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ABSTRACT

These proceedings report on a project designed to help faculty and administrators in the Louisiana State University (LSU) College of Agriculture to internationalize the undergraduate curriculum of the college in order to foster students' awareness of the global agriculture environment. Through a series of six workshops, the undergraduate teaching faculty in the college were provided with the background information and guidance necessary to add this international dimension to their courses. Each workshop consisted of two major components: the background/information component, which focused on global markets and why they demand the attention of all agricultural disciplines; and the methods component, which focused on assisting teaching faculty in reviewing and reformulating course outlines and materials. After the workshops were completed, the project model of implementation was made available to deans of colleges of agriculture at all 1862 and 1890 land grant institutions. The 10-page project report is followed by summaries of the six workshops in chapter II. The summaries are as follows: one conducted for the entire college faculty; one designed for college department heads/directors of schools and for the project's planning and organization committee; and four targeted for faculty in four selected sets of curricula offered by the college. Chapter III lists highlights of LSU's model for internationalization and recommendations for future globalization efforts. Appendixes include the survey and evaluation instruments and a 48-item annotated bibliography. (YLB)

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**GLOBALIZING
THE COLLEGE OF AGRICULTURE CURRICULA WORKSHOP SERIES**

PROCEEDINGS

ED 386 563



Supported by
**U. S. Department of Agriculture/Cooperative State Research Service
Challenge Grant**

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**Louisiana State University
1995**



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**GLOBALIZING
THE COLLEGE OF AGRICULTURE CURRICULA WORKSHOP SERIES**

PROCEEDINGS



Donna H. Redmann, Project Director

Alvin R. Schupp, Project Co-Director

William B. Richardson, Dean and Project Co-Director

**Supported by
U. S. Department of Agriculture/Cooperative State Research Service
Challenge Grant**

**Louisiana State University
1995**



**United States Department of Agriculture
Cooperative State Research Service
HIGHER EDUCATION CHALLENGE GRANT**

Project Title: Globalizing the College of Agriculture Curricula

Funded by: Cooperative State Research Service (CSRS)
U. S. Department of Agriculture

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Project Duration: Sept. 15, 1991 through Sept. 30, 1995.

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ABSTRACT

The purpose of the project was to help faculty and administrators in the Louisiana State University College of Agriculture to internationalize the undergraduate curriculum of the College of Agriculture in order to foster students' awareness of the global agriculture environment. Through a series of six workshops, the undergraduate teaching faculty in the College were provided with the background information and guidance necessary to add this international dimension to their courses. Each workshop consisted of two major components: (1) the background/ information component, which focused on global markets and why they demand the attention of all agricultural disciplines; and (2) the methods component, which focused on assisting teaching faculty in reviewing and reformulating course outlines and materials. After the workshops were completed, the project model of implementation (workshop agenda and proceedings, video-tapes, etc.) was made available to deans of Colleges of Agriculture at all 1862 and 1890 land grant institutions.

**FOREWORD FROM DR. WILLIAM B. RICHARDSON
DEAN OF THE COLLEGE OF AGRICULTURE, LSU**

LSU COMMITMENT TO GLOBALIZATION

Louisiana State University is committed to internationalizing its curricula and programs. The University has committed resources at the central administrative level to accomplish this goal by establishing an office reporting directly to the Chancellor. The University international administrator, an Associate Vice Chancellor, is responsible for leading the University in the process of internationalizing its research and instructional curricula and related programs. The project's globalization faculty workshop series fits into the Vice Chancellor's international plan, as well as the internationalization agenda of the College of Agriculture. The internationalization of the College of Agriculture has two focuses: internationalization of undergraduate courses and curricula, and the Latin American Initiative.

The Latin American Initiative is being fostered throughout the University. All major units within the administration are being asked to seek out cooperative activities with sister institutions in Latin America. To this end, the College of Agriculture has established cooperative agreements and joint initiatives with Zamorano, the Panamerican School of Agriculture, in Tegucigalpa, Honduras. The focus of this agreement is the furtherance of institutional capability for both Zamorano and LSU in identifying and addressing tropical and subtropical agricultural and environmental problems. The University Development Linkages Project is the designated mechanism for implementing the established cooperative agreements. Objectives of the Linkages Project include initiation of faculty and student exchange programs that enrich the educational experiences of students at both institutions and provide a mechanism for faculty growth and development. The student and faculty exchanges between the College of Agriculture and Zamorano and the internationalization of the College of Agriculture curricula complement each other, and together make a major contribution to the University-wide effort to internationalize LSU programs.

The need to internationalize our curriculum is probably greater now than ever before. As a teaching institution, LSU's commitment to its students involves making sure the students are on the cutting edge of technology in their given discipline and in what is happening in the rest of the world. Firms that hire LSU graduates are looking for people who have an international dimension to their thinking and can deal in a much broader perspective. The focus of the Globalization Faculty Workshop Series was one of the first steps to assist the College of Agriculture faculty in infusing international concepts within their courses, in order to better prepare the graduates for the world of today and for the world of tomorrow.

ACKNOWLEDGMENTS

This project represents the cooperative efforts of personnel in the College of Agriculture at Louisiana State University. A very special appreciation is extended to the co-principal investigators: Dr. Alvin Schupp, Professor of Agricultural Economics and Agribusiness, and Dr. William B. Richardson, Dean of the College of Agriculture. Special recognition goes to Dr. Michael F. Burnett, Director of the School of Vocational Education, who assisted the project staff with the initial planning, the workshops, and the evaluation methodology. Dr. Mildred Haley, who served as the first project director, is credited with getting the grant proposal written and funded. Through her vision and efforts, this globalization project was initiated. Appreciation is also extended to Dr. James Trott, Associate Dean for Instruction in the College of Agriculture and to all the department heads/directors of schools within the College of Agriculture. Special thanks is extended to Dr. Edward P. Dunigan, Department Head of Agronomy, and to Dr. Stanley B. Carpenter, Director of the School of Forestry/Wildlife/Fisheries, for hosting several of the workshops in their facilities.

Also, a special commendation goes to the members of the project's Planning and Organization Committee: Antonio S. Achacoso--Dairy Science, Richard L. Bengtson--Biological & Agricultural Engineering, James E. Board--Agronomy, Michael F. Burnett--School of Vocational Education, Stanley B. Carpenter--Forestry/Wildlife/Fisheries, Evelina W. Cross--Human Ecology, Sam E. Feagley--Environmental Management Systems, J. Marcos Fernandez--Animal Science, J. Samuel Godber--Food Science, Steven A. Henning--Agricultural Economics & Agribusiness, Barbara A. Holt--School of Vocational Education, John P. Jones--Plant Pathology, Raul E. Macchiavelli--Experimental Statistics, David H. Picha--Horticulture, Thomas J. Riley--Entomology, and Roger Teekell--Poultry Science.

Special mention and thanks is made to the following graduate assistants from the School of Vocational Education who worked on various phases of the project: Giovanni Estrada, Bridge Evans, Cathy Hamilton, Mark Holden, Ellis Njoka, and Blaine Reynolds. Appreciation is extended to Sandra Cash, secretary, who assisted with the various word processing tasks.

Recognition and appreciation is extended to Dr. Jay Jackman from the Cooperative State Research Service office at the United States Department of Agriculture for his encouragement, guidance, and technical assistance.

And finally, gratitude and appreciation is extended to the following workshop facilitators/speakers who made this globalization effort a success: Dr. E. T. York, Chancellor Emeritus, from the University of Florida, who delivered the keynote address for the entire workshop series; Dr. Ronald A. Brown, Associate Vice-President and Director of International Programs, from Mississippi State University, who spoke to the department heads/directors of schools and to the project's Planning and Organization Committee; Dr. James White, Professor,

from Oklahoma State University, who served as workshop facilitator/speaker for Group I; Dr. W. Stephen Damron, Professor, from Oklahoma State University, who served as workshop facilitator/speaker for Group II; Dr. Wanda L. Dodson, Associate Professor, from Mississippi State University, who served as workshop facilitator/speaker for Group III; and Dr. David M. Henneberry, Professor, from Oklahoma State University, who served as workshop facilitator for Group IV.

Dr. Donna H. Redmann, Project Director
Associate Professor, School of Vocational Education
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Globalizing the College of Agriculture Curricula: Faculty Workshop Series

***Animal Science
Agricultural Economics & Agribusiness
Agricultural Engineering
Agronomic Systems
Dairy Science
Entomology
Experimental Statistics
Food Science
Forestry, Wildlife, & Fisheries
Horticultural Systems
Human Ecology
Plant Pathology & Physiology
Poultry Science
Rural Sociology
Vocational Education***

CHAPTER I**GLOBALIZING THE COLLEGE OF
AGRICULTURE CURRICULA****THE NEED FOR GLOBALIZATION**

NAFTA, GATT, EC, EFTA, ASEAN, ...No mere stream of cryptic alphabetic characters, these acronyms and others signify the prevailing reality in the realm of global trade. Through trade agreements and alliances, government leaders in all corners of the world are demonstrating their commitment to reducing barriers to international commerce and to enhancing free flow of goods, services, and ideas across national borders.

Presently, the welfare of U.S. agriculture is highly dependent on export markets whose structure has changed dramatically over the past 20 years. Technical innovations in the areas of communication and transportation have linked agricultural markets across countries to a point where it is no longer relevant to talk about export markets as small, autonomous, national entities. Agricultural markets, particularly in oilseeds, wheat, and feed grains, are integrated between countries, forming single global markets.

Moreover, since the mid-1980s, several key factors, including volatility in exchange rates, commodity supplies, and governmental agricultural policies, have together created a "buyers' market" for countries importing large quantities of agricultural commodities. This, in turn, has created intense competition between exporting countries for shares of foreign markets. Agricultural economists expect the degree of competition in global agricultural markets to intensify as trade barriers between countries are further dismantled, and as transfers of technology between countries become more prevalent and efficient.

In this evolving climate of reduced barriers to trade, U.S. industry and its workers will encounter both opportunity and challenge. The opening of new markets overseas will present unprecedented opportunity as well as competition. **As educators, can we afford to ignore these events and risk denying our students the preparation necessary to meet these challenges?**

As the twentieth century draws to a close, the long-held promise of the "Global Village" seems to be nearing reality. The role of education will be central in preparing the U.S. workforce to face new challenges and to be positioned to take fullest advantage of the opportunities presented. Goal Five of the America 2000 strategic plan for U.S. education emphasizes the need for U.S. educational institutions "to change dramatically the way they teach and what they teach" so as to better train the workforce to compete in the emerging global economy. Agricultural teaching faculty are in a unique position to provide opportunities for students to acquire the knowledge and skills necessary to conduct business on an international level.

Until recently, the accepted dynamic of an undergraduate university curriculum was for the student's perspective to become more narrowly focused as he or she progressed through a four-year degree program. In colleges of agriculture, undergraduate students move through a progression of general university requirements, then to a more focused set of courses required by the college as prerequisites for the more technical courses offered in the student's chosen major discipline. Once the student has satisfied university and college course requirements, he or she is deemed prepared to tackle the higher level courses that pertain directly to his or her chosen major. These courses in the various agriculture-related disciplines tend to be narrowly focused and/or technical in nature.

This narrowing of the student's perspective as he or she progresses through an undergraduate curriculum of a college of agriculture is, in one sense, necessitated by the highly technical nature of many of the agriculture-related disciplines, such as agricultural engineering or agronomy. Moreover, faculty in these disciplines face binding time-constraints, brought about by the veritable explosion of technology that has occurred over the past decade. Given the technical nature of many agriculture fields, and the ever-expanding technological innovations that have increased the knowledge-base requirements in many agriculture-related disciplines, it is no surprise that courses offered in colleges of agriculture tend to be highly focused on tightly defined topics. Justifiable as it may seem from a disciplinary perspective, this trend toward specialization clearly runs counter to undergraduate educational needs being suggested by events and factors impacting world agriculture as it moves toward the 21st century.

In competitive global markets, it has become clear that the key to maintaining shares of foreign markets is in knowing and appreciating the preferences of one's customers, and in knowing and appreciating the competitive strategies of one's foreign competitors. This fact, in itself, makes it imperative that we focus on reversing the existing dynamic in agriculture curricula that functions to effectively narrow the perspectives of undergraduates. Whether a major in plant pathology, animal science, or agricultural economics, undergraduates need to understand and appreciate that the globalization of agricultural markets has shifted the focus of agricultural problems away from a purely production orientation, toward new challenges, such as comparative advantage and improved product quality, each requiring a broadly focused, interdisciplinary approach.

Because many differences in culture continue to separate nations, and because communication, transportation and the interdependence of markets continue to advance geometrically, the need for efficiency in international literacy is more evident than ever before. In the last couple of decades, the world economy has become more integrated and interdependent; consequently, Americans no longer have the luxury of time or distance to justify a lag in international competency. The agriculture teaching faculty can and should address this new challenge by providing the opportunities for students to develop the skills needed to succeed in the international market.

Therefore, there is a need for a mechanism to assist undergraduate teaching faculty in reversing the myopia found in many College of Agriculture courses and curricula, whereby the perspective of the undergraduate is narrowed to problems confined to his or her major discipline. As an initial step toward this goal, a series of faculty workshops can provide teaching faculty with the background, information, and guidance necessary to add an international dimension to undergraduate course material. The curriculum tools acquired in these augmentation workshops will assist faculty in balancing critical information requirements with the imperative of fostering student awareness of the global dimensions of their chosen disciplines. An international dimension can be integrated into existing curricula (courses) or can be taught in a course devoted exclusively to "International Literacy." A side benefit of incorporating international concepts into the existing curriculum is that the introduction of novel concepts and strategies may enhance the overall appeal of the course to agricultural students.

The primary beneficiaries from faculty workshops will be college of agriculture students. Graduates of programs with strong international dimensions will be better equipped to deal effectively with the new and varied problems that globalization have and will continue to generate. Moreover, curricula augmentation will prepare graduates who remain in their respective states for key roles in broadening the perspectives of existing agricultural institutions and commerce. The ultimate beneficiary of an effort to broaden the perspectives of agricultural undergraduates will be the U.S. agricultural sector. Students tutored to appreciate such things as the preferences of Japanese homemakers in rice variety selection, and the means by which Brazil is able to export cleaner soybeans than the U.S., will be critical elements of any U.S. effort to remain competitive in global agricultural markets.

Can we ignore this training need for our agricultural undergraduates? Do we have a choice? No! The seriousness of the need and the opportunities offered by the challenge motivated the Louisiana State University College of Agriculture to apply for a USDA Challenge Grant to implement a strategy designed to improve the international aspects of undergraduate education in the College of Agriculture and to assist other colleges of agriculture in meeting the challenges also.

USDA CHALLENGE GRANT

The College of Agriculture at Louisiana State University received a Higher Education Challenge Grant from the Cooperative State Research Service (CSRS) at the U.S. Department of Agriculture. The project was funded from September 15, 1991 through September 30, 1995.

PURPOSE OF GRANT

The purpose of the project was to internationalize the undergraduate curricula and courses of the College of Agriculture in order to foster students' awareness of the global agricultural environment. The project staff provided the undergraduate teaching faculty with the background information and guidance necessary to add this international dimension to undergraduate course material. A series of curriculum augmentation workshops were held. Each workshop consisted of two major components:

- (1) the background/information component, which focused on global markets and why they demand the attention of all agricultural disciplines; and
- (2) the methods component, which focused on assisting instructors in reviewing and reformulating course outlines and materials.

The tools acquired in the curriculum augmentation workshops were designed to assist the faculty in balancing critical information requirements, with the imperative of fostering student awareness of the global dimensions of their chosen disciplines.

PROJECT ACTIVITIES

Planning & Organization Committee

To facilitate planning and organization for the workshops, a faculty member from each of the fourteen College of Agriculture department/curricula was recruited and designated as a department representative for the project's planning and organization committee. The representatives were responsible for assisting the Principal Investigator in identifying speakers for the workshop series, for compiling profile data on each department/curricula, and providing other assistance and advice. The following LSU faculty members served on the committee: Antonio S. Achacoso--Dairy Science, Richard L. Bergtson--Biological & Agricultural Engineering, James E. Board--Agronomy, Michael F. Burnett--School of Vocational Education, Stanley B. Carpenter--Forestry/Wildlife/Fisheries, Evelina W. Cross--Human Ecology, Sam E. Feagley--Environmental Management Systems, J. Marcos Fernandez--Animal Science, J. Samuel Godber--Food Science, Steven A. Henning--Agricultural Economics & Agribusiness, Barbara A. Holt--School of Vocational Education, John P. Jones--Plant Pathology, Raul E. Macchiavelli--Experimental Statistics, David H. Picha--Horticulture, Thomas J. Riley--Entomology, and Roger Teekell--Poultry Science.

In order to develop a profile of the College of Agriculture Department/Curricula, the committee members were asked to provide the following information on their unit within the College of Agriculture:

1. Department name
2. General description of program/curriculum
3. Description of curriculum in terms of
 - a. Core courses
 - b. Other courses
4. Current copies of all course outlines/syllabi used in program.
5. Approximate number of students enrolled in
 - a. Undergraduate program
 - b. Graduate program
6. Types of careers students prepared for upon graduation
7. Types of international careers students prepared for upon graduation.
8. International students
 - a. Number enrolled in program
 - b. Number planning to return to their home country
9. As part of the program, do any students study abroad?
 - A. Number
 - b. Length of time
10. International activities are conducted by the department
11. Faculty who have integrated any international concepts in their courses
 - a. Types of activities or concepts
 - b. Individuals involved
12. International experience of faculty
13. Faculty's current involvement in international projects
 - a. Identification of projects
 - b. Faculty involved
14. List of potential speakers for workshops

Workshops

A series of six workshops were held for the purpose of assisting College of Agriculture faculty in adding an international dimension or focus to their courses/curricula. These workshop were titled **Globalizing the College of Agriculture Curricula Workshop Series**. The workshops took place on the Louisiana State University main campus in Baton Rouge. The workshop facilitator/speakers selected for these workshops were asked to plan their presentations and activities to include the following components:

1. background/information that explains the need to have a global focus for all the agricultural disciplines,

2. examples of advances and accomplishments made at universities that demonstrate that this can be done,
3. examples/techniques that can assist department heads reviewing and reformulating their curricula to include a global dimension.
4. methods that can assist the faculty in reviewing and reformulating their course outlines and materials to include an international dimension, and
5. activities that allow for participant interaction.

The first of the six workshops was conducted for the entire College of Agriculture Faculty. Dr. E. T. York, Chancellor Emeritus, of the University of Florida delivered the **keynote address** for the entire workshop series.

The second workshop was designed for College of Agriculture department heads/directors of schools and for the project's Planning & Organization Committee (a faculty representative from each curriculum/department). The emphasis of the workshop for the department heads was on curriculum, whereas the emphasis of the four workshops for the faculty was more on planning for specific courses and instruction. Dr. Ronald A. Brown, Associate Vice-President and Director of International Programs, Mississippi State University, served as the workshop facilitator/speaker for this administrative workshop, which was conducted July 26, 1994.

Four of the six workshops were targeted for faculty in the following four selected sets of curricula offered by the College of Agriculture. The subject-matter curriculum consultants who served as workshop facilitator/speakers and the dates of the workshops are also listed.

Group 1:

Agronomic Systems
Horticultural Systems
Entomology

Speaker: Dr. James D. White, Professor
Oklahoma State University
Date: July 15, 1994

Group 2:

Animal Systems
Animal Science
Dairy Science
Poultry Science
Food Systems (Food Science)
Agricultural Engineering

Speaker: Dr. W. Stephen Damron, Professor
Oklahoma State University

Date: July 22, 1994

Group 3:

Agricultural Economics and Agribusiness
Human Ecology
Vocational Education
Rural Sociology *

Speaker: Dr. Wanda L. Dodson, Associate Professor
Mississippi State University

Date: July 26, 1994

**Faculty in the Department of Rural Sociology have dual appointments in the College of Art & Sciences and the LSU Agricultural Center.*

Group 4:

Forestry, Wildlife, and Fisheries
Plant Pathology & Crop Physiology
Experimental Statistics

Speaker: Dr. David M. Henneberry, Professor
Oklahoma State University

Date: August 26, 1994

The speakers selected for these four faculty workshops were from other academic institutions that have developed international dimensions to their undergraduate programs. Each of the workshop facilitator/speakers articulated a strong argument favoring the proposition that educators must respond to rapid technological change and the impact of globalization by preparing students to look beyond the state and national borders for commerce, markets, and ideas. How institutions and faculty could go about integrating an international dimension into their course outlines, materials, and curricula were the focus of these presentations.

Copies of the six speakers' presentations are provided in Chapter II.

Description of Workshops and Materials

The specific purpose of the workshop series was to assist LSU College of Agriculture faculty in adding an international dimension or focus to their courses/curricula. The first workshop was the keynote address for the workshop series. The entire College of Agriculture faculty, administrative staff, and students were invited. Chancellor Rouse Caffey, LSU Agricultural

Center, introduced Dr. E. T. York, Chancellor Emeritus. Dr. York's presentation addressed global markets and why they demand the attention of all agricultural disciplines. He stressed the role of educators in preparing students for global challenges as well as for the rapid technological changes of their respective discipline.

The half-day workshop designed for department heads/directors of schools and for the project's Planning & Organization Committee focused on curriculum and on the need to help faculty gain international experience, whereas emphasis on the faculty workshop was on planning for specific courses and instruction. In this administrative workshop, Dr. Ronald A. Brown stressed that the faculty is the key to globalizing the curriculum. Dr. Brown indicated the need to globalize faculty first; the content of courses/assignments can be expected to change subsequently. Changing faculty attitudes and improving the international experience base of the faculty, which do not require large sums of money, should be the first order of business. Changes may also be necessary in the criteria and procedures for evaluating, recognizing, and rewarding faculty--promoting international involvement by counting it positively in promotion and tenure. Department heads/directors of schools and faculty representatives also attended one of the four faculty workshops for their respective discipline.

The four faculty workshops followed similar formats. Each of these workshops was conducted for a half day either as a morning or afternoon session. Each facilitator provided background/information explaining the need for a global focus in all the agricultural disciplines, examples of advances and accomplishments made at other universities (demonstrating that these advances can be made), the methods that can assist the faculty in reviewing and reformulating their course outlines and materials to include an international dimension, and activities that encouraged participant interaction.

The workshop facilitators provided materials that were duplicated and placed in 2 to 3 inch binders. The binders were distributed to the faculty at the workshops. Those faculty unable to attend the workshops were provided a binder for their workshop group through a department/faculty representative. The material provided in the binders consisted of course syllabi, course outlines, course notes, general information, reference lists, strategies for internationalizing curriculum, overhead transparencies, sources of international market information, a sample CULTURGRAM, publishers' brochures on international books and textbooks, information on where to obtain international experience, and workshop assignments.

At each of the workshops, a large array of resource material that had been collected by the project staff was prominently displayed. An annotation of these materials is provided in Appendix D. After the workshops, faculty were encouraged to review and check out the resource material for indepth use. Books and video tapes that were discipline-specific were forwarded to the respective department.

Video tapes were made of each speaker's presentation. Summaries of each of the workshop facilitator/speaker's presentation are provided in Chapter II.

A complete set of the 1995-1996 CULTURGRAMs were purchased for each of the departments within the College of Agriculture. The 1995-1996 CULTURGRAM set consists of four-page briefing papers for 143 different countries. The four-page CULTURGRAM contains a brief discussion on the country's land, climate, history, customs and courtesies (greetings, gestures, visiting, and eating), lifestyles (family, dating & marriage, diet, recreation, holidays, and commerce), the people (population, language, religion, and general attitudes), and society (government, economy, transportation and communication, education, and health). The complete set of CULTURGRAMs, a catalog, and copyright information was placed in a 3-ring binder. CULTURGRAMs can be ordered for individual countries, by geographic area, or by language. To order, or for more information, contact:

Kennedy Center Publications
Brigham Young University
P.O. Box 24538
Provo, UT 84602-4538 USA
Phone: 1 (800) 528-6279 or (801) 378-6528
Hours: 8:00 a.m. to 5:00 p.m., Mountain Time, Monday to Friday.

Evaluation

To determine the impact of the workshop series on faculty's implementation of the concepts and techniques provided in the workshops, several evaluation activities were conducted.

Curricula Profile. The first evaluation dealt with developing a profile of the different curricula represented in the College of Agriculture. The project's Planning and Organization Committee, was asked to provide information about their department's curriculum, faculty and student international activities and to provide course outlines/syllabi. The project staff examined and summarized the pre-workshop course outlines and curriculum requirements for all departments/schools within the College of Agriculture.

Faculty Pre-Workshop Perception. A faculty survey was administered by the project staff at the beginning of each of the four faculty workshops. The purpose of the faculty survey was to determine faculty perceptions regarding the internationalization of the curriculum in the College of Agriculture and activities conducted by the faculty to add international perspectives to their curricula. The instrument used for this survey was a modification of a questionnaire developed by Michael J. Akpan and Robert A. Martin at Iowa State University (1994) that was designed to study the perceptions of agricultural educators in U.S. institutions of higher education regarding internationalization of the agricultural education curriculum. A copy of the faculty perception survey is in Appendix A.

Faculty Post Workshop Evaluation. An evaluation of the effectiveness of the Globalization Workshops (speakers, reference materials, and binders) in encouraging College of Agriculture faculty members to add an international dimension to their courses was conducted. A questionnaire was developed and mailed to all College of Agriculture faculty. A copy of the evaluation instrument used is in Appendix B.

Senior Survey. One of the goals of the project was to ascertain the current level of understanding of the internationalization of agriculture among LSU College of Agriculture seniors. To achieve this goal, project personnel developed a questionnaire to estimate the student's knowledge of selected common international measures, knowledge of some less known facts of international agriculture and of their perceptions of selected food and nutrition issues facing international agriculture. In addition, the responding students also assessed the role of the LSU College of Agriculture in developing the student's awareness and interest in international aspects of agriculture. The students surveyed were students graduating from the LSU College of Agriculture during the Fall Semester 1994, Spring Semester 1995, and Summer Term 1995. The literature offered little guidance for project personnel in developing the questionnaire. Preliminary copies of the questionnaire were critically reviewed by faculty members in a number of departments and schools in the LSU College of Agriculture. The questions on the questionnaire attempted to evaluate both the student's current knowledge of international issues as well as their perceptions of selected other international issues. It was considered highly unlikely that specific questions on the senior survey would have been directly covered in any course taken by the student in the LSU College of Agriculture. Therefore, students were not expected to exhibit high accuracy in their responses to the questionnaire, especially on those questions demanding specific objective answers. A copy of the senior survey is in Appendix C.

Dissemination:

The model of implementation (workshop agenda/proceedings and workshop video tapes) will be available to other institutions seeking to globalize their agricultural curricula. The published proceedings, in the form a final report, from all of the workshops will be posted to deans of Colleges of Agriculture of all 1862 & 1890 land grant institutions. A letter, indicating that the final report was sent to the college of agriculture deans, will be sent to all associate deans of academic programs and to all representatives of university agriculture international programs.

