How Do Students of Agriculture Perceive Globalization and International Involvement?

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Abstract

The rising level of global integration has made it necessary for college students to have international experiences. If international experiences are an innovation to learn the skills necessary to be successful in our global society, then we must study students’ innovation-decision process to increase the likelihood of students participating in these programs. The innovation-decision process involves students making a decision based on initial knowledge of an innovation and then forming an attitude toward that innovation. Although much research has been conducted to determine the level of knowledge college students possess in the realm of international events and those effects on agriculture, little research has asked students their perceptions of globalization and international involvement. In this qualitative study, 122 students were asked to define globalization and define international involvement. Inductive analysis techniques were used to analyze data by identifying salient domains and finding themes that emerged across domains. Salient domains of the term globalization included a process of unification and worldwide business. Salient domains of the term international involvement included a degree of collaboration and government policy. The researchers concluded that more research is warranted concerning students’ decision to participate in international internships, experiences and study tours. The researchers also concluded that the inductive analysis technique is an effective method for faculty of other universities to determine the perceptions of students within their department.
Introduction

Globalization of the student’s learning experience is a critical component in preparing a global workforce for agribusinesses (Acker, 1999). However, Moore, Ingram and Dhital (1996) found that college of agriculture students were reasonably knowledgeable of international agriculture related to the USA, but less knowledgeable of world agricultural issues. “The rising level of global interdependency” (Tucker, Hart & Muehsam, 1993) has made it essential that colleges produce graduates with qualities that enable them to be successful working in a global society.

International programs are critical to the mission and responsibilities of a college of agriculture (Acker & Scanes, 1998). As agribusinesses become more involved in the international marketplace, there becomes a need for an experienced workforce educated on the subject of globalization and international involvement. Colleges of agricultural sciences have responded by requiring foreign language classes, encouraging study abroad programs, and internationalizing curriculum (Moore, Ingram & Dhital, 1996). However, Redmann, Schupp, and Richardson (1998) found that college students at a land grant university needed to be more knowledgeable of international agriculture, and that college faculty must develop curricula to meet this need. Lindner and Dooley (2002) conclude that agricultural education doctoral students’ knowledge of international agriculture was only average following graduation and that this may cause “negative consequences” (p. 65) for future undergraduate students interested in pursuing international experiences.

Although much research has been done concerning students’ knowledge of international agriculture, little research exists relating to students’ perception of globalization and international involvement. Wingenbach, et al. (2003) found no significant relationship between students’ knowledge of international agricultural issues and their attitudes toward them; that is students’ perceptions were independent of their knowledge. If this is true, it becomes crucial that we assess students’ perceptions of globalization and international involvement before we continue to develop curriculum to meet needs of agricultural students.

Participating in agricultural international experiences is typically considered a planned behavior, therefore deeming it critical to recognize how students’ perceptions and knowledge influence behavior execution. Ajzen (1985) theorizes that the extent to which behaviors are executed depends on the amount of perceived behavioral control one has over the behavior. Perceived behavioral control directly influences intentions and may directly affect behavior depending on the task difficulty. Tasks that require resources, skills and opportunities have a higher degree of difficulty, thus requiring a greater belief of control.

One way to describe a student’s decision to study in another country is to look at it from a diffusion of innovation perspective. Rogers (2003) explains the innovation-decision process as an individual going through a process of initial knowledge of an innovation, to forming an attitude and making a decision. Roger’s model of the innovation-decision process involves starting with the knowledge stage as an individual learns of the existence and gains understanding of the innovation. The individual then moves to the persuasion stage as the person forms a favorable or unfavorable perception toward change. Later, the
individual will move to the decision stage which leads to a choice of adopting or rejecting the innovation (p. 169).

In this case, the innovation to be adopted by students is participating in international experiences and study abroad programs. If students already have an adequate amount of existing knowledge of globalization and international involvement, it then becomes imperative to assess agricultural students’ perceptions to continue the innovation-decision process of students subscribing to international experiences and study abroad programs. The terms globalization and international involvement are commonly used in discussions concerning the world around us, but how do students perceive these two terms?

