

# PROBLEMS AND CHALLENGES ASSOCIATED WITH THE FIRST YEARS OF TEACHING AGRICULTURE: A FRAMEWORK FOR PRESERVICE AND INSERVICE EDUCATION

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## Abstract

*This national study used the expertise of the winners of the NVATA Outstanding Young Member Award in identifying problems and challenges associated with the first years of teaching agriculture. The study was conducted using a three stage Delphi technique. The population surveyed were the state winners of the NVATA Outstanding Young Member Award for the years 1995 and 1996 and totaled 61 different names. The respondents to survey one listed over 350 problems and challenges associated with the first years of teaching agriculture. The 350 problems and challenges were subsequently grouped into 23 categories and formed the content for surveys two and three using a Likert-type scale. Sixty percent of the respondents rated seven of the 23 categories as very important problems and challenges for first year teachers. Classroom management and student discipline, again in this study, surfaced as a problem for first year teachers. However, different from other studies, the issues relating to time and organizational management, and managing the activities of the FFA chapter surfaced as big problems and challenges and consistently placed at the top of the list in this study.*

## Introduction and Theoretical Framework

Entry into the profession of teaching high school agriculture can be difficult at best. Nesbitt (1991) noted that agriculture teachers are not only held responsible for the activities of a regular subject matter teacher such as classroom management and subject content, but beginning agriculture teachers are additionally responsible for the many activities associated with a total program of vocational agricultural education. Studies concerning problems associated with the first years of teaching confirm the often difficult transition into the profession. Veenman (1984) in an extensive review of 91 studies conducted after 1964 which dealt with problems of beginning teachers across disciplines, found the most reoccurring problems were: classroom discipline, motivating students, dealing with individual differences, assessing students' work, relationships with parents, organization of class work, inadequate teaching materials and supplies, and dealing with problems of individual students.

Researchers (Nichols & Mundt, 1996; Health-Camp & Camp, 1992; Mundt, 1991; Barrick & Doerfert 1989) confirm some of the same problems for agriculture teachers as identified by Veenman. Consistently, classroom management and student discipline come to the forefront as problems for beginning teachers. They also found that additional problems included: managing the vocational student organization, facility management, safety and health, and global organizational issues.

Problems related to the first years of teaching can be translated to inservice needs of first year teachers. Research related to the inservice needs of beginning teachers of agriculture and attributes of beginning teacher induction programs (Garton & Chung, 1996; Nesbitt & Mundt, 1993; Barrera & Finley, 1992) supported a link between problems incurred and inservice education needed and/or provided. Benefits to beginning teachers which were cited as a result of induction and inservice education were the enhancement of technical

knowledge and pedagogical skill. However, those activities which boosted teacher moral and provided encouragement during the first year were also reported to be very important. Flowers & People (1988), recommended teacher educators and state supervisors develop programs which would boost teacher morale.

The literature reviewed for this study found that beginning teachers of agriculture were surveyed during their first year of teaching. Additionally, beginning teachers' principals, teacher educators, and state supervisors of agricultural education were also surveyed. In most cases these were census studies within certain states or regions of the United States. The research focus for these studies dealt with the problems and inservice needs of beginning teachers of agriculture. This research effort also focused on the problems and challenges of the first years of teaching agriculture. However, the research approach was different from other recent studies as follows: 1) the study was a national Delphi, 2) participants were those beginning teachers who had taught from three - five years, and 3) the participants were declared state winners in the NVATA (National Vocational Agricultural Teachers Association) Outstanding Young Member Award Program. The researchers were interested in comparing the responses of beginning teachers who were named outstanding agriculture teachers as determined by their selection as state winners of the NVATA Outstanding Young Member Award with the results of other studies that investigated the problems faced by first year agriculture teachers.

### **Purpose and Objectives**

The purpose of this Delphi study was to utilize the expertise of the state winners of the NVATA Outstanding Young Member Award in identifying problems and challenges associated with the first years of teaching agriculture. Specific objectives of the study were:

1. To identify a list of problems and challenges associated with the first years of teaching agriculture.
2. To determine a priority ranking of problems and challenges as determined by participants in the study.
3. To reach consensus on the priority ranking of problems and challenges using the Delphi process.
4. To compare the results of this study with other research efforts dealing with the problems and challenges associated with the first years of teaching agriculture.