CHAPTER II

WORKSHOP SUMMARIES

INTERNATIONALIZING U.S. COLLEGES OF AGRICULTURE

Keynote Address for Faculty Workshop Series

Dr. E. T. York, Jr.
Chancellor Emeritus
Institute of Food and Agricultural Sciences
Building 106, Mowry Road
University of Florida
P. O. Box 110850
Gainesville, Florida 32611-0850
904-392-6545

September 16, 1993

I am delighted to be back on the LSU campus--the home base of many long-time friends and colleagues. In fact my association with LSU deans, directors, chancellors and presidents goes back more than 30 years. You have had and continue to have some great leaders here in the College and University.

I am also pleased to be invited to address the general topic of internationalizing U.S. colleges of agriculture. This is a subject of great interest to me personally and, I believe, of great importance to colleges of agriculture across the nation.

Several years ago I was asked to give the Seaman A. Knapp Memorial Lecture at the annual meetings of the National Association of State Universities and Land-Grant Colleges. My topic was, "A Major International Dimension for U.S. Colleges of Agriculture--An Imperative." Today I would underscore the fact that such an international dimension continues to be an imperative if we hope for our colleges of agriculture to be truly relevant in today's world.

Truman's Point IV Program

Let me recognize that land-grant universities, such as LSU, have played a vital role in international development activities since the need for such efforts was set forth so effectively in Point IV of President Harry Truman's 1949 inaugural address.

I have just completed reading the book, Truman, by David G. McCullough, who was awarded a Pulitzer Prize for his effort. With the passage of time, I think the enormous contributions of President Truman become all the more evident. And I believe that one of his most significant contributions was his leadership in developing the so-called "Point IV Program."

In his inaugural address Truman proposed that the United States "embark on a bold, new program for making the scientific advances and industrial progress available for the improvement and growth of underdeveloped areas of the world." While President Truman did not refer specifically to assistance in agriculture, it was recognized then, as it is today, that agricultural development is basic to the overall improvement of developing countries and must be given highest priority in whatever is done to assist these countries. A recent World Bank report underscores this point: "Agricultural production is a key factor in the development of most countries. In the poorest countries, it is critical."

It may be noted that President Truman's proposal was, in part, a recognition of how the United States has benefitted from the contributions of other nations to our own development and reflected a desire to assist others as we had been helped. Truman's Point IV proposal came approximately 130 years after a former U.S. President had expressed clearly the needs of a young, developing country for assistance in science and technology. In 1820 Thomas Jefferson said: "In an infant country such as ours, we must depend for improvement on the science of other countries, long-established, possessing better means and more advanced than we are. To prohibit us from the benefit of foreign light is to confine us to long darkness." Such a statement could well be echoed by developing countries around the world today.

Contributions by Land-Grant Universities

Many significant contributions have been made by land-grant universities to the U.S. development assistance efforts.

In the mid-'80s, while Chairman of BIFAD, I had the pleasure of leading a delegation of representatives from the six U.S. land-grant universities (University of Illinois, Ohio State, Kansas State, the University of Missouri, Penn State and the University of Tennessee) that were involved in institution-building efforts in India in the 1950s and 1960s. The Indian government had invited representatives from these six institutions to visit and to observe the progress that had been made in developing a network of agricultural universities in India--building on the initial efforts of these six institutions.

Our delegation was impressed by the tremendous progress made in developing some 23 Indian agricultural universities--modeled somewhat after land-grant institutions in the U.S. Many would say that this Indian experience represents one of the most successful institution-building efforts ever undertaken through USAID funding. The tremendous progress in the development of Indian agriculture over the last quarter of a century is due in no small measure to the contributions of these institutions.

An article in *The Economist* magazine some time ago highlighted the significant progress made in food production in India and emphasized the contrast between this and the lack of progress in Africa.

While many U.S. colleges of agriculture have been involved in international technical assistance efforts of one kind or another, very few have given their programs the kind of international flavor, emphasis, or dimension which I believe is called for today.

Historically, U.S. colleges of agriculture have been concerned primarily with the problems and development potential of agriculture in their respective states. This is appropriate, since these are, indeed, state institutions. Furthermore, agricultural production was directed primarily towards meeting domestic rather than foreign needs. In fact, prior to 1970, less than 10 percent of U.S. agricultural production moved into world markets. Under these circumstances, government farm programs helped to keep commodity prices relatively stable for domestic markets, and American agriculture was not affected greatly by what happened globally.

These circumstances resulted in our colleges of agriculture becoming more inward looking and less concerned about international issues that might affect agriculture here in the United States. While such a posture may have been acceptable a few decades ago, it is no longer adequate if our ag colleges are to be truly relevant in today's highly interdependent world.

Our interdependence with other parts of the world is highlighted in this old but classic story. (In fact, the story is so old, that I suspect that many of the younger members of our audience here today may never have heard it.) The story is about the fellow from New Orleans who

- woke up in the morning to the sound of music coming from his Japanese clock radio;
- climbed out of his bed from between sheets made of long-staple, Egyptian cotton;
- put on a silk robe from Thailand;
- after showering and shaving, splashed on some lotion from France;
- dressed in an English woolen suit,
- made by a skilled Chinese tailor, and
- purchased in Hong Kong;
- put on shoes from Spain,
- and a tie from Italy;
- went downstairs and had a cup of tea made of leaves grown in Sri Lanka.
- With his cereal, he had a banana from Honduras;

--drove to work in his BMW from Germany,
--powered with a mixture of fuel from Saudi Arabia and Nigeria;
--got to his office and sat down at a beautiful mahogany desk made of wood from Brazil;
--was served a steaming cup of coffee made from a mixture of beans from Colombia,
Jamaica and Costa Rica.

As he sipped on his coffee, he leaned back in his chair, smiled and reflected on the good life he was enjoying, and said: "My, my, isn't it great to be an American."

Of course, it is great to be an American--far greater than we appreciate at times. But I am afraid that all too often, we lose sight of how interdependent the world community is and how much we are impacted by circumstances outside our own country.

I am not implying that U.S. colleges of agriculture have been as inward looking as our friend from New Orleans. I would, however, underscore the need for giving greater recognition to the interdependence of the world community, with particular attention directed towards how university programs can better relate to that global community.

Opportunities for U.S. Agriculture

I am also not suggesting that colleges of agriculture abandon their traditional mission of serving agricultural needs and interests of their respective states. To the contrary, I am suggesting that if U.S. colleges of agriculture are to serve adequately the needs of agriculture in their respective states (as well as the nation), they must reorient and strengthen their efforts to deal more effectively with international issues which have a direct impact on agriculture in their states. The future viability of American agriculture will be impacted greatly by how well such reorientation and strengthening is achieved.

Let me be more specific.

Except for recurring droughts, floods, hurricanes and other natural disasters, most of the serious problems facing American agriculture today relate directly or indirectly to circumstances or conditions external to the United States. Let me illustrate.

As indicated earlier, up until 1970, we were exporting less than 10 percent of our total agricultural production. However, beginning in the early 1970s, the export market expanded quite rapidly, and by 1981, the products of about 40 percent of our crop land were marketed overseas. In less than a decade, U.S. agricultural exports to developing countries grew in value from \$2.2 billion to \$15 billion.

During this period, U.S. farmers borrowed heavily to expand their operations and meet this rapidly expanding international market for their products.

In the late 1970s and early 1980s, several things happened to substantially affect the situation. Globally we experienced both double-digit inflation and interest rates along with a worldwide recession that severely impacted the economies of most countries--especially the poorer developing countries. These countries could no longer afford to buy our agricultural products as they had in the 1970s.

Furthermore, the European economic community greatly expanded its production of agricultural commodities and began to sell them at heavily subsidized prices in world markets, competing strongly with U.S. producers. Our competitive position in global markets was made even more difficult by the rapid rise in the value of the dollar in relation to other currencies.

The result of all of this is seen in the fact that in 1986, the value of U.S. agricultural exports was some \$26 billion. Five years earlier, U.S. agricultural exports had a value more than 50 percent greater than this level. In 1986 agricultural products made up less than 14 percent of the total value of all U.S. exports--the lowest level since 1940.

The U.S. Congress responded to all of this by passing legislation which essentially ignored the realities of the global marketplace in which we were attempting to compete. The ultimate result is that American farmers, the most productive and efficient of any on earth, became the victim of a wide range of circumstances relating to U.S. and global monetary, fiscal and trade policies that had a great impact upon their ability to compete effectively in the international marketplace.

Although conditions have improved since 1986, U.S. agriculture continues to face major difficulties--difficulties which obviously result from a number of complex circumstances. A major problem continues to be that of realizing more fully our potential for expanding agricultural exports.

Domestic demand for agricultural products absorbs about half of what our farms can produce--even with various programs to take cropland out of production. Moreover, domestic markets are not expected to grow substantially. Therefore, the future well-being of American agriculture will, in large measure, depend upon its ability to find export markets for its products at prices sufficient to assure reasonable returns.

The future growth in demand for U.S. agricultural commodities will not occur in the more industrialized countries of Western Europe which, until recent years, accounted for a large share of our farm exports. As in the U.S., these countries are experiencing a relatively low rate of population growth and have reached levels of consumer income and food demand where further substantial increases in per capita consumption of agricultural commodities cannot be expected. Furthermore, many of these countries are, themselves, surplus producers of agricultural products.

Obviously, the greatest potential for growth in demand for U.S. agricultural commodities is in the developing world. This is where three-fourths of the world population is found, where 90

percent of the population growth is occurring, where major food deficits now exist, and where there is the potential for substantial increases in per capita food consumption. But the basic problem is that these are poor countries--many of them with a per capita income of less than \$300 annually. Obviously, poor countries make for poor customers.

John Naisbitt, in his best-selling book, Megatrends, suggests that, in the past, the more affluent developing nations have justified their aid to their poor neighbors on the basis that it was morally right to provide such help. He emphasized, however, that while it is still morally right to do this, there is perhaps another more compelling motivation--the self-interest of the more developed countries. He further states: "Only by developing the Third World, will the North (the industrialized nations) be assured of adequate markets for its goods. In an interdependent world, aid is not charity; it is investment. And it is an especially strategic investment, considering that traditional markets are becoming saturated."

Most developing countries have agriculturally based economies, with most of the population employed in the agricultural sector--usually at very low income levels. Improving the agricultural economy is the key to raising per capita incomes and the economy as a whole. Improvements in agriculture have a multiplier effect by increasing per capita income, generating consumer demand, and stimulating the development of other businesses and industries.

Experience has shown that in developing countries where people are existing on bare subsistence levels of food, consumer expenditures for food increase sharply as incomes improve. This results in substantially greater demand for food than increased domestic production can normally accommodate. Therefore, this higher income and greater purchasing power contribute to greater food imports.

Higher incomes also contribute to changing dietary patterns, with consumers shifting to more meat and animal products and less cereals and root crops. Such shifts contribute to expanded imports of either animal products or the feed to produce these products domestically.

The point I would like to underscore here is that the increased income and purchasing power generated by improvements in the agricultural economies of developing countries generate a greater demand for agricultural products than the increased domestic production can normally accommodate.

Furthermore, USDA studies have indicated that, when the poorer developing countries expand food imports, the United States is the exporting country that benefits the most.

This brings me to the central theme of this paper. U.S. colleges of agriculture have the capacity to make unique contributions to the improvement of Third World agricultural economies through our nation's development assistance programs. This is especially true in the area of building or strengthening indigenous agricultural research, education and extension organizations while providing the related training to support such institution-building efforts.

U.S. Development Assistance

Given these circumstances, it is rather ironic that there is so much criticism of so-called "foreign aid" programs, suggesting that we should not be using our nation's financial resources to help other countries when we have so many critical needs for such resources here at home. Unfortunately, most critics of foreign aid make no distinction between military, economic and perhaps certain other types of aid and the technical assistance which our universities can provide. Such assistance may actually contribute substantially to addressing some of our own critical domestic problems such as job creation and stimulating our own economy.

It is also ironic and disturbing that USAID seems to be in a cycle or stage, which the organization appears to go through periodically, of forgetting the critical role which agricultural development must play in overall development efforts in Third World countries. Consequently, we are in a period in which AID support for agricultural development efforts is given very low priority. I am very hopeful, however, that with Clif Wharton as the number two man in the State Department and knowing fully his thinking on this subject--that he will help AID to better order its priorities and give renewed emphasis to agricultural development which I believe is so vital.

Let me also add that I think that we in the university community have an important role to play in providing relevant information to the general public concerning the important role which appropriate international development efforts can play--emphasizing that such efforts are not purely altruistic and do not represent "giveaway programs"--that they are, indeed, in our own national self-interest.

How Can Colleges of Agriculture Contribute

The need to develop improved capabilities to participate in our nation's agricultural development assistance activity is, obviously, one reason for strengthening the international dimensions of U.S. colleges of agriculture. But I would emphasize that this is only one reason.

It has become almost trite to talk about a shrinking globe and the interdependence of the people on it. It is obvious that we must have a better knowledge of other countries, their people, their cultures and their languages if we hope to prosper or, perhaps, even to survive.

To what extent are the teaching programs of our colleges giving future agricultural leaders an understanding of international issues that are to prepare them for the world in which they must live and work?

Several years ago, a President's Commission on Foreign Languages and International Studies reported that the lack of emphasis on international education in this country is "profoundly alarming." The Commission concluded that such specific educational neglect "is reflected in

public uncertainty about the relationship between American interests and goals and those of other people and cultures."

The President's Commission found that only 15 percent of U.S. high school students were studying any foreign language. Furthermore, a survey of high school seniors indicated that more than 40 percent of the students interviewed could not locate Egypt on a map and 20 percent did not know the location of France or China. Only 5 percent of college students preparing to become teachers were found to have taken any courses related to international affairs or foreign areas.

A few years ago, a study indicated that there were more teachers of English in the Soviet Union than there are students of Russian in the U.S.

We hear a lot these days about our trade deficit--and especially about the imbalance of trade between Japan and the U.S. Many factors undoubtedly contribute to this. It may be of considerable significance that Japan has an estimated 10,000 English-speaking business representatives working in the U.S., while we have less than one tenth that number representing our business interests in Japan--and only a handful of these speak Japanese.

Someone asked a Japanese businessman what foreign language he spoke. He smiled and replied: "The language of my customers, of course."

Much of what I am saying underscores the need for colleges of agriculture to give careful attention to the adequacy of their current programs in terms of preparing students for the role they must play in an increasingly complex and interdependent world. What about greater emphasis upon foreign languages? How about more attention to international trade issues? What about greater emphasis on area studies to give students a better understanding of important regions of the world, their people, and cultures?

How can the Cooperative Extension Service help farm families as well as farm-related businesses gain a better appreciation of international issues which affect so many facets of their lives and livelihood? How can research programs of colleges of agriculture develop a better understanding of trade problems as well as effective trade strategies and policies which might enhance our ability to be more competitive in international markets? In what way can cooperative research efforts with developing countries serve domestic agricultural interests while helping the developing country improve its agriculture?

Most of the crops and animals produced for food in the U.S. had their origins in other countries. Furthermore, the productivity of U.S. agriculture is dependent in large measure upon continuing infusions of foreign germ plasm. This is one reason why continuing interactions with the agriculture of other countries is vital to the future success of our own.

These are some of the issues which I believe colleges of agriculture should address as they attempt to strengthen the international dimension of their programs.

Strengthening our International Dimension

Now let me touch on a few factors which I think are vital to the success of such efforts:

- o International programs or activities should not be something separate and apart from what might be considered "regular" programs. They need to be made an integral part of an ongoing effort within our colleges of agriculture.
- o There needs to be a strong commitment to international programs by the faculty and by all levels of administration, right up to the president's office.
- o There must be an appropriate reward system for those engaged in international activities--especially those involved in long-term overseas efforts. Faculty members engaging in such activities must be assured that, if their performance is meritorious, they will be duly recognized in terms of tenure, promotion, and salary increases. Indeed, active involvement in international activities should be a positive, rather than a negative, factor in terms of an individual's professional advancement.
- o Colleges of agriculture have a responsibility to give their students a reasonable comprehension of world affairs and thus equip them to become more intelligent and responsible citizens. This is accomplished in part by broadening their curricula and requiring significant exposure to appropriate courses in the social sciences and humanities. Equally important, of course, is the need to bring an international dimension to technical and professional courses as well. All such courses should seek to broaden the student's viewpoint by offering a global perspective of the subject matter involved.
- o We must try to attract or develop a faculty whose members are not only familiar with the global dimensions of a particular subject, but who can also incorporate them into their classroom activities. Certainly a faculty whose background includes some foreign experience is better equipped to incorporate such a dimension into their teachings.
- o We must modify our current overemphasis on studies of Western cultures with a true international emphasis that recognizes the place of non-Western cultures. For example, when U.S. students study foreign languages, the great majority are concerned with French, Spanish or German. Yet most of the global population is in the developing world--in Africa and Asia, not Europe or the West. Most speak languages very different from the romance languages. Certainly a knowledge of the local language greatly enhances the ability of the agricultural technician or the agricultural business person to work in a Third World environment.

- o We should recognize that every university is different and, to the extent possible, every institution should attempt to build upon its existing strengths as it emphasizes its international dimensions. Let me cite two universities which have done that in a way that has been extremely productive. My undergraduate alma mater, Auburn, has elected to give primary emphasis to building upon its outstanding domestic programs in aquaculture and fisheries. In a similar manner, Mississippi State has built upon its domestic work in seed technology. While both Mississippi State and Auburn are good, solid institutions, neither would be considered to be a world-class university. Yet they have emerged as global centers--perhaps unexcelled anywhere in the world--in the areas in which they have elected to specialize. They have done this by building upon existing strengths rather than by trying to emulate some other institution.

Now let me turn for a moment to the question of training foreign students.

We need to recognize that the background and ability of many foreign students entering U.S. colleges of agriculture from developing countries often leaves much to be desired. Few foreign students have rural backgrounds. Almost none has had a direct involvement with agriculture. Having little if any understanding of agriculture in their own country, they have little basis on which to compare and to understand lessons drawn from U.S. agriculture.

There is also reason to believe that the preparation, if not the basic ability, of many foreign students studying agriculture may be below that of the student coming into the U.S. to study medicine, law and engineering since these are considered to be the more prestigious professions in many developing countries. (Obviously, I am generalizing in making such a statement because there are, at times, many truly outstanding foreign students coming into our agricultural programs.)

These deficiencies in background and ability of foreign students, where they exist, should not constitute valid reasons for having double standards of performance for U.S. and foreign students. They do suggest differences in approach, guidance, program mix and research assignments. Attention should be given to the selection of research problems which should have maximum benefit to the student when he/she returns home. Frequent and understanding counsel is vitally important.

In accepting foreign students, colleges of agriculture should give these students an education that is in the highest tradition of American scholarship while paying attention to their special needs and making sure that they are properly prepared to return to their own environment. Ken Turk, the late former director of Cornell's International Agricultural Programs, made this observation: "Too often it is found that graduate and professional training given foreign students is unrealistic in terms of the conditions they have upon returning to their home country. Their thesis problem in the U.S. may have no application whatsoever; the sophisticated equipment they have learned to use may not be available and, in many cases, the level of development of science makes other knowledge more necessary than that gained in the United States."

Where the program and institutional arrangements permit, there are definite advantages in allowing graduate students to conduct thesis research in their own country. This may not be too difficult if the major professors have had experience in the student's country or if the U.S. university has appropriate staff there in connection with a technical assistance contract.

Foreign students have many obstacles to overcome. Experience indicates that perhaps up to half do not have sufficient command of English to understand the substance of the lectures and discussions in the courses when they began their work. They also need orientation to social and cultural factors in the U.S. and to our system of education.

It is the responsibility of our colleges of agriculture not only to insure the technical competence of foreign students, but to make every effort to instill in them the service concept and the practical, problem-solving approach that has characterized the professional agriculturalist in this country. Field experience may be one of the most valuable parts of a student's training if it helps him/her realize that there is no conflict between fieldwork and professionalism.

In closing, let me see if I can put this subject of internationalizing colleges of agriculture in perspective. While I was serving on BIFAD, one of my colleagues in AID wrote me a long letter expressing concern about the failure of many universities to give adequate emphasis to developing an appropriate international dimension in their programs. Let me quote a couple of paragraphs from his letter.

"Often we find ourselves thinking as if it were somehow unnatural for a university to assume any obligation for international work. Yet perhaps such programs are not nearly as esoteric as many activities totally accepted as normal. Why is it less organic to a university's interests to equip the university with experience and knowledge about the developing parts of the world--where its students may one day work and where its farmers now find their markets, than to equip it to work in astronomical observations of the stars where it is unlikely that any of its students or faculty will ever visit? Why should faculty be reluctant to develop the language capability to deal competently with foreign friends or adversaries? How can scientists accept geographic boundaries on the source (or application) of their knowledge? Can we really believe students, preparing now for careers which peek two decades from now, are well educated if taught entirely by provincial teachers?

"Today, university leadership must recognize that its own constituents' interests, its students' careers, and its own moral reasons for existence cannot be solved by treating science as if it were bounded by state lines, students as if they were to live in isolation from world affairs, and their general publics as if the economic destitution or progress of the poor countries did not matter."

Many circumstances point to the fact that LSU does indeed recognize the importance of a strong international dimension in its agricultural programs. Let me commend you for what you are

already doing in this area, and wish you Godspeed as you continue to strengthen and improve this vital part of your total effort.

It is a great pleasure to be with you. Thank you.

GLOBALIZING COLLEGE OF AGRICULTURE CURRICULA

Faculty Workshop for Department Heads/Directors of Schools, and Faculty Representatives

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The Morrill Act of 1862 authorized the establishment of Land-Grant Colleges focusing on agriculture and the mechanical arts. Additional legislation in the form of the Hatch Act (1887) and the Smith-Lever Act (1914) comprised our three-fold mission of teaching, research, and service.

Though the primary focus of our early leaders was agriculture and the mechanical arts, their motivations, I think, were much as ours are today--economic and social development of our people. If you follow the history of the Land-Grant system, you will see teaching, research, and extension programs which were designed to help people earn a better living and live a better life. The early focus was agriculture because it was the key to the economy--and is still a key part of our present economy.

We have been effective through the years because we have changed as the situation around us changed. And that is why we are here today talking about globalization--the situation around us has changed, and we need to make adjustments.

Why should we globalize our curricula? What are the changes that make globalization necessary? What does it mean? How do we do it?

For the first two or three decades after WWII, the U.S. was fairly well self-sufficient. We had most of the raw materials we needed, we had a large and growing domestic market, and the

world's capital market used the dollar as its standard, allowing us easy control of the dollar's exchange value by exercising domestic policy.

Now we import a large part of the necessary raw materials, such as petroleum products, which require an increase in exports to generate foreign currency. Our dependence on international trade doubled in the decade of the 70s, and tripled over the 15 years between 1965 and 1980. With advances that have been and are being made in the technology of communications, transportation and computers, the wall between domestic and international trade has all but disappeared. We can no more ignore trade with Latin America, Asia, Europe and Africa than we can close the border between our states. This is as true in agriculture as in other sectors of the economy. By 1980, the produce of one-third of our acreage was being exported, with the percentage of some crops being exported ranging from 40 to 70%.

The changes in the dollar standard, significantly impacted by the economic advances of Europe, Japan, Singapore, and Taiwan, and by the OPEC-related increase in the costs of petroleum products, makes us greatly dependent on the economies of foreign countries, and requires our current flexible exchange rate.

We have also seen major changes in the economic comparative advantages various countries hold. We have seen major manufacturing industries move from the Northeastern U.S. to the South, then to Japan and Taiwan, and not to Brazil, Mexico, Thailand, and Malaysia. Agriculture is somewhat more location-specific, but not entirely. For example, we have seen Brazil take half of the international soybean market and most of the frozen orange juice market.

While the U.S. is decreasing its investment in agricultural research, many other countries are increasing theirs, contributing to shifts in comparative advantage. As technology develops, these changes in comparative advantage will continue. Without doubt, we are in an irreversible world market. Recent actions, such as the GATT and NAFTA, are only refinements in rules and regulations designed to make the system work better. If we wish to compete effectively, we must adjust to the situation in which we are living and globalize our teaching, research, and extension programs.

Schuh (1990) said that "... graduates of our universities will either work abroad themselves, work for a company that has strong international competition, work for a company that exports and thus itself competes abroad, or work for a branch of state or Federal government or the non-profit sector that has an international responsibility. Yet most universities in this country do very little to prepare their graduates for the kind of world they will be working in.

... to compete internationally, and to devise a strategy to compete more generally in the international economy, we as a nation need to have a strong knowledge base on the agriculture in other countries, including tropical soils, the tropical livestock sector, the crop sector, insects and other pests, and the policies that affect the competitiveness of those sectors. Yet we are far from having an adequate knowledge base for this purpose. In fact, we do not have an adequate base of knowledge to determine where our own comparative advantage lies, or where it is headed in the future.

... our agricultural producers and those exporting value added products, as well as those who compete with imports from abroad, also need to be informed about the world in which they compete. This nation has an inadequate knowledge base for helping these groups to be or become competitive.

... An important part of becoming competitive internationally is to increase the number of people working in the sectors servicing agriculture with adequate knowledge on the international economy and society. A growing share of the global R & D budget for agriculture comes from countries other than the United States. Moreover, to an ever increasing extent, new technological breakthroughs and innovations in agriculture come from other parts of the world. Yet, this nation does very little to access this new knowledge developed elsewhere, nor does it have much of an institutional mechanism in place for it to do so. Other countries invest quite a bit to pick up the latest in new production technology from this country, but we invest very little to do the reverse.

... there is a high degree of complementarity between helping other countries to develop their own teaching and research institutions and between developing a system to access the new knowledge generated abroad. In working with institutions abroad, U.S. institutions need to develop collaborative relations, instead of the one-way relationships we have had in the past, in which we assumed we had a monopoly on knowledge. In today's world we need to be working jointly to increase our knowledge on the world, to the benefit of both sides of the relationship, rather than pretend that we have all the answers.

... agriculture is this nation's last world class industry. What eventually happens to that sector will largely be determined by what we do about our agricultural research, extension, and teaching systems."

So, if globalization is important, what does it mean? It means that faculty must make changes in teaching, research and extension programs.

1. The first and most important change is in ourselves--our attitudes. The key to globalizing our curricula is globalizing our faculty--ourselves--and the key to this is our attitude. One example, guided by attitude, is a consumer focus: Imagine how few Sony TVs would be bought in the U.S. if the Japanese had a consumer attitude that matched many of ours--all Sonys would be wired for 100 instead of 110 volts, the dials and operating instructions would be in the Japanese language, and repair parts and instructions would not be available. I read elsewhere of a question posed to a Japanese businessman: In what language did he do business, and his reply was, in the language of the customer. We can change our attitudes through knowledge.

