

## **Teacher Attitudes toward Professional Organization-Developed, State Board-Approved Standards for Agricultural Education**

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### **Abstract**

Accountability was the focus of this study of the attitudes of program personnel toward the teacher association-formulated and State Board-approved Standards for Agricultural Education in Georgia. Data were collected from state Agricultural Education personnel by securing their reactions to 32 statements about the Standards. Eighty-five percent of the personnel in Georgia participated. A Cronbach's alpha reliability coefficient of .95 was determined for the instrument. The sample demographics were representative of the population for the state. Most respondents reported using the Standards within their departments, but many used them as a shared evaluation instrument. Respondents agreed on 11 statements, were undecided on 20 items, and disagreed with one item. Attitudes toward the Standards were affected by job description, years of experience, use made of the standards, age, gender, size of school, and ethnicity of respondents. Educational level and number of teachers of agriculture in the school had little effect on ratings of the statements about Standards.

## Introduction

Accountability has been a byword in education for many years. The educational reform movement was initiated by the National Commission on Excellence in Education in its 1983 report, *A nation at risk...*. Numerous state and national reports followed, including the National Research Council's 1988 report, *Understanding agriculture...*. In Georgia, a "Futures Conference" in Agricultural Education (Iverson, 1987) was held to address concerns about the program and its development. Later, the Georgia Quality Basic Education Act (QBE) was a legislative response to the public outcry for accountability. Within the profession, some state leaders had anticipated the need for reform. In the early 1970's, the Iowa Standards for Vocational Agriculture (Iowa Department of Education, 1977) were developed as a means for improving the program and to serve as means for assuring accountability. However, these standards were not widely accepted by programs across the country. In Georgia, no written standards were in existence until the Georgia Vocational Agriculture Teachers Association began drafting a trial instrument in 1994. Committees were utilized during the developmental phase to formulate a list of standards. In addition to the Iowa Standards, state planning materials from Missouri (1992), Arizona (1995), California (1995), Ohio (1995), Oklahoma (1995), Texas (1995), Michigan (1996), North Carolina (1996), South Dakota (1996), and West Virginia (1996) were referenced to develop a tentative list. A total of 33 standards for high school agriculture teachers, 11 standards for local system support, 6 for Food Processing Centers, and 29 for middle school agriculture teachers, were field tested for one year, and the list was modified and approved by majority vote at the 1996 GVATA Summer Conference (Georgia Vocational Agriculture Teachers Association, 1996). These Standards were approved by the Georgia Department of Education in January, 1996. The Georgia Board of Education reviewed and adopted the standards in 1998. Adjustments and expansion to specialized areas have occurred each year since the initial standards were developed. However, the general attitudes of agricultural education personnel in Georgia regarding the standards had not been measured, up until this study.

## Purpose and Objectives

The primary purpose of the study was to determine perceptions of the Georgia Standards for Agricultural Education held by GVATA personnel. Specific objectives were to: 1) determine the characteristics of the respondents; 2) ascertain the use of the Standards instrument in respondents' programs; 3) determine respondents' attitudes toward evaluation statements regarding the Standards; and 4) find out if certain demographic characteristics influenced respondent attitudes toward the Standards.

## Methods and Procedures

The design of the study was descriptive *ex-post facto*. The target population was all Agricultural Education personnel in Georgia. The sample consisted of Agricultural Educators in attendance at the 1998 GVATA Summer Conference. Since no data-gathering instrument specific to the objectives of this study was found in the literature, the researchers developed a two-part questionnaire which included a nine-item demographic section and a list of 32 evaluation statements. These statements were set up on a five-point, Likert-type scale, with “1” representing “strongly disagree”, “2” being “disagree”, “3” indicating “uncertain”, “4” being “agree” and “5” representing “strongly agree”. The instrument was field tested with the Regional Agricultural Education staff, UGA Agricultural Education faculty, and two English teachers and an administrator at Jeff Davis High School, Hazelhurst, GA. The instrument was also reviewed and approved by the Human Subjects Committee, Institutional Review Board, The University of Georgia. After modifications were made, the final instrument was duplicated for distribution at the Summer Conference.