Purpose

In the University of Florida (UF) Strategic Plan (Young, 2002), internationalization of the campus and the curriculum was identified as one of the key areas of focus. This effort was designed to extend to undergraduate and graduate students as well as faculty. The College of Agricultural and Life Sciences (CALS) responded to this campus-wide initiative by naming a faculty member to lead these efforts, beginning an international minor and certificate program and expanding study abroad opportunities.

In an attempt to understand how agricultural experience may be related to interest in international learning programs and activities, a previous study was conducted (Place, Irani, & Friedel, 2004) among undergraduate and graduate students in UF’s College of Agricultural and Life Sciences (CALS). Results indicated that, in general, agricultural students have limited international backgrounds and experience with respect to international learning opportunities. Nevertheless, the level of interest in participating and willingness to travel to other regions of the world to engage in international activities was fairly high.

Based on the above, the purpose of this study was to further explore students’ perceptions of globalization and international involvement, specifically answering the question: How do undergraduate and graduate students in the College of Agricultural and Life Sciences (CALS) at the University of Florida define the terms globalization and international involvement?

Methods

To conduct this study, researchers developed an online Web form survey which was administered in the 2003 fall semester to a random sample (n = 800) of undergraduate students and graduate students from the College of Agricultural and Life Sciences (CALS). Within this survey, one component allowed students to openly define the terms “globalization” and “international involvement.” The two open ended questions were derived by the researchers from the university’s and the college’s stated objectives in promoting study abroad programs and their respective international initiatives, which consistently use both terms to describe these efforts. Based on a thorough review of the literature, the researchers were able to substantiate that these terms are also commonly used
by other academic organizations to describe and promote international programs and activities for students.

A total of 122 students responded to the qualitative questions, which became the sample for the present study. A qualitative design was most appropriate for this study, because the data collected was contextual with a high degree of complexity and from a small number of respondents. Data was therefore analyzed according to inductive analysis techniques (Hatch, 2002), which includes the following steps:

1. Identify frames of analysis.
2. Create domains based on semantic relationships within frames.
3. Identify salient domains.
4. Reread data to refine salient domains while looking for relationships.
5. Decide if domains are supported by the data.
6. Complete an analysis within domains.
7. Search for themes across domains.
8. Create a master outline expressing relationships within and among domains.
9. Select data excerpts to support elements of the outline.

(p. 162).

A frame of analysis is defined as the “level of specificity” (p. 163) in which the data will be analyzed; that is the degree of meaning derived from the data. Domains are defined as categories that include other interrelated categories, all of which are understood by people with the same cultural understanding (p. 165). Additionally, a theme is defined as a “broad element” (p. 173) that establishes connections across domains to link the data together.

A reflective journal including original data analysis, codes, semantic relationships, listing of all domains, and researcher thoughts and reflections were kept for verification and trustworthiness.

**Results**

Participants of the study were mostly female (68) with 52 being male. The students were of mixed academic levels of freshman (11), sophomores (15), juniors (18), seniors (32), masters level graduate students (22), and Ph.D. students (22), all of whom were enrolled in the College of Agricultural and Life Sciences (CALS). The students involved in the study had relatively high self-reported GPA’s as 64 holding a 3.5 or above and 33 students holding a GPA between 3.0 and 3.49. A total of 32 students were born outside of the United States and 38 could speak a second language fluently. Of all the participants of this study, 13 had grown up on a farm.

In this study, frames of analysis were simply characterized as definitions students provided when asked to define globalization and international involvement. The study identified salient and non-salient domains of the terms globalization and international involvement with varying degrees of salience.
Globalization

Salient domains that emerged from the students’ definitions of globalization included unification and worldwide business, but interestingly students perceived the word as a process or a verb. Globalization is in fact a noun (Globalization, 1997).

Within the domain of unification, multiple categories of data were found within each of the students’ definitions providing support that the term globalization being perceived as multidimensional. For example: *Globalization is the process by which our world is moving together in a sense that cultures are being merged. This includes an integration of everything from trading arenas to cultural characteristics such as food and language* (student code #31). See Table 1.