2. The next change is in the experience base of our faculty. There is a myth that globalization requires lots of money from the administration and the commitment of all the faculty. Neither of these is true, yet some of both is necessary. This change, like most others, can best be done by first focusing on a few areas. If you have 10 - 15% of the faculty in key areas who are truly committed, you can make great progress in globalizing the curricula.

In a Commission on International Affairs publication titled "Internationalizing Higher Education Through the Faculty," the major points made are that faculty are critical to internationalizing the campus, that obstacles must be removed so that faculty can be involved internationally, and that incentives should be in place to promote faculty involvement.

My example of focusing on faculty involvement is our Agribusiness program, a joint program between the College of Agriculture and Home Economics and the College of Business and Industry. It is particularly appropriate because of the nature of the content and its domestic and international complementarity. Faculty in this program have been one of our focuses, and we have gained international experience in a number of ways:

- sponsored international students through USAID, FAO, World Bank, ADB, IDB, private companies, educational institutions, Ministries of Education, USDA, and other donor agencies.
- sponsored short-term trainees through some of these same entities
- Fulbright programs - both outgoing and incoming
- Language Training
- Mentors
- Title VI, Higher Education Act
- National Security Education Program
- Host international meetings
- Foreign plays, lectures, films
- Internet connections and international library selections
- Visiting Professorships (two-way)
- Sabbaticals
- Joint research programs with overseas institutions through USDA programs with IARCS, USIA programs, or other donor agencies
- VOCA
- Short-term or long-term technical cooperation contracts through various mechanisms

This last one listed is a primary vehicle, with proper institutional policies, to provide incentives to faculty and departments through which low-cost international experience can be gained. Not only does our involvement provide low-cost globalization benefits, it also provides economic benefits to the U.S. while helping develop the economies and standards of living of other countries. For example:

- Of the 50 largest buyers of U.S. farm goods, 43 have received food aid from the U.S. in the past.
- Korea now buys as much from U.S. farmers in one year as it received in its 25 years as a PL-480 recipient.
- More than 5 billion consumers make up the developing world today, and the increase in customers is growing more rapidly in LDCs than anywhere else. By the year 2000, 4 of every 5 consumers will reside in the developing world.
- Already, more than 30% of all U.S. exports are shipped to LDCs.
- Thirty years ago, the U.S. gave away 25% of its food exports; now exports have increased by about 300%, and only 5% is given away.

Now, our work with other countries must move from the one-way technical assistance model to a two-way model of technical cooperation. This will mean fewer faculty living overseas for 2-10 years, but more who make shorter trips on a continuing basis. This will enhance globalization.

Other benefits include:

- access to genetic materials (most of our crops are indigenous to other countries)
- access to beneficial insects and plants, and the opportunity to learn about those that are harmful
- an opportunity to work on issues that have no borders, such as the environment, water, air and soil, food safety and security, diseases and social issues
- an opportunity to learn about the soils, climate, and production systems of other countries
- an opportunity to learn about language, culture, and sociopolitical systems -- all of which have relationship to markets and how people behave.

Back to our Agribusiness example of strengthening faculty expertise. Our work in Uzbekistan moved from contact with a student to a funded consulting trip to a USIA Institutional Affiliation Grant to a major World Bank effort. It has brought several students to campus, the Ambassador twice, a group from the Cabinet of Ministers (contact with the business community and the State Department of Economic and Community Development--poultry, furniture, and office equipment were of interest), a group of University Rectors, and a group of faculty. Our work is primarily with one key institution, but more than ten others are involved.

Joint research opportunities include not only the common agricultural production areas, but also collection of baseline data related to movement from a planned to a market economy. Other projects are also anticipated (Example, Cotton) that will be mutually beneficial.

Already (and we are only half way through the first phase) eight agribusiness faculty have been to the Central Asian region, agricultural and other products have been sold from our state, and teaching and research programs have been enhanced. It is easy to conclude that this is a low-cost way to globalize, promote economic development, and help other countries.

3. Globalizing our faculty is the first order of business, then the content of our courses/assignments to students can change. We must integrate into our curricula the new things we learn; good faculty do this as a general rule. However, attention can be called to the need to do this through proper administration (curriculum review committees, faculty evaluation, mentoring, rewards, and incentive programs such as globalization grants). Assignments or opportunities we provide students can enhance globalization of the curriculum as well (International Partners, World Neighbors, Student Exchange, Study Abroad, Student Ambassadors, Visitors, Residence Hall Programs, Speakers Bureau).

4. Courses and content required from agriculture and other areas need to be reviewed to determine if students need to be advised differently. This can be initiated in one program area (Agribusiness) where courses in agriculture are reviewed and revised, where changes are made in courses required outside the program area, and, through work with other faculty, content of courses outside of agriculture may be changed. Or it can be approached on a much broader scale, for example, the Oregon State University program where an international dual degree program was established in which students from every major at the university can participate.

Vehicles that are commonly used are degree programs; core courses or sets of core courses; area studies courses; interdisciplinary courses that focus on world problems, issues, and topics such as economic development, security, population, food, and the environment; course infusion; and comparative courses.

5. The scope of research and extension programs usually follows a disciplinary or economic interest. We as faculty are generally rewarded by peer recognition and by having discretionary funds. International cooperation projects frequently provide both. Our work in Uzbekistan has significantly impacted research and extension programs, particularly in agricultural economics, management, and marketing.

6. Changes may also be necessary in the criteria and procedures followed in hiring, evaluating, recognizing and rewarding faculty. Some particular programs in some universities require international experience prior to employment. Others promote international involvement by counting it positively in promotion and tenure decisions, and in salary administration.

In conclusion, if we are to prepare individuals to compete effectively in the future, we must act on the idea of globalizing our teaching, research, and extension programs. It should be viewed by the administration as an important part of the mission of the university, obstacles must be removed which hinder faculty participation, and faculty activity must be recognized and rewarded. Faculty are the key!

References

- International Education, 1993. Establishing International Connections, Volume III, Number 1, Spring.
- National Association of State Universities and Land-Grant Colleges Commission on International Affairs, 1993. Internationalizing Higher Education Through the Faculty, November.
- Oregon State University, 12993. Don't Leave OSU Without It: The International Degree, Advisor's Handbook.

Schuh, G. Edward, 1990. Challenges Facing the U.S. Agricultural Research Establishment at the Close of the Twentieth Century (presented February 6, 1990 as testimony before Congress).

GLOBALIZING THE COLLEGE OF AGRICULTURE CURRICULA

Faculty Workshop for Agronomic Systems, Horticultural Systems, and Entomology

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July 15, 1994

Introduction

Many changes have taken place in agriculture during the 20th century, especially in the last 40 years. Our century has literally been the century of change. The early 1900s began with President Theodore Roosevelt advocating the establishment of a National Extension Service and the appointment of the Country Life Commission in 1908. However, change came in the form of compromise in 1914 with the establishment of the Cooperative Extension Service and in 1922 with the passage of the Capper-Volstead Act which extended ownership of farm commodities from the farm gate to the processor. Vertical integration and the Cooperative movement would change the agricultural landscape forever. American agriculture was in its "Golden Age", but would soon end with the "Great Depression" of the 1930s and early 1940s. In addition to the United States entering and ending World War II, the Century was leading the post-war recovery and implementing the Marshall Plan in Western Europe; while the most dramatic change taking place at home was in American agriculture. Mechanization, the adoption of hybrid corn, rural electrification, soil and water conservation and increased demand for American farm products were critical factors in the development of a capital intensive agriculture. Coupled with President Truman's establishment of the Point-Four Program, the forerunner of today's USAID, and Eisenhower's response to the launching of the Soviet space craft-Sputnik. Four decades of unprecedented change were set in motion. Scientific advancement became the challenge and requisition of the day in many disciplines and American agriculture was leading the charge. The development of new hybrid cultivars, chromosome mapping, development of synthetic growth hormones, cloning, embryo transfer and remote sensing to name a few were bringing about unparalleled change. As a result, Americans became the best fed and clothed people on the face of the earth, spending slightly less than 17 percent of their disposable income for food. An abundance and an unrivaled variety of cheap food was available. The American farmer, less than two percent of the population, is producing enough food for himself and 118 other people.

Suddenly, disagreement and disputes with powerful trading partners began to change how we dealt with political adversity. This led to the Russian grain embargo, flooding of U.S. markets with Japanese products and the Europeans erecting trade barriers against U.S. agricultural products. Along with this seemingly constant era of change in agriculture came an evolution in American Foreign Policy and International Trade beginning with the Truman Doctrine and leading up to the passage of the North American Free Trade Agreement.

Technical assistance, in-country training of local agricultural scientists, exchange programs - bringing talented international students to American Universities and Colleges slowly but surely started to make a difference in the Lesser Developed Countries (LDC's). Free trade, education and "giving a hand-up, not a handout" was making a positive difference. Development and advancement of agricultural research in many developing nations have led to the production of surplus grain, sugar, cotton, oil seeds and other crops. A case in-point has been Norman Borlaugh's work at CIMMYT. Breeding efforts with maize and short-strawed wheat cultivars have made net exporters out to be the poorest of the poor, primarily India and Pakistan.

Why Should We Globalize the Curriculum in Agriculture?

As one considers the preface/introduction, several legitimate responses could be given. However, I will attempt to focus my remarks on two major areas that I believe should concern faculty in Colleges of Agriculture; the well being of the American farmer and the students enrolled in our classes who are the next generation of production agriculturalists.

First, the industry of agriculture has been one of continuous change. Dynamic programs of research and extension are essential if agriculture is to continue to be the leader in the development of renewable natural resources. It is the mainstay of our economy either directly or indirectly; employing over 20 percent of the nation's workforce and contributing over \$20 billion annually to our balance of trade. Therefore, it should be our responsibility to develop quality programs that provide the foundation for an industry that feeds our nation and much of the world. Farmers have been and will continue to be dependent on experiment station developments and service programs for new ideas, techniques and policy involving cultural practices, the release of new cultivars, harvest and storage of produce and commodities and the development of policy and strategies for international trade. Many large family operations are at the point today "if they cannot sell it abroad they don't grow it." Furthermore, it has been documented time and again that we do agriculture better and more efficiently than anyone else in the world. It is our strength, and if we are to continue as the world leader in agriculture, we must play to our strength. At this point, it becomes an issue of national security. As in the recent past it has been the research and extension programs of Land-Grant colleges and universities which provide the edge for American agriculture to feed the world. Therefore, it seems imperative that we have a definite understanding of World Agriculture and how it impacts our farmers and students, because it touches each of our lives.

In response and summary to the question "Why Should We Globalize the Curriculum in Agriculture?"

- * To develop a more sustainable and competitive American agriculture. The U.S. farmer of the future will have to do it better and more efficiently than its ever been done before and with the least inputs possible.
- * Assist the American farmer in developing a global perspective concerning marketing strategies and exports. To accomplish this with the fewest barriers possible, producers need to understand the preferences and tastes of their international customers as well as their culture. Furthermore, U.S. producers should also have an understanding and appreciation of where and when the commodities they are producing originated?
- * To assist our students in developing the skills and expertise to compete in a changing world. We have a window of opportunity and hopefully a teachable moment to mentor these that have the interest to pursue careers in the not-so traditional areas as well as the understanding that tomorrows' agriculture will be different due to extensive changes in international trade, additional government regulations and GIS technologies. In addition, we also have the obligation to "warn" those who may think that American agriculture will be business as usual.
- * To insure our ability to respond to World-wide Emergency Relief situations. How to best respond to the natural disasters of drought, floods, hail, untimely freezes, pestilence's etc., as well as the tragedies of man, terrorists, war, starvation and disease. Surplus food and technical assistance should be used to meet the needs of a suffering humanity.
- * National Security. The protection of U.S. citizens from violence and peril, both foreign and domestic.

Why International Agriculture?

Many U.S. agriculture students unfortunately have not had the opportunity or encouragement to travel abroad. Basically, when people travel and see how other people live, work and go about coping and solving the problems associated with life, they come away with a much deeper understanding and appreciation of other people and their culture. As a result, we begin to recognize that people from other cultures and ethnic backgrounds are intelligent and have the ability to make valuable contributions not only in academia, but also practical applications in production agriculture as well. Few U.S. agriculture students have been exposed to situations where their family's livelihood was completely dependent on foreign markets for the cash crop and livestock they produced. Some have purposely isolated themselves from any international contact while others only seem interested when it appears they might reap substantial benefits. Today's agriculture graduates need more than a knowledge about plant propagation and how to

calculate breeding values and heritability estimates of beef sires. They need the realization that tomorrow's agriculture will not be an extension of the past. Their success and well being will be dependent on foreign markets, international trade and demand for American agriculture products. Tomorrow's agriculturalists will need only the knowledge and experience of an agricultural background but an understanding of culture and global politics, ability to communicate in another language and an understanding of international markets and trade as well as the process involved in exporting commodities/products to another country. In summary, there is a definite need to know agriculture in order to survive. College-age young people seem to be the most logical group to educate regarding the importance of international agriculture and the benefits accruing from their involvement as well as the problems associated with it.

Why Do AG People Need To Know?

"Ag people" need to know how to conduct international agriculture efforts; whether we are addressing trade, providing emergency relief, supporting technical assistance in developing nations or educating expatriates. The basic issue is the survival of agriculture as a family business as well as the quality of life and family well being in the United States. U.S. farmers not only need to know and understand the culture, needs and values of other people, but have an understanding of international trade from the standpoint of competition with large national and multinational corporations. Many U.S. farmers would get involved in the direct export of agriculture products, but feel they are handicapped due to their limited contacts with regard to foreign markets. Most do not know the language or culture, have little understanding or knowledge concerning quality standards expected, product liability or how to receive payment for the product once it's delivered. However, a danger does exist when the power to produce or trade food is concentrated in the hands of a few. We have a "cheap food policy" today because many producers are involved in the production and marketing chain. Farmers are "price takers not price setters." If agriculture as a family operation is to survive, producers, producer families, farm organizations, commodity groups, production agriculture advocates and others must assume the responsibility for educating themselves and their representatives as well as those who are accountable for regulations governing the production, processing, marketing and distribution of food. The summary in one word. SURVIVAL!

Why Should AG Faculty Feel Responsible for Providing Leadership and Instruction in International Agriculture and Extension Education?

We enjoy a lifestyle and quality of life that few even dare to dream about. We are the sons and daughters of the Land-Grant movement which started over 132 years ago. It didn't come easy, someone paid a price for the quality of life we enjoy as Americans. Pioneers in this movement worked from dawn to dusk. They sacrificed themselves and their families and did without to make a difference and leave this world a better place than they found it. The inventors Whitney, McCormick, Deere, Ford and Ferguson along with Seaman Knapp, George Washington Carver, Liberty Hyde Bailey, Henry A. Wallace, Henry G. Bennett, Norman Borlaug and many others, too numerous to mention, all made a positive difference not just in the U.S. agriculture but

around the world. Bennett as President Truman's first director of the Point-Four Program utilized the intellect, talent and experience of university agriculture faculty to provide technical assistance in agriculture to development projects in Ethiopia and Pakistan. Dr. Oliver S. Willham, President of Oklahoma State University (1952-1966), stated: "A Ford Foundation official told me frankly that the University's programs in Pakistan were the best example of technical assistance overseas the foundation has ever experienced" (p. 48). Between 1952 and 1976 over 500 Oklahoma State University faculty and administrators served in some capacity in over 35 nations around the world. Today, university faculty from Louisiana State University as well as many other U.S. agriculture faculty are involved in agricultural development projects in more than 20 countries. Furthermore, there should be little doubt that university faculty in U.S. Land-Grant Institutions possess the expertise and technical skills to conduct, coordinate and administer development programs in agriculture anywhere in the world. Now, let's work together and go a step further and share that same expertise and know-how concerning Global Competitiveness and Sustainability of U.S. Agriculture with our producers as well as their sons and daughters who sat in your classroom today. Wouldn't it be great to sit down with a young and work out a degree program that provided international experience, help them learn another language and/or provide them the technical skills that might lead to a career in International Agriculture as a U.S. Agriculture Trade Representative, an Agriculture Missionary, a U.S. Ambassador, Director of the Agency for International Development, the Secretary of Agriculture or maybe better yet, the skills and savvy to save the farm back home? After all it's those hard-headed stewards of the soil who have independently fed, clothed and sheltered us for more than 200 years. Don't they deserve a break now and then? Believe it or not, these are the folks who pay the bills to make laboratories, classrooms, equipment and opportunities available to faculty, administrators and students. Seriously, not that I haven't been in a rather lengthy discourse; but we do have a lot to offer our students and producer clientele as well as those requesting assistance in agricultural development. Don't our own deserve assistance; sometimes, even when they don't want to know? Yes, even when they want to kill the messenger.

What is the importance of Globalizing the Curriculum?

**" I think OSU is a far better university, it
is a far richer university, than it would have been
if we had remained essentially isolationist...
Having the different nations represented
on our campus makes us a better
educational institution" (p.106)**

*Dr. Robert B. Kamm, President
Oklahoma State University
1966-1977*

The diversity it brings, creates, develops and enriches each of our lives and especially the unique opportunities it provides for both students and faculty. Specifically, American agriculture will never be the same nor will it be an extension of the past. This is a new day, our students and

producer clientele need every advantage and opportunity they can possibly acquire to be successful. Simply put, if our students, alumni and producer clientele are successful in producing and marketing American agriculture products abroad, then we will also be successful. Reality is here. It's simply self-preservation!

How Can We Globalize the Curriculum in Agriculture?

How can we do it?

How do we go about accomplishing this most important task? First, this is not a task, but an opportunity! An opportunity that will create additional opportunities and bring unbelievable benefits to our students, production agriculture clientele, the university and faculty. I hope we are not too late!

I. First, let's start with where we are today.

- a) Production courses are naturals. Sometime during the semester, most production courses address marketing as an important aspect of maintaining or expanding a business. 1) The marketing section of the course is an open invitation to insert and discuss export marketing, world production and trade, 2) During course sections which address pests and pathogens, openly discuss those that have been brought into the U.S., especially if they impact producers in your state or area. It's also important to discuss how to control them. 3) Discuss the origin, genus and species of the plants and animals addressed in your course as well as their history and influence on U.S. production and their contribution as a source of germ plasm.
- b) Introductory courses provide opportunities to unveil the idea of International Agriculture and encourage students to consider seriously some facet of International Agriculture as a career option. The origin, history, culture, world production, export marketing and trade impact the diverse plant, animal, insect, pathological and mechanical subject matter disciplines within the academic settings of Colleges of Agriculture. Student and clientele awareness, interest and imagination may be stimulated by outstanding faculty incorporating International Agriculture as a part of an introductory course.

II. Secondly, we could develop specific International Agriculture courses for all the disciplines within the college or provide service courses in only those departments which have the largest enrollments.

- a) Do we act provincial and require "our" students to take "our" course in "our" department? Or will credit in an International Agriculture course in Agronomy suffice for the International requirement in Plant Pathology/Protection or vice versa?

- b) An alternative may be to develop two or three International Agriculture courses (service courses) for the College of Agriculture in the departments with the largest enrollments. This would allow students the opportunity to choose the one which course suits them best.

III. Third, but not the least desirable method, would be to take personal responsibility for one's course and include International Agriculture as a major component. One could take an innovative approach to teaching rather than conducting the "traditional" lecture. First, invite a capable guest to address the issues facing everyone in agriculture, NAFTA, GATT, WTO, etc. One could also plan a panel discussion w/international graduate students in the College of Ag as panelists. Panelists could discuss, agriculture, education, economy and culture in their respective countries w/undergraduate students. Bring plants, animals, specimens, and other visual examples to your class/laboratory to help in the learning process. Also, discuss origins, history, geography, culture, world production and trade. Today, many students travel today worldwide and can share their insight and experience regarding the country in which they toured. One should ask questions in an effort to find those students and use them as teaching tools. Include a tour of an International Agriculture business firm, a farm involved in export marketing or an International Development firm (i.e. Winrock International) if the opportunity avails itself.

IV. An Alternative: Conduct an International Agriculture Study Tour

What did we do July 15?

Introduction

- * At the very door as we speak, an International visitor! Johnsongrass - its origin is Central Africa. It came to the U.S. as seed embedded in the clothing of slaves. The seed germinated in the fertile cultivated soils of the South, and Johnsongrass flourishes today in an environment which closely resembles its natural habitat.
- * Opportunities are available. Many are unique and apply directly to your area. Example: Rice. Why is Louisiana no longer the number one rice producing state in the U.S.? Prior to hostilities in the Gulf, Iraq was Louisiana's best rice customer. The trade embargo against Iraq resulted from U.S. action in Kuwait.

The Presentation

* **Why International Education?**

- + "Global education is central to developing graduates who can work effectively in a modern interdependent world."

R.J. Woods

- + The challenge for U.S. higher education is to develop people who can provide leadership and solve problems in a multi-dimensional framework as well as the ability to empathize with people in other cultures.
- * Three compelling reasons for providing an international perspective in undergraduate educational programs.
 - 1) Enhance American competitiveness in world markets.
 - 2) National Security
 - 3) Provisions for emergency relief and support for international development efforts.
 - 4) Educate students concerning 21st Century Agriculture.

Barriers to International Education:

- * We are self-sufficient!"
- * "I am only interested in what's in it for me!"
- * Few have experienced International travel or been exposed to other cultures.
- * Little understanding of world geography and that some countries do have a comparative advantage in the production of some agriculture commodities.

Course Evaluations:

- * What was the most beneficial aspect of the course?
- * "It caused me to really think for the first time in my college career."
- * " I have come to realize how much I don't know."
- * " To get acquainted with students in agriculture from other countries."
- * " Our international guests helped me accept the reality that I take a lot for granted."
- * " It greatly expanded my perspective."

*LeRoy Rogers
Washington State University
Pullman, WA
Spring 1992*

Summary of Long Term International Assignments on Professional Activities of Faculty at Washington State University

- * Faculty with overseas experience taught a higher portion of globalization in their course(s).
- * What are the alleged negative consequences of an international experience? Promotion, tenure, salary increase, enhanced status among peers?
- * Can we contribute to the mission? A definite yes! Within the mission of Land-Grants-Teaching, Research & Extension.
 - Technical Assistance
 - Inservice Training for professionals (in country)
 - Participant Training programs in the U.S.
- * How much have you changed the content of your "most international" course?
- * Why did you make the change in the International content of the course?

"Personal Travel was the most important reason"

- * Universities & Colleges of Agriculture particularly should enhance the opportunities for their faculty to participate in long term overseas assignments if they really want to internationalize their programs and curriculum.

THE WORLD AS A VILLAGE - this puts things into perspective quickly. The population is only a 1000.

World Population

- Population by Continent
- Population by Language Groups
- Population by Religious Preference

Land Area

- Acres Cropland
- Acres Pasture
- Acres Desert, Tundra, Payment, Shopping Centers, etc.

"Our Small Town Includes..."

- # Soldiers
- # Teachers
- # Doctors
- # Refugees

Gross National Expenditures - Budget \$3M

- \$ Defense
- \$ Education
- \$ Health Care

Summary

- A Contrast: A Country's Income & It's Infrastructure

A Comparison: Texas and Pakistan - Contrstting a Developing Nation with a Highly Developed U.S. State of Comparable Size

Characteristics of Comparison

- Land Area
- Physical Characteristics
- Population: Rural & Urban
- Population Density
- Language(s)
- Religious Preference
- Educational Systems
- Literacy Rate
- Type of Government
- The Economy & Exchange
- GNP & GDP
- Basic Industries
- Major Agriculture Products
- Brief History

Development

- Maslow's Hierarchy of Needs
- Knowles' Model - Translation Need
- The Development Process
- Needs Assessments
- Community Resources
- Planning the development Project
- Implementing the Project/Program
- Project/Program Evaluation

The Slide Presentation

PAKISTAN

- * History and Culture
- * The People and Their Customs
- * Food Production and Marketing
- * Educational System
- * Agricultural Scientists who were a part of the Winrock/Mart Training Project

HONDURAS

- * The Country and its People
- * The Pan-American Agriculture University @ El Zamarano
- * Market Day in Tegucigalpa
- * Sugar: The crop and its importance
- * U.S. Fruit Companies & Their Plantations
- * Hondurian Agricultural Experiment Stations
- * Campesinos - The Rural Poor
 - Using draft animals (bullocks for tillage purposes)
 - Contour Farming Project: Rural Village near the Nicaraguan border
 - Cooking the family meal on the Lorena
 - Natural Resources and Forestry Project

Question and Discussion Session

- * How might Extension education and/or training programs be included in your discipline to serve "landless" farmers (campesino's rural poor) in an international setting?
- * Would your discipline or course lend itself to studying the process of designing/developing an agricultural experiment station? What would be included in such a course, how would you teach it and how would it serve undergrads, graduate and/or international students?
- * How could you incorporate a portion of your course as providing technical assistance to helping the rural poor increase income from agricultural production, enhance literacy, provide medical care and alleviate hunger? In your discipline is there a crop or practice, that would enhance this possibility? If this was part of an international assignment for you, what would you recommend to your clientele ("landless peasants").
- * How can I incorporate needs assessment in my class? Give examples.
- * How does international trade fit in my particular subject matter discipline and how can it be applied in a practical sense?

- * How can/do you incorporate culture in your discipline and where will it best fit? Introduction of course? With specific crops of international origin? End of course, etc.? Provide examples how specific crops, etc. could be used in the course you teach.
- * Where/how would the concept of using available resources fit in the production of agronomic and horticulture crops or pest control?
- * Could rural development be included in your subject matter discipline and how would it be viewed by your clientele (undergrads, graduate and international students and "users" of Coop Extension).

Recommendations

- * Take advantage of the opportunity that International Agriculture provides. Our students and clientele desperately need it.
- * Faculty also deserve the opportunity to be involved in a hands-on-experience internationally.
- * Teach it with enthusiasm and spontaneity.
 - Use the real thing in class if possible (if not use examples, specimens, illustrations, pictures, posters, maps, slide presentations, video tapes, etc.)
 - address U.S. and world production, origins, history, culture, geography, exports and trade.
 - Plan a hypothetical development project (identify strengths & weaknesses, determine needs and priorities, identify alternatives, develop a budget, implement selected program(s) and evaluate the results.)
 - Conduct a tour of an agribusiness or farm involved in export marketing or international trade.
 - Conduct a tour of an International Development Firm (Winrock Int'l, Heifer Project Int'l, etc.).

GOOD LUCK!

