PERCEPTIONS REGARDING THE INFUSION OF A GLOBAL PERSPECTIVE INTO THE CURRICULUM AS IDENTIFIED BY THE FACULTY OF THE COLLEGE OF AGRICULTURE AT IOWA STATE UNIVERSITY

Don R. King, Assistant Professor and Assistant Dean
School of Education & Graduate Studies
Chadron State College

Robert A. Martin, Professor
Dept. of Agricultural Education & Studies
Iowa State University

Abstract

Recently, many universities and colleges have been examining the international dimensions of their programs and have concluded that the process of internationalization of the curriculum is a priority, as it has the potential to bring about substantial changes in student attitudes regarding cultures and societies around the world and to provide alternative methods for dealing with them. What research has been conducted in this area has primarily centered on the internationalization of the entire university curriculum, and not on one aspect of it. This study focused on the internationalization of the curriculum of the College of Agriculture at Iowa State University.

The major purposes of this study was to assess and analyze perceptions of College of Agriculture teaching faculty regarding the infusion of a global perspective into the agriculture curriculum, and to supply information on the performed activities, opinions, and concepts critical to adding a global perspective to the study of agriculture.

Introduction

Recently, many universities and colleges have been examining the international dimensions of their programs and have concluded that the process of internationalization of the curriculum is a priority (Henson & Noel, 1989, p. 17).

Many people believe that internationalization of the college curriculum has the potential to bring about substantial changes in student attitudes regarding cultures and societies around the world and to provide alternative methods for dealing with them. What research has been conducted in this area has primarily centered on the internationalization of the entire university curriculum, and not on one aspect of it. A recent study focused on the internationalization of the curriculum of the College of Agriculture at Iowa State University.

For the purposes of this study, "internationalization" of the curriculum was defined as the incorporation of international dimensions, content and considerations into the teaching, research, extension and/or public service functions of the college to enhance their relevance in an interdependent world (Henson & Noel, 1989, p. 17).

Purpose of the Study

The major purpose of this study was to assess and analyze perceptions regarding the infusion of a global perspective into the curriculum as identified by the faculty of the College of Agriculture at Iowa State University. A secondary purpose was to determine those activities currently being used by teaching faculty to add a global perspective to the subject matter area of agriculture.
Of the 155 respondents, approximately 41% of the respondents (teaching faculty) indicated that 50% of their time was allocated to research, while only 24% indicated that 50% or more of their time was allocated to teaching (see Figure 2).

Of the 155 respondents, eighty-one (52.2%) indicated that they were using some activity to add a global perspective to their instruction. Fifty-four of the respondents (35%) had spent a total of one year or more in countries other than the United States, and approximately 102 of the respondents (66.3%) spoke one or more languages other than English (see Figure 3).

Eighty-eight (57%) of the respondents indicated that they had not published any professional journal articles which had an international focus.

The second objective of this study was "to identify the perceptions held by faculty members regarding internationalizing the agriculture curriculum." Respondents felt strongly that: (1) educators can enhance students development by helping them recognize the global nature of issues; (2) faculty should encourage students to appreciate their role as world citizens; and (3) the College of Agriculture curricula should provide students with an international agriculture base of knowledge. However, after examination of those student activities being used to add a global perspective to the curriculum, the data indicate that very little in the way of internationalization of the curriculum is actually being done. Of those student activities being used by faculty to add a global perspective to the curriculum, discussion and/or debate were rated as the most used activities. Thus, one may conclude that some instructors are conducting a few activities that are having an impact on internationalizing their courses, but there is a greater number of courses where no efforts are being made to add a global perspective to the study of agriculture. Respondents did not agree with the following statements: (1) faculty attitude is a limiting factor in trying to integrate a global education into the agricultural curricula; (2) College of Agriculture should have a foreign language requirement; (3) faculty need to have professional international experiences; (4) College of Agriculture should encourage international internships for all undergraduate students; and (5) a sense of global responsibility

![Figure 1. Distribution of respondents by gender (N = 154).](image-url)
will not enable agricultural educators to act in ways that will contribute to solving world problems.