Table 1

**Globalization Semantic Relationships for Unification**

<table>
<thead>
<tr>
<th>Included Term</th>
<th>Semantic Relationship</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linking economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free trade markets</td>
<td>is a characteristic of</td>
<td>Unification</td>
</tr>
<tr>
<td>Interdependency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefiting</td>
<td></td>
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</tbody>
</table>

Many students defined globalization in the context of increasing communication and specifically noting how the increased communication has shaped our world. This student realized the importance of communication in the global society, “The trend towards a more international society, in aspects such as education, commerce, and culture. Communication is its most vital component” (141). Students frequently defined globalization in terms of the economy and free trade. A majority in this category noted the interdependence of countries depending on each other for resources as well as to benefit the economy. One student defined globalization as “Having efficient or stable economies throughout the entire world. Opening up all trade barriers to allow fair and open trade between all” (20). Globalization was commonly referred to as integration of markets, but also cultures. The integration of markets and cultures contribute to a global society as defined, “The integration of the world, economically, technologically, culturally, ideologically. ‘a smaller world’” (34). Students frequently referred to the worldwide community with easier accessibility to other cultures and countries, and living together in a global society, such as, “The world becoming one large community, with full trade and ease of travel between countries” (60). The majority of students perceived globalization as a positive term benefiting countries involved in globalization therefore bettering society. One student stated, “Taking account of the various ways in which countries are connected and can benefit from each others’ traditions of knowledge” (2).
Globalization was also defined within the domain of worldwide business with multiple categories included. See Table 2.

Table 2  

**Globalization Semantic Relationships for Worldwide Business**

<table>
<thead>
<tr>
<th>Included Term</th>
<th>Semantic Relationship</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linking economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>is a part of</td>
<td>Worldwide business</td>
</tr>
<tr>
<td>Free trade markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficient economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capitalistic forces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The term globalization seemed to revolve around the economy and business with the realization that the economic forces of capitalism are at play at an international level. In respect to the economy, students defined globalization as, “The linking of the economies of individual countries into a larger, more homogenous economic engine” (1). Students were aware of the scope of global markets and companies. This student realized, “Globalization is the broadening of markets and policies to an international rather than national level, including the development of multinational companies that are independent of countries” (98). It is interesting to note that globalization means the integration and interdependence of countries with other countries, but it also means large companies being independent of countries. The students were aware that the economy is enhanced by the ability to communicate with other countries and businesses faster than before to benefit of everyone. One student noted, “Communication and sharing worldwide to economically benefit a local community. Basically...Development” (55). The impact free trade has on businesses and national economies were evidence of globalization to the students. This student defines globalization as “Includes removal of tariffs, companies have global branches, moving production to wherever it is most efficient and cheapest” (24). Again, integration was a commonly used term in defining globalization with respect to worldwide business. Student 15 perceives globalization as, “The tendency toward a worldwide investment and the integration of national capital markets.”

It must be mentioned that some students had negative connotations when defining globalization. The term denationalization was used several times to describe the lowering of borders to allow free trade and mixing of cultures. One student elaborates, “Globalization is the process of denationalization of markets, politics and legal systems” (44). Within these negative definitions of globalization, there seemed to be a sense of exploitation of developing countries by large companies and large governments. “Large corporations overcoming the boundaries between nations in terms of trade yet often at the expense of the quality of life of the working class in developing countries” (student code #128). Students also perceived globalization as a negative exploitation of U.S. corporate monopolies pushing western values on the rest of the global society. Finally, cultural assimilation was evident among students negatively defining globalization, as opposed to respect and acceptance of cultural
differences. This student describes globalization as “The blending of cultures and economics to the extent that there is no longer a recognizable geographic or cultural distinction between groups” (121).

Determining themes across domains is a final and critical step in using inductive analysis. See Table 3.

Table 3
**Globalization Defined**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Domain</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Unification</td>
<td>Globalization</td>
</tr>
<tr>
<td>Linking economies</td>
<td>Worldwide Business</td>
<td></td>
</tr>
<tr>
<td>Free trade markets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Integration, communication, linking economies, and free trade markets are themes that were found within both the domains of unification and worldwide business. Although all four themes are different, they are easily related. It is the speed and quality of communication between different countries that has increased cultural, economical, and political unification. Or, has free trade markets and the linking of economies caused more communication leading to the integration of societies, and therefore globalization.