### **Methods and Procedures**

The study was conducted using a three round Delphi technique to identify problems and challenges associated with the first years of teaching agriculture. The Delphi is a group process technique of eliciting, collating, and generally directing informed (expert) judgement toward a consensus on a particular topic (Delp et al., 1977, p 168). The population (panel of experts) for the study was the NVATA Outstanding Young Member Award state winners for the years 1995 and 1996. The list of names and addresses was provided by the national office of the NVATA. The list included 61 different names for the two years. In some cases the same individual may have received the award for two consecutive years and in other cases not all states had declared a state winner in the program for each year, which explains the number less than the total possible of 100. After the first round mailing and follow-up phone call it was found that seven of the participants had either changed occupations or had moved to another school. Therefore, the final population for the study was 54 agriculture teachers.

The three round Delphi process was conducted from February 20 through April 30, 1997. The process included three mailings and follow-up

phone calls to those who had not responded by the requested date. The study included a series of three surveys. All surveys were developed and checked for content validity by faculty in the Department of Agricultural and Extension Education. The first survey contained an open ended question asking the respondents to list up to ten problems and challenges associated with the first years of teaching agriculture. The resulting list of problems and challenges was placed into 23 categories which resulted in the content for the second survey. For the second survey the respondents were asked to rate the level of importance for each category on a Likert-type scale with 1=not important, 2=slightly important, 3=important and 4=very important. The third and final round of the process resulted in a survey which was identical to the second round survey except the individual responses and the group responses were reported for each category. The objective of the third round was to build consensus among the respondents by including the frequency ratings for each category as determined by their peers. Respondents were asked to rate the level of importance, again using the original scale. Respondents could repeat their original response or change it to reflect the consensus of the group. The data were analyzed using frequencies, percentages, means, standard deviations, and Pearson product-moment correlation coefficients.

## Results

The overall response rate for all three surveys was 82.7%. The individual response rates were 81.5% for survey one, 88.9% for survey number two, and 77.8% for survey three. Respondents to survey one listed over 350 problems and challenges associated with the first years of teaching agriculture which were subsequently grouped into 23 categories (Table 1). The 23 categories formed the content for surveys two and three.

Table 2 presents the rank order by mean scores of the 23 categories after round two. The

categories are ranked from the highest to the lowest on the Likert-type importance scale. Five categories were rated as very important with mean scores of  $\geq 3.50$ . Seventeen of the categories were rated as important with mean scores between 2.50-3.49. The one remaining category of dealing with the reputation of the previous teacher was rated as slightly important with a mean score of 2.43.

Table 3 presents the rank order by mean scores of the 23 categories after round three. Sixteen of the mean scores increased and seven scores declined. Respondents moved toward consensus and mean scores generally increased. In the third round, eight of the categories were rated as very important with mean scores of  $\geq 3.50$ . Fourteen of the categories were rated as important with mean scores between 2.50-3.49. The one remaining category of dealing with the reputation of the previous teacher was again rated as slightly important with a mean score of 2.35.

The standard deviations (Table 3) indicated that the tendency was a movement toward consensus. Standard deviations tended to decrease around the mean or stay the same from survey two to survey three. Twenty-one of the 23 standard deviations (91%) decreased from survey two to survey three. The responses were found to be very stable from survey two to survey three as indicated by the Pearson product-moment correlation coefficients. Fifteen coefficients were in the very strong association range and eight were in the substantial association range (Davis, 1971).

The researchers determined that consensus was indicated on an item if at least 60% of the respondents were in agreement. An analysis of the frequencies found that 19 items (83%) met the criteria for agreement. All 19 items were in the important or very important range. Table 4 shows the level of agreement by frequencies from survey three. Table 5 shows those items on which no agreement was reached.