The third objective of this study was "to identify those concepts critical to adding a global perspective to the study of agriculture in the College of Agriculture at Iowa State University." Respondents felt that environmental management and sustainable agricultural practices were the most important agricultural concepts which should be taught from a global perspective. The fourth objective of this study was "to compare the data based on the demographic characteristics of the population."

A positive correlation was found between the length of time respondents had spent outside of the United States and their level of agreement to A perceptions regarding internationalization of the curriculum." In other words, the greater the amount of time spent abroad by a respondent, the higher was their overall level of agreement placed on internationalization perceptions by that respondent.

A positive correlation was also found between the number of languages that a respondent spoke and their level of agreement as to A perceptions regarding internationalization of the curriculum." The more languages a respondent spoke, the higher was their overall level of agreement with perception statements. Thus, it appears that those faculty members who have had international experiences and speak a foreign language were more supportive of internationalizing the agricultural curriculum.

A positive correlation was found between the number of languages a respondent spoke and the level of importance they placed on the selected A concepts to be taught from a global perspective." The more languages spoken by a respondent, the higher the level of importance they placed on the concepts they felt should be taught from a global perspective.”
It should be noted that white respondents and non-white respondents differed in levels of agreement placed on internationalization perceptions, and on the level of importance they placed on concepts to be taught from a global perspective. Also, non-United States born respondents tended to have a higher level of agreement with the internationalization perceptions than did respondents who were born in the United States.

The findings of this study concur with the internationalization literature. Both the literature and the findings from this study imply that individuals from foreign countries, as well as individuals who speak at least one foreign language tend to be more supportive of internationalizing the curriculum. Henson and Noel (1989:19) found that a faculty member's interest and understanding of the relevance of incorporating a global perspective into the curriculum are directly influenced by his or her having had a professional experience in another country.

The fifth objective of this study was to "identify activities or procedures currently being used by College of Agriculture teaching faculty which add a global perspective to the existing curriculum." "Classroom discussion and debate" was the primary student activity used by respondents to add a global perspective to their teaching and to student learning, while the "use of films, slides, and videos" and "use of guest speakers" both ranked second. "Use of student and/or one's own international experiences" (10%) as a student activity was rated low by respondents. It can be concluded that a narrow
range of student learning activities form the international infusion effort.

Of those topics used for class discussion and/or debate "world agricultural systems" was the general topic area most frequently discussed in courses to add a global perspective to the curriculum. "Technical subject matter as it applies to specific courses," and "selected political and economic topics" were the second and third most discussed topics, while "world education and extension systems" were the topics least discussed.

The first and second ranked reasons cited by respondents for adding a global perspective to their course work were "it is necessary for student development" and "it is pertinent to the course subject matter," while the least cited reason for adding a global perspective to their course work was "because of student interest."

With regard to opinions on the existing College of Agriculture curriculum, the most commonly cited general curriculum problem, as indicated by respondents, is that it is "too narrow and restrictive." Respondents generally felt that their departmental curriculum was too rigid and did not meet the needs students; there is no room for flexibility. The second most commonly cited general problem with the curriculum is that it needs "more student and faculty experiences." Respondents felt that both students and faculty need to be exposed to new and different learning experiences, in that existing learning activities are old, outdated, and stale. Respondents

Figure 4. Frequency distribution of the primary departmental curriculum problems impacting international agriculture as perceived by agriculture faculty at Iowa State University (N = 107).
indicated that there was too much emphasis on research and technical subject matter; students need to be able to apply what they have learned. The least common general curriculum problem cited by respondents was that there needs to be "more focus on research" (see Figure 4). Respondents seemed to be in general agreement that there needs to be a greater emphasis placed on student learning, as opposed to the traditional research orientation of many departments. In subsection two, respondents were asked to list those activities which they felt would improve the curriculum in their departments (see Figure 5).

