

education. We need to be very vigilant in identifying what it is that will work specifically in our particular programs. Finally, I encourage everyone to shift toward being an educator. Evaluate technology for its potential impact on

learning, not simply as a gimmick to be tried or to gain attention. I wish you all well in your teaching endeavors.

Attitudes Of Pennsylvania Governor's School Scholars Toward Diversity

**Patreese D. Ingram¹, Agricultural and Extension Education,
The Pennsylvania State University, University Park, PA 16803
Nicole Rodgers², 1996 Pennsylvania Governor's School**

Abstract

The workforce of this country is becoming increasingly diverse. The ability to relate to and work effectively with people who are different from ourselves will become critically important for success on the job. What attitudes toward diversity and cultural pluralism will today's youth bring to the workplace? Pennsylvania Governor's School for the Agriculture Sciences scholars were surveyed on their attitudes toward various dimensions of diversity. Although in general, attitudes toward diversity were positive, the findings raised a number of concerns.

Introduction/Background

The population of the United States is becoming increasingly diverse. By the year 2000, one in every three Americans will be a person of color (non-White). Moreover, eighty-five percent of new entrants into the labor force will be women and people of color (Johnson and Packer, 1987). Not only is the population changing in sheer numbers and percentages, but the very identity of America as a nation is going through a transformation (Gardenswatz and Rowe, 1993).

Today, as workers from different racial, ethnic, cultural, and religious backgrounds enter the workplace, they are doing so with feelings of worth and not with shame because of their differences (Gardenswartz and Rowe, 1993). The same is true for those with physical and mental challenges, those whose first language is not English, and those with alternate sexual orientations.

Today's youth will be tomorrow's work force. Clearly, they will need, in addition to technical knowledge and skills, the ability to relate effectively to people who are different from themselves. Bruening and Scanlon (1995)

conducted a study to identify the specific business and communications skills needed by agribusiness employees. They found that "the ability to work well with others and the ability to feel part of the team..." are key skills needed by potential employees. Considering the changing demographics of the workforce, the ability to understand, appreciate, and indeed embrace cultural diversity will become increasingly important in order to succeed on the job.

But what attitudes toward diversity and cultural pluralism will today's youth bring to the workplace? Moreover, what attitudes do youth with interest in the agricultural sciences hold? How well do these youth accept people who are different from themselves?

A number of studies have focused on the attitudes of youth toward intolerance (Polakow-Suranky and Ulaby, 1990; Erickson et al., 1995). Findings from these studies suggest that: most high school students hold negative stereotypes about racial and ethnic minorities, and many have sexist attitudes. Crawley-Long (1995) reports that even students who consider themselves free of prejudice frequently recognize their hidden biases and hatred when issues of sexual preferences are raised. Youths, aged 21 or younger, are the most common perpetrators of anti-gay and lesbian violence, responsible for 50% of all reported incidents (Berk, 1990; Berrill, 1990). The state of Pennsylvania has a high number of hate groups (Rosellini, 1995; Southern Poverty Law Center, 1996).

Today's high school students will be members of the workforce soon. The attitudes toward diversity held by today's youth are critical to the economic well-being of our nation. Youth attitudes toward diversity demand the attention of the educational community. Educational institutions have the opportunity to impact the attitudes of youth toward diversity.

¹Assistant Professor

²Scholar

Purpose of the Study and Research Questions

This study examined the attitudes toward diversity held by youth who attended the Pennsylvania Governor's School for the Agricultural Sciences held at Pennsylvania State University during the summer of 1996. More specifically, this study was designed to answer the following research questions:

1. How do Pennsylvania Governor's School scholars define "diversity"?
2. What attitudes toward diversity are held by Pennsylvania Governor's School scholars regarding:
 - a) valuing of cultural diversity and cultural pluralism vs. assimilation of diverse cultures?
 - b) comfort when interacting with people who are different from themselves?
 - c) equality of gender?
 - d) attitudes toward multilingualism?
 - e) characteristics of rural communities compared to other types of communities?
3. Do male and female Pennsylvania Governor's School scholars differ in their attitudes toward diversity?

Materials and Methods

The population for this study was comprised of 63 high school juniors and seniors who participated in the Pennsylvania Governor's School for the Agricultural Sciences at Pennsylvania State University. Students resided in communities across the state of Pennsylvania and ranged in age from 15 to 17. Students were selected to participate in the Governor's School on a competitive basis. All students had previously demonstrated exceptional ability in the sciences and had interest in some phase of agriculture. Specific selection criteria included: grade point average, class rank, letters of recommendation, a personal essay, and course transcripts.

