# SOLUTIONS TO RECRUITMENT ISSUES OF HIGH SCHOOL AGRICULTURAL EDUCATION PROGRAMS

Brian E. Myers, Assistant Professor
University of Florida
Lisa M. Breja, Institutional Researcher
Iowa Valley Community College
James E. Dyer, Associate Professor
University of Florida

#### Abstract

Attracting and retaining quality students in agricultural education programs remains one of the most difficult problems faced by the profession. Much of the research that has been conducted addressing this problem has focused on the identification of obstacles to successful recruitment. This study focused on identifying solutions to those problems. Focus groups were organized in four states that had previously experienced enrollment declines, but have since rebounded. Eighteen issues were identified and solutions suggested to address each of those issues. Leading the list of issues were teacher quality and commitment, program quality, focus on production agriculture, perceived career opportunities, salary considerations, image of agriculture and the program, and availability of agriculture programs to students. Solutions focused on the preparation and hiring of quality teachers, adapting the curriculum to more accurately identify agriculture with science and technology, recruiting high quality students, providing meaningful activities and instruction, and promoting the agriculture program.

## Introduction

Quality students are the lifeblood of a secondary school agricultural education program. Whether a program adheres to a strictly vocational philosophy or endeavors to breach the chasm to an academic focus, a continuous supply of students is essential to accomplishing the goals of the program.

Over several the past decades, enrollment in secondary agricultural education programs has oscillated from alltime highs to near all-time lows (Breja & Dyer, 1999). Although a number of studies have been completed to examine ways to increase and maintain enrollment in postsecondary programs (Dyer, Breja, & Wittler, 2000; Fanno & Cole, 1999), little has been done to study ways in which agricultural education professionals can stabilize the variation in student enrollment in secondary agricultural education programs.

According to the National Research Council (1988), agriculture is a topic that is too important to be taught to only a

relatively small percentage of students. Yet, after experiencing peak enrollments in 1977 (National FFA Organization, 2002), high school agriculture enrollments declined by as much as 60% in the 1980s (Dyer & Osborne, 1994). While many programs across the country have experienced enrollments approaching those of the 1970s, other programs have closed due to the inability of the program leader to entice students to enroll in agriculture courses (Speer, 1998). This vacillation of program demand places the mandate of the National Research Council at risk.

According to Marshall, Herring, and Briers (1992), factors that have been found to influence a student's decision to either enroll or not to enroll in an agricultural education course are the characteristics of the course, enhancement of personal identity, interest in the agricultural field, practical application of information in a future career, encouragement from significant others, and circumstantial or disavowance reasons. These findings would

suggest that providing a strong agricultural education curriculum and informing both the students and those important to the student (i.e., parents, friends, siblings) about the agricultural education program should improve enrollment.

Other studies have examined differences in needs and reasons for enrollment among minority groups (Bell & Fritz, 1992; Cano & Bankston, 1992; Jones Bowen, 1998; Newson-Stewart & Sutphin, 1994; Sutphin & Newson-Stewart, 1995; Talbert & Balschweid, 2001; Talbert & Larke, 1995; Turner & Herren, 1997). Several studies have shown that minority students are less likely to view agriculture as a career choice due to negative perceptions of agricultural education, the FFA, and the agriculture industry in general (Jones & Bowen, 1998; Talbert & Larke, 1995). These studies also found that different groups of people are motivated by different forces to enroll in courses and participate in Sutphin and Newson-Stewart activities. (1995) reported that males responded to social pressure to enroll more than do females, and that females were more likely to enroll in agriculture courses to develop life and teamwork skills.

Other studies have examined strategies used by agriculture teachers who have been successful in the recruitment of students (Myers, Dyer, & Breja, 2002). Strategies such as contact with feeder schools, individual contact by the agriculture teacher and student contact with other potential students, utilization of the FFA, a strong agriscience curriculum, and use of support groups of the agricultural education program and the FFA chapter were found to be effective.