Selected Bibliography

- Afzal, M. and Hafiz A. (1987). Farming and Food In The Third World. Islamabad: Manza Press.
- National Agricultural Statistics Service (1993). Agricultural Statistics, United States Department of Agriculture. Washington, D.C.: United States Government Printing Office.
- Finley, G. Eddy and Price, Robert R. (1994). International Agriculture. Albany: Delmar Publishers, Inc.
- Gill, Jerry Leon (1978). The Great Adventure: Oklahoma State University and International Education. Stillwater: Oklahoma State University Press.
- Hayes, Jack (Ed.). (1981). Will There Be Enough Food? Yearbook of Agriculture. Washington, D.C.: USDA.
- Knowles, Malcolm S. (1970). The Modern Practice of Adult Education (Sixth Printing). New York: Association Press.
- Rasmussen, Wayne D. (1989). Taking the University To The People: Seventy-Five Years of Cooperative Extension. Ames: Iowa State University Press.
- Recognizing and Heeding Cultural Differences Can Be Key to International Business Success (1994, October). Business America, 115 (10), 8-11.
- Rogers, LeRoy. (1994, March). Impact of Long-Term Foreign Assignments on Professional Activities of Faculty. National Association of Colleges and Teachers of Agriculture Journal, 38 (1), 54-57
- World Development Report. (1994). Infrastructure for Development. New York: Oxford University Press.

GLOBALIZING THE COLLEGE OF AGRICULTURE CURRICULA

Faculty Workshop for Animal Science, Dairy Science, Poultry Science, Food Science, and Agricultural Engineering

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Room 109 Animal Science Bldg.
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405-744-6065

July 22, 1994

Informal Introduction

I would like to state for the record that I am not a guru on this topic and I certainly don't have all the answers. Having said that however, I will further state that I think I am doing some things right, some of my colleagues are doing some things right, and I think OSU is doing some things right and I am happy to share them.

My goals for the day are simple. We will work through the morning in 3 phases.

In *Phase I*, I will offer background and historical perspective and define what I believe an international dimension is as it pertains to an educational experience. Then I will offer observations on the overall importance of providing a more globalizing education to our students and in so doing hopefully convince you that this is an imperative. As the last task of this phase I will present some potential methods for accomplishing this task for your consideration.

In *Phase II*, what I will share with you will be simply the perspectives of a practitioner from the trenches of teaching an international dimension class. I will share my course as a model of one method of globalizing a curriculum.

In *Phase III*, I will request that you become involved as a part of some workshop activities. Presuming that you buy into at least some of what I have to offer, we will make a significant step toward globalizing your curriculum today.

Introduction: History and Perspective

Internationalizing the college curriculum has been receiving an increasing amount of focused attention over the last decade. I specify *focused attention* because the need was actually recognized and addressed in a sporadic manner even earlier. Eckert and Nobe (1983) state that university internationalization began with President Truman's Point IV Program and by the mid 1960's several universities had accepted the international dimension as a central focus of their programs. Unfortunately this was not the case for the majority, at least where curriculum was concerned. In 1984, Merritt refers to curricular innovation in international agricultural development as one of the innovative and highly desirable curricular improvements begun in some colleges in the late 1960's and early 1970's that failed to be given adequate local support and therefore failed to diffuse to other institutions. If you credit the beginning of the curricular movement to the 1960's and observe that it is 30+- years later, Woodrow Wilson's wry observation that "the process of changing a college curriculum may be as difficult as moving a graveyard" seems as alive with truth in the last decade of this century as he apparently believed it to be back in the first.

Of course things have now changed. McBreen and Schram,(1992), declared "The internationalization of U.S. universities has become a nation-wide cause ce'le'bre..." While perhaps true, meaningful progress has yet to be widespread and we are still far from attaining any general international literacy. Indeed, Kunkel (1992) suggests that most of us don't even know how to define "international competence". It would seem that we've talked much and done little.

While I firmly believe that there is much yet to accomplish, there are good things happening around the country and this series of workshops at LSU is one of those things. I would like to applaud each of you for being here and also applaud the initiative of Donna Redmann, William Richardson and Al Schupp as to their successful granting activity which is making this activity possible.

International Dimension Defined

An international dimension is nothing more than an element of learning directed at the world or some portion of it other than the nation of the learner, which improves the learner's world view and/or understanding. Providing an international dimension to educational programs in the United States would then include all teaching and research conducted within American universities relative to nations, societies, and cultures outside the United States. This definition includes all teaching and research on topics explicitly treated in a multi-national, comparative, or international manner such as international trade, international relations, international development development, and any other comparative studies which involved the inclusion of a foreign element. It would also include study of any collateral area which facilitated the understanding of the topic such as language or cultural studies.

Thus, the process of internationalization of the university is the process of including international content, materials, activities and understandings into the teaching, research and public service functions of universities in order to enhance their relevance in an interdependent world. Bob Hallcock, 1994.

From the perspective of teaching programs, courses in international trade, economics of agricultural development, crop production in the tropics, and world animal agriculture, are all examples of agriculture courses which qualify as providers of an international dimension. An international dimension can also be provided by including comparative foreign area content in courses not having a specific international focus. This could be in any area including agricultural core courses in any of the disciplines. (Kellogg, 1984).

Of course, many courses in the arts, humanities and social sciences would fit under either category mentioned above. Obviously, world geography, languages, anthropology, religion, world political systems, and world ecology qualify. From my perspective, any course capable of providing one or more of the major globalizing influencers (cultural awareness; language awareness; geographical awareness; political awareness; climate awareness, and religious awareness) to the students taking them qualifies as having or providing an international dimension.

Justification of Need for Internationalizing Curricula

For this section, I will work from the initial premise that our society in general and students specifically are for the most part internationally illiterate; that college could be a good place to correct that deficiency, but that college curricula in general are not currently adequately globalized to accomplish this (Merritt, 1984; Brandt, 1987; Bonham, 1989; Henson and Noel, 1990; and King and Martin, 1994). We will then attempt to justify the effort required to correct this shortcoming by answering the question "Why bother?".

Because the world is shrinking. (You don't know how hard I looked for a less fatigued cliché). It may not be consensus opinion just yet, but there is no doubt that the general citizenry of the United States needs a higher level of international competence (McBreen and Schram, 1992). That students graduating from colleges of agriculture are no exception should go without saying. Agriculture is internationalizing, so should the students of agriculture. Certainly, agricultural employers have indicated a need for our graduates to have a better world view (Helming, 1989). Recent trade agreements and developments offer very pragmatic cases-in-point. Almost every product of American agriculture is traded internationally. Our future economic health depends on that continuing. We have a mature economy and the market places for the expansion of a mature economy are to be found outside the borders of the nation which contains it. Common sense dictates that international trade opportunities will be easier to come by if we learn something of those with whom we wish to trade. We've no option but to prepare our students with the tools to compete in a global economy. It is in the vital interests of our

nation and all its peoples. "Global interdependence is a fact of life. Dealing with it is a responsibility we cannot escape" (Hammig and Rosson, 1989).

We are obligated. We as faculty have the primary responsibility of shaping relevant curriculum for agricultural students. Our mandate, The Morrill Act, calls for the provision of "a liberal and practical education to the industrial classes." I would argue further that it is our duty as educators, to also provide the *best* liberal and practical education we are capable of providing. "...if a person is to be considered educated in agriculture, he/she must be cognizant of the interrelationships of various agricultural systems and the governments, cultures and societies in which they function. It is no longer sufficient to know how to produce food and fiber and conduct or manage the many tasks in today's agricultural industry. Development and enhancement of one's agricultural system is unavoidably interwoven with those of other nations." (Martin, 1987).

It follows then that "it is ...essential...that the university express a global perspective" or "risk failure in our social responsibilities." Eckert and Nobe(1983).

Scholarship. "Being a true scholar within a discipline requires an international perspective of the subject matter." (Kellog, 1984. p.21). The U.S. is not the undisputed leader in all types of research and development. Even in those areas that we do dominate there are people in other nations doing work from which we could benefit. Work with foreign counterparts offers us the chance to keep more current than if we do not and thereby grow professionally. I would also argue that it offers significant opportunity for personal growth.

To help us change the image of agriculture. Evidence abounds that we have an image problem in agriculture and in agricultural education and we know it. We have responded in a variety of ways. Some I fear are more cosmetic than substantive. For instance, simply keeping track of all the new names of former colleges of agriculture is a daunting task. Handelsman(1992) argues eloquently that "... agriculture as a field of study is dogged by conservative, dusty, and dull images." and gives compelling reasons why we must change that image through curriculum innovation. Three of the four solutions that she offers to change that image could be partially accomplished by providing more global perspective to our colleges. I highly recommend this paper to you.

Remove the fear of the world. I contend that many of the decisions we make individually and as a people are made out of fear that is grounded in ignorance. No doubt there are things to fear in the world, enough in fact that we cannot afford to waste energy fearing simply because we don't know enough not to fear. Globalizing a curriculum can be your contribution to world peace-of-mind and thus national security, world peace and stability.

Student career objectives. We have students whose career objectives include employment in a foreign country, with an international agency or business concern. This is a small number at present but should grow. Others will end up there even if they don't know it yet. I would like

to say that general student curiosity is an important reason. However, that has not been my own experience and studies by Martin and King (1994) and Mason et.al. (1994) support my observations.

Improve the quality of life for our citizenry. There does not have to be a practical reason for everything we do. There is a whole world of pleasures and delights out there to be sampled and enjoyed. Globalization provides a vehicle of awareness for the wonders of the world and whets the appetite to see and experience them. Along the way we cannot but help meeting someone that will enrich our lives.

History of International Dimension at OSU

In 1972 E. J. Turman began teaching a course entitled "Ecology of Farm Animals". This was in response to a college committee recommendation that more recognition be given to non-traditional educational pursuits. Along with a similar course in agronomy, this was the beginning of the internationally-focused course in the college.

In the late 70's, the university curriculum committee decreed that each student who graduated from OSU must have at least one course which qualified as having an International Dimension. In order to qualify, the course was required to " ...help students explore a culture or several cultures which are different from their own." In the early years of the requirement things were relatively loose with regards to the interpretation of the standard. Foreign language courses, courses in international trade, classes which explored foreign literature and a myriad of others came to carry the "I" designation. Sometime in the 80's there was a growing recognition that the intent had been bastardized.

When I came to OSU in 1988, I was offered the opportunity to take over Agricultural Animals of the World. This was the current name of the old ecology course that E.J. had developed. It had not been taught for a couple of years because E.J. had retired. My first job as the new instructor of record was to submit documentation to the University curriculum committee and convince them that the course deserved to retain it's "I" designation.

When I started to do my homework on the committee and the course I discovered several things. The first was that the current committee was a righteous bunch of dudes and dudesses, hell-bent to restore the integrity of the general education core. Any course that retained it's "I" designation would comply with the original intent of the requirement.

I also discovered that the acid test of acceptability for any course would be that the cultural exploration part of the course must comprise at least 51% of the content.

In addition, I discovered that the list of courses which had survived the scrutiny of the committee was exceedingly small. What had been several score of courses had been reduced to less than a dozen and several of them were teetering on the brink.

And last but not least, I discovered that the absolutely wonderful set of notes I had been given by E.J. for what I regarded as a not-too-bad place to start teaching an entirely new course would in actuality almost certainly not be able to withstand the scrutiny of the righteous. I had 2 weeks to reinvent Agricultural Animals of the World. Well, to make a long story short I was able to retain the "I" designation for the course, and I think our students are the better for it. The revised version of that course is what I will be sharing with you today.

Now having said all that, I wish to point out that I don't agree with the committee that a course must be 51% cultural exploration in order to be useful in internationalizing a curriculum. International awareness is much more than cultural awareness, though cultural awareness is certainly important. In recognition of this, I have provided you each with a copy of the text that E.J. wrote to accompany the course as he taught it and which I revised for use in a correspondence course. I now use less than one-third of this material in the course. I have provided it because I think there is information there which may provide some of you with ideas of things which you might do in other classes.

I have also provided you with a set of class notes for the course as I now teach it. Let me hasten to point out that I don't consider this the perfect course. Nor are these publishable. To begin with, they are hopelessly plagiarized and very poorly referenced. They are designed for my own use, organized to accommodate my own lecture style. They are provided for you today because I simply don't know any other way to provide a comprehensive look at a workable course that would be meaningful. Some of the sections included here are in need of revision. Getting good statistics from former Soviet satellites or states has been practically impossible the past few years. There are also many things in the course that do not appear in these notes. I am a hopeless free-styler. The notes simply serve as a jumping off place for broader discussions. Cultural implication is my constant theme throughout the course, yet that is not always apparent when you read these notes. I also consider the videos that I use in the class to be an integral part of the course and their content is not reflected at all by these notes. Now, I am happy for you to have them as long as you don't make more of them than they are.

Animal Science 3903. Discussion of the Course

In the 22 years this particular course has been offered at OSU it has had 2 instructors: E.J. Turman and myself. E.J. was clearly responsible for its development and its early scholarship. Through his writing and discussions he was also responsible for educating me on many of these topics. My contributions included massaging this course to its current form, presenting it in a form palatable to students, and changing the focus and perspective of the course more to sociology and away from biology.

Enrollment. The course is currently taught twice yearly in the spring and summer to 120 and 20 students respectively. The spring enrollment is capacity for classroom size. When we have offered the course in the fall it has always filled as well. We aren't currently offering it in the

fall because I have had to take on the responsibility of Principals of Nutrition due to staffing decreases.

Students. The student population is roughly 80% agricultural majors. The rest are from all over. All agricultural majors are represented in rough proportion to their enrollment in the college. The course is also taught through correspondence to about 30 students per year. Enrollment comes from all over the U.S. and majors are largely unknown. About half of the OSU enrollment is agricultural students. The rest are mixed majors.

Prerequisites. None.

Credit. Three semester credits.

Texts. Agricultural Animals of the World by W.S.Damron and E. J. Turman. Selected chapters

A Partnership for Humans and Animals by R.E. McDowell

Format. The course is an augmented/supplemented lecture format. Several films are used each semester. Most are 60 minutes in length. Since the course is taught twice weekly for 90 minutes, the remaining 30 minutes on film days is used for discussion. Writing assignments always accompany films. Guest lecturers are used several times each semester. Their topics vary. I tend to be very opportunistic about their selection, depending on who I've heard lately and who has a fresh new experience to share. I also have a number of "old reliables" upon whom I can count as well. I sprinkle guests and film throughout the semester. The topics for the lecture presentations coincide with the course notes provided. Films and speaker topics vary from semester to semester.

Term papers/projects are an option but not required. For those who select the option, I serve as project facilitator by reviewing work-in-progress a minimum of 4 times per semester and offering suggestions. They are given a timetable for completion of the project and we both sign a contract within the first two weeks of the semester as to number of references, page length, topic, due date, percent of grade, etc. Once the contract is signed the only option they have is to finish the project. Only the final version is assigned a grade.

Methodology, tips and pointers for teaching an "I" course.

I take the opportunity on the first day of class to sell them on the importance of the course. While one could argue that all courses should be "sold" to some degree, it is vitally important in a class where one might expect some initial student resistance.

I came quickly to understand that our students were resentful of the international dimension requirement because I asked them in a survey. My results indicated that 85% of our student body that had not yet taken their "I" course resented the requirement and a slightly higher number were delaying the course until their senior year. Luckily, their attitudes change radically after they take the course. Surveys taken on students who have completed their "I" course

indicate that over 95% judge the requirement as either beneficial or highly beneficial. Surveys taken more recently indicate less initial negativity on the part of students, a significant number (62%) still rate their pre-class attitude as indifferent, resentful or highly resentful. While I am thankful for the improvement, I still feel the need to offer my perception of the benefits of the course. If you have access to an outside "evangelist", especially one with high student credibility, this would be an excellent place to use an outside speaker. A local businessman who interacts with foreign trade partners perhaps. I frequently use our director of international programs.

Approach. It took me a while to learn that this is a class that works best when the instructors methods are directed to the exploration of ideas, general notions and attitude rather than insistence on inclusion of a large number of facts, figures and hard data. If I have a central theme in my course it is this: People are different, understand why if you can, reject their philosophy if you must, but respect their right to be as they are. Above all, glean all that you can about what interests and motivates other people.

Ways of Integrating Material into Other Courses

Guest speakers - Leap of faith.
Writing assignments - Perhaps a comparison contrast paper on some topic with the emphasis on why things are different.
Examples of some of my stuff.

Conclusion. Dealing with Instructor Fears.

One common comment I most frequently hear from colleagues is that they don't believe they know enough to add any international dimension to their courses. I have several observations about that,

First, you don't need to know much. You just need to be willing to share what you do know. None of us can accomplish this alone. It will be the accumulated influence that we all exert on our students that will make the difference.

Second, you all know more than you think you do. It's simply a matter of finding a place to use it. I contend that simply thinking about the issue, and staying aware of the need to include such information will give us all ample opportunities to do our part. Whether that is the next time you are on seminar committee, or the next time you revise a course or whenever you need to schedule an outside speaker, the opportunities are plentiful. We just need to take the opportunity when the opportunity arises.

Third, knowledge is attainable. We can all learn. The big issue is not what do you know but rather what are you willing to know. Start with National Geographic. I use stuff out of there all the time.

Methods of Internationalizing an Educational Experience.

There are several means of offering meaningful globalizing influences in curricula of all kinds. Some are highly formal, others less so. Some place the responsibility squarely on the shoulders of the student. Others require ownership and investment by the faculty to the ultimate benefit of the student. Some are based on a traditional teacher-student model; others are more collaborative and offer significant opportunity for simultaneous teacher-pupil discovery, challenge, and reward. As with all things educational, there is no magic mix and blend of available avenues that is intrinsically better than the others, although it is probably true that a mixture of approaches and opportunities will better serve the goal. There are also some elements which are more important than others. A brief discussion of some of the more useful and practiced approaches is probably in order.

Study and internships abroad. These may be the single most effective mechanisms for learning to appreciate the perspectives of other cultures in life and in business. Unfortunately, a variety of factors make these opportunities available to only a few students at most. Not the least of these impediments is the simple fear on the part of many of our students to seek an experience so far outside the limits of their current experience. Many of these students could be interested in study abroad if they only had more base knowledge on other cultures to begin with. Even for the ones who are interested, the cost is often prohibitive.

Broaden the international experience of the faculty. Granting that it is difficult for some people to work this kind of experience into a career, it is never-the-less vitally important to the credibility of an internationalizing process for some of the faculty to be able to say "When I was in thus-and-such so-and-so happened."

Internationalizing the people responsible for the curriculum is a very effective way of internationalizing a curriculum. It may indeed be the key to the whole process as suggested by McBreen and Schram,(1992). "There is little substitute for the instructor who has been sensitized through field experience in a cross-cultural setting." (Eckert and Nobe, 1983.) This statement is further supported by recent studies by King and Martin (1994) and Rogers (1994). Faculty were found to be more supportive of the internationalization of the curriculum if they had had previous international experiences and more likely to improve international contact in their courses.

Unfortunately, many faculty find themselves behind the curve on international experience. This can present a daunting obstacle to their efforts to include globalizing influences in the educational experiences of their students. Nor are these experiences easy to come by. Yet it is absolutely imperative that we find ways to accomplish this. I do not believe that any globalizing initiative can survive without a core of people who have significant, direct, international experience. It does not have to be globe-trotter status, it doesn't even have to be especially diverse for any given individual. It just has to be enough to impart those things most easily attained by direct experience: credibility and ownership.

If they would make me President of the university for one day, I would allocate enough money to fund 1 months travel abroad for 10% of my faculty each year to do anything they chose to do, no questions asked. If they would agree to lead a study tour with students I'd pay the way of their favorite companion, again no questions asked. That's not going to happen, but it should. I do think that administrators at all levels should be encouraged to develop a package of rewards for faculty to encourage them to develop international experience. It is clearly one element of the mix that has been severely ignored.

There are other ways that faculty can increase their global horizons. Sponsor exchange students and befriend international students.

International graduate students. Whether used as TA's, guest speakers in courses or seminars, resource and collaborative personnel on competitive grants or simply regarded as a desirable lunch or racquetball partner graduate students have the power to lift and transform our view of the world. How often and how consistently do we treat them as the valuable resource that they really are?

My opportunities in Pakistan have come as a direct result of a social relationship between my wife and the wife of a graduate student in ag econ. My wife volunteers to teach English classes to international student's wives at the university's family resource center. From that contact we developed a social relationship that lasted the 4 years Shahid was in school and a friendship that will last forever. I haven't yet been to Pakistan. The stuff I've been doing for them has been from my office, but we are working on it. We hope to turn that one into a double opportunity, my wife's specialty is TESL and she speaks Urdu so I would have my own translator. We'll see. I might point out that Frazana had a masters degree in sociology. I used her in my class to talk about the role of women in third world rural societies with special emphasis on the primitive and subsistence agricultures of India, Pakistan and Bangladesh. She was so popular that I brought her back during the religion section to compare and contrast Islamic women to Hindu and Christian women in Pakistan and how their religion affected their food choices.

We are currently close friends with a couple from the Sudan. His mother is a frequent visitor to the US and then in our home. She is the third wife of a Bedouin chieftan. Her face carries the ritual scars of the upper ranking woman that is her heritage. My knowledge of the world improves each time these people share my home. OSU has a program that matches interested faculty families to graduate students. Such programs cost practically nothing to implement and reap enormous benefits.

Faculty can also increase their international awareness through the use of seminars. Various departments at OSU publish their seminar schedules with topics. I often attend and learn a vast amount of useful information on this topic as well as others. Our departmental seminars include presentations by international graduate students and post-doctoral fellows on some aspect of their home lands. I have included an abstract of one such presentation for your information in your workshop packets. We even resort to show-and-tell slide presentations from colleagues recently

returned from off-shore wanderings. Those have been rather East-European dominated of late but we have a cross disciplinary group of range scientists that have been beating a path to South America and a gene-splicer freshly returned from Samoa. I look forward to hearing from them this year.

There is also the time honored method by which scholars have always acquired new information, **STUDY, READ, INQUIRE.**

Offer courses designed specifically for the purpose. This is the major formalized university strategy employed at OSU. The general education core requirements include one course which must meet the criterion for qualification as an international dimension course. I have provided a list of the "I" courses at OSU with the catalog descriptions for your information.

Several courses are being offered at various universities that are aimed at this goal. One that I am especially fond of is offered at Purdue and is described by Schweitzer and Baumgardner (1993). I am seriously considering proposing an inter-disciplinary course based on this model. I have brought copies of the article for use in the workshop.

Include globalizing influencers in already existing courses. For my money this avenue offers the most universally accessible opportunity to accomplish this task. No new courses to develop, curriculum committees to convince, and overall less individual effort are just a few of the reasons I say this. It may even be the most effective method for helping the most students. A consistent sampling of information in many courses has to be more effective than a saturation campaign in a few. It can be accomplished as easily as strategic selection of examples or expanding a list to include the world rather than just our backyard. Only slightly more taxing would be the integration of comparative foreign area content. While this might be more easily accomplished in survey courses, I contend that ample opportunities exist in specialty courses as well.

I also think that this may be the only indispensable globalizing element in a curriculum. It is certainly true that this is the only way to broadly expose our students to this dimension without completely reworking degree requirements. I have included some examples from my Introduction to Animal Science lecture series.

Require courses in the core which provide base knowledge and raise awareness for the globalizing elements. Foreign language studies, religious studies (especially comparative), world geography, anthropology, world political systems, comparative world economics, comparative sociology and various histories are all studies which can contribute to the cause. I like Karl Brandt's observation on this topic "...our students need exposure to the thinking of our liberal arts and humanities faculty members, whose views are not wrapped into the narrow focus of career preparation in agriculture. Our students need to experience other ways of thinking, and to encounter mentors whose focus is understanding people and the creative forces of history, the arts, and human cultures. What the courses might be is less important, in some

ways, than the excursion over the "wall" that all too often separates agricultural campuses from the arts and sciences." (Brandt, 1987. p. 74.)

Create new programs. Music to the ears of every over-worked faculty and every over-budget administrator as well. Lets do some more work and spend some more money. With all the constraints facing higher education and especially agriculture this one must be approached with caution. Hammig and Rosson (1989) offer a good set of ideas for such a program. I recommend their article. The new graduate and undergraduate programs in Agroforestry at Virginia Tech are excellent examples of programs designed to meet the needs of the times (Gold et.al.,1994). Certainly it is possible for these programs to be designed without the addition of any new courses. We have just begun considering adding this option in the animal science department at OSU.

Student clubs. Faculty advisors to student organizations should encourage program activities to better international awareness. If you have international experience, volunteer to be a program speaker. Help recruit alumni who have something of importance to share or convince an international graduate student to speak..

Special problems courses especially directed study. This would offer a wonderful opportunity for both student and faculty to explore some topic of interest.

Conclusion. You will probably have noticed that most of my suggested solutions deal with curriculum changes of one type or another. I believe that they are essential if this goal is to be realized. Curriculum changes require faculty to make them.

All of us can easily find ways to include globalizing some elements in nearly every aspect of the educational experience we make available to our students. I am a great supporter of integrated learning. I think the way we take information and divide it up into little pieces, lay claim to our own little piece, then absolve ourselves of any responsibility for the rest of what needs to be learned is the epitomy of academic arrogance and irresponsibility. I also think it says volumes about our confidence in our own general knowledge and understanding of the world. Couple that with our god-complex, that is our obsession with always being right and never appearing human to our students, and and you provide the perfect fostering environment for not-me-ism. Don't succumb.

I suppose I am laying the groundwork here for an attitude adjustment. A successful globalization program requires that we rearrange our thinking about our responsibilities as educators. I know that comes as terrible news!!! The reason is simple. Acceptance of what I've just said leads us inevitably to the knowledge that we will need to reinvest our efforts in activities very different from what we now do. In simpler language, I'm making more work. Terrible news indeed!!! But important and rewarding work.

Workshop Assignment #1

Attached you will find an article about Indonesia. (Yes, I know that it is dated-use it anyway.) You have 15 minutes to scan this article and find something which you can insert in a meaningful way in an existing course.

Workshop Assignment #2

Develop an assignment for class use which uses the whole document.

My suggestions include:

Writing assignment. Compare and contrast the idea of family farm in Indonesia with the same concept in the U.S. (Use in Introduction to Animal Science Or International Dimension course)

Writing assignment. Discuss the uses for cattle (pigs, chickens, sheep) in Indonesia and compare with the uses in the developed world. (Use in production course or International Dimension course).

Writing assignment. Now that you have completed nutrition, we have decided to give you a foreign assignment. You will be sent to Indonesia for 2 years as a consulting nutritionist. Please speculate as to which of the skills and bodies of information you have learned as an undergraduate will be the most useful to you in your new environment. Justify your choices. (Use as the last writing assignment at the end of Nutrition, either Principals or Applied, human or animal).

Semester project. Please update the information provided in this excellent, but somewhat dated, article on livestock production in Indonesia.

These assignments can be used as regular graded assignments, extra credit, make-up work, part of a seminar, regular or honors, as part of fulfilling the honors portion of a course honors contract. They could also be used as group projects or as independent assignments.

Workshop Assignment #3

You have been broken down into cross-disciplinary groups. Design a senior seminar or senior project which could be used by all your students as a capstone course. A minimum of 50% of the elements of the seminar or project must include globalizing influencers.