The assessment instrument used in this study was a 45 item questionnaire developed by the researchers from a review of literature. The instrument was validated by a panel of experts for content validity. Part I asked participants to define the word "diversity." A five-point Likert-type scale was used in Part II for rating attitudes toward various aspects of diversity. The following rating scale was used: 1 = Strongly Disagree; 2 = Disagree; 3 = Neither Agree Nor Disagree; 4 = Agree; and 5 = Strongly Agree.

Statements in Part II were categorized as relating to the following six areas, each forming an attitude scale: equality of gender; assimilation vs. cultural diversity and cultural pluralism; feeling of comfort with people who are different

from oneself; rural vs. other types of communities; multilingualism vs. English-only; and "poverty as one's own fault." Part III asked respondents to indicate the group with which they would be most and least comfortable. Part IV contained demographic questions. The questionnaire was administered to the Governor's School scholars during a class meeting.

Data were analyzed using the Statistical Package for Social Sciences (SPSS) (Norusis, 1990). Descriptive statistics were used to determine the frequencies, percentages, means, and standard deviations of item responses.

The 39 attitudinal items were analyzed for each scale. Five items were eliminated using both empirical and conceptual strategies to obtain the strongest internal consistency, while maintaining the integrity of the scale. Three of the five items eliminated originally formed the scale "poverty as one's own fault". The final value for internal consistency measured by Cronbach's Coefficient Alpha (Ary et al. 1990) was overall .92. This rating suggests that youth responses were consistent across items. Cronbach's Alpha for individual scales ranged from a low of .66 to a high of .84. A t-test for equality of means was used to determine differences in attitudes between males and females at the .05 confidence level.

Limitations

This survey might simply indicate that Pennsylvania Governor's School scholars were sophisticated enough to recognize socially and culturally desirable (or undesirable) attitudes and responded accordingly, regardless of their "true" attitudes. Additionally, the students in this study were considered "among the best." Their responses may not be reflective of students who perform at lower academic levels. Therefore, the results of this study are generalizable only to the subjects of this study.

Results

Forty-four percent (28) of scholars were males and 56% (35) were females. The ethnic background of scholars included 84% White Americans, and 16% minorities including African Americans, Asian Americans, and Hispanics Americans. Eighty-four percent (84%) of students attended a school in which the student body was primarily Caucasian; 14% attended schools with racially-mixed populations; and 2% attended a school with an all or mostly minority student body. Scholars resided in the following types of communities: (34%) in suburban communities, 20% in small towns (<10,000), 20% in rural communities, 16% in small and mid-sized cities (>10,000 and < 50,000), and 9% lived in large metropolitan cities (>50,000). The fathers of 75% and the mothers of 62% of students were college graduates. Thirty-nine percent (39%) of parents attended

graduate school. All students planned to attend a four-year college.

Research Question 1. Definition of Diversity

Respondents were asked to briefly describe what the word “diversity” meant to them. Sixty-two of the 63 participants responded. Open-ended descriptions were analyzed for similarities across responses.

Twenty-six percent of respondents (26%) defined diversity as difference in cultures, ideas, experiences, backgrounds, attitudes or beliefs. Another 24% of respondents defined diversity with a one or two word answer: “different,” “difference,” “unique,” or “uniqueness.” Thirteen percent of responses included some form of the word “variety,” and some (10%) incorporated the concept of “coming together” in their definition.

Research Question 2. Attitudes Toward Diversity

Sexual Equality: Overall, scholars had positive attitudes toward equality of gender (Table 1). Most (85.7%) felt that women are as capable as men in American society. Few (7.9%) believed that women’s emotions interfere with their ability to do a good job, or that women should work outside the home only if additional family income is needed (11.1%). Nearly three-quarters (72.6%) of students felt that most school subjects are equally appropriate for girls and boys.

Comfort With Differences: Fifty-six percent (56%) of scholars were comfortable with people who are different from themselves (Table 2). Few said they are uncomfortable with people who are racially (9.5%) or culturally (7.9%) different. The groups with which students had the most discomfort included people with physical and mental challenges. One-third felt comfortable talking to a mentally retarded person,

and 54% were comfortable around people who have a physical disability.

Assimilation v. Cultural Pluralism: The scholars preferred cultural diversity and cultural pluralism to assimilation (Table 3). Most (88.9%) appreciated the similarities and differences among racial and ethnic groups. In addition, 88.8% considered cultural diversity a valuable resource and felt that minority cultures have something positive to contribute to American society. Few (6.4%) students believed that America would be a better place if we would assimilate into one culture. However, one in four (27%) believed we should try to eliminate cultural differences among racial groups, and nearly half (42.9%) believed that differences in cultural groups cause problems.