International Involvement

Salient domains that emerged from the definition international involvement included government policy and collaboration. Students typically perceived international involvement as a level of intensity or degree. International involvement was also perceived as multidimensional with several categories of data found within the domains. For example: *Getting involved in solving problems that affect other societies by doing voluntary work, sending humanitarian aid, peace keeping like in cases of hunger, catastrophes, wars, development, conflict resolution, and human rights* (student code #108). See Table 4.

Table 4
**International Involvement Semantic Relationships for Government Policy**

<table>
<thead>
<tr>
<th>Included Term</th>
<th>Semantic Relationship</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanitarian service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working together</td>
<td>is a part of</td>
<td>Government policy</td>
</tr>
<tr>
<td>Advancement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The term involvement was used by many students not realizing that they were defining a word with itself. Nevertheless, it was interesting to discover how they commonly referred to the term as an extent of involvement. This student writes, “*International involvement is a*
measure of participation in a certain matter or field at the international, global level.” (50). Countries contributing to humanitarian aid resonated throughout the data in various ways; often this was perceived as a commitment or responsibility. One student defines international involvement as, “Communities helping others, developed countries helping developing countries with financial aid, health assistance, food supply, etc (29). Students frequently associated international involvement with countries working together to solve a common problem or issue. These definitions typically asserted that international involvement includes two or more countries. This student describes international involvement as, “Various agencies and governments working together for one common goal” (115). This common goal was usually referred to as policy to help advance developing countries realizing there are benefits to giving aid to other countries. One student writes, “Participation from many countries to improve a local economy. Where everyone participating benefits. OR...where all nations come together to help improve the world for an easier everyday living” (55). The word influence was only used once; conversely, it became a salient domain indirectly as students defined international involvement as countries having an impact on each other. This student perceives international involvement as, “The proactive engagement between one or more countries (e.g. trade, humanitarian aid and development, war negotiations, etc.)” (142).

International involvement was also defined within the domain of collaboration with multiple categories included within this domain. See Table 5.

Table 5

<table>
<thead>
<tr>
<th>Included Term</th>
<th>Semantic Relationship</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign affairs</td>
<td>is a type of</td>
<td>Collaboration</td>
</tr>
<tr>
<td>Working together</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advancement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic improvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The implications of foreign affairs were evident in the data as students defined international involvement in the context of governments interacting with each other in the development of public policy. One student comments, “The involvement of organizations and governments in the affairs of other organizations and governments in other countries, including humanitarian aid, military action, trade, and commerce” (54). Again, the concept of making decisions together and putting effort towards a common goal was evident within the data. As defined by student 77, “Participation and collaboration in international projects and decision making in order to offer support, advice and understanding towards international issues that may or may not affect directly your own nation.” The collaboration of nations was regularly coupled with the advancement of other developing countries as a common goal or reason to work together. This student determines international involvement as, “All industrialized nations working together. Often times to help other nations who are not industrialized” (120). Collaborating was also found to benefit the economies of the countries involved by making decisions to increase the exchange of goods and technologies. Student 20 defines international involvement as “The gathering of all nations meeting to help make
decisions on different economic policies and to help others along with themselves to become more efficient” (20).

A non-salient domain of international involvement emerged in the context of study abroad programs and learning about culture. This student concurred, “It is an educational way to learn more about others cultures. It will tell you about characteristics of other countries such as music, food, religion, people, thoughts and feelings (1). There was no mention of education, learning, or study abroad programs as students defined the term globalization.

Only a couple of students perceived international involvement in negative undertones; much less than globalization. The theme within the negative remarks concern the exploitation of small countries by U.S. driven foreign policy. One student wrote, “International involvement is the mingling of affairs on an international basis. Creating alliances and enemies, just as children do at play in school, every action has a consequence and the smaller country is usually taken advantage of while the more do...” (39).