Data collection was conducted at the opening general session of the 1998 GVATA Summer Conference. Additional data collection was done at regional breakout sessions, which assured that all in attendance at the Conference were given the chance to be represented in the study. Additional follow-up was done by mail to those identified as not attending the conference; the mailing list was provided by the three regional coordinators. Of the 226 registered at the Conference, 197 or 87.2% provided useable responses. The 73 individuals identified as not being at the Conference were surveyed by mail; 59 responses (80.8%) were received, for a total of 256, which represented 85.6% of state Agricultural Education personnel. The mailed follow-up responses were compared with responses from the Conference, using the t-test for independent samples on the evaluation items; only two items – numbers 25 and 30 – were significant at the .05 level, which was set *a priori*. Since this number of significant items could have occurred by chance alone, the respondents were assumed to be from the same population; therefore, all responses were combined for analysis.

Primarily descriptive statistics were used to analyze the data, including frequencies, percentages, means, and standard deviations. In addition, Cronbach’s alpha was used to determine the reliability of the instrument. The reliability coefficient for the 32 evaluation variables was .946. Subgroups from the demographic section were also used to analyze the responses to the 32 evaluation variables, using Chi Square and ANOVA statistics.

## Findings

### *Characteristics of Respondents*

Educational level: Respondents were nearly evenly split between those having a Masters degree and those having a Bachelors degree, each at about four in ten. However, when those having graduate degrees were combined, nearly two-thirds had advanced degrees; fewer than 2% had “other” degrees.

Years of experience: The respondents years of teaching experience ranged from 0 to 37, with a mean of 14.6 years. The three largest groups were those with 0 to 5 years (23.4%), 6 to 10 years (18.4%), and 16 to 20 years (17.6%); together these groupings comprised six out of ten respondents.

Age: The respondents ages ranged from 23 to 66, with an average age of 40 (mean of 39.97). The greatest number ranged in age from 40 to 49 (41%), followed by those ranging from 30 to 39 (31%); together, these age groups comprised seven out of ten respondents.

Gender: The respondents were predominantly male (84.8%).

Ethnic heritage: The predominant ethnic heritage was Caucasian (91%), followed by African-American with 8.2%. Hispanic and Asian made up less than 1%.

Size of school: The size of school which employed the largest number of respondents was AA (32%), followed by those employed at AAAA schools (23.8%), AAA schools (20.7%), and the smallest, “A” schools (17.6%).

Teacher status: The largest number of teachers taught in single teacher departments (141, or 55%); most of the remainder taught in multi-teacher departments with two or three teachers.

Job description: Over seven out of ten of the respondents were regular high school teachers (72.3%), followed by middle school teachers (12.1%), young farmer teachers (10.2%), and state Agricultural Education staff members (3.1%); other personnel made up only two percent. These findings may be observed in Table 1.

### *Uses of the Standards*

The largest group of respondents said that the Georgia Agricultural Education Program Standards are only used by the department (40%), followed by those who use them as a shared evaluation instrument (32.9%), those using it as the only evaluation instrument (18.8%), those who do not use it at all (5.5%), and the “other” category, (2.7%). The responses given for the other category were 1. Assist with program standard evaluation, 2. Administrator use, 3. Used to prepare future teachers, 4. Used in classes—

T. Ed. Standards 5. Personal use, and 6. Regional office use. These data may be observed in Table 2.

Table 1. *Characteristics of Respondents (N=256)*

| <b>Characteristics/Category</b> | <b>Frequency</b> | <b>Percentage</b> |
|---------------------------------|------------------|-------------------|
|---------------------------------|------------------|-------------------|

*Educational Level*

|             |    |       |
|-------------|----|-------|
| Provisional | 2  | .8%   |
| BSA         | 95 | 37.1% |
| Masters     | 98 | 38.3% |
| EdS         | 51 | 19.9% |
| Doctorate   | 8  | 3.1%  |
| Other       | 2  | .8%   |

*Years of Teaching Experience*

|               |    |      |
|---------------|----|------|
| 0 - 5 years   | 60 | 23.4 |
| 6 - 10 years  | 47 | 18.4 |
| 11-15 years   | 28 | 10.9 |
| 16 -20 years  | 45 | 17.6 |
| 21 - 25 years | 35 | 13.7 |
| 26 - 30 years | 29 | 11.3 |
| 31 - 37 years | 12 | 4.7  |