The most commonly cited suggested activity for improving the curriculum was to "refocus and restructure it" (18.4%). The second most commonly cited activity for improving the curriculum was to "improve the teaching abilities of the faculty" (12%), while the third most commonly activity for improving the curriculum was to "internationalize the content and experiences" (10.4%). The least common suggested general activity for improving the curriculum was to "add foreign language requirement" (2.45%).

Again, faculty responses were in agreement with the current literature. Dorner (1989, p. 85),

![Figure 5. Frequency distribution of suggested activities that could be used to improve the curriculum within departments as perceived by agriculture faculty at Iowa State University (N = 92).]
claims that the American post-secondary educational system must adapt to develop new capacity in our people, because our current system is too parochial for today's world. The swiftness with which social change is occurring and the responsibilities of living in a global village suggest a re-examination of the purposes of education (Svengalis, 1989, p. 8). Faculty responses to "the level of commitment they believed their departments had established for the incorporation of internationally related content, materials, activities, and understandings into the teaching, research, and/or public service functions," indicated that fifty-six felt their departments had done so to a moderate degree, thirty-three indicated to a high degree, while only seven respondents felt their departments had done so to a very high degree.

With regard to faculty perceptions about whether the global studies problems, and/or opportunities will be "More Important," "Stay About the Same," or "Become Less Important" to the parts of society that rely on services and products from the University during the next ten to twenty years, 123 of the 155 respondents indicated "More Important," 18 indicated "Stay About the Same" and only one respondent indicated a "Become Less Important" response.

Fifty-six of the 155 respondents indicated a "no" response, while 51 indicated a "yes" response when asked whether their department had within the last three years, conducted any type of review, study, or planning activity directed toward evaluating, increasing or strengthening the international content and dimensions of departmental programs. Additionally, 32 respondents indicated "yes," 45 "no," and sixty respondents indicated "do not know" responses when questioned whether their departments had a mission statement document that included language specifically addressing a commitment to internationalization of the department.

When asked if they felt during the next ten to twenty years the level of international related programs and activities at Iowa State University will "Increase," "Decrease" or "Stay About the Same," 43 respondents indicated that it will "increase greatly," ninety-one indicated it will "increase slightly," and seven indicated it will "stay about the same," and two respondents "did not know." The general response or rationale most commonly cited for encouraging Iowa State University to establish, maintain, or develop a commitment to internationalization of its programs, course offerings and activities was that it is "necessary for the workability of faculty and college graduates" (29%). In other words, respondents felt that students and faculty members will need to develop those international attitudes and skills which will, therefore, enable them to compete and function more effectively at the international level. According to Henson and Noel (1989, p. 21), it is estimated that during the next ten years more than fifty percent of the agricultural college graduates will be employed by companies directly involved in international trade, or will work for commercial firms with significant indirect involvement in international trade. Schuh (1989, p. 8) claimed that our students will be at a serious disadvantage, as will our nation as a whole, if they are not properly prepared to compete in the international marketplace. The second most commonly cited rationale was "because the global community is becoming smaller and more interdependent" (23.7%), while the third most commonly cited rationale was that "the nature of the global community is calling for it" (20.4%). The least common rationale for encouraging Iowa State University to establish, maintain, or develop a commitment to internationalization of its programs, course offerings and activities was for "technology transfer and information exchange" (2.2%). Five respondents (5.4%) indicated that Iowa State University is "doing enough now," while one respondent indicated that "there is no rationale" for encouraging Iowa State University to establish, maintain, or develop a commitment to internationalization of its programs, course offerings, and activities.

### Summary of Major Findings

The major findings of the study were as follows:

1. It was the general perception of the respondents that the College of Agriculture curriculum at Iowa State University lacks a global perspective.

2. Internationalization of the curriculum was perceived to be important.
3. Approximately forty-one percent of the respondents (classified as "teaching faculty") identified 'research' as their primary workload area.