According to Dyer and Breja (2000), the major obstacles to the successful recruitment of students into agriculture programs are those associated with scheduling difficulties, guidance counselor support, competition from other programs and activities, image of agriculture, access to students. administrative support, and teachers having time to recruit. In study after study, the same problems to recruitment surfaced, a poor image of the agricultural education program, agriculture in general, or the FFA (Bell & Fritz, 1992; Breja & Dyer, 1999;

Breja, Ball, & Dyer, 2000; Croom & Flowers, 2001; Gliem & Gliem, 2000; Hoover & Scanlon, 1991a, 1991b; Jones & Bowen, 1998; Newson-Stewart & Sutphin, 1994; Talbert & Larke, 1995; Thompson & Russell, 1993). In addition to a poor image, students often did not perceive any future value in enrolling in agricultural education courses (Bell & Fritz, 1992; Conroy, 2000; Fanno & Cole, 1999; Gliem & Gliem, 2000; Hoover & Scanlon, 1991a). Even though these obstacles have been identified, little has been done to study the solutions to these well-documented problems in recruiting.

Exploration into the recruiting problems faced by high school and university agricultural education programs is relatively new; most of which has occurred during the last decade. As such, the existing literature base on this theme is comparatively shallow in that it has generally focused on explaining enrollment patterns and/or identification of barriers to enrollment (Breja et al., 2000; Conroy, 2000; Croom & Flowers, 2001; Gliem & Gliem, 2000; Hoover & Scanlon, 1991a; Marshall, Herring, & Briers, 1992; Reis & Kahler, 1997; Thompson & Russell, 1993). Whereas these studies have provided an excellent understanding of the problems facing agricultural education in recruiting students, a dearth of research exists on solutions to those problems. While it is necessary to understand the obstacles to successful recruiting, what is really needed is an understanding of the solutions to recruitment problems. This study sought to explore those solutions.

# **Purpose and Objectives**

The purpose of this study was to identify workable solutions to problems experienced by agriculture teachers in recruiting students into secondary agricultural education programs. Specifically, this study sought to identify recruitment issues from agriculture teachers using the nominal group technique, and to identify solutions to those problems.

#### Methods/Procedures

This qualitative effort used a focus group approach to meet the objectives of the study. Interview questions for focus group leaders

were designed to gain an understanding of the issues facing agricultural education, as experienced by each of the respective groups of individuals composing the focus group, and to find solutions for each of the problems identified. Focus groups were composed of high school teachers (n = 14), administrators (n = 2), guidance counselors (n = 2), and students (n = 23); state agricultural education staff (n = 3); university students who had completed high school agricultural education coursework (n = 24); and university faculty in teacher education, leadership, and communication (n = 6) in Illinois, Iowa, North Carolina, and Texas. Each of the states represented had previously experienced declining high school agriculture enrollments, but had reversed the trend and were experiencing an increase in enrollment. The Nominal Group Technique (Delbecq, Van de Ven, & Gustafson, 1975) was used to facilitate the identification of problems facing agricultural education in each of the targeted states, followed by discussion sessions focusing on methods to overcome those problems. Focus group sessions ranged from 3-5 hours in length and were facilitated by one or more of the researchers. At the conclusion of each session, notes were transcribed and summarized into matrices matching issues with solutions. Nominal Group ratings from each focus group were combined to identify an overall ranking of problems.

#### Results

The objectives of this study were to identify problems encountered by agricultural education teachers in recruiting students and to identify solutions to those obstacles. Eighteen issues were identified by the various focus group members. As

indicated in Table 1, many of these issues included topics already identified in the research base. However, several new issues emerged.

The primary issue facing agricultural education programs in the successful recruitment of students was identified as teacher quality and commitment. This issue was identified by each focus group as being the key to a successful recruitment program. The suggested solution to this problem dealt with more effective teacher preparation for recruiting (both in teacher education programs and in inservice programs delivered to current teachers), and in recruiting and certifying high quality individuals.

The second most often identified issue affecting recruitment of students into agricultural education programs was the quality of the program. Focus group members indicated that students would likely not be interested in a program that was perceived to be of low quality. As a solution, respondents recommended an agriscience focus on program curricula, the hiring of quality teachers, and a focus by university faculty and state staff on helping teachers address program quality issues.

The image of the agriculture program and of the agricultural education profession as representing only the production phase of agriculture (farming), was the third most often cited issue. Group members suggested that teacher education programs prepare students to focus on aspects of agriculture other than farming; and for teachers to teach using an agriscience curriculum, FFA activities that do not require backgrounds for participation, and nontraditional SAEs. Furthermore, the groups recommended a public relations program be instituted by teachers to convey agriculture's scientific and technological contributions.