*Age of Respondents*

|                   |     |       |
|-------------------|-----|-------|
| 23 - 29 years old | 37  | 14.45 |
| 30 - 39 years old | 80  | 31.25 |
| 40 - 49 years old | 104 | 40.63 |
| 50 - 66 years old | 35  | 13.67 |

*Gender*

|        |     |      |
|--------|-----|------|
| Male   | 217 | 84.8 |
| Female | 38  | 14.8 |

*Ethnic Heritage of Respondents*

|                  |     |      |
|------------------|-----|------|
| Caucasian        | 233 | 91.0 |
| African-American | 21  | 8.2  |
| Hispanic         | 1   | 0.4  |
| Other            | 1   | 0.4  |

*School Size*

|       |    |      |
|-------|----|------|
| A     | 45 | 17.6 |
| AA    | 82 | 32.0 |
| AAA   | 53 | 20.7 |
| AAAA  | 61 | 23.8 |
| Other | 14 | 5.5  |

*Teacher Numbers in Respondent Schools*

|                |     |      |
|----------------|-----|------|
| Single teacher | 141 | 55.0 |
| Two teachers   | 80  | 31.3 |
| Three teachers | 18  | 7.0  |

|                |   |     |
|----------------|---|-----|
| Four teachers  | 4 | 1.6 |
| Five teachers  | 3 | 1.2 |
| Seven teachers | 2 | 0.8 |

*Job Description of Respondents*

|                                   |     |      |
|-----------------------------------|-----|------|
| Regular high school teacher       | 185 | 72.3 |
| Middle school teacher             | 31  | 12.1 |
| Young Farmer teacher              | 26  | 10.2 |
| State staff member                | 8   | 3.1  |
| Vocational or other administrator | 2   | 0.8  |
| Teacher trainer                   | 2   | 0.8  |
| Other                             | 2   | 0.8  |

Table 2. Use of the Georgia Standards by Respondents (N=256)

| <b>Category</b>                         | <b>Frequency</b> | <b>Percentage</b> |
|---|------------------|-------------------|
| Used as the only evaluation instrument  | 48               | 18.8              |
| Used as a shared evaluation instrument  | 84               | 32.9              |
| Only used by the Agricultural Ed. Dept. | 102              | 40.0              |
| Not used at all                         | 14               | 5.5               |
| Other                                   | 7                | 2.7               |

Respondent Attitudes toward the Standards

Respondent Ratings of Evaluation Statements: The respondents ratings for the 34 evaluation statements about the GVATA Agricultural Education Standards are listed in Table 3. It can be seen that just ten items (29.4%) were in the “agree” or “strongly agree” category, as expressed by over 3.5 in mean rating. Conversely, only one item --

Use by the administration to base program funding... was in the “disagree” range, as indicated by less than 2.5 mean rating. Thus over two-thirds (67.6%) were in the “undecided” category. The large standard deviation, which averaged over 1.0, indicated that there was a relatively wide range of views toward the statements.

### *Relationship of Demographic Characteristics to Ratings of Evaluation Statements*

Educational level: For group statistics educational level was divided into two categories: those who had a bachelors degree or less, and all others which included masters, specialist, and doctorate. When these two groups’ responses on the 32 items were compared by t-test, seven were significantly different (Items 1, 13, 14, 20, 27, 28, and 30).

Years of Experience: For years of experience the groups were divided into four categories of comparison. The first category was those up to 5 years; the second was those 6-15 years; the fourth was over 16 years. Using ANOVA, there were 24 statements that were significant at .05 alpha level: 1-7, 9, 11-15, 18-24, and 26-29. Of the 24, 12 were highly significant.

Age: The groups were divided into two age categories for comparison. The first category was for those under forty and the second was those over forty. There were 17 that were significant at .05 alpha level using the t-test: items 1, 6, 10-15, 17-23, 26 and 29. Of the 17, six were highly significant.

Gender: There were 13 items that were significant at the .05 level, using the t-test. The items were: 3, 5, 9, 10, 13, 16, 20-21, 23, 29, 31, and 32. Of the 13, four were highly significant.

