



RESEARCH PROJECT OUTLINE

Research and Graduate Education ♦ College of Agricultural Sciences
The Pennsylvania State University ♦ University Park, Pennsylvania

Title: Internationalization of the Agricultural Education Curriculum

Probable Duration: 59 months (February 1, 2006 through December 31, 2010)

Personnel:

Project Leader(s)

Thomas H. Bruening (15%)

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Justification, Relevance and Expected Outcomes or Impacts:

Increasingly international understanding and competence is becoming a requirement for students in higher education. Employers, business leaders and society expect this generation of college graduate to enter the workforce better prepared to meet the diverse demands of a global workforce.

In 1995, Maidstone suggested that the rationale to integrate global topics and themes in higher education included the following four points: globalization of the curriculum needs to take place because of the emergence of a worldwide political economy; greater interdependency among nations; changes in international security; and demographic changes in society (Maidstone, 1995). Still others believed that internationalization of the curriculum is a required part of the students' undergraduate experience. Maidstone (1995, p. 7) stated, "The realization before us now is that the question is not whether international/intercultural education should be a significant part of our colleges; without it what we call 'education' is incomplete and insufficient for our contemporary and future needs."

According to Acker & Scanes (2000), multinational companies want to hire graduates who have cross-cultural experiences and language skills. Most scholars believe that the understanding of diversity gained through international experiences helps students bridge the cultural gap.

The College of Agricultural Sciences at Penn State personnel have indicated that it is important to provide opportunities to support student understanding of international agriculture (College of Agriculture Strategic Plan, 2005-2008). In particular, the strategic plan calls for course modifications to include "awareness of and respect for diverse cultures and perspectives" (p. 9).

What is an internationalized curriculum?

Adding relevant international examples in coursework represents the first level of student academic international awareness. Stand alone international courses provide students with a wide range of learning opportunities. Student study abroad suggests a greater commitment of students to international learning. However to many, a fully actualized internationalized curriculum means that students should demonstrate a positive attitude toward other cultures, understand and articulate the interrelationships between countries, and possess the ability to work effectively in a global setting.

What is an internationalized curriculum? How is it defined? Bremer and van der Wende (1995, p.10) defined the internationalized curriculum as: "Curricula with an international orientation in content, aimed at preparing students for performing (professionally/socially) in an international and multicultural context, and designed for domestic students and/or foreign students." This is a general description of suggested international content. What specific topics should be included in the curriculum to provide students with the knowledge needed to be effective in international agriculture? What are the most pressing topics that all students

studying international agriculture should be taught? What are the most important strategies to teach these concepts to students? What activities would best help students learn about international agriculture?

Factors important for university student participation

Obviously private colleges and universities are much more effective in establishing the culture within the institutions that fosters and encourage study abroad programs. It is not hard to imagine the communication that might occur between freshmen students. The question is not “if” you are planning to study abroad but rather the discussion likely must occur early in the students’ career – “where are you going on your study abroad program?” The mentality and the culture regarding internationalizing the curriculum in land grant institutions must change the students graduating from these institutions or these students will be increasingly at a disadvantage.

Clearly the cost of study abroad is an issue. Also post 9/11 security must be considered as a major disincentive. Also, what positive and negative influence do parents, other family members, and faculty advisors have on university students’ decisions regarding participation? What role does the community play in helping students make decisions to participate in study abroad programs?

University infrastructure support

The university as an institution is a major contributor to internationalization of the curriculum. The goals of many land grant intuitions are about 20-30% participate in study abroad programs. Often these lofty goals are stated by presidents of various institutions to attempt to foster faculty participation and lead the university toward higher numbers of student participants.

However, more than rhetoric is needed to move the institution toward a culture of internationalization. Aggressive programs need to be put in place to help unit level administrators and faculty actualize these goals. Financial resources, time away from campus responsibilities and faculty study abroad initiative need to be consider.

It is not clear how faculty value study abroad programs at land grant institutions. Does faculty help students or are they a deterrent to student study abroad participation? Also, what types of program could universities develop that would encourage faculty interest, development and support for students to study abroad? What are the triggers that need to be in place in order for students to feel supported and empowered to participate in study abroad programs?

Platt (2004) in a review of the proposed changes at Harvard University indicated that significant reforms were needed so that undergraduates leave the university with greater international knowledge and experience and with stronger foreign language skills. Part of the rationale for increased international study is that today one in six U.S. jobs are directly tied to international trade. Ultimately as a society we need graduates that are globally competent so that they can work effectively in diverse international settings.

In particular this project relates to the first CSREES national goal: An agricultural production system that is highly competitive in the global economy and the sub goal: CSREES Objective 1.3: To recruit and educate a diverse set of individuals for careers as future scientists, professionals, and leaders who are well-trained in agricultural sciences. Moreover this project directly relates to the College’s goal A to enhance student success by enriching students’ learning by providing meaningful international experiences. If future graduates lack a comprehensive understanding of the global economy it is unlikely that these graduates will be able to effectively compete internationally.

Information gathered in this project will help college of agriculture design more effective study abroad programs. These programs should be able to produce students better prepared to work in a global environment.