Workshop Assignment #4

With reference to the globalizing influencers identified at the beginning of this presentation (cultural awareness, language awareness, geographical awareness, political awareness, climate awareness and religious awareness), consider each course that you teach and find a way to insert each element into the course at least once. If you will all do just that much the rest will take care of itself.

Workshop Assignment #5.

You have been provided with a series of news briefs. Scan them and find ones which you can insert into your course.

Workshop Assignment #6.

You have been given the assignment of ramrodding a cross-disciplinary course along the model of Schweitzer and Baumgardner. Prepare the course including the list of speakers and topics.

It is easy to say that we are going to internationalize our curriculum. Actually doing it is less easy. The bottom line is this: if a critical mass of faculty is willing to take ownership of this need and accept the responsibility of doing something, then it will get done. If they are not, then it will not. It is really that simple.

Americans pride themselves on being a nation of immigrants, and some of us are more recent immigrants than others. We come from all over and we have useful language and area skills within our own society from all over the world. Why then are we so well known for our ethnocentricity, our racial and ethnic bigotry, our ignorance of other languages and our intolerance of other cultures and customs?

The answer lies, in part, in the failure of our locally-based education system to recognize the importance of international education, despite its other strengths. Instead of being part of the answer to international problems, most of our colleges and universities--and also our elementary and secondary schools--are still a big part of the problem.

American isolationism, bigotry and ethnocentricity must go. Never appropriate, in today's world they are severe handicaps. No more can courses in "world history" and "world literature" confine themselves to the East Mediterranean and West European civilizations. No more should our young people feel ill at ease when meeting a contemporary from another land because they don't know anything about where he or she is coming from.

I would like to thank you all for being wonderfully attentive and gracious audience. Thanks also to Donna for all her hard work and facilitation. I've enjoyed my stay with you.

Sources

- Bonham, G.W. 1989. Education and the World View, in IV. *Education and the World View, Council on Learning*. Change Magazine Press.
- Brandt, K.G. 1987. IX. International agricultural curricular dimensions for the future. in *Curricular Innovation for 2005-Planning for the Future of Our Food and Agricultural Sciences*. The North Central Curricular Committee Project. p. 69-85. University of Wisconsin-Madison and USDA Higher Education Programs.
- Eckert, J.B. and K.C. Nobe. 1983. The international dimension as a valid university function. *NACTA Journal* 27(1):34-39.
- Gold, M.A., R.D. Harris, J.R. McKenna and R.L. Young. 1994. Development of graduate and undergraduate programs in agroforestry at Virginia Tech. *NACTA Journal* 38(2): 21-25.
- Hammig, M.D. and C.P. Rosson,III. 1989. Agricultural curriculum: whether an international dimension. *NACTA Journal* 33(2): 36-39.
- Hathcock, B. 1994. International agriculture and home economics. The University of Tennessee at Martin Alumni News. 1(2). p. 3. 132 Brehm Hall, UTM, Martin, TN. 38238
- Handelsman, Jo. 1992. Changing the image of agriculture through curriculum innovation. in Board of Agriculture, National Research Council. *Agriculture and the Undergraduate*. National Academy Press, Washington, D.C.
- Helming Group. 1989. *Searching for the ideal agricultural graduate: A survey of the agriculture, agribusiness and food industries*. College of Agriculture, University of Nevada, Reno.
- Henson, J.B. and Noel, J.C. 1989. Faculty and the Internationalization of the Agricultural Education Curriculum for the Year 2005--*Educating for a Global Perspective*, The North Central Curricular Committee Project, p.19-25.
- Kellogg, E.D. 1984. Providing an international dimension to curricula of agricultural students. *NACTA Journal* 28(3): 18-25.
- King, D.R. and R.A. Martin. 1994. Infusing a global perspective into the college of agriculture curriculum; topics, activities ,and problems. *NACTA Journal* 38(2): 39-42.
- Kunkel, H.O. 1992. Overview. in Board of Agriculture, National Research Council. *Agriculture and the Undergraduate*. National Academy Press, Washington, D.C.

- Martin, R. 1987. *Project to Infuse an International Perspective into the Agricultural Education Curriculum*. The National Council of Agricultural Education, Alexandria, VA. in: King, D.R. and R.A. Martin. 1994. Infusing a global perspective into the college of agriculture curriculum; topics, activities, and problems. *NACTA Journal* 38(2): 39-42.
- McBreen, Edna L. and Susan G. Schram. 1992. The global context of agriculture. in Board of Agriculture, National Research Council. *Agriculture and the Undergraduate*. National Academy Press, Washington, D.C.
- Mason, S.C., K.M. Eskridge, B. Kliever, G. Bonifas, J. Deprez, C.M. Pallas and M. Meyer. 1994. A survey: student interest and knowledge of international agriculture. *NACTA Journal* 38(2): 34-38.
- Merritt, R.H. 1984. Challenges for undergraduate education in agricultural sciences. *NACTA Journal* 28(3):9-14.
- Rogers, LeRoy. 1994. Impact of long term foreign assignments on professional activities of faculty. *NACTA Journal* 38(1): 54-57.
- Schweitzer, L.E. and M.F. Baumgardner. 1993. A course expanding the international perspective of undergraduate students. *NACTA Journal* 37(4): 4-7.

GLOBALIZING THE COLLEGE AGRICULTURE CURRICULA

Faculty Workshop for Agricultural Economics & Agribusiness, Human Ecology, Vocational Education, and Rural Sociology

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Introduction

Globalization is the "buzz" word of the decade and is a popular concept that pervades many institutions, particularly higher education. It is timely to globalize or internationalize the curriculum. However, globalization is not an empty concept but is critical to the United States' ability to compete in the international arena. In an address entitled, "The Future of Land Grant Universities", G.E. Schuh (1993) said:

... our ability to defend our standard of living and to have influence in the international community will depend increasingly on our ability to have a strong knowledge base on the rest of the world. ... This in turn will depend on the investments we make in science and technology, in the production of new knowledge, and in our knowledge of other cultures and societies.

Globalization is not a new concept for agriculture. In the South, international trade in agricultural commodities has a history of more than two hundred years (Seale, 1994), and agricultural colleges grew up with at least this one global dimension. The concept of globalization, like the globe, is changing rapidly and to be relevant, the Colleges of Agriculture must reestablish their commitment to globalization. With the current down-sizing of programs and fiscal shortages in universities, new courses and programs addressing globalization are less likely to be implemented than modifications of existing curricula. Thus, it behooves educators to examine the existing curricula for status of globalization and to build a global dimension into existing courses in an organized and systematic manner.

In this presentation I assume that there is university support for globalizing curricula in Agricultural Economics and Agribusiness, Human Ecology, Rural Sociology, and Vocational

Education. I will use the words internationalization and globalization interchangeably and will present: 1) a definition of globalization, 2) an example of globalizing curricula and courses in the Department of Home Economics at Mississippi State University, 3) a list of proposed global competencies for students, 4) steps in globalizing curricula, 5) writing course objectives, 6) a few instructional methods, 7) examples of utilizing Hanvey's five globalization concepts, 8) sources of information for faculty for enhancing global skills, and 9) obstacles to globalization. I will attempt to present examples that are applicable to the various departments represented here. However, the majority of the examples will be those used in Home Economics (Human Ecology). I believe the system and methods used to globalize the Home Economics curricula are applicable to and can be adapted to other disciplines.

A Definition of Globalization

The Department of Home Economics at Mississippi State University has adopted the Washington State University's (Henson, 1989) definition of internationalization as a frame work for addressing globalization of curricula. The definition is broad and encompasses teaching, research and public service and is as follows:

It is the incorporation of international-related contents, materials, activities and understandings into the teaching, research, cooperative extension and public service functions of the university (Henson, 1989).

The Department of Home Economics has developed a working definition of globalization that fits into the mission of the College of Agriculture and Home Economics. Globalization may be defined as a dynamic, changing dimension of curricula that is expressed through the insertion of topics, materials, and activities into courses so that the student has the opportunity to gain a global perspective of one or more areas of the subject matter.

Robert Hanvey (1979) has suggested five dimensions be addressed in the globalized curriculum. These five dimensions are: 1) perspective consciousness, 2) state of planet awareness, 3) cross-cultural awareness, 4) knowledge of global dynamics, and 5) awareness of human choices. These factors are taken into consideration when writing course objectives and activities and will be addressed later.

Globalization of Home Economics Curricula at Mississippi State University

The Home Economics Department has six curricula with several faculty members being responsible for planning each curriculum to meet one or more accreditation standards. For each curriculum, three or four faculty members determine competencies for students, and each faculty member is then responsible for the course content to meet specific competencies. Most if not all the globalization of curricula occurs within courses.

To facilitate globalization of curricula, the Department Chair appointed an International Committee of five faculty members who were interested in globalizing curricula and/or had some international work experience. Committee members assist faculty in identifying and assessing course objectives and activities that are global in nature. The committee also has other responsibilities as listed below:

1. Keep abreast of global news that is vital to the department and bring to the attention of appropriate faculty members
2. Acquire library materials/teaching aids with global perspective
3. Maintain a resource file of faculty, staff, and students who have international expertise and are available to present lectures, seminars, etc.
4. Identify needs of faculty for global resource materials
5. Work with international office to locate international experiences for faculty and students
6. Consult with cooperative extension specialist on global issues
7. Encourage language study (The committee recommends a foreign language requirement for all Home Economics majors- only Merchandising and Apparel Production and Design have a foreign language requirement).
8. Interface with Cultural Diversity Center
9. Interface with International Study Tours
10. Assume leadership or participate in writing international proposals

Additionally, department seminars and special events with a global perspective are held at least once a semester. Faculty, staff and students are encouraged to attend these events and to participate in other international activities or programs on campus. International Study Tours for experiential learning in specialized areas of Home Economics are offered annually.

Proposed Global Competencies (Skills) for Students

The desired outcomes for students can be considered at two distinct levels: at the course level and at the completion of curriculum requirements (graduation). The desired outcomes (objectives) at the course level are identified in the course syllabus and will be addressed later. The competencies identified for students to have at graduation and the qualities that are carried over into the workplace are more difficult to define and are being developed. The following competencies for a university graduate may include but not be limited to the following:

1. Global perspective of discipline/international scholar/ global mind-set
2. Competitive in the international job market. According to Evertt and Drapeau (1994), persons with the ability to: adapt, listen, work in teams, set goals, solve problems, and be willing to: learn, change, innovate, and collaborate will be most competitive in the global job market.
3. Sensitive to own and other cultures/feels comfortable with at least one culture other than own.

4. Communicate with people in at least one language in addition to English (Spanish is highly recommended as a second language.)
5. Self-motivated and continues to learn after graduation
6. Recognizes contributions the world has made to his/her discipline
7. Uses global information systems.

Steps in Globalizing Curricula

Since several faculty are responsible for a curriculum, affairs pertaining to the curriculum are usually best handled in a group situation. Therefore, the following task, particularly task number 1, may be addressed by a group of faculty and any appropriate consultants, i.e., industry. Tasks 4, 5, 6, and 7 are most likely to be performed by an individual.

1. Identify global competencies for undergraduate/graduate students
2. Examine the current curriculum to determine if competencies are being met:
 - a. Is a foreign language requirement needed?
The University of Hawaii, College of Tropical Agriculture and Human Resources required two years of foreign language study for all majors.
 - b. Which courses address globalization?
 - c. Are additional international courses needed?
 - d. Are there international practicums, internships, and exchange programs?
3. Examine course descriptions and syllabi of all courses
 - a. Does the course contain a global perspective?
 - b. Can the course be globalized?
 - c. What objective(s) can be modified to reflect globalization?
 - d. Are there global activities but no objective to cover them or visa versa?
 - e. Does the syllabus need to be revised to better reflect the global nature of the course?
4. Revise Syllabi to reflect a global dimension
 - a. Write measurable objectives (outcomes)
 - b. Determine method of instruction
 - c. Determine activities needed to meet the objectives
 - d. Determine how the activity will be evaluated
5. Identify resources needed to meet the objectives or produce desired outcomes
6. Teach Course
7. Evaluate course and plan for the next semester

Writing Course Objectives (Student Outcomes)

The Department of Home Economics at Mississippi State has a standard format for course syllabi, and the current syllabi are maintained in an open file in the Department Office. The standardized format not only facilitates the evaluation process by accrediting bodies, but also

allow faculty members to review syllabi for all the curricula. In this manner, coordination of activities is enhanced and redundancy is reduced.

Objectives of a course are of critical importance as they determine the course content, activities, and materials on which a student will be evaluated. Despite the fact that Bloom's Taxonomy of Educational Objectives (1956) is in its fourth decade, it provides a guide for writing objectives. When objectives are written in terms of student outcomes, it is clear to the faculty, students, and others as to the course content and expected student performance. Objectives pertaining to the cognitive domain will be addressed in this presentation, and if one is using the affective and psychomotor domains the verbs are changed to reflect the appropriate domain.

Martin (1994) has presented approximately 100 objectives relating to international agriculture which might be used as is or modified to fit a variety of courses and academic levels. Similar to Martin, faculty may write global objectives for a specific curriculum and then fit the objectives into the respective courses. On the other hand, each faculty member may write the global objectives for each individual course. In either case, the objectives should be used in a systemic and logical manner.

Using Blooms instructional guide (1956), objectives are written to describe what the student is to learn. The objective expresses the level/depth of learning expected. Some examples of objectives using the cognitive domain are listed below:

The student/learner will be able to:

1. trace Louisiana grown rice to point of consumption/utilization.
2. compute the cost of producing a bale of cotton in USA and Egypt.
3. compare and contrast a family farm in Louisiana with one in Germany.
4. describe child care systems in France and Louisiana.
5. identify food safety standards used in food processing industry in China.
6. compare the use of color in interior of residences in Mexico and South Central USA.
7. examine dietary treatment of disease in selected cultures.
8. describe penetration of apparel imports into U.S. market.
9. utilize Internet for obtaining information on family farm operations in Southeastern USA.
10. describe ERIC (Educational Resources Information Center) as a tool for the vocational education teacher

Upon inspection the objective-- the student will be able to compare and contrast a family farm in Louisiana with one in Germany-- has two parts. The first part is -the student will be able to do... This phrase may be written, or it may be omitted with the understanding that the student/learn is implied. The second part is a verb task-- compare and contrast a family farm in Louisiana with one in Germany. This verb is at the comprehension level, and indicates that the student has to have acquired and assimilated information (in/outside the class) about family farms in both Louisiana and Germany before beginning the comparison and contrast stage.

Furthermore, the student must identify the criteria to be used for the exercise. For the evaluation, the professor will use some method to evaluate the students' performance of this task.

Objectives are written to reflect six cognitive levels. For example, knowledge is the first (lowest) cognitive level followed by comprehension, application, analysis, synthesis, and evaluation at the sixth (highest) level. The level of objectives is selected according to the course and academic level of the students. Lower division courses usually have a preponderance of objectives taken from the knowledge, comprehension, and application levels whereas, upper division and graduate courses use a great many analysis, synthesis, and evaluation level objectives. Examples of objectives for the six levels are presented below:

1. Level I - Knowledge
The student will be able to list the agricultural exports from the USA to Western Europe.
2. Level II - Comprehension
The student will be able to explain five factors that affect the export of agricultural exports from the USA to Western Europe.
3. Level III - Application
The student will be able to calculate gross dollar amount of agricultural exports to Western Europe.
4. Level IV - Analysis
The student will be able to summarize agricultural export data to Western Europe for last five years.
5. Level V - Synthesis
The student will be able to propose three ways of increasing agricultural exports to Western Europe.
6. Level VI - Evaluation
The student will be able to assess and rank methods proposed for increasing agricultural exports to Western Europe.

Methods of Instruction:

A library search on teaching methods and evaluation strategies of global or international concepts indicated that educators are thinking about the topic but very little has been published. Business educators have approached the subject by investigating the perceived effectiveness of various instructional methods in preparing students for a role in the global economy. According to the survey of business educators which included some respondents from Colleges of Agriculture (Everett, 1994), the case study was ranked the most effective instructional method followed by supervised on-the-job training, simulations, coaching/mentoring, computer assisted instruction, lecture, seminars/workshops, role playing, films/video, peer tutoring, team teaching, computer based training, interactive video, and programmed instruction.

In addition to the methods listed above, interviews, surveys, field-trips, debates, and popular press have been used. Gannon and Associates (1994) have proposed cultural metaphors as a method for understanding global cultures; their premise is that learners need a framework upon which to catalogue and integrate the pieces of information they receive from various sources. For example, the cultural metaphor for the United States is "American Football" which includes individualism and competitive specialization, huddling, and ceremonial celebration of perfection.

Faculty in the Department of Home Economics incorporate campus activities with global perspective into courses. Students may receive credit for attending Home Economics Seminars, World Food Day Teleconference, Foreign Film Festival, and other campus sponsored activity with a global perspective. Students evaluations have been very high and may be related to the learning styles of Home Economics students. Dr. Elizabeth Stiffler has surveyed Home Economics students' learning styles. Students in Interior Design and Fashion Merchandising are visually oriented learners (field-independent) while dietetic students are (field-dependent) less visually oriented. The visually oriented students perform well in unstructured situations while the non-visually oriented learner learns best in a traditional setting. Lyon-Lawrence (1994) studying business students reported that the visually oriented learners performed well in computer based instruction while the non-visually oriented learner performed less well. If we are successful at educating students for the global society, we need to consider learning styles and how best to teach students the global concepts.

Additionally, curriculum enrichment may occur through collaboration with other colleges and agencies. Home Economics has a one credit hour course entitled "Professional Protocol". The course is targeted for Business Majors but other students find the information beneficial. Some of the topics covered in the course are: international business manners, dressing for success, business at breakfast/lunch/dinner, letter writing, networking, and protocol for government/military/other special groups.

The graduate students in Agricultural Economics present seminars which have been beneficial to furthering the global perspective of the College of Agriculture and Home Economics. The majority of the graduate students are international students and present a seminar on the food and agricultural systems of their respective countries. The students entertain with a meal, music, and fellowship.

Utilizing Hanvey's Five Globalization Concepts

The five global concepts of Hanvey (1979) are relevant to any curriculum and will be discussed here in relation to the Home Economics Food and Nutrition Curriculum. Perspective consciousness can be interpreted in two or more ways. One, the student is aware of the global perspective of the discipline, and two, the student is aware of different perspectives/opinions of subject matter issues presented within the course. For example the definition of food varies extensively from one culture to another and within cultures. The Chinese definition of food is inclusive of vast numbers of animals and plants. Thus, their chance of survival is greater during

famines/disasters than if food were narrowly defined. Moreover, China has regional food patterns that reflect a difference in the definition of food as well as other factors.

State of planet awareness comes from several different perspectives also. Photographs of the earth taken from the moon help transmit the concept of planet awareness. From space, it is very obvious that we share resources, and that some of these resources are finite. For example, students may be asked to list five renewable and nonrenewable resources and to identify countries that have the largest reserve of these resources. Since water is the most important nutrient for humans, I commonly ask the students to describe potable water resources in various countries, and discuss effects on health, migration, etc.

The opportunity to attend class with students from other parts of the United States and the World provide the opportunity for cross-cultural awareness. Planning is needed to maximize the cross-culture aspect in a course, because it is desirable for all students of all nationalities to benefit. Cross-cultural activities is not only for American born students to learn about other international students, but for all international students to learn about each other and the U.S. as well. Class projects are designed in such away that cross-cultural approaches have to be taken in order to solve the problem. Knowledge of global dynamics can be taught through trade of various commodities (food, clothing, technology, etc). In winter, the fresh produce section of the supermarket may carry foods from a number of countries. It is commonly assumed that some foods, i.e., bananas are imported. Less often, fresh produce, i.e., grapes, peaches, and nectarines are thought of as imports. During the winter months these items are likely to be imported from Chile. During February, many of the fresh vegetables i.e. squash, tomatoes, etc come from Mexico. Students realize that international trade results in increased variety of products at reasonable prices.

Awareness of human choices is evident in most instances. It is evident that population issues, type of government, trade agreements, food policies, etc. are the result of human choices. People make choices on population issues, human rights, pollution control, vector control, food and water distribution, etc. The choices people make often make the difference between creating or solving a problem. A well designed food distribution policy can make the difference between starvation and health.

Sources of Information for Faculty for Enriching Global Skills

The university's International Program Office is one place to identify potential global opportunities; colleagues are also a good resource. The Internet has notices of international opportunities as do professional journals. Participating in international meetings is a good way to network with international colleagues. International communication is becoming easier with Fax and E-Mail services available around the world. The Fulbright Scholar Program provides opportunities for global research, teaching, and travel.

My most rewarding and beneficial experience on globalization was participating in the Hawaii International Program (HIP) in 1991, at the University of Hawaii, Manoa (UH). This program was designed to provide faculty the opportunity to bolster the internationalization of undergraduate courses in agriculture and food science; increase professional interaction with international peers; and gain experience directing a student project with an international orientation. We spent one month at the UH campus and one month at the South China Agricultural College in Guangzhou, China examining food and agricultural systems.

Obstacles to Globalization

There are many real and perceived obstacles that impede curriculum globalization. For example, globalization may be viewed as competing with basic course content or other required content. Globalization should not compete but enrich the course and curriculum.

Another obstacle is that faculty may not feel confident in teaching global issues and/or have limited resources. It is important to be realist and come to terms with globalization. One may solicit assistance from colleagues and students, attend international professional meetings, and network with international colleagues here and abroad. Occasionally, it is necessary to make a personal investment in order to initiate globalization of courses and activities. Once networking is established, many more opportunities surface.

Perhaps the most difficult obstacle is to determine if our graduates have the desired global skills. If objectives of the course is written in a manner that can be evaluated, then the problem is lessened. We educators are becoming increasingly accountable for what we teach (1); therefore, we should voluntarily work on evaluating our impact on students' preparation and ability to function in the global society.

Recommendations

1. Regard globalization as a continuous process
2. Designate a department leader/committee for globalization
3. Globalize curricula and include a foreign language requirement
4. Globalize courses
5. Develop strategies for evaluating the global component of curricula and student competencies
6. Maintain an enthusiastic, adventuresome attitude toward global learning
7. Utilize Internet for teaching and to enhance global learning

References

- Bloom, B.S. ed. (1956) *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain*. New York: David McKay.
- Everett, D.R. and Drapeau, R.A. (1994) Effective instructional methods in Business and education. *Delta Pi Epsilon Journal* 36:135-156.
- Gannon, M.J. (1994) *Understanding Global Cultures*. Sage Publication, Thousand Oaks, CA.
- Hanvey, R. (1979) *An Attainable Global Perspective*. New York: Global Perspectives in Education.
- Henson, J.B. and Noel, J.C. (1989) The internationalizing of U.S. Universities and Participation in Development Assistance: Implications for the Developing Countries and the U.S. Occasional Paper #5. International Program Development Office, Washington State University, Pullman, Washington.
- Lyons-Lawrence, C.L. (1994) Effect of learning style on performance in using computer-based instruction in office systems. *The Delta Pi Epsilon Journal* 36:166-175.
- Martin, R.A. (1994) International Agriculture. *Agri. Educ. Magazine* 66(7):17-19.
- Seale, J.L., Jr. and Fairchild, G.F. (1994) Trade agreements, competition, and the Environment: Gridlock at the Crossroads. *J. Agr. and Applied Econ.* 26:97-107.
- Schuh, G. E. (1993) The future of land grant universities. *J. Agr. and Applied Econ.* 25:112-121.
- Dr. Elizabeth Stiffler - Personal Communication

GLOBALIZING THE COLLEGE OF AGRICULTURE CURRICULA

Faculty Workshop for Experimental Statistics; Forestry, Wildlife, & Fisheries; and Plant Pathology & Crop Physiology

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Introduction

Globalizing the College of Agriculture at Louisiana State University has been made a priority by the administration and faculty. This particular workshop is one of a series designed by Dr. Donna Redmann to promote internationalization among the teaching faculty.

There will be five separate topics covered in this seminar. The first is cultural awareness, followed by the importance of international markets, why internationalize land grant students, what is internationalizing a course, and an exercise with individualize course outlines. Covering this material from cultural awareness through the importance of international markets to the practical aspects of internationalizing a course will help the teaching faculty in the College of Agriculture to understand the process of globalization and to develop some practical ideas as to how they can implement improved international content within their specific courses.

Cultural Awareness

Cultural awareness begins with an understanding of culture. Culture is defined as an integrated pattern of behavior including thought, speech, action and artifacts. Culture provides an identity, shapes understanding and perceptions, and organizes physical and social interaction. There are several characteristics of culture which are important for instructors in the Division of Agriculture to understand. These characteristics are listed below:

- ◆ Sense of self and space
- ◆ Communication and language
- ◆ Dress and appearance
- ◆ Food and feeding habits

- ◆ Time and time consequences
- ◆ Relationships
- ◆ Values and norms
- ◆ Beliefs and attitudes
- ◆ Mental process and learning
- ◆ Work and work habits.

The above characteristics of culture are identified by Bethann Witcher-Byers, an author in the Global Entrepreneurship management support group from Texas A&M University. These characteristics of culture are the identifying marks that separate one society from another. There are several ways in which understanding these can aid instructors of agriculture in the classroom. For example, a sense of self and space can create self-identity and appreciation among students from different nations. Classroom behavior can be a function of what a student believes to be an appropriate activity within a lecture type environment. It is not necessarily true that students who sit in the back row are the goof-offs. For example, in some cultures it is a sign of respect not to approach the instructor too closely. Sitting in the front row is the closest possible seat to the instructor. Since it would be considered disrespectful in the front row, and an increase in the distance away from the instructor is a show of respect for the instructor, the last row might be a logical choice from some one wishing to show a great deal of respect to the instructor.

Work and work habits are another example of a cultural difference which needs to be understood by instructors in the Division of Agriculture. The attitude toward work, the dominant types of work, the division of work and work habits and practices such as promotions or rewards differ from culture to culture. It is commonly noted among college professors that international students tend to study more in groups while American students tend to study individually. This is simply a manifestation of culture traits. Americans value independence very highly and view their scholastic activity as an individual effort. When an American student enters an examination, their attitude is typically that the results of the examination will reflect their relative ranking within the class as an individual. Foreign students more accustomed to a group learning environment will be more likely to study in a group, will be more likely to tackle homework assignments in a group and will be more likely to benefit more from group activities in the classroom. In the area of homework assignments, it is important for instructors to make clear what is or is not appropriate as a group activity. It is not necessarily true that foreign students will understand that they may be considered to be cheating if they complete a homework assignment as a group activity. It can be argued that promoting such group activity among students in land grant universities will help them to develop other social skills that they will need for future success in the workplace.

Relationships are another feature of culture which is important in understanding the international aspect in land grant universities. Cultures fix human and organizational relationships by age, sex, status, and degree of kindred as well as wealth, power and wisdom. In Asian society, it is commonly noted that respect for age is much better defined and more important than it is in

the United States. Showing age based respect is a fact in Asian society and dictates the way in which Asian students often behave toward faculty in land grant universities.