Ethnicity: The groups were divided into three categories; Caucasian, African-American, and other; 13 of the 32 items were significant and two of the 13 were highly significant, again using the ANOVA.

Size of school: ANOVA was also used to test the affect of size of the school on the ratings of the 32 items. The four major categories of size were used. The items were 1, 4, 5, 7, 14, 15, 19, 20,22, 23, 26, 28, and 31. Of the 13 that were significant, six were highly significant.

Table 3. Respondent Ratings of Statements About the Standards (N=256)

| Item | Statement  | Rating |      |      |      |      | Mean | SD   | D/U/A |
|------|--|--------|------|------|------|------|------|------|-------|
|      |  | SD     | D    | U    | A    | SA   |      |      |       |
|      | The GVATA Agricultural Education Program Standards:                                    |        |      |      |      |      |      |      |       |
| 1    | Are flexible   |        |      |      |      |      |      |      |       |
|      | #  | 39     | 78   | 49   | 87   | 3    | 2.75 | 1.12 | U     |
|      | %  | 15.2   | 30.5 | 19.1 | 34.0 | 1.2  |      |      |       |
| 2    | Yield a fair evaluation for all Agricultural Education departments                     | 55     | 60   | 36   | 88   | 17   | 2.81 | 1.29 | U     |
|      |  | 21.5   | 23.4 | 14.1 | 34.4 | 6.6  |      |      |       |
| 3    | Yield a fair evaluation for Agricultural Education instructors                         | 47     | 58   | 40   | 99   | 12   | 2.89 | 1.24 | U     |
|      |  | 18.4   | 22.7 | 15.6 | 38.7 | 4.7  |      |      |       |
| 4    | Yield a fair evaluation for FFA chapters   | 20     | 56   | 41   | 124  | 15   | 3.20 | 1.10 | U     |
|      |  | 7.8    | 21.9 | 16.0 | 48.4 | 5.9  |      |      |       |
| 5    | Help to point out needed areas of improvement  | 4      | 8    | 36   | 162  | 46   | 3.93 | 0.76 | A     |
|      |  | 1.6    | 3.1  | 14.1 | 63.3 | 18.0 |      |      |       |
| 6    | Have a positive effect upon my personal performance                                    | 15     | 23   | 73   | 125  | 20   | 3.44 | 0.97 | U     |
|      |  | 5.9    | 9.0  | 28.5 | 48.8 | 7.8  |      |      |       |
| 7    | Have provided me with a harmonious understanding of the Agricultural Education program | 11     | 24   | 105  | 96   | 19   | 3.33 | 0.93 | U     |
|      |  | 4.3    | 9.4  | 41.0 | 37.5 | 7.4  |      |      |       |

| Item | Statement  | Rating     |            |            |             |            | Mean | SD   | D/U/A |
|------|--|------------|------------|------------|-------------|------------|------|------|-------|
|      |  | SD         | D          | U          | A           | SA         |      |      |       |
|      | The GVATA Agricultural Education Program Standards:  |            |            |            |             |            |      |      |       |
| 8    | Have helped the school administration to focus on a positive understanding toward the Ag. Ed. dept.  | 24<br>9.4  | 52<br>20.3 | 69<br>27   | 93<br>36.3  | 18<br>7.0  | 3.11 | 1.10 | U     |
| 9    | Have assisted me through the promise of a stronger overall Ga. Agriculture Ed. program in the future | 11<br>4.3  | 17<br>6.6  | 67<br>26.2 | 129<br>50.4 | 32<br>12.5 | 3.60 | 0.94 | A     |
| 10   | Have assisted in the promotion of a new/improved image of Agricultural Education/FFA                 | 10<br>3.9  | 31<br>12.1 | 66<br>25.8 | 126<br>49.2 | 23<br>9.0  | 3.47 | 0.95 | U     |
| 11   | Have helped in procurement of tools, supplies, or other department needs                             | 37<br>14.5 | 87<br>34.0 | 64<br>25.0 | 66<br>25.8  | 2<br>0.8   | 2.64 | 1.04 | U     |
| 12   | Have helped to increase salaries for Ag. Educators through extended day and/or extended year         | 38<br>14.8 | 50<br>19.5 | 95<br>37.1 | 68<br>26.6  | 5<br>2.0   | 2.81 | 1.05 | U     |
| 13   | Have increased the Agricultural Educators' morale  | 37<br>14.5 | 44<br>17.2 | 84<br>32.8 | 84<br>32.8  | 7<br>2.7   | 2.92 | 1.09 | U     |
| 14   | Have helped me to feel that I am a participant in the overall evaluation process for Ag. Educators   | 15<br>5.9  | 41<br>16.0 | 63<br>24.6 | 122<br>47.7 | 15<br>5.9  | 3.32 | 1.00 | U     |
| 15   | Are an equal means of evaluation for all Agricultural Education programs in Georgia                  | 42<br>16.4 | 55<br>21.5 | 52<br>20.3 | 93<br>36.3  | 14<br>5.5  | 2.93 | 1.21 | U     |

