester, lectures that mirror the textbook in logical order, PowerPoint presentations with pictures, quizzes, summary notes, videos, and vocabulary lists. For laboratory-type topics, local area work experience was the sole best practice result. Best practices for student assessment were quizzes and vocabulary lists. Practitioner recommendations centered on assisting faculty in becoming stronger online instructors. Some recommendations included participating in professional development workshops, becoming involved in communities of practices, and exploring other disciplines' successful methods of online instruction. Research recommendations

included repetitions of this study involving a larger participant population and a broadened examination of best practices for all laboratory-based animal science disciplines.

Introducing Library Research Databases to Agricultural Economics Students

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Abstract

A professor of agricultural economics and a member of the library faculty at Purdue University collaborated to improve the quality of students' research and references for a class project, which the agricultural economics professor had been assigning for several semesters. They designed a class lecture, which included an active learning exercise, to help students learn how to use library databases for research for the project. After the class lecture, students were surveyed to determine the effectiveness of the intervention, the change in their awareness of different reference materials, and the change in their usage of these references. The survey referenced in this article was deemed exempt by Purdue University Institutional Review Board. Results indicate that students significantly expanded their awareness and use of references for the course in question as well as other courses they were taking that semester, evidence of an increased level of information literacy.

The Implications of Frequency and Correlation in FFA Career Development Events in Texas

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Abstract

As the National FFA Organization continues to grow in membership, the quality of Career Development Events becomes critical. This study uses Pearson product-moment correlation coefficient and frequency measures to evaluate the event quality in the Farm Business Management competition. Poor quality questions use in the competition are identified based on frequency distribution and *r* values. These questions possess flaws and need to be reviewed or eliminated to improve test quality. This will increase the level of fairness and difficulty of FFA events in the future. However, the ultimate beneficiaries are the students, who will gain the most from improvements.



Collaborative Marketing Case Studies for Horticulture

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Abstract

While common in business schools, the use of case studies are less common in horticulture curricula, especially for business-related topics. After graduation, most students will go to work in a business, but horticulture majors are often not as well prepared for business management as they are for the technical aspects of horticulture production. In the horticulture industry, collaboration among businesses without formation of a formal cooperative is atypical; thus, the collaboration of independent retail plant sellers in Western Michigan provided an excellent opportunity for the development of a horticultural marketing case study. Branding, especially among state industry groups, has become increasingly popular as a means to differentiate products and stimulate sales. Pricing products can also be challenging, and bundling products often purchased together may give a wholesaler a competitive and price advantage. Since case studies on non-cooperative collaboration, branding, and pricing were not available, three case studies were developed and are presented here for use in an upper-level horticulture course. Students enrolled in a senior-level elective course, Horticulture Marketing, have participated in these case study discussions since 2002. Suggestions for using this case study are also presented.

Evaluation of CROPVIEW as a Crop Science Teaching Resource for Post-Secondary Educators

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Abstract

Since less of the American population is involved in agriculture fewer students in university and high school biology courses are familiar with plant species that supply most of the world's food. Crop science concepts such as identification, adaptation characteristics, and current topics related to food production have traditionally been introduced in classroom lectures and reinforced using seed and

plant specimens. This study investigated the development and efficacy of the website CROPVIEW as an educational tool in an agriculture curriculum designed for a diverse audience of college students enrolled in undergraduate courses in the College of Agriculture at three different universities. The target population consisted of all undergraduate students in those courses (N= 287). The researchers used a general knowledge instrument to gather data. The study's findings conclude that the website was equally as effective for student learning of agricultural information as traditional teaching methods.

A Descriptive Evaluation of Agricultural Education eLearning Courses: Students' Perspectives

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Abstract

There has been an increasing push to utilize eLearning resources as a more active component within agricultural education due to increased presence of technology in society. Instructors must overcome the barriers to social interaction and preserve the knowledge facilitated by traditional educational environments in using technology enhanced learning environments. Means of measuring and examining student satisfaction within these environments are necessary to ensure learning is taking place. This study used quantitative research surveys to evaluate the eLearning environment and provide descriptive statistics regarding the level of student satisfaction given the current curriculum. The data from this evaluation indicated that students valued instructor support, student interaction and collaboration, and autonomy as components of satisfaction more so than active learning. Students scored the areas related to instructor interaction most highly, seeking instructor facilitation and support. The areas related to engaging with other class participants also scored highly. The students were interested in collaborating and interacting with their classmates. Future research should address the relationships between the variables and student satisfaction. The relationships determined by further study will help shape appropriate practice in terms of increasing student satisfaction.

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