Table 1. Open Ended Responses of Problems and Challenges from Survey One

Category	Responses
Curriculum issues (organizing, scheduling, time, interesting, etc.)	29
Time management	<b>24</b>
Classroom management and student discipline	<b>21</b>
Program budgets and funding	<b>20</b>
FFA issues, knowledge, activities, events, chapter management, etc.	<b>16</b>
Organizing and managing the facility	<b>16</b>
Learning the structures, policies, procedures, norms, etc.	<b>14</b>
Balancing work and personal life, outside activities, etc.	<b>13</b>
Building school and community support for the program	<b>13</b>
Building a relationship with community resources and people	<b>13</b>
Educating and working with administrators	<b>12</b>
Paperwork	10
Identifying, securing, inventorying, up-to-date teaching resources	9
Being technically competent in all areas of agriculture	8
Dealing with individual student needs	<b>8</b>
Dealing with the reputation of the previous teacher	<b>7</b>
Student motivation and feedback	7
Organizational issues	7
Working with other school faculty and staff	6
Developing a local program improvement plan	6
Public relations, image of agriculture and the agriculture program	6
Teaching methods, strategies and lesson planning	6
Student recruitment	<b>6</b>
Working with parents, volunteers and other adult groups	<b>6</b>
Keeping up with technology (computers, etc.)	5
Other issues and items	<b>62</b>

### Conclusions

A list of 23 problems and challenges associated with the first years of teaching agriculture was created by the respondents using the Delphi

technique. After round three the top eight categories rated very important (mean scores  $\geq 3.50$ ) were: 1) managing the overall activities of the local FFA chapter, 2) building the support of faculty, counselors and administrators within the

Table 2. Mean Scores of Problem and Challenge Categories from Delphi Survey Two

Category	<u>M</u>	<u>SD</u>
Managing the overall activities of the local FFA chapter.	3.59	.49
Balancing professional and personal responsibilities and maintaining personal motivation and a positive outlook.	3.52	.65
Properly managing your time, completing paper work and meeting required deadlines.	3.51	.54
Building the support of faculty, counselors and administrators within the school system.	3.50	.61
Using proper classroom management strategies and dealing with student discipline problems.	3.50	.74
Recruiting and motivating students in agricultural education.	3.41	.67
Organizing and developing agricultural curriculum including: schedules, time budgets and selecting relevant and interesting material.	3.39	.53
Organizing and managing safe and attractive facilities (classroom, shop, greenhouse, etc.).	3.39	.67
Building support from parents, organizations and adult groups within the community.	3.37	.67
Developing and managing the budget and finances of the agricultural program.	3.37	.60
Developing and implementing a public relations program to promote the agriculture program.	3.27	.67
Keeping technically competent in new agricultural knowledge, skills and computer technology.	3.27	.67
Developing and using a variety of teaching methods, strategies, grading systems and preparation of lesson plans.	3.25	.69
Identifying and building support from resource people and agricultural industry within the community.	3.22	.75
Developing and managing relevant Supervised Agricultural Experience programs for students.	3.20	.68
Adjusting to individual student needs, learning styles and special education students.	3.14	.82
Forming and using an advisory committee to provide guidance to the agricultural program.	3.14	.71
Learning the structure, policies, procedures and norms within the school system.	3.08	.67
Completing FFA forms and award applications.	3.06	.72

(table continues)

Category	<u>M</u>	<u>SD</u>
Developing short-term and long-term program improvement plans (decision making).	2.93	.69
Obtaining and inventorying teaching materials, shop tools, and equipment.	2.91	.67
Preparing competent teams for FFA Career Development Events.	2.76	.69
Dealing with the reputation (positive or negative) of the previous agricultural teacher.	2.43	1.00

Note. 1=not important, 2=slightly important, 3=important 4=very important.