| Item | Statement  | Rating     |            |            |             |            |      | Mean | SD | D/U/A |
|------|--|------------|------------|------------|-------------|------------|------|------|----|-------|
|      |  | SD         | D          | U          | A           | SA         |      |      |    |       |
|      | The GVATA Agricultural Education Program Standards:                              |            |            |            |             |            |      |      |    |       |
| 16   | Have helped to improve the statewide Georgia Agricultural Education Program      | 6<br>2.3   | 19<br>7.4  | 75<br>29.3 | 127<br>49.6 | 29<br>11.3 | 3.60 | 0.87 | A  |       |
| 17   | Have helped to increase program awareness for local administrators               | 8<br>3.1   | 58<br>22.7 | 59<br>23.0 | 108<br>42.2 | 23<br>9.0  | 3.31 | 1.02 | U  |       |
| 18   | Have helped to increase program awareness for counselors                         | 30<br>11.7 | 86<br>33.6 | 80<br>31.3 | 51<br>19.9  | 9<br>3.5   | 2.70 | 1.03 | U  |       |
| 19   | Have a positive improvement approach for the Agricultural Education programs     | 3<br>1.2   | 30<br>11.7 | 71<br>27.7 | 124<br>48.4 | 28<br>10.9 | 3.56 | 0.88 | U  |       |
| 20   | Are a conclusive evaluation for all Agricultural Education departments           | 48<br>18.8 | 52<br>20.3 | 84<br>32.8 | 64<br>25.0  | 8<br>3.1   | 2.73 | 1.12 | U  |       |
| 21   | Have shown a progressive movement for the Georgia Agricultural Education Program | 10<br>3.9  | 20<br>7.8  | 61<br>23.8 | 137<br>53.5 | 28<br>10.9 | 3.60 | 0.92 | A  |       |
| 22   | Set a useful goal for the beginning teacher of agriculture                       | 5<br>2.0   | 15<br>5.9  | 38<br>14.8 | 170<br>66.4 | 27<br>10.5 | 3.77 | 0.82 | A  |       |
| 23   | Set a useful goal for the experienced teacher of agriculture                     | 6<br>2.3   | 14<br>5.5  | 38<br>14.8 | 170<br>66.4 | 28<br>10.9 | 3.78 | 0.80 | A  |       |
| 24   | Help point out areas of the local department or program which could be improved  | 2<br>.08   | 11<br>4.3  | 32<br>12.5 | 162<br>63.3 | 49<br>19.1 | 3.96 | 0.75 | A  |       |

