

THE ATTITUDES OF EXTENSION FACULTY IN VIRGINIA TOWARDS GLOBALIZING EXTENSION PROGRAMS

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Abstract

Agricultural experts have argued that for the Cooperative Extension System to remain viable, they must address globalization issues through local Extension programs. The purpose of this study was to assess the attitudes of Virginia Cooperative Extension (VCE) faculty toward globalizing their programming efforts. The study also ascertained information related to VCE faculty's current involvement in globally-focused activities as well as barriers to globalizing programming efforts. The web-based survey instrument used for this study included four sections: 1) Employee Profile, 2) Involvement in International Activities, 3) Attitudes towards Global Issues, and 4) Perceived Barriers to Globalizing Extension Programs. The target audience for this study was all VCE faculty members (N = 332). Two hundred and six faculty members completed the on-line survey; 205 of the surveys were usable. This represents a return rate of 62%. The data revealed that 92 percent of the respondents were involved in international efforts within the past five years. The data also revealed an attitude mean score of 2.9 on a scale of one to four, with four being the most positive. Furthermore, the top two barriers to globalizing VCE programs, as identified by respondents, were "lack of financial support" and "not a programming priority".

Introduction

In February 2002, The Extension Committee on Organization and Policy (ECOP) released a report entitled *The Extension System: A Vision for the 21st Century*. This report lists the "Impact of Globalization" as one of the six major challenges currently facing the Extension System. ECOP contended that Extension must provide leadership in demonstrating the local implication and potential consequences of global interdependence.

The United States is more interdependent on other nations than ever before. Recent international agricultural trade statistics help to put the growing impact of globalization into perspective. Between 1991 and 2001, U.S. exports of agricultural products increased by 24%, while U.S. imports jumped 59% (FAS, 2002).

Over the past several years, many state Cooperative Extension Services have taken inventory of their engagement with international issues, including barriers (real and perceived) to active participation in globalizing programs and staff needs for effectively engaging diverse audiences. Furthermore, in 2002, Cooperative State Research, Extension, and Education Service (CSREES), USDA, launched the National Initiative to Internationalize Extension (NIIE), which will assist states and the national Extension System with global programming for domestic audiences.

Virginia Cooperative Extension (VCE) actively involves 4-H youth in international exchange programs. However, it has not engaged in a coherent and proactive effort to globalize all program areas (i.e., Agriculture, Family & Community Sciences, and 4-H Youth Development). For VCE to remain viable in the 21st century, agents, specialists and administrators must buy in to the relevance of globalization in local Extension programs. A positive attitude towards globalization and information-sharing with program participants is indicative of the necessary buy-in within the organization. Yet, no systematic documentation exists to establish such attitudes towards globalization among VCE agents, specialists, and administrators.

Purpose and Objectives

The purpose of this study was to assess the attitudes of VCE faculty toward globalizing their programming efforts. The specific research questions addressed in this study were:

- To what extent are Extension faculty engaged in globalizing their programming efforts?
- What are the attitudes of Extension faculty towards globalizing programming efforts?
- To what extent are the attitudes and behaviors related?
- What are the perceived barriers to globalizing Extension programming?

Theoretical Base

Extension faculty must incorporate a global dimension into their educational programs if VCE is to remain a viable organization. Extension leadership should seek to understand and influence attitudes of faculty, which will lead to desired behaviors related to globalizing VCE programs.

Attitude Definition

Numerous definitions of “attitudes” have emerged over the past several decades. For example, Allport (1954, p. 45) defines attitudes as “a mental and neutral state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual’s responses to all objects and situations with which it is related.” The definition used for this study is “The beliefs, feelings, and action tendencies of an individual or groups of individuals toward objects, ideas, and people. An action tendency refers to a disposition to respond in a certain way towards an object or person” (Hutt, et al, 1966, p. 401).

Attitude Formation

There are several theories regarding the formation of attitudes. Fishbein & Ajzen (1975) argue that processing information develops attitudes, and they arise from beliefs that people have toward the attitude object. Myers (1990) contends that most social scientists embrace the theory that attitudes are learned through socialization, conditioning and exposure. Socialization suggests that attitudes can be acquired from others via social learning. Conditioning refers to learning through the association process (Baron & Byrne, 1994). For example, a supervisor who regularly rewards those who perform a certain behavior can influence other employees’ attitudes toward that behavior. According to Bornstein (1989), direct experience can be obtained from exposure to an object. He contends that the more familiar the object or behavior, the more we generally like it.

Attitude Change

In attitude change theory, persuasion is a key process used to influence others (Petty & Cacioppo, 1986). Based on the Rational Model of Persuasion, beliefs, values and motives shape attitudes, and attitudes impact behavior. Consequently, to change attitudes, persuasive messages must target the audience's beliefs, values and/or motives.