Eye contact is another aspect of relationships which is commonly misunderstood. In the United States looking somebody squarely in the eye is viewed as a show of honesty and an earnest desire to communicate. In Middle Eastern society looking somebody who is your superior directly in the eye is considered rude and impolite. When the middle eastern student enters the office of a land grant university professor and keeps his eyes pointed to the floor and never looks the professor in the eye, it is common for the professor to feel that the student is hiding something that he or she is deceitful and dishonest and that there is some type of a problem or a hidden agenda. In fact, the student is attempting to show respect for the professor. In the students opinion looking the professor in the eye is rude and doing so would make the student very uncomfortable.

There are several ways in which developing cultural sensitivity can be accomplished. By following these suggestions it is possible to learn how to deal with cultural differences.

- ◆ Be culturally prepared
- ◆ Learn communication complexities that vary internationally
- ◆ Mix with host nationals
- ◆ Be creative and experimental
- ◆ Be culturally sensitive
- ◆ Recognize complexities in other cultures
- ◆ Perceive yourself as a culture bearer
- ◆ Be patient, understanding and accepting of yourself and your host
- ◆ Be realistic in expectations
- ◆ Willfully accept the challenge of inter cultural experiences.

These items lead to the development of skills for affective multicultural communication. One of the most important skills is the ability to show respect. Respect can be shown by understanding the importance of age in communicating respect, the significance of the manner of speaking, the gestures which express respect, the type of eye contact which expresses respect and an understanding of what constitutes a personal question as an invasion of privacy and therefore a lack of respect. It is also important to tolerate ambiguity. The ability to react to new, different and at times unpredictable situations with little visible discomfort or irritation is an important part of multicultural communication. Finally it is important to master the ability of relating to people. There can be too much concern for getting the job done, and getting it done technically correct, which can lead to a neglect of "people maintenance" within the organization. If "people maintenance" is not developed this can lead to a failure in transferring skills and therefore a breakdown in the educational system. It is also important to be nonjudgmental. The ability to withhold judgement and remain objective until one has enough information requires an understanding of the other person's point of view.

The skills for effective multicultural communication are in fact nothing more than common sense. To be able to see the world as other people see it and to understand others behavior from their perspective is perhaps the most important guide that college and university professors can practice and attempt to pass on to the students in their classes.

Importance of International Markets

The importance of international markets underlies the need to globalize curriculum in land grant universities. This section will attempt to provide a foundation of understanding for instructors to document the growing importance of the international marketplace for agriculture in the U.S.

The purposes of this overview are to document recent trends in U.S. and world agricultural trade, to illustrate the importance of trade to the farm and nonfarm sectors, and to understand current and emerging international markets. The recent trends in U.S. and world agricultural trade stem from the 1970s (which was a period of export boom), continued through the 1980s (which was a period of export bust) and end in the 1990s (which is a period of export market consolidation).

The export boom of the 1970s is attributable to a number of readily identifiable factors. The first of these is high oil prices caused by the OPEC oil cartel. The higher oil prices increased income in OPEC countries spurring demand for food imports in those areas. A recycling effect was created as OPEC bank deposits were transferred into increasing loans to developing countries to prevent those economies from stalling as a result of the oil prices. A second factor was the easy credit which was made available to the developing countries. In the 1970s it was possible for developing countries to borrow funds for food imports, something which is normally not possible. Normal credit arrangements would provide for the importation of capital goods and inputs for production, but not for easily consumable items such as food.

The emergence of the Soviet Union as a major grain importer and improved relations with the Peoples Republic of China after President Nixon's visit were further factors contributing to the boom in exports in the 1970s. Bringing these two major regional powers into the global marketplace allowed the United States to pursue a fence row to fence row agricultural policy of maximizing production. Despite the production maximizing policy scenario, crop shortfalls occurred in the United States as weather was unfavorable for agricultural production. The timing of these shortfalls was such that it caused a rapid increase in the prices of agricultural commodities and created a panic mentality among buyers on the global market, increasing the demand for exports from the United States and reducing stocks within the United States. The 1970s was a period of U.S. dominance in global commodity trade because it was the United States who was viewed as the supplier of last resort and the United States that had the stocks initially to provide the world market.

The 1980s reversed the fortunes of the 1970s. The largest bust in agricultural exports of this century occurred during the 1980s. Once again the factors underlying this bust are readily

identifiable with hindsight. The first of these is the global recession and lower oil prices. Particularly, in the European Community the 1980s were a period of very slow increases in personal income and this had a negative affect on the growth of export markets. This slump in the developed countries was compounded by a similar slump in the income growth of developing countries. Another factor underlying the export bust of the 1980s was the increase in protectionism. A number of countries around the world feared the onslaught of low cost agricultural imports from the United States and felt that if these low cost agricultural products were allowed to enter their countries that their farmers would never be able to compete with the high technology and improved seed varieties used by farmers in the United States. The response was to institute both tariff and nontariff barriers to prevent the easy access of U.S. commodities into global markets. Importing countries felt justified in following this policy because as they increased tariffs they felt it put their farmers, who had underdeveloped technology, at an even level with US farmers who were very technologically current.

The strong U.S. dollar was another factor which contributed to the export bust of the 1980s. During the early 1980s interest rates rose significantly and acted as an international vacuum cleaner, sucking up excess currency from other countries around the world. Foreigners have always looked with favor upon the United States as a place to deposit excess capital holdings. The high interest rates of the early 1980s served as an additional encouragement to increase the flow of foreign funds into the United States. As foreigners sold their currency and purchased dollars to make such deposits, this caused the value of the dollar to increase. The strong dollar caused the price of U.S. farm products to appear artificially high on the international marketplace. It literally pushed U.S. farmers out of markets worldwide. This was one of the major trends of the 1980s and is symptomatic of a more general change in U.S. agricultural trade in which farmers are subjected to forces completely outside of their control such as the value of the dollar and interest rates and capital availability.

The emergence of the European Community as a major grain exporter was the final blow which sealed the export bust of the 1980s as one of the worst decades U.S. agriculture has faced. Historically the European Community was a significant grain importer and a major customer of the United States. While they have remained a major customer for U.S. agricultural products they have developed a significant agricultural export industry and in fact compete with the United States in a number of key commodities. Wheat is a prime example. Farm subsidies from the European Community contributed to expanded wheat production in France and other areas of southern Europe. These low cost wheat exports were particularly competitive in markets such as Egypt in which the United States had a traditional foothold. As the US lost some of these markets to stiff European competition, stock piles grew in the United States, prices fell, and farmers faced severe financial difficulty.

Another shift in U.S. agriculture has been the changing composition of trade away from bulk commodities toward value-added commodities. This is a trend which has been very rapid and significant worldwide. Today nearly two-thirds of world agricultural trade is in value-added agricultural products. However, only one-third of U.S. agricultural exports are value-added

products. Therefore the United States is significantly behind the global trend and shifting its exports away from bulk commodities and into value-added products. There are a couple of major costs associated with lagging behind the trend in this area. The first of these is that bulk-commodities are very volatile in their price. If the United States relies on bulk commodities as the cornerstone of its agricultural exports, then it must accept the fact that this means the prices of its exports will be highly variable and in turn farm income will have more variability than it would otherwise have. Second, value-added products have more stable prices and more reliably growing stable markets. If we look back on the export data of the 1980s and decompose the decline in agricultural exports, breaking out the value-added products versus the bulk commodity exports, it becomes immediately apparent that the export bust of the 1980s is entirely attributable to bulk commodities. In fact, during most of these years (in which we had a major decline in agricultural exports) the value-added component of U.S. exports actually increased. This means that a considerable amount of the pain and suffering inflicted on U.S. agriculture could have been avoided had the United States identified and developed increasing markets for value-added products instead of its bulk commodity exports. Given the significant national interest in protecting the agricultural industry as a source of food and fiber production it seems prudent that the United States would pursue a more value-added product oriented policy in the future.

The increasing trend toward value-added products relies heavily upon land-grant universities to provide students capable of dealing with high technology markets and developing new products and making business applications in an ever changing world.

Why Internationalized Land Grant Students?

It almost seems obvious that students in the Colleges of Agriculture nationwide at land grant universities need to develop an international dimension in their plan of study. Looking at the agricultural industry in the United States it is possible to identify several issues which underline the importance of this area.

During a study conducted by Linda Byford and David Henneberry, agribusiness firms in Oklahoma, Kansas and Missouri were surveyed regarding their export market activity. In this study it was found that approximately two-thirds of the companies which actually export to Mexico had no individual within the company that spoke Spanish. Furthermore, these firms had no plans to hire anybody with Spanish speaking ability. It is readily apparent that the companies did not understand the importance of dealing with their market directly and of using such dealings to increase the size of their export market. It is probably the case that these firms are using some type of an export broker. The use of the export broker breaks their direct contact with the Mexican market and the broker probably speaks Spanish. This may be a very comfortable relationship but it highlights another problem. If these firms understand the export process, they would be aware that most of the time the use of an export broker is simply a temporary arrangement which occurs during the development of an export market and that eventually, in most cases, the broker is terminated and a direct firm to client relationship develops. This occurs in perhaps ninety percent of successful export products. These firms are

not preparing for the eventual need to deal directly with their market in Mexico. Furthermore, they don't seem to have any idea that its going to be necessary to do so. The managers within these companies graduated from universities without acquiring a significant international dimension in their training area. It is clear that had these managers developed a more sensitive awareness of the international marketplace while they were in their university years, they would currently be preparing more wisely.

What Is Internationalizing A Course?

There are three areas to the internationalization of a course at a land grant university. These are defining the objective of the internationalization, defining the options for internationalization and finding the information necessary to complete the process.

Defining the objective of internationalization is something that will vary from course to course. In general, the objective is commonly perceived to be the inclusion of a small amount of material, probably not more than ten percent of the total course content, which has a definite international dimension. This process of incorporating the international aspect of a course is arrived at through a concept of true globalization which views all topics as being international. The challenge facing students is to learn the international dimension in all areas. This is in stark contrast to what used to be seen as a viable alternative. The alternative was to identify a course as the international dimension and have all students take a given international dimension course as a means of fulfilling this requirement. It should be duly noted that internationalizing the curriculum is not in conflict with having a designated international dimension course.

Depending upon the discipline the international content of a course can vary from examples or applications to the international dimension, inclusion of specific international material such as in international agricultural policy, or utilizing the students own experiences to create and develop an international dimension.

Identifying the options available through internationalization is an important step in internationalizing a course. Dr. Donna Redmann has developed a list of over 100 different options available to instructors attempting to insert an international dimension in their course. These options are identified in the salmon colored sheets in your workbook binder. At this point, we will simply discuss several of the available options, and the reader is encouraged to read the workbook materials for further ideas.

International students within the courses provide one of the easiest ways for an instructor to insert an international dimension. International students represent a bridge between foreign cultures and the course material. They are able to perceive the value of the course material as it might be applied in their home country. Through class examples and group activities, these international students can be encouraged to incorporate an international dimension.

Another way of incorporating an international dimension is to make the students themselves seek out and identify what it is. This would be accomplished through an assignment, such as a term paper or course project. The paper or project would have a significant international component and the students would be challenged to incorporate that. Course lectures could augment and provide some ideas to students but initially the majority of the effort would be theirs. This would encourage them to draw upon their own unique international experiences whether those were acquired through travel overseas or through contact with international students within the United States or other experiences, and they would thus develop a rounding out of their educational package.

The important thing for instructors at land grant universities to remember is that internationalizing a course is not a theoretical area. It is a very simple pragmatic aspect of teaching. Words are cheap but action counts. If instructors simply take the time and make the effort to incorporate an international dimension in all courses at the land grant university then students will be exposed to a wide variety of international topics and would perceive their education as preparing them for the global marketplace of the twenty-first century.

CHAPTER III

HIGHLIGHTS AND RECOMMENDATIONS

Highlights of LSU's Model for Internationalization

The highlights enumerated below detail a number of the perceived and probable successes of the project. However, at a minimum, the project staff felt they were successful in raising the awareness level of faculty for the need to internationalize their courses/curricula. The project leaders also believe that they developed a model that can be used by other academic groups to start their approach to the internationalization of curricula/courses.

Highlights:

- Faculty attendance at the workshops (55 percent of the COA faculty) was greater than expected based on the voluntary nature of compliance, and further, based on the period of the year (Summer) in which the workshops were held. Many of those unable to attend the workshops contacted the project staff for binders distributed and for other resource materials available at the workshops. Administrative workshop attendance was almost 100 percent.
- Faculty interest in globalization was evidenced by the large number of faculty reviewing books and resource materials on display during the workshops. After the workshop series, faculty borrowed resource materials from the project staff for review and evaluation for possible textbook adoption, course content material, etc. Most of the books were "claimed" by faculty members at the close of the sixth workshop.
- Of the faculty responding to a post-workshop survey, 44 percent had voluntarily made changes in course content to add an international dimension to the courses taught in Fall of 1995. A smaller percentage made changes in presentation or objectives.
- As a result of the Workshop Series, there has been increased dialogue among faculty at meetings and planning sessions regarding the need to add an international component to curricula or courses.
- During of Fall of 1994, the Dean of the College Agriculture appointed a new standing committee, the International Activities Committee. The Committee was charged with the following major activities: to review international agreements to be signed by the college, to recommend policy and procedures for international programs and projects, to meet international visitors and articulate College of

Agriculture international interests, and to serve as an advisory committee to the Dean with respect to international activities.

- The intent of the original proposal was to bring in renown speakers such as John Nesbitt, author of Megatrends, but due to financial limitations of the grant, the project staff sought alternative means. A networking approach was utilized in locating individuals who had had successful experiences in internationalizing agriculture curricula. Once potential speakers were located, each eagerly agreed to prepare materials for their workshop and to present it at LSU. Each of the workshop speakers enthusiastically performed his or her duties while on the LSU campus.
- This project was unique in that it was one the first efforts to design and conduct faculty inservice training for the purpose of providing the necessary awareness and skills for internationalizing courses. Given the relative novelty of this undertaking, the speakers had a real challenge in this first attempt to educate faculty on course modification to include the international dimension. It is clear that the speakers gained experience and insight as a result of the process. Subsequently, we now have identified a cadre of experienced speakers/facilitators who can do the job of conveying international concepts and skills even more effectively and efficiently.

Recommendations for Future Globalization Efforts

Based on the experience gained by the project staff, the following recommendations are made for those academic units planning to use the LSU model in group efforts to add an international dimension to curricula/courses. A general recommendation for the conduct of such an effort is that the project staff be flexible and resourceful to adapt to changes in personnel and institutional requirements.

Recommendations:

- Due to the general nature of any grant, there may or may not be faculty buy-in or acceptance of the project objectives at the initial proposal stage. Conversely, when a grass roots effort by the faculty exists, there tends to be a higher level of interest and commitment. Therefore, it is recommended that the faculty be encouraged to lead the effort in forming a faculty committee with representatives from each department. A higher degree of faculty involvement in the initial planning and execution of the process will increase their acceptance of the entire project.

- In addition to internationalizing courses, serious consideration should be given to the possibility of establishing a course that is devoted exclusively to "International Literacy" designed for, but not limited to, students in the agricultural disciplines.
- Faculty need to have an opportunity to increase their international base if they are to develop international interest and expertise. Administration can support faculty in obtaining this international experience through a variety of ways that may or may not require a lot of funds: encouraging international travel and sabbaticals, stimulating joint research efforts with foreign institutions, supporting short-or long-term technical cooperation contracts, encouraging faculty exchanges with foreign institutions, sponsoring international students, providing language training, hosting international meetings, supporting internet and international library use, and providing lectures and films involving international themes. Dr. Ronald Brown, the Administrative Workshop speaker, stressed this need in his presentation.
- Internationalizing courses and curricula requires individual faculty members to spend their limited time in seeking material and planning its use in the classroom or laboratory. Therefore, it is recommended that faculty be offered some reward incentives to encourage them to devote their limited resources to internationalizing their courses.
- Current requirements for promotion and tenure call for excellence in instruction but do not capture the efforts faculty may make to add global aspects to their courses. In addition to the teaching, research, and service components of faculty evaluation, the promotion and tenure process should be reviewed to possibly include a fourth component that recognizes and rewards faculty for international involvement.
- Existing faculties in colleges of agriculture have differing levels of international experience, hence their capability of modifying their courses to increase the quality and quantity of international aspects will also differ. Therefore, we recommend that different levels of workshop training be provided for faculty with varying degrees of international experience ranging from extensive to limited.
- While the initial workshops provide the training and motivation for faculty to make changes in their courses, follow-up training in globalization is needed to build upon what was learned in the initial workshops.
- Likewise, continuous evaluation procedures are recommended to determine the extent to which individual faculty are changing their courses to add international dimensions.
- Research is needed to define the competencies COA students need to possess to be considered internationally literate. As evidence of this need, the senior surveys

completed by graduating LSU seniors in the College of Agriculture indicate a very limited knowledge of some highly important measures that are likely to be part of this international literacy, such as time, measurement, geography and currencies.

- Once these international literacy skills have been identified, additional research is needed to develop a senior survey capable of measuring the actual international literacy skills possessed by graduating agriculture seniors.
- Research is also needed to identify the most effective instructional methods for teaching international literacy to agriculture students in traditional courses as well as in specialized international literacy courses.

APPENDICES

- A. Faculty Perception Suvery**
- B. Faculty Workshop Evaluation Instrument**
- C. Senior Survey Instrument**
- D. Annotated Bibliography**

APPENDIX A

*Faculty Perception Survey***Globalization of the COA Curricula**

Name: _____

PART I. PERCEPTIONS REGARDING INTERNATIONALIZATION OF THE CURRICULUM IN COLLEGE OF AGRICULTURE**Instructions:**

The following statements describe possible ways to infuse an international perspective into the agriculture curriculum. Please read the statements and indicate how much you agree or disagree with each statement by circling an appropriate option. Use the following rating scale:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
1	2	3	4	5	
Please circle your response					
01. Internationalization of the general curriculum should be a priority function of all U.S. institutions of higher education.	1	2	3	4	5
02. The current emphasis on Western civilization and culture in the curriculum at U.S. universities should not be diluted by adding international perspectives.	1	2	3	4	5
03. The total college of agriculture curriculum should reflect a respect for and a knowledge of the global community.	1	2	3	4	5
04. International education is good for the U.S. agriculture economy.	1	2	3	4	5
05. International education should be actively promoted by students, faculty, and administrators.	1	2	3	4	5

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
1	2	3	4	5	
Please circle your response					
06. There are strong reasons for a university to encourage, establish, maintain or develop a commitment to internationalization of its programs, course offerings, and activities.	1	2	3	4	5
07. United States citizens should increase their knowledge of other countries' agricultural systems.	1	2	3	4	5
08. Internationalization of the curriculum will help U.S. citizens to gain a greater understanding of the interdependence among nations.	1	2	3	4	5
09. Agricultural educators have an important responsibility to enhance students' understanding of international issues that affect their lives and bind them to other people	1	2	3	4	5
10. The attitudes, values, and commitment of the college faculty are important factors in trying to integrate global perspectives into the agricultural curriculum.	1	2	3	4	5
11. Department heads and faculty in U.S. colleges of agriculture should be genuinely committed to promoting international education.	1	2	3	4	5
12. The general university environment in which an individual faculty member works plays an important role in his/her participation in international activities.	1	2	3	4	5
13. International issues will become more important to U.S. citizens in the next ten to twenty years.	1	2	3	4	5
14. Faculty should encourage their students to develop an attitude of appreciation and understanding of their role as citizens of the world.	1	2	3	4	5
15. There is no need for continued effort in helping students develop a global perspective in agricultural education because they will get this elsewhere in the university.	1	2	3	4	5

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
1	2	3	4	5	
Please circle your response					
16. In the context of United States' participation in the world community, it is imperative to employ agricultural faculty with an international perspective.	1	2	3	4	5
17. Agricultural faculty need a background of international knowledge in order to help students develop attitudes and practices that will be more compatible on a global scale.	1	2	3	4	5
18. Agricultural educators should try to give examples from other countries' agricultural production systems along with the U.S. system.	1	2	3	4	5
19. International agricultural programs should be offered to help U.S. students understand current international market trends.	1	2	3	4	5
20. Opportunities to develop a knowledge base about the dynamics and interdependencies of nations throughout the world should be provided to students not only by the college of agriculture but throughout a university-wide program.	1	2	3	4	5
21. U.S. institutions of higher education are placing too much emphasis on international research priorities.	1	2	3	4	5

PART II. ACTIVITIES CONDUCTED BY COLLEGE OF AGRICULTURE FACULTY TO ADD INTERNATIONAL PERSPECTIVES TO THEIR CURRICULUM

Instructions:

This section of the questionnaire is designed to collect information regarding the activities you or your department are/is undertaking to infuse international perspectives into your curriculum area. Using the following scale, please rate the extent each activity is performed.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5
Please circle your response				
01. Incorporating courses that build awareness of trends affecting the future of agriculture worldwide.	1	2	3	4 5
02. Inviting guest speakers to share perspectives on global issues.	1	2	3	4 5
03. Incorporating international students' perspectives into class activities.	1	2	3	4 5
04. Using educational materials that reflect an international perspective.	1	2	3	4 5
05. Providing examples from diverse cultures.	1	2	3	4 5
06. Encouraging class discussions about other peoples' points of view.	1	2	3	4 5
07. Including international issues and material in your curriculum.	1	2	3	4 5
08. Providing exchange programs for U.S. agriculture students in foreign countries.	1	2	3	4 5
09. Offering opportunities for U. S. students to study or intern abroad.	1	2	3	4 5
10. Establishing a foreign language requirement.	1	2	3	4 5
11. Supporting faculty exchanges abroad.	1	2	3	4 5
12. Encouraging research on international topics.	1	2	3	4 5

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
1	2	3	4	5	
Please circle your response					
13. Establishing cooperative relationships with institutions in other countries.	1	2	3	4	5
14. Participating in international development projects and activities.	1	2	3	4	5
15. Providing faculty international development opportunities.	1	2	3	4	5
16. Hiring international educators as faculty and administrators in the college of agriculture.	1	2	3	4	5
17. Providing funds for international programs.	1	2	3	4	5
18. Awarding financial aid to support the recruitment of international students into your programs.	1	2	3	4	5
19. Bringing distinguished educators from other countries to campus to serve as visiting scholars.	1	2	3	4	5
20. Providing special services to your students through workshops.	1	2	3	4	5
21. Keeping in contact with former students who have returned to their countries.	1	2	3	4	5
22. Incorporating suggestions from former international students into your curriculum.	1	2	3	4	5
23. Attending seminars, colloquia, meetings, etc. on international development.	1	2	3	4	5
24. Other (please specify):	1	2	3	4	5

PART III. DEMOGRAPHIC INFORMATION

Directions:

Please circle the letter next to the response which best describes you or fill in the spaces with appropriate responses.

01. Your department/curriculum is:

- A. _____ Agricultural Economics and Agribusiness
- B. _____ Agronomy
- C. _____ Animal Science
- D. _____ Biological & Agricultural Engineering
- E. _____ Dairy Science
- F. _____ Entomology
- G. _____ Experimental Statistics
- H. _____ Food Science
- I. _____ Forestry, Wildlife & Fisheries
- J. _____ Horticulture/Human Ecology
- K. _____ Human Ecology
- L. _____ Plant Pathology and Crop Physiology
- M. _____ Poultry Science
- N. _____ Vocational Education

02. Your gender is:

- A. Male
- B. Female

03. Your age group is (in years):

- A. 19 or under
- B. 20-29
- C. 30-39
- D. 40-49
- E. 50-59
- F. 60 or over

04. Your present rank

- A. Assistant Professor
- B. Associate Professor
- C. Full Professor
- D. Instructor
- E. Other (please specify) _____

05. Years taught in college or university _____
06. Indicate the percentage of your present position allocated for each of the following:
- A. _____ Teaching
 - B. _____ Research
 - C. _____ Administration
 - D. _____ Extension
 - E. _____ Other (please specify) _____
07. To which group do you belong?
- A. _____ Native American
 - B. _____ African American
 - C. _____ Asian American
 - D. _____ Alaskan native
 - E. _____ White American
 - F. _____ Hispanic American
 - G. _____ Other (please specify) _____
08. Are you a . . .
- A. U.S. citizen
 - B. U.S. permanent resident
 - C. Other (please specify) _____
09. Have you ever spent time in another country? Yes ____ No ____

Country	Length of stay	How you spent your time
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

10. How many languages do you speak other than English? _____

List: _____

Thank You!

APPENDIX B

FACULTY WORKSHOP EVALUATION INSTRUMENT**Evaluation of COA Globalization Workshop and Materials**

Please respond to the following questions:

1. Did you attend one or more of the Globalization Workshops held during the summer of 1994? (*Check one*)

☐ Yes ☐ No

If answered No, skip to Question 4.

2. If you attended a Globalization workshop, please circle the workshop attended.

- a. July 15, James White (Agronomic Systems, Horticultural Systems and Entomology)
- b. July 22, Steve Damron (Animal Science, Dairy Science, Poultry Science, Food Science and Agricultural Engineering)
- c. July 26, Ron Brown (All Department Heads/School Directors and Faculty Representatives)
- d. July 26, Wanda Dodson (Agricultural Economics, Human Ecology, Vocational Agricultural Ed. and Rural Sociology)
- e. August 26, David Henneberry (Experimental Statistics, Plant Path. & Crop Physiology and For., Wildlife & Fisheries)

3. Please rate the invited Workshop speaker as to increasing your interest in the globalization of courses and curricula using the following five-point scale. (*Circle one*)

Poor Fair Good Very Good Excellent

4. Please rate the material in the Globalization binder as being useful in increasing your interest in the internationalization of courses and curricula using the following five-point scale. (*Circle one*)

Poor Fair Good Very Good Excellent

5. Did the Globalization Workshop stimulate your interest in making adjustments to your course objectives, content or presentation to add an international dimension? (*Check each*)

- a. Objectives Yes ☐ No ☐
- b. Content Yes ☐ No ☐
- c. Presentation Yes ☐ No ☐

If a-c answered No, go to Question 9.