Multilingualism vs. “English Only”: Most (90.5%) scholars believed the ability to speak another language is a valuable skill in this country and that it is good for our children to learn a second language (91.5%) (Table 4). While most scholars (72%) enjoy being around people who speak more than one language, 32% get irritated when around people who do not speak English.

Rural Vs. Other Communities: At least one in five scholars rated rural communities as having more positive characteristics than other types of communities (Table 5). Less than half *disagreed* that rural people work harder than those who live in the city (47.7%), that children get a better sense of community growing up in rural communities (44.5%), and that people in rural communities make better neighbors (39.7%).

Groups With Which Youth Are Most And Least Comfortable: Respondents were asked to choose the groups with which they would be most comfortable and least

Table 1. Percentage of Scholars Who Agree and Disagree With Sexual Equality Attitude Statements

| Item | A/SA ¹ | D/SD |
|--|-------------------|-------|
| Women are as capable as men in American society. | 85.7% | 7.9% |
| Women’s emotions interfere with their ability to do a good job. | 7.9% | 73% |
| Women should not work outside the home unless the family really needs the money. | 11.1% | 74.6% |
| Most school subjects are equally appropriate for girls and boys. | 72.6% | 12.9% |

¹ N = 63. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree. The percentage of participants who selected Neither Agree Nor Disagree is not reported.

Table 2. Percentage of Scholars Who Agree and Disagree With *Comfort With Difference* Attitude Statements

| Item | A/SA ^z | D/SD |
|--|-------------------|-------|
| I would welcome an opportunity to work alongside a person from another race. | 84.1% | 0% |
| People who are racially different from me make me uncomfortable. | 9.5% | 68.2% |
| I often feel uneasy when I am around people who are not like me. | 12.9% | 56.4% |
| People of diverse groups are treated differently because they act differently. | 49.2% | 22.2% |
| I feel comfortable talking about differences in religious beliefs. | 88.9% | 4.8% |
| People who are culturally different from me make me uncomfortable. | 7.9% | 82.5% |
| I would feel quite comfortable talking to a mentally retarded person. | 33.3% | 38.0% |
| I am comfortable around people who have a physical disability. | 54.0% | 19.1% |
| People who have a learning disability are as intelligent as other people. | 59.6% | 12.9% |

^z N = 63. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree. The percentage of participants who selected Neither Agree Nor Disagree is not reported.

Table 3. Percentage of Scholars Who Agree and Disagree With *Assimilation vs. Cultural Pluralism* Attitude Statements

| Item | A/SA ^z | D/SD |
|--|-------------------|-------|
| Minorities should conform to the dominant American culture standards if they want to be accepted. | 17.5% | 57.1% |
| I appreciate the similarities and differences that exist among different racial and ethnic groups. | 88.9% | 11.1% |
| Cultural diversity is a valuable resource and should be preserved. | 88.8% | 3.2% |
| Each minority culture has something positive to contribute to American society. | 92.1% | 3.2% |
| We should try to eliminate cultural differences between racial minorities and Whites in our society. | 27.0% | 46.0% |
| Having lots of different cultural groups in this society causes lots of problems. | 42.9% | 23.8% |
| If members of ethnic groups want to keep their own culture, they should keep it to themselves. | 4.8% | 68.2% |
| Immigrants should be expected to give up their own cultures and adapt to American ways. | 6.3% | 80.9% |
| I find myself thinking, "Why don't they act like us.?" | 14.3% | 73.0% |
| America would be a better place if we would assimilate into one culture. | 6.4% | 82.5% |

^z N = 63. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree. The percentage of participants who selected Neither Agree Nor Disagree is not reported.

Table 4. Percentage of Scholars Who Agree and Disagree With *Multilingualism vs. English-Only* Attitude Statements

| Item | A/SA² | D/SD |
|--|-------------------------|-------------|
| It's good for our children to learn a second language, other than English. | 91.5% | 8.0% |
| I enjoy being around people who speak more than one language. | 71.5% | 6.4% |
| I get kind of irritated when I am around people who do not speak English. | 31.7% | 44.4% |
| A person who doesn't speak English has no right to expect to get-ahead in America. | 15.9% | 59.3% |
| I am comfortable with the ability to speak only English. | 19.0% | 44.0% |
| The ability to speak another language is a valuable skill in this country. | 90.5% | 4.8% |

² N = 63. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree. The percentage of participants who selected Neither Agree Nor Disagree is not reported.