<table>
<thead>
<tr>
<th>Themes</th>
<th>Domain</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working together</td>
<td>Government policy</td>
<td>International Involvement</td>
</tr>
<tr>
<td>Advancement</td>
<td>Collaboration</td>
<td></td>
</tr>
</tbody>
</table>

Two themes emerged that extended across domains. The extent of working together for a common goal and helping other countries to advance their society were predominant themes in most of the student definitions. These themes are well related and are products of government policy and collaboration.

**Educational Importance, Implications, and Application**

To place this study in the state of affairs of the time, six months prior, the United States launched Operation Iraqi Freedom. At the time of the study the media was beginning to question the United States and United Nation’s ability to rebuild Iraq. The media was questioning reasons for going to war as no weapons of mass destruction were found. Did this impact the data? One would tend to believe that the data would be much more negative if this was the case. Wingenbach, et al. (2003) found that 44% of students in their study considered watching international news on television as their primary international experience. They further question if students connect media coverage with classroom discussions.

With that in mind, university faculty must help students learn the complex, interconnected, diverse, and ever-changing global society (Moore, Ingram & Dhital, 1996). University faculty must know students’ perceptions of concepts such as globalization and international involvement to complete the decision-making process and increase the likelihood for diffusion of the innovation. Although one cannot generalize from qualitative
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data, these findings may be transferable to other environments within colleges of agricultural and life sciences.

In this study, salient domains of globalization were determined to be the process of unification and the conducting of worldwide business. Themes that spread across both domains included the processes of integration, communication, linking economies, and opening free trade. The relationship between these four themes is apparent in that all contribute to a global society. There is also evidence that suggests students have negative perceptions of globalization. It is likely that these negative perceptions inhibit the innovative decision to participate in international experiences.

Within the negative perceptions of globalization, denationalization was frequently used. Why is this? The business phrase “to go global” has meant to participate in international markets. Is it possible that students commonly perceive globalization as an effect of businesses in worldwide markets and free trade? The researchers suggest that more research be conducted to discover why students have negative perceptions of globalization and why denationalization has started to become a synonym.

Domains that were salient of international involvement included government policy and collaboration. Themes that spread across both domains included the degree of working together to solve a common problem and the advancement of developing countries through the help of developed countries. It is easy to recognize how governments can work together for the advancement of developing countries. There were only a few negative suggestions of international involvement as perceived by students.

A non-salient domain of international involvement of interest to this study connects international involvement to learning and understanding cultures through study abroad programs and international experiences. Why does this relationship exist? More research is warranted to determine why international involvement is associated with multicultural education. Can international involvement be used in the context of student international experiences?

Neither globalization nor international involvement was defined with a salient domain of education, learning or participating in international experiences. Perhaps it is necessary to develop a word with international education implications that is best perceived by undergraduate and graduate students. This “buzz word” could then be used to better market international internships, experiences and study tours.

More research is necessary to recognize the role of agricultural education in shaping students’ perceptions concerning international experiences. Wingenbach, et al. (2003) believes that agricultural education’s role is limited without helping students understand how perceptions are formed. A possible solution to changing students’ perceptions regarding international experiences may include a virtual international experience (Boyd, Felton, & Dooley, 2004).
Students were mostly positive in defining the terms globalization and international involvement. If students have an adequate knowledge of how global events impact agriculture and if students have a positive attitude towards globalization and international involvement, what is restraining students from participating in international opportunities? Are students aware that opportunities for study abroad and international internships exist? What other factors come into play in a student’s decision to participate in an international experience? These questions may represent direction for further research in students’ innovation-decision making process to participate in international internships, experiences and study tours.

Based on the results of this study, the inductive analysis technique was deemed an effective method in analyzing contextual data with a high degree of complexity. It is suggested that an inductive analysis technique be considered for use by faculty in other universities who are interested in such questions as determining the perceptions of global terms used in the recruitment of students to participate in international programs.

Overall, this study provided insight into how students perceive the terms globalization and international involvement. It was found that many students have positive perceptions of these two terms, therefore are not believed to inhibit the innovation-decision process to participate in an agricultural international experience. However, since many students still do not participate in international experiences, this study poses more research questions needed to be answered concerning students’ decision processes to subscribe to international internships, experiences and study tours.

References