6. If either a, b or c were answered Yes, was the material given in the Workshop Binder helpful in assisting you to make adjustments in your course objectives, content or presentation to add an international dimension? *(Check one)*

☐ Yes ☐ No

7. If you made an adjustment in objectives, content or presentation for courses you taught in Fall 1994 to add an international dimension, what adjustments did you make? *(Check all appropriate responses)*

- ☐ Changed course objectives to add an international perspective.
☐ Changed course content to add international dimensions to course material and/or examples.
☐ Did not change course objectives or content but committed myself to discuss international aspects on a spontaneous basis.
☐ Used some of the materials provided in the Workshop binder or displayed on the table during the workshop.
☐ Other (Please Specify) _____
☐ Other (Please Specify) _____

8. What specific adjustments to course objectives, content or presentation did you make for courses taught in the Fall 1994? *(Check all appropriate adjustments)*

- ☐ Developed a separate unit for the course on the international aspects of the course.
☐ Integrated the international aspects of the material throughout the course content.
☐ Used take home or in class assignments that made application of the international aspects of the material.
☐ Added readings on the international aspects of the material to my reading list for the course.
☐ Brought in guest lecturers with international experience in the material discussed in the class.
☐ Used films to add an international perspective to the course.
☐ Used international students in class to comment on the difficulties or ease with which the material, ideas or concepts discussed in class could be applied to their home country.
☐ Encouraged students in the class to travel internationally.
☐ Adopted a supplemental textbook that discussed the international aspects of the material presented in class.
☐ Other (Please Specify) _____
☐ Other (Please Specify) _____

9. If you did not make any adjustments in the objectives, content or presentation of courses you taught in Fall 1994 to add an international dimension, please indicate why using the following. *(Check all appropriate responses)*

- ☐ Neither the Workshop speaker nor the Workshop material were effective in increasing my interest in globalization of my courses at this time.
- ☐ Neither the Workshop speaker nor the Workshop material provided the help I needed to be able to make the desired changes in my course objectives, content or presentation.
- ☐ My course objectives and contents already reflect the level of international involvement with which I am comfortable.
- ☐ I had too much other more important work to do than to make the changes needed in current classes in the short time frame.
- ☐ I think international aspects should be reflected in specific courses taught for this purpose.
- ☐ A lack of international experience limited my ability or interest in "globalizing" my courses this semester.
- ☐ I feel uncomfortable with discussing any material for which I have minimum or no personal experience.
- ☐ Students have sufficient access to globalization issues in the mass media.
- ☐ The students in my classes have shown no interest in the international aspects of the class.
- ☐ Other (Please Specify) _____
- ☐ Other (Please Specify) _____

10. If you made an adjustment, were you, in general, pleased with the responses of students to the changes you made in the class to add the international dimension? *(Check one)*

☐ Yes ☐ No

11. If you made adjustments yet were not satisfied, please indicate some reasons for your dissatisfaction. *(Check all appropriate responses)*

- ☐ Students showed little interest in the applications made in the course.
- ☐ Due to time and other constraints, I was unable to integrate the material in such a manner that the students recognized and/or appreciated the applications.
- ☐ I do not feel my responses to student questions on the international aspects of the added course material were adequate.
- ☐ The films or speakers that I selected to add the international dimension did not fit in well with the other parts of the course.
- ☐ Other (Please Specify) _____
- ☐ Other (Please Specify) _____

12. Did you make any changes in objectives, content or presentation of courses you taught in Spring 1995 to add an international dimension? (Check one)

a. Objectives Yes _____ No _____
b. Content Yes _____ No _____
c. Presentation Yes _____ No _____

If a-c answered No, go to Question 15.

13. If you made an adjustment in course objectives, content or presentation of courses taught in Spring 1995 to add an international dimension, what type of adjustment did you make? (Check all appropriate responses)

_____ Changed course objectives to add an international perspective.
_____ Changed course content to add international dimensions to course material and/or examples.
_____ Did not change course objectives or content but committed myself to discuss international aspects on a spontaneous basis.
_____ Used some of the materials provided in the Workshop binder or displayed on the table during the workshop.
_____ Other (Please Specify) _____
_____ Other (Please Specify) _____

14. What specific adjustments to course objectives, content or presentation did you make for courses you taught in Spring 1995? (Check all appropriate responses)

_____ Developed a separate unit for the course on the international aspects of the course.
_____ Integrated the international aspects of the material throughout the course content.
_____ Used take home or in class assignments that made application of the international aspects of the material.
_____ Added readings on the international aspects of the material to my reading list for the course.
_____ Brought in guest lecturers with international experience in the material discussed in the class.
_____ Used films to add an international perspective to the course.
_____ Used international students in class to comment on the difficulties or ease with which the material, ideas or concepts discussed in class could be applied to their home country.
_____ Encouraged students in the class to travel internationally.
_____ Adopted a supplemental textbook that discussed the international aspects of the material presented in class.
_____ Other (Please Specify) _____
_____ Other (Please Specify) _____

15. If you did not make any adjustments in objectives, content or presentation of courses taught in Spring 1995 to add an international dimension, please indicate why no adjustments were made. *(Check all appropriate responses)*

- ___ Neither the Workshop speaker nor the Workshop material were effective in increasing my interest in globalization of my courses at this time.
- ___ Neither the Workshop speaker nor the Workshop material provided the help I needed to be able to make the desired changes in my course objectives, content or presentation.
- ___ My course objectives and contents already reflected the level of international involvement with which I am comfortable.
- ___ I had too much other more important work to do than to make the changes needed in these classes.
- ___ I think international aspects should be reflected in specific courses taught for this purpose.
- ___ A lack of international experience limited my ability or interest in "globalizing" these courses.
- ___ I feel uncomfortable with discussing any material for which I have minimum or no personal experience.
- ___ Students have sufficient access to globalization issues in the mass media.
- ___ The students in my classes have shown no interest in the international aspects of the class.
- ___ Other (Please Specify) _____
- ___ Other (Please Specify) _____

THANK YOU!!!

***Please return to: Dr. Al Schupp
Dept. of Agricultural Economics/Agribusiness
Room 125, Ag. Administration Bldg.***

APPENDIX C

SENIOR SURVEY INSTRUMENT

Date _____

Globalization of Curricula and Courses in the College of Agriculture

*******CONFIDENTIAL*******

Please answer the following questions designed to estimate how curricula and coursework in the College of Agriculture at LSU have added to your awareness of the international aspects of agriculture.

PART 1

1. Using the following seven point scale, respond to the following six statements:

- 1 = Disagree strongly
- 2 = Disagree moderately
- 3 = Disagree slightly
- 4 = Neither agree or disagree
- 5 = Agree slightly
- 6 = Agree moderately
- 7 = Agree strongly

- a. Based on the material and experience I have received from my classes in the College of Agriculture, I feel that I have an good awareness of the international aspects of my discipline. (circle one)

1 2 3 4 5 6 7

- b. My coursework in the LSU College of Agriculture has increased my interest in working with an international firm or organization. (circle one)

1 2 3 4 5 6 7

- c. My coursework in the LSU College of Agriculture has increased my interest in reading about other cultures. (circle one)

1 2 3 4 5 6 7

- d. My coursework in the LSU College of Agriculture has increased my interest in international travel. (circle one)

1 2 3 4 5 6 7

- e. My coursework in the LSU College of Agriculture has increased my interest in international issues, such as environmental pollution. (circle one)

1 2 3 4 5 6 7

- f. My coursework in the LSU College of Agriculture has increased my interest in working in another country. (circle one)

1 2 3 4 5 6 7

2. Which one of the following has had the greatest positive impact on your awareness of and interest in international issues while at LSU? (Circle one)

- a. Interaction with international students.
- b. A specific instructor (please identify)_____.
- c. Class assignment (please identify course)_____.
- d. Other (please specify)_____.

PART 2.

Based on your present knowledge, please respond to the following:

1. As a percentage of the Federal budget, the amount of money the U.S. has given to other countries over the past four decades has: (Circle one)
 - a. Increased
 - b. Decrease
2. A typical meal in the poor countries of the world consists of: (circle one)
 - a. meat, vegetables, and a dairy product.
 - b. cereal grains and a side dish of vegetables.
 - c. meat or fish and cereal grains.
 - d. an egg or dairy product, vegetables, and fruit.

3. Which of the following is the major reason why more and more countries in Asia, Africa, and Latin America have become net food importers in the last fifty years? (circle one)
- a. Generally they have not had the resources to grow enough food to feed their populations.
 - b. They have been encouraged to shift production from food crops to cash crops.
 - c. Importing food has seemed desirable as a hedge against frequent crop failures.
 - d. They have shifted a large part of their labor forces to industrial production.
4. When we help other countries grow food, what happens to agricultural exports from the U.S. to those countries? (Circle one)
- a. agricultural exports decrease
 - b. agricultural exports increase
5. Match the following countries with their currencies:
- | | | |
|------------------|-----------|-----------|
| ___ a. Australia | 1. Dollar | 6. Rupee |
| ___ b. India | 2. Nila | 7. Shekel |
| ___ c. Israel | 3. Peso | 8. Yen |
| ___ d. Japan | 4. Pound | |
| ___ e. Mexico | 5. Rand | |
6. Which one of the following agricultural products is most widely consumed around the world: (Circle one)
- a. Corn b. Rice c. Wheat
7. The current world population is approximately: (circle one).
- a. Four Billion b. Six Billion c. Eight Billion
8. At the end of the 18th century, Thomas Malthus first publicized the idea that: (Circle one)
- a. rapid population growth is essential for economic stability.
 - b. population growth tends to outstrip the earth's capacity to produce food.
 - c. population control programs should be initiated to keep population in balance with food supply.
 - d. technological innovations in food production allow the world to cope with increasing population growth.

- 9 Male farmers outnumber female farmers in every country in the world. (circle one)
- a. True b. False
- 10 Which one of the following four countries has had to depend on imports to meet its food needs over the last 20 years? (Circle one)
- a. Bangladesh
b. India
c. Rumania
d. Thailand
e. I don't know
11. The worldwide spread of human disease has been linked to all of the following EXCEPT: (circle one)
- a. advances in transportation technology and associated increases in the speed at which carriers of disease travel.
b. the development of super strains of bacteria and viruses or their vectors as unintended consequences of disease prevention measures.
c. increased contact among hitherto remote populations through voluntary and involuntary migrations.
d. the evolution of new insect species that sometimes carry human diseases.
12. With which country on the following list does the United States not have a free trade agreement: (Circle one)
- a. Canada
b. Israel
c. Mexico
d. United Kingdom
13. For individuals in developing countries of the world, the focal point of assistance in meeting daily needs is: (Circle one)
- a. the business community
b. the community
c. the family
d. the government

14. The following statement involves the exchange rate between the U.S. and Japan.

Other things equal, when the value of the dollar rises relative to the yen, the U.S. trade imbalance with Japan is likely to be: (Circle one).

- a. Worsened
- b. Unchanged
- c. Improved

15. As a global problem, inadequate nutrition is largely the result of: (circle one)

- a. large populations living in countries whose production of foodstuffs is insufficient to provide the minimum number of calories required by each person each day.
- b. world population having outgrown the world's ability to produce enough food to meet each person's daily caloric requirements.
- c. large populations living in countries in which inequalities of income result in a significant portion of the population being unable to buy the foods produced by others.
- d. trade controls that prevent food surpluses produced by some countries from being exported to other countries that want to buy them.

16. You have a container that weighs 160 pounds and has a volume of 20 gallons. What are these measurements in kilograms and liters? (Circle one)

- a. Approximately 72 kilograms and 76 liters.
- b. Approximately 330 kilograms and 7 liters.
- c. None of the above.
- d. I don't know.

17. Thanks to the NAFTA Trade Agreement, Levi Strauss can now cheaply manufacture textiles in: (Circle one)

- a. Brazil
- b. Europe
- c. Canada
- d. Mexico

18. If it is 6 AM in Baton Rouge, it is: (circle one)

- a. 4 AM in Alaska.
- b. 2 PM in South Africa.
- c. Noon in Japan.
- d. I don't know.

19. Although large areas of land are brought into cultivation each year, large amounts are also rendered useless or reduced in productive capacity for all the following reasons **EXCEPT**: (circle one)

- a. soil erosion.
- b. salinization, or salt buildup, in irrigated land.
- c. conversion of agricultural land to other purposes.
- d. lack of sufficient farm labor.

20. Match the following countries with the appropriate continents in which they are located:

- | | |
|---------------------------|------------------|
| <u> </u> a. Belize | 1. Africa |
| <u> </u> b. Cambodia | 2. Asia |
| <u> </u> c. Finland | 3. Australia |
| <u> </u> d. Iceland | 4. Europe |
| <u> </u> e. New Zealand | 5. North America |
| <u> </u> f. Paraguay | 6. South America |
| <u> </u> g. Zimbabwe | |

PART 3

Please respond to the following questions on your background.

1. What will be your graduation curriculum? _____
2. What is your gender? (Circle one)
 a. Female b. Male
3. What is your date of birth? _____
4. What is your country of birth? _____
5. How many years have you resided in the United States? _____
6. What is your cumulative LSU Grade Point Average? _____

7. What is your Ethnic Group? (check one)

- ☐ African American
☐ Asian American
☐ Hispanic American
☐ Native American
☐ Oriental American
☐ White American
☐ Other American (please specify) _____
☐ Non American (please specify) _____

8. What languages do you speak, excluding English? (Please list)

9. What countries have you visited (excluding the United States)? (Please list)

10. Have you studied, at any age, in a country other than the United States? (Circle one)

- a. Yes b. No

If answered yes. Where? _____ When? _____
 Where? _____ When? _____
 Where? _____ When? _____

11. Have you been employed in a country other than the United States? (Circle one)

- a. Yes b. No

If answered yes. Where? _____ When? _____
 Where? _____ When? _____
 Where? _____ When? _____

Please feel free to make whatever comments you would like to make in relation to your opportunity to become internationally literate at LSU.

!!!Thank You!!!

APPENDIX D

ANNOTATED BIBLIOGRAPHY

Alexander G. & Williams, O.B. (eds.). The Pastoral Industries of Australia: Practice and Technology of Sheep and Cattle Production (1973). Hardcover. 545 pages. ISBN 0 424 06540 1 cloth bound edition, ISBN-0-424-06550-9 paper bound edition

Publisher: Sydney University Press
Press Building
University of Sydney

North American Publisher: International Scholarly Book Services, Inc.
Portland, OR

Twenty-nine specialists combine forces in this book to write about the production of sheep and cattle under grazing conditions in Australia. Grazing industries occupy more than half of Australia's land as well as generate almost half the national export income.

The emphasis of the book is on the practice and technology of animal production, with the economics contributions directed towards this end rather than to the reporting of economic futures.

The chapters are organized into four sections: Australian environment and rural history; grazing industries as they are at present; dissection of productivity into various components examining knowledge gained by scientific research in the fields of pasture improvement and nutrition, reproduction, genetics and selection, behavior and climatic effects, animal disease and management economics. The final section deals with recent developments that will shape the industries in the future.

The book is directed to a wide range of readers including senior high school and university students and teachers as well as specialist research and extension workers, journalists, and animal producers. The book should find application in southern hemisphere countries as well as providing a contrast for readers more familiar with the intensive animal production systems of much colder climates.

Asante, M.K. & Gudykunst, W.B. (Eds.) Handbook of International and Intercultural Communication (1989). Hardcover. 520 pages. ISBN 0-8039-3202-2

Publisher: SAGE Publications, Inc.
2111 West Hillcrest Drive
Newbury Park, CA 91320

The purpose of this volume is to summarize the state of the art on international, intercultural and development communication and set the agenda for future research in the three areas. Although international, intercultural and development communication are distinct entities, they encompass interrelated areas of research. What binds the three areas together is that each is concerned with the interrelationship between communication and culture. This book focuses on the influence of culture on communication.

This collection of essays examines new theoretical formulations, demonstrates the application of diverse methods of research, and provides the basis for finding solutions for critical issues facing the world. Topics addressed in this volume include language and intergroup communication, interpersonal power and the influence of intercultural communication, mass media effects on cultures, interracial workplace encounters, intercultural communication training, and effective ways of conducting research on culture, language and communication.

Ball, A. D. & McCulloch, W. H. Jr. International Business: Introduction and Essentials (5th Edition). (1993). Hardcover. 851 pages. ISBN 0-256-10652-5

Publisher: Richard D. Irwin, Inc.
1333 Burr Ridge Parkway
Burr Ridge, IL 60521

This fifth edition adds full color to the numerous graphs, maps and tables presented throughout the volume, adding to the already "student friendly" format and writing style. The authors intend this text to be an introductory text in international business for either the undergraduate or a M.B.A. student. In this "student friendly" volume, the nature of international business as it relates to domestic and foreign environments is used to enhance the global approach of all business areas. The impact of increasingly important international organizations and the international monetary system is treated at length. Ball and McCulloch first discuss the uncontrollable forces that make up the foreign environment illustrating the effects on business practices and then flip the coin with a discussion of how managers deal with the uncontrollable forces. The book concludes with a description of the trends and new directions of worldwide companies.

Brown, E. E. World Fish Farming: Cultivation and Economics (2nd edition).(1983). Hardcover. 497 pages. ISBN:0-87055-427-1

Publisher: The AVI Publishing Company, Inc.
Westport, Connecticut

In this book the author gives an overview of technical information on commercial aquaculture by both countries and species. The book includes 31 countries, including all major producing ones. Between 5.5 and 6.0 million metric tons of finfish, shrimp, and crayfish cultured production are represented, which accounts for about 90% of the world's total.

More than 100 species of cultured fish, seven species of shrimp and prawns, and six species of crayfish are discussed. The manuscript includes more than 100 tables, about 150 illustrations and photographs. Data are presented in both the metric and U.S. customary systems.

Cultural data include feeding practices, foods, and types of production facilities for freshwater, brackish, and marine production. Pond, raceway, fiord, cage, net, and other culturing methods are presented.

The book's wide range of topics is for those who have an interest in fish culture, whether as a large-scale enterprise or hobby, for importers or exporters, fisheries economists, students, and for those individuals who wish to learn more about an increasingly important worldwide food source.

Committee on Managing Global Genetic Resources: Agricultural Imperatives Agricultural Crop Issues and Policies (1993). Hardcover. 449 pages. ISBN 0-309-04430-8

Publisher: National Academy Press
2101 Constitution Avenue, NW
Washington, DC 20418

The conservation of genetic resources is an important part of agriculture. Genetic diversity is crucial to agriculture's defense against loss to biologic and environmental stresses. Strategies are needed to identify new genetic resources and storage programs for crop germplasm as well plans for future environmental challenges, changing agronomic practices, and different consumer preferences.

Agricultural Crop Issues and Policies presents the scientific and technical base for germplasm conservation and use and explores policy issues relating to the exchange and use of germplasm and the establishment of global programs. The volume examines the structure that underlies

efforts to preserve genetic material, including the worldwide network of genetic collections, the role of biotechnology, and myriad scientific, institutional, legal, economic, and political issues that surround management and use.

Committee on Managing Global Genetic Resources: Agricultural Imperatives Managing Global Genetic Resources: Livestock (1993). Hardcover. 254 pages. ISBN 0-309-4394-8

Publisher: National Academy Press
2101 Constitution Avenue, NW
Washington, DC 20418

With the developments in molecular biology and reproductive physiology the improvements in animal breeding techniques and production has advanced so rapidly that the Committee on Managing Global Genetic Resources believes that now is the time to assess the goals and future directions of the livestock research and production communities, with a specific focus on genetic diversity.

Preserving the capacity to continue to develop modern livestock requires global actions, on national and international levels, to prevent the loss of valuable genetic resources. Consensus exists within the livestock production community on the need to develop national and international efforts to conserve and manage livestock genetic resources. This book reconciles the two views of conservation--utilization and preservation--by incorporating them both into a cohesive strategy for conservation and management.

Specifically the committee was asked to do the following:

- Examine the uses and status of livestock genetic resources globally.
- Examine methods for using and preserving livestock genetic resources.
- Identify the major problems that limit effective management of global resources.
- Assist the status of international efforts to conserve and exchange animal germplasm.
- Recommend research and development priorities and practical strategies for animal genetic resources management at national, regional, and global levels.
- Present a global strategy for conserving and managing livestock genetic resources.

Committee on Managing Global Genetic Resources: Agricultural Imperatives. Managing Global Genetic Resources: Forest Trees (1991). Hardcover. 248 pages. ISBN 0-309-04034-5

Publisher: National Academy Press
2101 Constitution Avenue, NW
Washington D.D. 20418

Rapid and continuing losses of the world's forests has been of concern for many years. Although most losses are measured in square kilometers, it is impossible to measure the impact of their continued decline to human society. As forests disappear, so do their genetic resources. The genes and biological diversity they possess can no longer aid in their adaption to a changing environment, nor can they be used to develop improved varieties or products.

This book assesses the status of the world's tree genetic resources and management efforts. While recognizing serious threats to all the species and ecosystems represented in the world's forests, the authors focus on managing those forest trees from which harvested materials are currently extracted. Strategies for meeting future needs and alternatives to harvesting natural forests are presented. The book also outlines methods and technologies for management, evaluates activities now under way, and makes specific recommendations for a global strategy for tree genetic resources management.

Cunningham, W. H., Aldag, R. J. & Block, S. B. Business in a Changing World. (3rd edition). (1993). Hardcover. 763 pages. ISBN 0-538-81391-1

Publisher: South-Western Publishing Co.
Cincinnati, OH

This text is designed to be a single-source, introductory business text that provides comprehensive business basics in the context of our world as students know it. Included in the volume are all the basic material and principles associated with an introductory business text, but integrates that information in a global context as well. Following each of the six major divisions of the text, the authors include short, provocative case studies to enhance the development of critical thinking skills.

The goal of the text is two-fold: 1) to equip the professor with a complete, accurate, and current text package that lets him/her easily adopt the course to the changing world of business and 2) to help students learn the basics of business as they relate to today's business climate.

Czinkota, M. R., Rivoli, P. & Ronkainen, I. International Business (2nd edition). (1992). Hardcover. 657 pages. ISBN: 0-03-054618-4

Publisher: The Dryden Press
Orlando, FL 32887

The authors recognize the importance of companies' and individuals' decision making process incorporating the possible effects of the international market. Firms must focus on international business to remain competitive. This text reflects the realities of educational and marketplace

needs in that it discusses the international business concerns of all types and sizes of companies and includes the activities of service firms.

The text is divided into four parts. The first part introduces the basic concepts of international business activity and theory. The second focuses on the economic and financial environment, reviews institutions and markets, and delineates trade policy issues. Part 3 concentrates on the business-government interface, with special attention given to emerging market economies and state-owned enterprises. Part 4 is devoted to strategic management issues.

The text is accompanied by an Instructor's Manual designed to provide in-depth assistance to the professor. For each chapter of the text, the manual provides suggested teaching notes, possible group projects, an overview of the chapter's objectives, and answers to all end-of-chapter Review and Discussion Questions. The manual also includes more than 60 transparency masters for use in the classroom.

Deans, P. C. & Kane, M. J. International Dimensions of Information Systems and Technology. (1992). Paperback. 196 pages. ISBN: 0-534-92811-0

Publisher: PWS-KENT Publishing Company
20 Park Plaza
Boston, MA 02116

Part of the International Dimensions Series, this text answers the demand for increased knowledge in the arena of international business. Two major forces currently transforming business today are globalization of the marketplace and the impact of information technology on the firm. This text gives an overview of the significance of international business activity and the role of the firm's information systems in the evolving global marketplace. A framework is given for identifying issues relevant to the controllable and uncontrollable environments in which the multinational corporation operates. This framework further identifies a means by which multinational IS managers can begin to understand the major forces in the technological social/cultural, legal/political, and economic dimensions of the foreign environments in which they do business.

de Blij, H.J. Human Geography: Culture, Society and Space (1977). Hardcover. 432 pages. ISBN 0-471-20047-6

Publisher: John Wiley & Sons
New York, NY

The author attempts to place a wide range of current and urgent concerns in a human-geographic context without sacrificing major, tradition elements that must be learned. The issues are addressed in five parts, each consisting of several chapters.

In the first part, the population question is discussed under rubrics of numbers, nutrition, health, and mobility. Regional, racial, linguistic, and religious patterns are among those discussed in the book's second part, with some emphasis on art, architecture, and music as elements of the cultural landscape. In the third cluster of chapters, the phenomenon of urbanization is considered from several viewpoints, including the temporal. Part four describes how the fruits of the livelihoods of the world's peoples enter a global distribution and acquisition system that favors some and deprives others. In the fifth and last part of the book, a central argument is that the system of states and nations that marks the modern political map is under such ideological and economic pressure that it may not survive.

Dowling, P. J., Schuler, R. S. & Welch, D. E. International Dimensions of Human Resource Management (2nd edition) (1994). Paperback. 267 pages. ISBN 0-534-21366-9

Publisher: International Thomson Publishing
Belmont, CA 94002

The newest in the International Dimensions Series, this text answers the demand for increased knowledge in the arena of international business. The focus of this text is the impact of international business on human resource management. Organizations must engage in human resource management on an international scale. In this volume, the authors emphasize the choices of international human resource management practices that confront multinational enterprises and some factors to consider in making those choices.

The book has been organized into eight chapters. Chapter 1 begins with a description of international human resource management and what differentiates it from domestic human resource management. Chapter 2 examines the organizational context of international HRM, including the impact of the strategy and structure of multinational enterprises (MNEs) on those aspects. Recruitment and selection of international employees and issues and choices in international performance appraisal are the topics of Chapters 3 and 4. Chapter 5 discusses the dimensions of international training and development. International compensation and complexities in labor relations are of concern in chapters 6 and 7. Chapter 8 examines future directions and a theoretical developments in international HRM. The appendix raises research issues in the field of international human resource management.

The authors posit that the increased understanding of the international dimensions of HRM is contributing to a strong theoretical base. This theoretical base allows continued development of international HRM research, which help companies to formulate and implement effective HRM programs and policies.

Elashmawi, F. & Harris, P. R. Multicultural Management: New Skills for Global Success (1993). Hardcover. 234 pages. ISBN 0-88415-042-9

Publisher: Gulf Publishing Company
P. O. Box 2608
Houston, TX 77252-2608

Elashmawi and Harris use three distinct cultures, American, Japanese and Arab to encourage the reader towards valuing and managing cultural diversity. Although the three targeted cultures show specific challenges and multicultural interactions, the authors believe the strategies and specific skills can be transferred to any international or intercultural setting.

The practical information presented in the book reflects the authors research and extensive experience in international business management training and consulting. The guide is designed for executives, business students, technical and marketing personnel with the intent to enhance their multicultural business and management skills.

Ensminger, M.E. and Ensminger, A. China-the impossible dream. (1973). Hardcover. 305 pages.

Publisher: Agriservices Foundation
Clovis, CA

The authors attempt to evaluate China's agriculture and peasants (China's farmers) through an in-depth study describing one-fifth of the world's population struggle for food, clothing and shelter. The texts combines facts, figures and tables on such issues as the transformation of China's countryside, the outer territories, communes, education, research and industry, economics and politics. Ensminger and Ensminger strive to make the information as meaningful as possible to North American readers by drawing comparisons between China and the United States and augmenting their work with illustrations and material secured from both U.S. Government documents and those of the People's Republic of China.

Fitzhugh, H. A. & Bradford, G. E. (eds.) Hair Sheep of Western Africa and the Americas: A Genetic Resource for the Tropics (1983). Paperback. 311 pages. ISBN-0-86531-370-9

Publisher: Westview Press
5500 Central Avenue
Boulder, CO 80301

This publication focuses on hair sheep emphasizing data from tropical, developing countries in western Africa and the Americas. It incorporates a detailed evaluation of hair sheep, their

performance traits, production systems and, most importantly, the contributions of developing country specialists with firsthand working knowledge of hair sheep.