Attitude/Behavior Relationship

According to attitude/behavior theories, one's attitude towards an object will influence his or her behaviors related to that object (Hogg & Terry, 2000; Ajzen, 1988). Other research suggests that an individual's attitude toward performing a behavior can be impacted by the perceived potential benefits of pleasing others (e.g., supervisors) (Fishbein & Ajzen, 1975; Liska, 1984). Accordingly, Extension administrators' explicit support for globalizing programming effort can impact the attitudes of Extension agents and specialists.

Methods

Population

The target audience for this study was all faculty members (N = 332) of VCE, including approximately 226 Extension agents, 88 specialists, six district directors and 12 administrators. The Extension agents are located in 107 county and city offices throughout Virginia. The Extension specialists and administrators included in this study are housed primarily at Virginia Tech, Virginia State University (VSU), Agricultural Research and Extension Centers (ARECs) and 4-H Camping Centers.

Instrument

The survey instrument used in this study hybridizes two surveys developed and employed by Barbara Ludwig in studies on Ohio Cooperative Extension. The Web-based survey for this study included four sections: 1) Employee Profile, 2) Involvement in International Activities, 3) Attitudes Towards Global Issues, and 4) Perceived Barriers to Globalizing Extension Programs.

The respondents' current level of engagement was assessed by their participation in fourteen different types of activities. For this study, the respondents were asked to select one of the following options that best represented their level of engagement in each activity. Each response was assigned a value to allow an average score to be calculated for each respondent. The options included:

- 4 = Done in the past 12 months
- 3 = Done more than one year ago, but less than five
- 2 = Done more than five years ago
- 1 = Have never done

For the purpose of analysis, average scores were also calculated by job category and program area to determine if differences existed in the amount or types of activities in which employees were engaged. Respondents were also provided the opportunity to include other types of international involvement that were not included in the list of 14 activities.

A Likert-type scale was used to assess the attitudes of the respondents toward globalization as well as incorporating a global dimension in their programming efforts. Scores ranged from 1-4, with the most positive attitude represented by the value of 4 and the most negative attitude represented by the value of 1. The respondents selected from the following options:

- 4 = Strongly Agree (SA)
- 3 = Agree (A)
- 2 = Disagree (D)
- 1 = Strongly Disagree (SD)

An average attitude score was computed for each employee included in the study. Scores were compared by job category and position. Respondents were also offer the opportunity to provide additional comments regarding their perception of globalizing Extension programs.

Finally, the respondents were asked to identify potential barriers that would preclude them from incorporating a global dimension into their programming efforts. As in Ludwig's (1999) study, the respondents were asked to identify three out of 15 potential barriers, which are most likely to prevent them from incorporating a global dimension into their programs.

Content validity was determined by a panel of experts from Virginia Tech and Virginia State Universities. Reliability scores were calculated for the behavior (i.e. current involvement) and attitude sections of survey and yielded alphas of 0.86 and 0.87, respectively.

Data Collection

The survey instrument was set-up as a web-based survey using Virginia Tech's on-line survey service (i.e., Survey.vt.edu). Dillman's (2000) Tailored Design Method was used for collecting data. First, the VCE Director included a letter of endorsement and an overview of the study, which was drafted by the researcher, in the weekly VCE electronic newsletter (Partners In Excellence). One week later, the targeted employees received an e-mail from the VCE Director, which restated the purpose of the study and included a link to the Internet survey.

Two follow-up efforts were conducted with non-respondents only. To identify non-respondents, the researcher included a statement at the end of the survey instrument requesting that the respondents send a brief e-mail message to the researcher to confirm their completion of the survey. This approach allowed the researcher to identify those who had completed the survey, while not linking the respondent with his/her responses to the survey instrument. Those who completed the survey without sending a confirmation e-mail, were included in the follow-up efforts.

The first of the two follow-up efforts included a concise e-mail message as a friendly reminder one week following the original request. Three weeks after the original request, a second follow-up e-mail was sent, which reiterated the purpose of the study and instruction for completing the survey.

For this study, non-response error was assessed using late respondents from the second (n=64) and third (n=31) reminders as surrogates for non-respondents. Using a t-test at the .05 level, no significant differences were found between early (n=110) and late respondents.

Results

Two hundred and six faculty members completed the on-line survey; 205 of the surveys were usable. This represents a return rate of 62%.

Characteristics of Respondents

The respondents to the study consisted of nine (or 4%) campus administrators, four (or 2%) district directors, 52 (or 25%) specialists, and 135 (or 66%) agents. The respondents to the survey closely approximate the proportion in the population for each group. Agricultural and Natural Resources (ANR) faculty comprised more than half (56%) of the respondents, followed by 4-H (22%) and Family & Consumer Science (FCS) (16%) faculty, respectively. The data reflects a slight over-representation of 4-H faculty in the study compared to the group's proportion in the organization. Representation of the other program areas in the study is proportionate to the groups' representation within VCE.