Table 3. Mean Scores of Problem and Challenge Categories from Delphi Survey Three

Category	<u>M</u>	<u>SD</u>	<u>r</u>
Managing the overall activities of the local FFA chapter.	3.85	.35	.54
Building the support of faculty, counselors and administrators within the school system.	3.73	.44	.56
Balancing professional and personal responsibilities and maintaining personal motivation and a positive outlook.	3.71	.55	.56
Recruiting and motivating students in agricultural education.	3.69	.56	.74
Using proper classroom management strategies and dealing with student discipline problems.	3.64	.57	.86
Properly managing your time, completing paper work and meeting required deadlines.	3.59	.49	.84
Organizing and managing safe and attractive facilities (classroom, shop, greenhouse, etc.).	3.57	.50	0.58
Building support from parents, organizations and adult groups within the community.	3.57	.59	.73
Keeping technically competent in new agricultural knowledge, skills and computer technology.	3.33	.61	.81
Organizing and developing agricultural curriculum including: schedules, time budgets, selecting relevant-interesting material.	3.33	.57	.87
Developing and implementing a public relations program to promote the agriculture program.	3.30	.60	.66

(table continues)

Category	<u>M</u>	<u>SD</u>	<u>r</u>
Developing and managing the budget and finances of the agricultural program.	3.30	.51	.78
Identifying and building support from resource people and agricultural industry within the community.	3.29	.67	.89
Adjusting to individual student needs, learning styles and special education students.	3.23	.69	.91
Forming and using an advisory committee to provide guidance to the agricultural program.	3.19	.59	.75
Developing and using a variety of teaching methods, strategies, grading systems and preparation of lesson plans.	3.16	.58	.61
Completing FFA forms and award applications.	3.14	.60	.85
Developing and managing relevant Supervised Agricultural Experience programs for students.	3.14	.52	.72
Learning the structure, policies, procedures and norms within the school system.	2.97	.51	.61
Obtaining and inventorying teaching materials, tools, and equipment.	2.90	.53	.78
Developing short-term and long-term program improvement plans (decision making).	2.88	.55	.86
Preparing competent teams for FFA Career Development Events.	2.83	.62	.62
Dealing with the reputation (positive or negative) of the previous agricultural teacher.	2.35	.90	.90

Note. 1=not important, 2=slightly important, 3=important 4=very important).

school system, 3) balancing professional and personal responsibilities and maintaining personal motivation and a positive outlook, 4) recruiting and motivating students in agricultural education, 5) using proper classroom management strategies and dealing with student discipline problems, 6) properly managing your time, completing paper work and meeting required deadlines, 7) building support from parents, organizations and adult groups within the community, and 8) organizing and managing safe and attractive facilities (classroom, shop, greenhouse, etc.) Three of the

eight problems were related to time management.

Consensus was reached on seventeen categories of problems and challenges associated with the first years of teaching agriculture. Ten categories were rated as important and seven were rated in the very important range. The top seven categories, rated as very important, had mean scores  $\geq 3.50$  and were ranked by percentages of agreement  $\geq 60\%$ . The seven categories were: 1) managing the overall activities of the local FFA

Table 4. Problems and Challenges Agreed Upon from Survey Three by Percent

Category	Not important	Slightly important	Important	Very important
Managing the overall activities of the local FFA chapter.	0.0	0.0	14.3	85.7 a
Balancing professional and personal responsibilities and maintaining personal motivation and a positive outlook.	0.0	4.8	19.0	76.2 a
Recruiting and motivating students in agricultural education.	0.0	4.8	21.4	73.8 a
Building the support of faculty, counselors and administrators within the school system.	0.0	0.0	26.2	73.8 a
Using proper classroom management strategies and dealing with student discipline problems.	0.0	4.8	26.2	69.0 a
Building support from parents, organizations and adult groups within the community.	0.0	4.8	33.3	61.9 a
Properly managing your time, completing paper work and meeting required deadlines.	0.0	0.0	40.5	60.0 a
Developing and managing the budget and finances of the agricultural program.	0.0	2.4	64.3"	33.3
Forming and using an advisory committee to provide guidance to the agricultural program.	0.0	9.5	61.9"	28.6
Completing FFA forms and award applications.	0.0	11.9	61.9"	26.2
Developing and using a variety of teaching methods, strategies, grading systems and preparation of lesson plans.	2.4	2.4	71.4"	23.8
Learning the structure, policies, procedures and norms within the school system.	0.0	14.3	73.8"	11.9
Developing and managing relevant SAE programs for students.	0.0	7.1	71.4"	21.4
Preparing competent teams for FFA Career Development Events.	0.0	28.6	60.0"	11.9
Obtaining and inventorying teaching materials, shop tools, and equipment.	0.0	19.0	71.4"	9.5
Dealing with the reputation of the previous agricultural teacher.	0.0	9.5	64.3"	7.1
Developing short-term and long-term program improvement plans.	2.4	14.3	76.2"	7.1