4. Twenty-four percent of the respondents (classified as "teaching faculty") identified 'teaching' as their primary workload area.

5. Some teaching faculty in the College of Agriculture are incorporating teaching strategies and student learning activities into their course work to add a global perspective to their instructional program.

6. Of the 155 respondents, eighty-one (52.2%) indicated that they were using some activity to add a global perspective to the learning process.

7. Fifty-four of the respondents (35%) have spent a total of one year or more in countries other than the United States.

8. Respondents indicated a need for the College of Agriculture curricula to provide students with an international agriculture knowledge-base.

9. Non-U.S. born individuals tended to be more supportive of internationalizing the curriculum.

10. Individuals who have had international experiences tended to be more supportive of internationalizing the curriculum.

11. Individuals who speak one or more foreign languages tended to be more supportive of internationalizing the curriculum.

12. Non-white respondents tended to be more supportive of internationalizing the curriculum.

13. Classroom discussion and debate were the primary student activities used to add a global perspective to the curriculum.

14. Respondents indicated that environmental management and sustainable agricultural practices were the most important agricultural concepts to be taught from a global perspective.

16. Respondents perceived that adding a global perspective to the curriculum was "necessary for student development" but there currently appears to be a lack of student interest.

Conclusions
A review of the findings of this study resulted in the following conclusions:

1. In general, the curricula in the College of Agriculture at Iowa State University does not have an global perspective.

2. College of Agriculture faculty members indicated that the need for students to gain a global perspective while at the university is an important issue.

3. Respondents in this study, in general, seemed to indicate that it may or may not be necessary to add a global perspective to all courses as long as students acquire this perspective while at the university.

4. A variety of teaching strategies (although narrowly focused) have utility in the process of adding a global perspective to the curriculum.

5. A small range of student learning activities form the international infusion effort.

6. Faculty members' international experiences have a significant impact on adding a global perspective to the teaching of technological agriculture.

Recommendations
Based on the findings and conclusions of the investigation, the following recommendations were made:

1. The results of this study should be shared with agricultural faculty and administrators within the College of Agriculture at Iowa State University, and with other individuals responsible for planning and providing direction for internationalizing the agricultural curriculum at other colleges and universities.
2. College of Agriculture faculty should give serious consideration to studying a foreign language and encouraging students at the collegiate level to do likewise.

3. College of Agriculture faculty should become involved in various international projects and experiences and utilize these experiences in teaching.

4. College of Agriculture at Iowa State University should foster and promote international experiences for faculty and students.

5. College of Agriculture faculty should be provided with in-service education programs and workshops to develop strategies to add a global perspective to the teaching of agriculture.

Recommendations for Further Research

The following recommendations for further research were suggested:

1. A more comprehensive study involving research and extension faculty should be conducted and the results compared with the findings of this study.

2. Similar studies should be conducted to determine the perceptions of agriculture industry employers, policy makers and government agency personnel, regarding internationalization of the agricultural curriculum at Iowa State University.

3. A similar study should be conducted to determine the perceptions of students of agriculture and graduates from the College of Agriculture at ISU, regarding internationalization of the curriculum at Iowa State University.

4. Research should be initiated to further expand and validate the procedures used in this study with other target groups at ISU and at other universities.

Concluding Remarks

One can conclude that faculty members serve as the key to successful internationalization of the curriculum. However, the process of internationalizing a curriculum rests on the development of a plan and a strategy. The development of this strategy should involve an appropriate participatory process which will promote ownership, as well as define the opportunities, benefits, and the current status of international efforts. The formulation of such an overall plan provides direction and reduces the possibility of fragmentation and loss of opportunities as well as resources.

The international dimension of agriculture needs to be fully integrated into course offerings, and additional experiences and programs (exchange, training, etc.) are needed to provide administration, faculty, and students with the skills and knowledge to have at least an awareness, and preferably, an understanding of the world in which we live and work.

List of References