The respondents included a balanced representation of males (53%) and females (46%). The largest group of respondents by age were faculty in their 50s (32%), followed closely by faculty in their 40s (29%) and 30s (24%), respectively. Eighty-four percent of the employees had obtained graduate-level degrees. Finally, the majority of the respondents classified themselves as non-minority (88%).

Current International Engagement

Ninety-two percent of the respondents reported some involvement in international efforts within the past five years. "Exchanged ideas with colleagues from other countries" and "hosted an international visitor" were the top two activities performed by faculty. On a scale of one to four, with four representing the highest level of engagement, campus administrators (mean = 2.66) and specialists (mean = 2.13) were the most involved in international programming effort; the least involved were the district directors (mean = 1.21). Additionally, ANR faculty (mean = 1.86) exceeded the 4-H (mean 1.68) and FCS (mean = 1.38) faculty in their international efforts.

Attitudes Towards Globalizing Extension

The overall mean score for attitudes is 2.9 on a scale of one to four with four being the most positive. This score indicates an overall positive attitude towards globalization and VCE internationalizing their efforts. Campus administrators (mean = 3) were the most positive of the four position categories; agents were the least positive (mean = 2.86). Regarding program areas, 4-H faculty (mean = 2.94) revealed the most positive attitude; FCS faculty followed closely with a mean score of 2.92. Agricultural and Natural Resources faculty (mean = 2.86) were markedly least positive in their attitudes than the other program areas.

In Ludwig's (1993) attitude study, she conducted a factor analysis, which resulted in the emergence of four dimensions. Ludwig provided the following labels for the dimensions: 1) assistance to less developed countries, 2) international trade, 3) other cultures and 4) Extension involvement in global education.

Virginia Cooperative Extension faculty's attitude towards "other cultures" is the most positive of the four dimensions with a mean score of 3.09. The lowest mean score (2.81) was related to "Extension's Involvement in Global Education". This dimension included two attitude variables which assessed the priority that VCE leadership places on globalizing Extension. These variables were not included in Ludwig's 1993 study. When these two variables are removed, the mean score for this dimension jumps from 2.81 to 2.89 (see Table 1).

Table 1. Attitude Variables by Dimensions.

Attitude Dimensions	Mean	<u>SD</u>
<u>Dimension 1: Assistance to Less Developed Countries</u>		
Less developed countries will be important customers for U.S. agricultural within the next five to ten years.	2.91	0.74
In the poorest countries of the world, agricultural growth will be necessary to provide the poor with more purchasing power.	3.02	0.70
U.S. agricultural assistance to less developed countries creates new competition and undercuts American farmers in the international market. *	2.67	0.73
Increased agricultural production in less developed countries coincided with their increased demand for agricultural imports.	2.66	0.55
One of the major obstacles to economic development in poor countries is that there are too many people who do not work hard enough. *	3.36	0.62
The solution to the world hunger problem is to severely limit the population growth in poor countries. *	2.90	0.68
Trying to help starving people in the world is counterproductive because so much of the food we give never reaches the people in need.	2.82	0.71
Dimension 1 Mean	2.9	
<u>Dimension 2: International Trade</u>		
U.S. responsibility extends only to its own farmers. *	3.07	0.70
We must stop giving away America's technology to other countries. *	2.95	0.72
If the United States helps other countries grow more agricultural products, those countries will import fewer agricultural products from the United States. *	2.64	0.63
In the future, the U.S. government should not assist countries in		

producing agricultural commodities if those same countries are producing commodities that compete with the U.S. on world agricultural markets. *	2.75	0.66
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One of the main U.S. agricultural problems is that we have too many cheap, subsidized foreign agricultural products flooding the U.S. market. *	2.56	0.68
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Small and medium sized American businesses can become effective participants in the global markets	3.00	0.51
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Dimension 2 Mean	2.83	
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Dimension 3: Other Cultures

American farmers do not need education from Extension faculty on global issues. *	3.20	0.55
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Citizen exchanges between countries improve the ability of participants to understand and care about how other people live.	3.29	0.52
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Getting to know people of another culture is a good idea, but little ever comes of it. *	2.90	0.65
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Our customs, beliefs, and values should be used as models by other countries. *	2.88	0.69
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Extension faculty can learn from the culture and technology of other countries.	3.33	0.49
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Citizens of the United States are ignorant of world affairs.	2.77	0.69
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The large number of foreigners in the United States is a primary reason for the high jobless rate among American citizens. *	3.13	0.58
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Global interdependence is a myth. *	3.18	0.54
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Dimension 3 Mean	3.09	
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Dimension 4: Extension Involvement in Global Education