Under represented populations will not be ignored in this project. Diversity, cultural understanding, and tolerance are inherently an important component of international study abroad programs. Most believe appreciation of others and their culture is vital to the development of the complete student.

Previous Work (Background) and Present Outlook:

According to Hayward (2000) few students study abroad during their college career. About three percent of all students study abroad and this is a long way from the Presidential Commission’s goal of 10% by 2000 (Haywood, 2000). Colleges of agriculture in particular have struggled to involve students directly in international programming. According to the Chronicle of Higher Education (2000), only about one percent of students that studied abroad in the 1999 school year were agriculture students. Given the importance of food production systems in developing countries, and the need for cultural knowledge and global contextual understanding, it is surprising that the number of agricultural students participating in study abroad programs is not much higher (Bruening & Frick, 2004). If the small numbers of students studying abroad in colleges of agriculture are compared to small private colleges and universities (see Figure 1) many individuals are shocked by the comparisons.

Figure1. Colleges and percent of students that studied abroad in 2005

Covenant College, Georgia	100%
Queens University of Charlotte, North Carolina	90%
Yeshiva University, New York	90%
University of Judaism, California	87%
Huntingdon College, Alabama	86%
Kalamazoo College, Michigan	83%
Earlham College, Indiana	80%
University of Dallas, Texas	80%
Centre College, Kentucky	75%
Bates College, Maine	70%

Note: America’s best international colleges top ten list: (usnews.com, 2005)

Beyond study abroad programs

Perhaps the greater problem in higher education is a phobia of internationalization and globalization. Students in the university are at a disadvantage because they have limited opportunities to learn content presented in a global context. Many international students will be better positioned in the future to take advantage of careers, innovations, and opportunities because they understand multiple cultures and language, (Hayward, 2000). Too few courses at the university have relevant international content. In a 1992 college study, 11% of the universities reported that they had no international content in their curricula. Twenty-three percent reported that only one to two percent of their courses included international content (Hayward, 2000). At Penn State University there is a renewed interest in internationalization. Recently the faculty senate approved a requirement whereby all students must complete a three-credit course that focuses on international content that leads to student competence.

What percent of the courses offered in the College of Agriculture Sciences at Penn State contain international content? What can be done to increase the content? What strategies could be developed to strengthen the attitudes, practices, and beliefs of college educators regarding the internationalization of the curricula?

Objectives:

1. Assess existing resources, programmatic factors and opportunities available to college students and university professors related to internationalization of the curricula.
2. Describe the barriers and constraints to internationalization of the curricula.
3. Define the impact on skills, competencies and attitudes and attributes gained by students and faculty that participate in study abroad programs and describe the implications toward internationalization of the curriculum.

4. Identify perceived barriers that parents and faculty place in front of students that want to participate in study abroad programs.
5. Assess the amount of internationalization that currently exists within the college.

Procedures:

To implement and complete the project multiple procedures are planned. The specific procedures are presented under each of the objectives. The project will utilize both qualitative and quantitative data collection approaches and analyses. A panel of experts at Penn State will make sure that the instruments possess construct validity. Data will be collected primarily from Penn State students, professors, and parents. Other audiences will be considered when deemed appropriate. Each instrument and procedure will be reviewed by Penn State social science Institutional Review Board (IRB).

1. Through the use of both qualitative and quantitative surveys, individuals in the college will be interviewed and the data will be analyzed to determine the resources available within the college to participate in internationally focused courses and programs in the College of Agricultural Sciences at Penn State.
2. Survey students and Penn State educators to determine the constraints that exist to internationalize the curricula. In particular, the interests, costs, timing, infrastructure, and belief systems of individuals are of the greatest interest.
3. Survey students and educators that participate in short and long term study abroad programs to determine the impact of participation. Short and long term study abroad programs are on the rise at Penn State, limited data collections have been completed to determine impact of these programs.
4. Students, educators and parents will be surveyed to determine the factors that prevent students from participating in study abroad activities and programs that focus on internationalization.
5. Develop a database of courses, educators and activities that represents study abroad, internationalization, and examples of international content that exists in the College of Agricultural Sciences.

Stakeholder Engagement:

The College of Agricultural Sciences at Penn State University and its students, staff and faculty will be the primary stakeholders. These stakeholders range from the Associate Dean for undergraduate education to the students in classrooms that could participate in these programs. The International Office in the College of Agricultural Sciences will be consulted for information. Secondary stakeholders would be those businesses and individuals that would employ the college's graduates.

Scope of Impact:

The scope of impact is large as there is a large gap proportionate between numbers of students that participate in study abroad activities at private colleges and land grant colleges in the U.S. Information gained here could be used in other settings to support or develop similar programs.

Integrated Activities:

It is expected that the results of this project will be integrated across the curricula in the College of Agricultural Sciences at Pennsylvania State University. It would be also expected that the results would help influence the delivery of content across the scope of higher education in colleges of agriculture.

Milestones:

The project is developmental in nature. Year one will focus on the development of instruments and identification of strategies to identify means of obtaining access to various populations. Year two will

involve actual investigations related to Objectives 1 and 2. In year three, Objectives 3 and 4 will be investigated and reports for objectives one and two will be completed. In year four, objective five will be investigated and reports will be made for objective three. In year five, results for objectives four and five will be reported.

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