<sup>a</sup>0%≥60%

Table 5. Problems and Challenges Not Agreed Upon from Survey Three by Percent

Category	Not important	Slightly important	Important	Very important
Organizing and managing safe and attractive facilities.	0.0	0.0	42.9	57.1
Identifying and building support from resource people and agricultural industry within the community.	0.0	12.2	46.3	41.5
Keeping technically competent in new agricultural knowledge, skills and computer technology.	0.0	7.1	52.4	40.5
Developing and implementing a public relations program.	0.0	7.1	54.8	38.1
Adjusting to individual student needs, learning styles and special education.	0.0	14.3	47.6	38.1
Organizing and developing agricultural curriculum including: schedules, time budgets and selecting relevant and interesting material.	0.0	4.8	57.1	38.1

Note. All %  $\leq$  60%

chapter, 2) balancing professional and personal responsibilities and maintaining personal motivation and a positive outlook, 3) building the support of faculty, counselors and administrators within the school system, 4) recruiting and motivating students in agricultural education, 5) using proper classroom management strategies and dealing with student discipline problems, 6) building support from parents, organizations and adult groups within the community, and 7) properly managing your time, completing paper work and meeting required deadlines.

Three of the seven categories related to time and organizational management issues and two of the seven categories related to building support for the program. The problems and challenges of time management, organizational management, and building support for the program were issues which appeared to be different from other research related to the problems and challenges of the first

years of teaching agriculture. Managing the overall activities of the local FFA was consistently ranked at the top of problems and challenges for new teachers in this Delphi study.

### **Implications and Recommendations**

The implications for the profession of agricultural education and specifically teaching high school agriculture are that indeed the beginning years of teaching provide big challenges for the new teacher. The comprehensive nature of a quality program of high school agricultural education, perhaps, makes the tasks expected to be accomplished, more than can be reasonably expected during the first years of teaching. The issues of classroom management and student discipline were consistent with the literature, and again in this study, surfaced as problems for first year teachers. New issues which surfaced in this study were those problems associated with time

and organizational management, and managing the activities of the local FFA chapter. Additionally, building support for the program and recruiting and motivating students were also deemed to be very important challenges or problems during the first years of teaching.

Over the years the National FFA Organization has consistently added new programs, award areas, and career development events. Perhaps the FFA is becoming too big for a beginning teacher to effectively manage.

The population of NVATA award winners in this study undoubtedly provided information from a different perspective than the traditional first year teacher. The respondents were a group of teachers who had taught from three to five years and had reached some pinnacle of success in that they were recognized as outstanding young teachers in their respective states. Their responses would appear to have impact for the profession in that as a result of their teaching and leadership they were judged to be outstanding. It may be reasonable to assume that these outstanding teachers might be an example to which new teachers of agricultural education might aspire. It would appear that their responses relating to time and organizational management, building community support for the program, and managing the overall activities of the local FFA chapter are matters which should be addressed by the profession in order to insure the success of those entering and progressing in the profession of teaching agriculture and serving as an advisor to the local FFA organization.

As a result of this study it is recommended that:

1. Time and organizational management strategies be incorporated as components of courses and workshops for pre-service and beginning teachers.
2. Ideas for building community, parental,

faculty, counselor, and administrator support for the program continue to be important components of courses and inservice workshops for pre-service and beginning teachers.

3. Research be conducted to study the effect of inservice/postservice activities in the areas of time and organizational management and building community support for the program.
4. Those involved in providing the leadership for the State and National FFA organizations provide guidelines for beginning teachers in order to effectively manage the local FFA chapter during the first years of teaching.
5. State and national FFA leaders assess the total FFA program to determine the magnitude of the program and the ability of teachers to effectively manage all of the components. The question should be asked; is the FFA program becoming too big for a beginning teacher, let alone a veteran teacher, to effectively manage?

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