Extension faculty should not be involved in helping farmers from less developed countries to improve production practices.*	3.06	0.74
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Extension can help Virginia citizens understand rationale for supporting agricultural development in less developed countries.	2.98	0.56
Involvement of Extension faculty in development projects to support poor countries can improve their ability to help local clientele.	2.95	0.56
Extension faculty should receive training to become more knowledgeable about global marketing.	3.19	0.59
Extension should develop programs to educate America's farmers, agribusinesses, and rural leaders about competing in the global marketplace.	3.18	0.55
Extension professionals do not have the expertise to help clientele understand global interdependence. *	2.40	0.67
Extension faculty in Virginia have a role to play in helping clientele understand global issues.	3.05	0.57
International study tours sponsored by Extension would increase clientele awareness of global issues.	3.11	0.51
Extension faculty should focus on local problems. *	2.12	0.73
Dimension 4 Sub-Mean (for comparison with Ludwig's study)	2.89	
<i>Items added to dimension 4 for this study</i>		
Extension faculty in Virginia are rewarded for their international programming efforts through the continued appointment/tenure and promotion system.	2.34	0.69
The leadership of VCE does not expect faculty to address global issues in their programs. *	2.54	0.66
Dimension 4 Mean	2.81	

Note. Strongly Agree = 4; Agree = 3; Disagree = 2; Strongly Disagree = 1; * = Reverse codes; SD = Standard Deviation.

Attitude/Behavior Relationship

A bivariate linear regression was conducted to assess the relationship between attitudes and behaviors (i.e., current activities). The mean scores for the attitude items were the independent variables and the overall mean score for the behaviors was the dependent variable. The R-squared is 0.365, which means that 37% of the variance in behavior is explained by attitudes. This score reflects a weak relationship between the attitudes and behaviors in this study.

Barriers to Globalizing Extension

The top two barriers to globalizing VCE programs, as identified by respondents, were “lack of financial support” and “not a programming priority”. Both barriers were selected by 47% of the respondents. “Lack of time” was the third largest barrier being selected by 41% of the respondent.

“Not Recognized in Promotion Criteria” and “Fear of Negative Career Impacts” were not considered to be substantial barriers with each being selected by only 5% of all respondents. “Lack of Support from Colleagues” was also relatively insignificant being selected by only 6% of all respondents.

Conclusions and Recommendations

The results of this study point to several conclusions and recommendations, especially regarding leadership, training and barriers, which are highlighted in this section.

Leadership

The results of this study suggest that VCE leadership recognizes the impact of globalization on Virginia’s local communities as well as the need to share expertise and resources across international borders. Thus far, however, the leadership’s efforts to globalize has not transcended to the programming faculty at the grassroots level.

According to the data, programming faculty also recognize the need to globalize VCE and they possess a willingness to move in that direction. The problem appears to be a lack of clear direction from leadership on the level of priority to be placed on globalization efforts. That is, while campus administrators are engaged in international efforts, there has been no related training, funding, or performance standards established to support similar efforts by programming faculty.

Recommendation 1. VCE leadership should clarify whether incorporating a global dimension into programming efforts is a priority, which aspects of globalizing are priorities, and identify and mobilize resources (e.g., training, funding, and human resources) to support this organizational initiative.

Recommendation 2. VCE leadership should also consider expanding the International Service component of the College of Agriculture and Life Science’s Faculty Annual Review to incorporate the globalization of local programming efforts.

Training

Ludwig drew the following conclusion from her 1999 study of Ohio Extension faculty:

“If Extension educators have the responsibility to help clientele develop a better understanding of the complexity of global issues, professional growth and development opportunities must be initiated for Extension staff.”

The attitudes of faculty towards globalizing VCE are positive. However, the written feedback provided by respondents revealed a need and desire for training. VCE faculty need guidance on what a “globalized program” looks like, including specific ideas that can be incorporated into their programs. Some faculty expressed interested in very specific training such as foreign languages, which will allow them to be more engaged with diverse cultures.

Recommendation 3. VCE leadership should tap into the vast resources made available through USDA and other State Extension Systems that are already heavily involved in globalizing Extension. As mentioned previously, The National Initiative to Internationalize Extension has created a national network of expertise, training resources, and funding opportunities to support states in their efforts to address the ubiquitous issues associated with globalization.

Barriers

The results of this study revealed several barriers (real or perceived) that have precluded or discouraged faculty from globalizing their programming efforts. Some of the critical barriers highlighted in this study, as well as in Ludwig’s (1999) study, were the lack of time, resources and expertise. Several State Extension Systems, like Indiana (Purdue University), have developed an International Extension Coordinator positions to address these potential barriers.

Recommendation 4. VCE leadership should consider creating an International Extension Coordinator position. The responsibilities associated with this position would include 1) coordinating relevant training, 2) organizing international study tours, 3) identifying opportunities for international collaboration and 4) procuring outside funding for international activities.

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