| Item | Statement   | Rating     |            |            |             |            |      | Mean | SD | D/U/A |
|------|---|------------|------------|------------|-------------|------------|------|------|----|-------|
|      |   | SD         | D          | U          | A           | SA         |      |      |    |       |
|      | The GVATA Agricultural Education Program Standards:   |            |            |            |             |            |      |      |    |       |
| 25   | Make me feel that I must score 90-100 percent in order to be rated successful                       | 6<br>2.3   | 18<br>7.0  | 54<br>21.1 | 112<br>43.8 | 65<br>25.4 | 3.82 | 0.99 | A  |       |
| 26   | Cause my administration to believe that I must score 90-100 percent in order to be rated successful | 12<br>4.7  | 35<br>13.7 | 76<br>29.7 | 86<br>33.6  | 46<br>18.0 | 3.45 | 1.10 | U  |       |
| 27   | Are used by my administration to base program funding on the percent score achieved                 | 58<br>22.7 | 64<br>25.0 | 99<br>38.7 | 31<br>12.1  | 3<br>1.2   | 2.43 | 1.02 | D  |       |
| 28   | Are responsible for a stronger local Agricultural Education program                                 | 26<br>10.2 | 38<br>14.8 | 74<br>28.9 | 103<br>40.2 | 15<br>5.9  | 3.17 | 1.08 | U  |       |
| 29   | May be easily modified  | 21<br>8.2  | 36<br>14.1 | 84<br>32.8 | 100<br>39.1 | 15<br>5.6  | 3.20 | 1.03 | U  |       |
| 30   | Evaluate equally the young farmer, high school, middle school, and area agriculture teachers        | 45<br>17.6 | 57<br>22.3 | 90<br>35.2 | 56<br>21.9  | 8<br>3.1   | 2.70 | 1.09 | U  |       |
| 31   | Help by suggesting a means of correction for program improvement                                    | 9<br>3.5   | 15<br>5.9  | 52<br>20.3 | 160<br>62.5 | 20<br>7.8  | 3.65 | 0.84 | A  |       |
| 32   | Have assisted me in a positive way through the promise of a stronger Ga FFA program in the future   | 9<br>3.5   | 14<br>5.5  | 63<br>24.6 | 133<br>52.0 | 37<br>14.5 | 3.68 | 0.91 | A  |       |

Teacher Status: The teacher status was divided into 2 categories of single teacher departments and multiple teacher departments. Just two items, 2 and 3, were significant; none were highly significant.

Job Description: When ANOVA was used to compare responses cross tabbed by job description, just six items were non-significant, items 22, 23, 25, 26, 29, and 30. Of the 26 significant items, 19 were highly significant.

Use of Standards: When the four categories of use were analyzed using ANOVA, 18 items were significant at the .05 alpha level; of these 14 were highly significant ( $\leq .01$ ). The items of significance were: 1-15, 16-20, 25, 27, and 30.

General Comments: Fifty-eight comments were made; of these 46 were critical or negative, 6 were positive, and 7 were problematic.

## Conclusions

When demographics were analyzed, the following profile of respondents emerged: the average age of respondents was 40 years; the typical respondent had a masters degree or higher; average years of experience was 14.6 years; 85% were male; 91% were Caucasian and 8.2% were African-American; the largest group of respondents (32%) were from AA-size schools.

Most respondents reported that the Standards were only used by the Agricultural Education departments; however, many reported use of the Standards as a shared evaluation instrument; one-fifth indicated that it was the only evaluation used.

When the 32 evaluation statements were analyzed for frequencies and means by the total group, it was found that 20 items fell in the undecided category (means of 2.51-3.50), 11 items were in the agree category (means of 3.51-4.50) and only one item was in the disagree category (means of below 2.50).

A number of demographic characteristics appeared to affect attitudes toward the Standards. The characteristics that significantly affected ratings of more than one-third of the items were: Job Description (26 items); Years of Experience (24 items); Use of Standards (18 items); Age (17 items); Gender (13 items); Size of School (13 items); and Ethnicity (13 items). Educational Level and Number of Teachers in the School had little effect on the ratings given the statements.

## **Recommendations**

The following recommendations are made, based on the above findings and conclusions:

1. Fairness in administration of the Standards should be paramount in their use.
2. The Standards should be promoted for statewide use in Agricultural Education department/teacher evaluation.
3. Inservice education programs should be provided to assist the one-third of the staff in understanding the benefits of the Standards for broader evaluation of the program and personnel.
4. Those items that were rated highly should be emphasized in inservice programs.
5. Items that were rated in the uncertain category should be reviewed and considered when revising the Standards.
6. The item rated lowest (on use of Standards by the administration for funding) should be analyzed and discussed at the next teachers' conference.
7. The demographic subgroups that disagreed with the overall ratings should be given attention when conducting inservice programs and when discussing modifications of the Standards.
8. Fears expressed in the comment section of the study should be reviewed and entered into the discussion at the next teachers' conference.
9. This study should be repeated on an annual or biennial basis, to reflect any changes in demographics.

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