The evaluation concentrated on hair sheep populations in the Western Hemisphere and western Africa. In addition to observing sheep production in 15 countries, government, university sheep specialists and private flock owners have contributed their data to the book.

The book is organized in four sections. The first provides a general description of hair sheep and current production systems, summarizes performance statistics, and makes suggestions for improved breeding, management, and research. The second through fourth sections contain the contributed chapters, which are organized by geographical regions: Middle America-South America, Western Africa, and North America, respectively.

Folks, W. R. Jr., & Aggarwal, R. International Dimensions of Financial Management. (1988). Paperback, 229 pages. ISBN 0-534-87194-1

Publisher: Wadsworth Publishing Company
Belmont, CA 94002

Part of the International Dimensions Series, this book answers the demand for increased knowledge in the arena of international business. The text offers a first introduction to the international dimensions of corporate finance. It is designed for use by the educator who is concerned with preparing financial managers for a world of economic and financial interdependence, and for students who will confront the challenges of such a world directly.

The topics included include: 1) the foreign exchange market, 2) the international monetary system and exchange rate forecasting, 3) currency uncertainty and financial decisions, 4) exchange risk management, 5) the global financial system, 6) global funding strategy and capital structure, 7) global mobilization of financial resources and finally, 8) international investment decisions.

Garland, J., Farmer, R. N. & Taylor, M. International Dimensions of Business Policy and Strategy (2nd edition). (1986). Paperback. 235 pages. ISBN 0-534-91942-1

Publisher: PWS-KENT Publishing Company
20 Park Plaza
Boston, MA 02116

First in the International Dimensions Series, this book answers the demand for increased knowledge in the arena of international business. It is crucial for students of business policy, in evaluating corporate strategy, to understand the global competitive and economic factors that

shape the environment in which firms operate. Throughout the book, the authors examine the basic strategic patterns associated with the internationalization of business. The chapters cover concepts such as economic integration from a macroeconomic perspective, the differences encountered in a global vs. domestic strategy, the implementation of those strategies, managerial critical decision making, technology transfer across national boundaries, structural options of the globally oriented firm and in-depth discussion of legitimacy demands and ethical concerns.

Grosse, R. & Kujawa, D. International Business: Theory and Managerial Applications (2nd edition). (1992). Hardcover. 733 pages. ISBN 0-256-08114-X

Publisher: Richard D. Irwin, Inc.
1818 Ridge Road
Homewood, IL 60430

The authors present a panorama of the most important activities in international business and to offer a framework for thinking about them from the perspective of the company manager. Although much of what is used in marketing, finance, strategy, and other business functional areas can be applied to international business phenomena, analysts of international business have developed some perspective that are uniquely international. These analyses are presented with a unifying theme of "competitive advantage" view of business strategy. Specific emphasis has been given to environmental (as opposed to company-specific) factors such as government policies and economic conditions in different countries.

The text was designed for a survey course in international business at the undergraduate or MBA level. It is a comprehensive text, organized into five sections. The sections include: scope of the field of international business and theory of competitive advantages, the "environment" that faces decision makers in international business, in-depth coverage of functional areas of business administration, international business activities and government policies. The fourth section looks at international business activities and government policies in three major kinds of countries: the industrial nations, the less developed countries, and the formerly-communist countries. The last section presents detailed studies of international business in four industries--oil, banking, autos and telecommunications. The book concludes with projections about possible directions for "international contractors of the 21st century."

Harris, P. R. & Moran, R. T. Managing Cultural Differences: High Performance Strategies for a New World of Business (3rd Edition). (1991). Hardcover. 639 pages. ISBN 0-87201-456-8

Publisher: Gulf Publishing Company
P. O. Box 2608
Houston, TX 77252-2608

This book is the third edition of the foundation book in the Managing Cultural Differences series teaching that through understanding cultural differences, it is possible to facilitate the process of accomplishing goals and objectives. This edition reflects the rise of the Commonwealth of Independent States, the consolidation of the European Economic Community, the booming Asian/Pacific rim markets as well as taking into account the need for the "global manager" here in the U.S.

The authors fill the book with ideas and insights as to how the "global manager " exercises leadership at home or abroad, in private or public sector, in profit-making or non-profit organizations. The reader will find a balance of theory and models, research and practical guidelines. The final unit embodies management resources for global professionals with instruments for data-gathering and analysis.

Jordan, T.G., Rowntree, L. & Hsu, M. The Human Mosaic: A Thematic Introduction to Cultural Geography (1990). Hardcover. 474 pages. ISBN 0-06-043460-0 (teacher's edition), ISBN 0-06-043481-3 (student's edition)

Publisher: Harper Collins Publishers
10 East 53d Street
New York, NY 10022

This text is intended as a college-level introduction to theoretical and applied cultural geography. The authors divide the content along five themes: culture region, cultural diffusion, cultural ecology, cultural integration, and cultural landscape. Diverse material and examples from various cultures and assorted time periods explain and illustrate the themes and topics from a local, global current and historical perspective.

The concluding chapter shows explicitly how cultural geography can be applied to the different social and environmental problems worldwide.

Kruzel, S. L. & Reynolds, F. International Studies: Import/Export Procedures. (1992). Paperback. 233 pages. ISBN 0-538-61421-8

Publisher: South-Western Publishing Co.
Cincinnati, OH

This text was written to encourage the integration of basic international trade concepts within the school curriculum. The volume is designed to be used in business education, marketing education or social studies. The combination text/workbook format exposes students to a broad overview of trade concepts and introduce them to differences around the world. The student-friendly approach challenges students to be aware of the need to remain current in global affairs while sparking their interest to do so.

McDowell, R. E. Dairying with Improved Breeds in Warm Climates. (1994). Paperback. 189 pages. ISBN 1-880762-05-6

Publisher: Kinnic Publishers
Kinnic Kinnic Agri-sultants, Inc.
P. O. Box 37763
Raleigh, NC 27627-7763

Warm climate zones (North-South 30 degrees latitude belt) have experienced a migration of people from rural areas to urban centers. The inadequate supply of milk is only one of the problems that has arisen with this migration. To support the need for more milk, many countries are importing improved dairy breeds. The exporting countries have failed in follow ups on their cattle in the new environments and many of the importing countries lack the necessary experienced personnel.

The major objective of this book is to put forth suggestions which can serve both the major needs for decision making for commercial dairy operators and to assist government policy makers in developing strategies on the use of imported dairy breeds.

The writings focus on dispelling two myths: the concept that green grass signifies good feeding value and two, perception that exchanging local types of cattle with new breeds or genotypes is all that is required to increase the output of milk from the grazing lands. The emphasis in the second section of the book concerns the need for consideration of minimum levels of animal biological efficiency as it relates to dairy breed cattle. The author demonstrates that biological and economic efficiency are highly related in dairy herd operations.

McDowell, R. E. A Partnership for Humans and Animals. (1991). Paperback. 89 pages. ISBN 1-880762-03-X

Publisher: Kinnic Publishers
Kinnic Kinnic Agri-sultants, Inc.
P. O. Box 37763
Raleigh, NC 27627-7763

In this book the roles of animals are examined as a global issue since animal life, plant life and human life exist in a necessary partnership. The objective of this book is to draw more attention to the already existing close partnership between humans and animals throughout the world and demonstrate means for strengthening this partnership. Certain roles of animals are inducements for farmers to bring about the needed large increases in food crop production to ensure meeting human food needs for 2000 and later. Animal agriculture is also the key to development of appropriate measures for reduction of erosion, improve soil and water conservation and sustainability of crop production through providing incentives to farmers.

McDowell, R. E. Improvement of Livestock Production in Warm Climates (1972). Hardcover. 689 pages. ISBN: 0-7167-0825-6

Publisher: W.H. Freeman and Company
San Francisco, CA

This book intends to serve primarily the needs of students in American universities who are interested in gaining insight into the variety of problems associated with livestock production in the warm climates. American nationals serving in programs for livestock development abroad, and foreign national contemplating development of area or country programs for improvement of livestock production will also find its contents useful.

The overall purpose of this book is to draw attention to some of the factors that reduce the efficiency of livestock production in "warm climates" regions of the world; regions lying between latitudes 30° North and 30° South. The book discusses various considerations that could improve livestock production in the traditionally lower average performance areas of warm climates.

In spite of widespread belief to the contrary, the authors contend that research and experiences of livestock production in cooler latitudes may be applied on a broader scale with a high probability of success.

Moran, R.T., Braaten, D. O., & Walsh, J. E. Jr., (Eds.) International Business Case Studies for the Multicultural Marketplace (1994). Paperback. 415 pages.

Publisher: Gulf Publishing Company
P.O. Box 2608
Houston, Texas 77252-2608

This book is one of a series in managing cultural differences. It is designed to stimulate and support the effort of globalization in all of its dimensions. In this volume the editors use case studies as a teaching tool to address questions of people, cultures, organizations and strategy in a rapidly changing, highly interdependent community.

The book is designed for executives, managers and graduate business students in an effort to help understand the complexities of the changing global environment. The thirty-six cases are all interactive illustrating the cultural diversity of people, product and issues as they come together--and can be taught cross-functionally. All are actual business experiences. The editors included a geographical balance in the selection of countries represented in the case studies.

The thirty-six cases are divided into seven sections: Global Strategic Alliances, Globalization, International Business Negotiations, International Marketing, International Management, Managing a Culturally Diverse Work Force and International Service Excellence.

Moran, R.T., Braaten, D.O., & Walsh, J.E. Jr., (Eds.) International Business Case Studies for the Multicultural Marketplace: Instructor's Guide (1994). Paperback. 133 pages.
ISBN 0-88415-194-8

Publisher: Gulf Publishing Company
P. O. Box 2608
Houston, TX 77252-2608

The workbook is designed to compliment the case study approach used in the basic text International Business Case Studies. The workbook facilitates the exploration of cross-cultural issues and problems that exist when people from different cultures meet in the international marketplace.

The chapters parallel the structure of the topic areas in the case book. Each chapter of the guide is designed to help present key aspects of the case study and promote class discussion.

Moran, R. T., Harris, P. R. & Stripp, W. G. Developing the Global Organization: Strategies for Human Resource Professionals (1993). Hardcover. 318 pages. ISBN 0-88415-071-2

Publisher: Gulf Publishing Company
P.O. Box 2608
Houston, TX 77252-2608

This additional text to the series Managing Cultural Differences combines a theoretical foundation with practical information and suggestions enabling the creation of a high performance workforce competent in any international, intercultural environment.

Chapters focus on every level of corporate activity, from overall strategy to organizational culture to individual roles. The ideas for discussion groups, role playing, films, lectures, workshops, case studies, etc. give more than adequate step by step strategies for transforming the manager into the global manager

Moran, R.T. & Stripp, W.G. Dynamics of Successful International Business Negotiations (1991). Hardcover. 235 pages. ISBN 0-87201-196-8

Publisher: Gulf Publishing Company
P. O. Box 2608
Houston, TX 77252-2608

The survival of American business requires increased involvement in world trade and investment. To meet that challenge Americans must understand what "going global" means and how it is done. This book focuses on what globalization entails and provides an overview for developing global strategy and opportunities through effective cross-cultural negotiations.

The authors choose a behavioral approach to understanding negotiation. Their assumption is that behavioral differences in negotiators stems from attitudes, values, beliefs and needs based in a cultural context. A greater understanding of one's own culture as well as other's gives a global manager the tools to make tentative predictions about expected behavior. The book develops strategies and techniques for understanding and incorporating cultural variables influencing a negotiator's decision making.

Cultural profiles of specific countries in Asia, Europe, Africa and South America are provided, as well as demonstrations of how the negotiating framework can be applied to them.

Moran and Stripp intend for the book to be of practical use to professional business negotiators, businesspeople who would like to globalize but are unsure how to proceed, students of international business, and academics.

North Central Region RICOP Curricular Committee. Educating for a Global Perspective: International Agricultural Curricula for 2005. (1989). Paperback. 105 pages.

Publisher: University of Wisconsin-Madison
Madison, Wisconsin

Nineteen professors pool their knowledge and experience to discuss how to fully integrate an international dimension into agricultural curriculum. Topics include the rationale for international agricultural education, careers in international agriculture, alternative curricular patterns, approaches adopted by various institutions, exchange programs, principles and guidelines that should undergird any international agenda and agency and organizational resources for helping an institution internationalize curriculum.

Phatak, A. V. International Dimensions of Management (3rd edition). (1992). Paperback. 235 pages. ISBN: 0-534-92812-9

Publisher: Wadsworth Publishing Company
Belmont, CA 94002

Part of the International Dimensions Series, this book answers the demand for increased knowledge in the arena of international business. We live in an interdependent world characterized by intertwined global economies. The basic premise of this book is that the management of a company having international operations differ in many important ways from that of a company whose business horizons are confined to just one country. The material in this book is focused on the managerial issues confronting senior executives as they attempt to plan, organize, staff, and control the global operations of a multinational company. Phatak offers an integrated and comprehensive discussion of management in multinational companies and in an international context.

Pickert, S. M. Preparing for a Global Community: Achieving an International Perspective in Higher Education. (1992). ASHE-ERIC Higher Education Report No. 2. Washington, D.C., Paperback. 87 pages. ISBN 1-878380-15-X

Publisher: The George Washington University
One Dupont Circle, Suite 630
Washington, DC 20036-1183

People from educators to policy makers are demanding that our educational programs reflect a world increasingly integrated by economics, communications, transportation and politics. The challenge for our graduates is to be literate in other cultural histories, languages and institutions.

The American educational institution must enable a broad understanding of world events by offering the perspectives of other cultures. This requires graduates who are competent not only to function professionally in an international environment, but who are quipped to make personal and public-policy decisions as citizens of an international society.

The report describes the various ways that American higher education is responding to the challenge. Highlighted are ways that administrators are devising new structures for coordinating increased international activities, incorporating international education into core curricula, analyzing study abroad, and the administration of international education.

Pond, W. G. & Maner, J. H. Swine Production in Temperate and Tropical Environments (1974). Hardcover. 632 pages. ISBN 1-878380-15-X

Publisher: W. H. Freeman and Company
San Francisco

The authors' purpose is to provide a technical basis upon which successful production of pork can be accomplished under both temperate and tropical conditions. Contrary to the opinions of many economists, demographers and agriculturists, the authors believe the importance of pork as a source of nutrients for people will increase with the population explosion.

Pork, if produced economically, can be an invaluable source of protein, vitamins, minerals, and energy for large segments of the human population, especially in developing countries. A high proportion of these people live in tropical and semitropical parts of the world. The pig is well adapted to tropical environments so that improved breeds of pigs from temperate zones can be introduced into the tropics without delay in productivity.

Utilization of modern technological knowledge in the major pork-producing areas of the world and adaptation of this knowledge in areas of less developed technology offer a major challenge. The objectives of this text are to illustrate the scope of significance of the pig to the welfare of man and to provide the background information necessary for building the technical knowledge of swine production for application in all parts of the world.

Porter, V. Cattle: A Handbook to the Breeds of the World (1991). Hardcover. 363 pages.
ISBN 0-8160-2640-8

Publisher: Facts on File, Inc.
460 Park Avenue South
New York, NY 10016

This book describes in detail nearly every variety and breed of cattle in the world, both domesticated and wild. It includes most of the newest breeds and many important extinct breeds. The early chapters trace the domestication of cattle and show how different types and breeds gradually evolved, while later chapters study wild species of the cattle family and some of their unusual interesting domesticants, especially in Asia. There is also a major section devoted to the world's water buffalo, which are of such great economic importance in many parts of Asia and are increasing rapidly in Australia and Latin America; the section gives a country-by-country guide. There is a chapter describing how tropical cattle have adapted to the environmental challenges they face.

The breed entries are gathered in geographical sections according to the breed's country of origin. Each section has an introduction which sets the region's cattle in a cultural as well as an agricultural context. The animals' physical characteristics are described along with their main roles historically and currently and their special characteristics.

Punnett, B.J. Experiencing International Business and Management. (2nd edition). (1994).
Paperback. 321 pages. ISBN 0-534-21462-2

Publisher: International Thomson Publishing
a division of Wadsworth, Inc.
Belmont, CA 94002

Punnett integrates a belief that all students of the nineties must understand business in an international environment with the belief that experiential learning is crucial to a student's readiness to work in that international environment. The purpose of this book is to give students an opportunity to address international decisions in a simulated real-life setting. The exercises and projects included here encompass many of the major management processes in international management and include decisions that relate to the various business functions.

The book is divided into several parts. Part 1 contains a series of exercises that are designed primarily for in-class use. Part 2 is made up of projects designed primarily for work outside of class. Part 3 consists of mini-cases and regional/country profiles. The projects that use the profiles involve outside research and decision making.

Punnett, B. J. & Ricks, D. A. International Business (1992). Hardcover. 534 pages. ISBN 0-534-92247-3

Publisher: PWS-KENT Publishing Company
20 Park Plaza
Boston, MA

The authors use a lively, simplified style of presentation without sacrificing substance in their presentation of global business and international interactions. The material ranges from information of concern to small manufacturers that purchase foreign materials and employs immigrant workers, to the large global organization that views the world as both its market and its source of supply. The book is written to explore the issues faced by such organizations in this global environment.

This text offers a survey of the major issues associated with doing business in the international arena rather than specialized areas.

Ricks, D. A. Blunders in International Business (1993). Paperback. 167 pages. ISBN 1-55786-414-4

Publisher: Blackwell Publishers
238 Main Street
Cambridge, Massachusetts 02142

Ricks has discovered that business blunders make for memorable, enjoyable and useful teaching tools. Given that international business is fraught with unexpected events, certain surprises, both favorable and unfavorable, are bound to occur. Ricks, however, calls a mistake a "blunder" only if a company makes a costly or embarrassing decision that was foreseeable and avoidable. Many mistakes have been made because managers have failed to remember that consumers differ from country to country.

The role of culture and importance of clear communication is interwoven throughout the book. Themes include production, marketing, translation, management and strategy on foreign soil. Summaries are offered following each chapter as well as a final chapter entitled, "Lessons Learned."

Sheth, J. & Eshghi, A. Global Financial Perspectives. (1989). Paperback. 171 pages. ISBN 0-538-80047-X

Publisher: South-Western Publishing Company
Cincinnati, OH

To be successful in today's sophisticated business climate, one needs to have an in-depth understanding of corporate finance in the international context. International finance affects companies not engaged in international business because global financial markets have an impact on their cost of capital, both short term and long term, as well as their offshore procurement of parts, materials and products.

This volume, one of a series by the authors on global business perspectives, is designed to be a supplement to a textbook in the required finance courses at the MBA level, as well as at the advanced undergraduate level. The authors detail the complexity of the international environment for financial decisions and practices. They provide a strategic and managerial perspective on international finance through readings that are practical and contain good case histories as well as conceptual frameworks. Finally, the text includes an annotated bibliography designed to encourage students in further exploration.

Sheth, J. & Eshghi, G. Global Human Resources Perspectives. (1989). Paperback. 173 pages. ISBN 0-538-80045-3

Publisher: South-Western Publishing Company
Cincinnati, OH

Increased global independence creates an increase in the need for understanding and managing human resources issues in a global environment. This text, one of a series on international business perspectives, is designed to supplement the text in required MBA courses on the management of human resources.

The authors explore the complexity of cross-cultural differences with respect to employee selection, training, reward systems and career advancement. They provide a managerial and strategic perspective on human resource issues. Included in the volume is a discussion on the differences and similarities in human resource practices among the U.S., European, and Japanese multinationals. It also focuses on the trade-offs in human resource practices that a global organization is likely to make.

Sheth, J. & Eshghi, G. Global Operations Perspectives. (1989). Paperback. 147 pages. ISBN 0-538-80484-X

Publisher: South-Western Publishing Company
Cincinnati: OH

Today, manufacturing and business operations are almost universally international. It is critical, therefore, to understand the complexity of international manufacturing and business operations.

This volume, one in a series on global business perspectives, is designed to supplement standard textbooks on production and business operations for required courses in the MBA level, as well as at the advanced undergraduate level.

This text describes the forces which are encouraging global manufacturing, provides a strategic and managerial perspective to manufacturing, and investigates different strategies of global manufacturing such as exports, licenses, joint ventures, subsidiary operations, and fully integrated worldwide operations.

Sheth, J. & Eshghi, G. Global Strategic Management Perspectives. (1989). Paperback. 174 pages. ISBN 0-538-80046-1

Publisher: South-Western Publishing Company
Cincinnati: OH

In today's economy, it is not sufficient to develop business policy and strategy without consciously examining the international context in which business operates. This volume, one in a series on global business perspectives, is designed to supplement standard textbooks on business policy at the graduate and undergraduate level. The authors discuss how complex is our global environment, especially as it relates to global competition, corporate strategy, and corporate structure issues. They provide a strategic and managerial perspective on business policy. Finally, this volume investigates whether domestic business strategy and structure can be extended in the international context and what changes, if any, need to be made.

Sheth, J. & Eshghi, G. Global Organizational Theory Perspectives. (1990). Paperback. 216 pages. ISBN 0-538-81023-8

Publisher: South-Western Publishing Company
Cincinnati, OH

Doing business in the global context has forced organizations to redesign themselves for better efficiency and effectiveness. This volume, one in a series of global business perspectives, is

designed to be a supplement to a standard text in required MBA courses on organizations theory and management. It can also be used at the undergraduate level. It is intended to fulfill the accreditation requirements for internationalizing the business curriculum. The authors explore the convergence between comparative management literature and theoretical literature in organizational management. It identifies cross-cultural obstacles an organization is likely to encounter as well as discusses various types of organizational structures and their appropriateness in different global settings.

Simons, G. F., Vásquez C., & Harris, P. R. Transcultural Leadership: Empowering the Diverse Workforce (1993). Hardcover. 260 pages. ISBN 0-87201-299-9

Publisher: Gulf Publishing Company
P. O. Box 2608
Houston, TX 77252-2608

At issue in this book is the emerging global reality: culturally diverse people of both genders in the workplace. This manual, part of the Multicultural management series, teaches managers how to focus on workplace diversity instead of concepts of "majority" and "minority." Practical guidance is given to managers to offer all personnel equal opportunities, develop all the human potential at their disposal and lead and strengthen the human resources of an organization. The authors call for leaders in business and industry to take the lead in this essential shift towards intergroup relations and civil justice.

Spradley, J. P., McCurdy, D. W. Conformity and Conflict: Readings in Cultural Anthropology (7th edition). (1990). Paperback. 471 pages. ISBN 0-673-52073-0

Publisher: Harper Collins Publishers
10 East 53d Street
New York, NY 10022

As a result of their intensive cross-cultural experience, anthropologists have developed a unique perspective on the nature and the significance of culture. Culture, as defined by the author, is the system of knowledge by which people design their own actions and interpret the behavior of others. They balance the coverage of cultures between non-Western and Western (including North American) in an effort to allow students to make their own cultural comparisons and see the relation between anthropology and their lives.

Included in the text is a discussion of some of the professional applications of anthropology. The authors posit that anthropology is a discipline that contains several tools applicable to everyday life. The concept of culture, the ethnographic approach to fieldwork, a cross-cultural

perspective, a holistic view of human behavior and the qualitative research design are incorporated into the twin themes of conformity and conflict.

Terpstra, V. International Dimensions of Marketing (3rd edition). (1993). Paperback, 202 pages. ISBN 0-534-93287-8

Publisher: Wadsworth, Inc.
Belmont, CA 94002

Part of the International Dimensions Series, this text answers the demand for increased knowledge in the arena of international business. Interdependence is especially important for American business. This introduction to international marketing is a helpful guide in a world market where competition is getting more intense, and even in the domestic market, foreign firms are gaining significant market shares in many sectors of the economy. Particular attention is given to international strategies of market analysis, development, pricing, distribution, and promotion of a product or service. The authors also include chapters concerning the environment of international marketing and international marketing research.

Terpstra, V. & David, K. The Cultural Environment of International Business (3rd edition). (1991). Paperback. 251 pages. ISBN 0-538-80003-8

Publisher: South-western Publishing Co.
Cincinnati, OH

Terpstra and David combine forces as a business school professor and professor of cultural and business anthropology collaborate in presenting a text to aid in understanding the complexities of operating in foreign environments. Their focus is environmental: how should organizations orient themselves in order to respond to issues that stem from the differing logics and objectives of foreign organizations, associates, or regulators.

The authors do not assume any background in either anthropology or international business administration. The overall structure of the book is intended to provide an introduction to cultural anthropology adapted for business use.

Wortman, S. & Cummings, R. W. Jr. To Feed This World: The Challenge and the Strategy (1978). Paperback. 429 pages. ISBN 0-8018-2136-3 (hardcover), ISBN 0-8018-2137-1 (paperback)

Publisher: The Johns Hopkins University Press
Baltimore, Maryland 21218

The authors acknowledge that increased food production is only a partial solution to the critical nature of the world food-poverty-population situation. However, progress in the agricultural sector is a proactive response to the urgent demands.

Wortman and Cummings are clear in what they hope to accomplish. First, for authorities of the developing countries and those who assist them, they seek to point out the approaches to rapid agricultural development that seem most promising in light of recent experience, the new resources that can be exploited, and some pitfalls that can be avoided.

Second, accelerated agricultural development involves a process of economic participation, frequently quite threatening to the interests of certain powerful minorities or the nation. The authors demonstrate that economic and social justice, as well as prosperity, is in the long-run interest of most, if not all, elements of society.

To the colleagues in the biological sciences, in economics and in other disciplines, they suggest new opportunities to make professional contributions more effective.

Usunier, J. C. International Marketing: A Cultural Approach. (1993). Paperback. 494 pages. ISBN 0-13-194580-7

Publisher: Prentice Hall Inc.
Englewood Cliffs, NJ 07632

In this text are combined two trends in management literature. One deals with marketing and market research; the other deals with culture and organizations. The book is intended for both graduate business students and practitioners. It attempts to provide readers with a framework for capitalizing on their own personal experiences in the field of international marketing, with particular emphasis on the development of behavioral skills in intercultural business relationships.

The book is a training instrument for international marketing. It is assumed that the reader understands basic marketing concepts, but it is not a classical text of consumer marketing. Adopting a cultural approach develops both a cross-cultural view that compares national marketing systems with an intercultural view, centered on the study of interaction between business people and those they deal with from a different national cultural background.

Wolf, J. S. Export Profits: A Guide for Small Business. (1992). Paperback. 283 pages. ISBN 0-936894-18-0

Publisher: Upstart Publishing Company, Inc.
12 Portland Street
Dover, New Hampshire 03820

This guide was written to encourage and help small and mid-size American companies develop export sales programs. The text covers such topics as the first steps to identify a foreign market, create an action plan for entering and developing a foreign market, how to find and select a freight forwarder, as well as the various ways to deal with payment. The author recommends contacts and sources of information throughout the book.