Table 5. Percentage of Scholars Who Agree and Disagree With *Rural vs. Other Communities* Attitude Statements

| Item | A/SA² | D/SD |
|---|-------------------------|-------------|
| People who live in rural communities work much harder than people who live in cities. | 20.6% | 47.7% |
| If people who live in cities would learn to live more like people who live in rural communities, this country would be much better off. | 20.6% | 55.5% |
| Children get a better sense of community growing up in a rural community than in other communities. | 27.0% | 44.5% |
| People in rural communities make better neighbors. | 22.2% | 39.7% |

² N = 63. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree. The percentage of participants who selected Neither Agree Nor Disagree is not reported.

comfortable. Six choices were provided: people with a physical disability; people with a different religion; the homeless; people who speak a different language; a gay or lesbian person; a person with a different race or ethnicity. The group with which scholars were most comfortable are people with a different religion (38%). Scholars were least comfortable with gay/lesbians (38%).

Research Question 3. Differences in Responses By Gender

When data were analyzed separately for males and females, females had significantly higher mean scores on all attitude scales. When groups with which scholars were most comfortable were considered, both males and females selected people who have a different religion. Females were least comfortable with people who have a physical disability (33%); males (57%) were least comfortable with gays/lesbians.

Discussion and Implications

Overall, scholars in this study had relatively positive attitudes toward diversity. The most favorable attitudes were related to equality of gender, cultural pluralism, and multilingualism. The findings of this study mirror those of other studies (Chronicle of Higher Education, 1995; Springer et al., 1995; Wergin, 1989) which reported that males hold significantly more negative attitudes toward diversity than do females. The attitude scores of males in this study may be more reflective of most agricultural science students than the composite attitudes scores for both males and females, since most agricultural programs tend to have a larger proportion of male students (Abridged Fall, 1993). Male ratings reflect somewhat to moderately positive attitudes toward diversity.

Although in general, attitudes were positive, the findings raised a number of concerns. Both males and females were uncomfortable with people who have physical and mental challenges. Feelings of discomfort when interacting with people who have a disability is not uncommon. "Many workers with disabilities say that others don't know basic issues of 'etiquette' in dealing with them." (Blank and Slipp, 1994, p. 103)

A notable number of scholars believed cultural differences should be eliminated among racial groups, and even more believed that differences in cultural groups cause problems. A considerable number of males believed minorities should conform to the dominant American culture if they want to be accepted. Additionally, while most students appear to be comfortable with the use of other languages, many get irritated when around people who do not speak English. A notable number of males believed that speaking English should be a requirement for being successful in this country. These findings suggest a need for colleges of agricultural sciences to incorporate concepts of cultural diversity into the educational experience of their

students.

Moore (1994) supports this need in his statement, "Considering changes in demographics, industry needs, and general societal needs, supporting diversity in agricultural education should be a high priority" (p. 4). More specifically, Bowen (1994) states that, "Universities should provide students with opportunities to develop skills in working with people of diverse backgrounds" (p. 17).

A number of opportunities exist for increasing agricultural sciences students' comfort level with diversity, thereby better preparing them for the changing workplace of the future. Colleges of Agriculture can provide examples of the contributions of women and minorities to the field of agriculture; bring speakers into the classroom from diverse populations to share their expertise in the field; expose students to programs such as AgrAbility (AgrAbility Project, 1995), which assists agricultural workers with disabilities to be both efficient and effective; encourage internships which offer exposure to persons from diverse backgrounds; build concepts of diversity into the curriculum of every course; and recruit students and faculty from diverse backgrounds into the agricultural sciences program.

Helping to prepare students to function successfully in a diverse society is not a responsibility limited to higher education. K-12 educational systems can take steps to reflect the diversity of our society by integrating materials by and about minority groups within the curricula, and by recognizing their unique contributions to society. Elementary and secondary teachers can encourage pride in cultural differences while creating a school climate of unity, acceptance and belonging. In educational settings with culturally homogeneous student bodies, natural opportunities for diversity awareness are limited. Special efforts can be made to provide students with meaningful exposure to cultures other than their own.

Faculty, at all levels, may need to gain increased diversity competence. Three areas are important: awareness of differences and similarities among cultures; knowledge of factual information about other cultures, and skills for working effectively with diverse populations.

Cross-cultural communication and appreciation and respect for diverse cultures are becoming highly desirable employment qualities (Coates, 1995; Thomas and Gregory, 1993/94). Schools and institutions of higher education must help students in the agricultural sciences gain these qualities.

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**For Information Contact Rick Parker
E-mail: ricpar@cyberhighway.net**