Table 1 Recruitment Issues and Solutions

Issues	Solutions
Teacher quality and commitment	<ul> <li>Increase the quality of teacher preparation through more effective inservice and pre-service programs</li> <li>Professional development of teachers</li> <li>Recruit quality students into teacher certification programs and certify only quality teachers</li> </ul>
Program quality	<ul> <li>Curriculum changes (agriscience focus)</li> <li>Certify only quality teachers</li> <li>Provide inservice programs for teachers on program quality issues</li> </ul>
Agricultural education is equated to "farming"	<ul> <li>Update teacher preparation programs</li> <li>Provide inservice education programs on scientific nature of agriculture</li> <li>Focus agricultural education curriculum on agriscience</li> <li>Focus on FFA – agriculture background not needed for success</li> <li>Public relations – convey agriculture's scientific/technological image to public</li> <li>SAEs – expand to include non-traditional SAEs</li> </ul>
Perceived career opportunities for teachers	<ul> <li>Maintain records of student placements and promote those statistics</li> <li>Develop placement program that focuses on high quality careers</li> </ul>
Teacher salaries	<ul> <li>Public relations – maintain records and promote facts of salaries, benefits, etc.</li> <li>Extended contracts for teachers</li> <li>Provide teachers with information on careers and salaries – information to be used for recruitment</li> </ul>
Image of agriculture	<ul> <li>Educate local administrators</li> <li>Curriculum – focus on agriscience and technology</li> <li>Public relations – develop a public relations program that targets parents, students, administrators, teachers, counselors, and community</li> </ul>
Image of department – students and teachers	<ul><li>Increase expectations</li><li>Quality of students</li></ul>

Issues	Solutions
Program not offered/students not aware of agricultural education	<ul> <li>Public relations – promote need for literacy in agriculture</li> <li>State staff and teachers' organizations work to get new programs funded</li> <li>Target schools without agricultural education programs – educate administrators about agriculture</li> </ul>
Scheduling problems	<ul> <li>Block schedule where applicable</li> <li>Multiple teacher programs – seek to expand programs</li> </ul>
Students are busy with other programs / classes / interests	<ul> <li>Build program into something in which students want to be involved</li> <li>Focus program on needs/wants of clients</li> <li>Develop new SAEs that attract students</li> <li>Promote benefits of involvement with agricultural education</li> </ul>
Competition from other programs	<ul> <li>Recruit – focus on quality (students follow quality)</li> <li>Develop public relations program</li> <li>Seek cooperation rather than competition</li> <li>Build success quickly</li> </ul>
Subject matter not of interest	• Change curriculum to focus on "consumption agriculture" rather than "production agriculture" – promote new focus to clients
Poor facilities / not maintained appropriately	<ul> <li>Instruction/inservice programs on facility management</li> <li>Promote organization</li> </ul>
Administrative support	<ul> <li>Public relations – target administrators</li> <li>Professional development of teachers</li> <li>Quality curriculum that focuses on scientific nature of agriculture – show how curriculum addresses state/national standards</li> <li>Beginning teacher workshops that require teacher to bring an administrator</li> </ul>
Narrow recruitment focus	<ul> <li>Expand recruitment to include representatives of all groups (gender, academic ability, background, race, etc.)</li> <li>Focus recruitment efforts on non-farm students (farm students enroll in Ag Ed anyway – a waste of time to recruit those who will enroll anyway)</li> </ul>

Inactive FFA chapter

Inactive FFA chapter

Increase expectations for students
Get students involved – encourage/reward participation
Focus FFA on application of classroom learning
Promote FFA to administrators, community, teachers, other students, parents, etc.
Provide opportunities for involvement early and often

Teacher understanding of FFA and SAE in agricultural education programs
Follow Local Program Success plans

Group members indicated that students believe there are limited opportunities in agricultural education. The identified solutions to this problem revolved around the creation of a placement program for students (including "placement" in college), and the documentation of student success for those students enrolled in agricultural education programs. Students' perception that teaching salaries are low, compared to other college graduates, was a related issue identified by group members. Groups reported that this was not generally an accurate perception, but identified the need to convey an accurate message to students through record maintenance and conveyance of facts to students. The group also identified extended contracts (12 months, FFA supplements, etc.) as a way to increase salaries.

The image of agriculture in general was another issue preventing the successful recruitment of students into agriculture programs. Apparently, agriculture has not successfully shed its pitchfork and overalls image. A public relations program that accurately depicts the scientific nature of agriculture, and educates clients, was the most often cited solution to this problem.

In addition to the image of agriculture, the image of the department – its students and teacher(s) – was another issue identified by focus groups. Group members suggested an increase in the level of expectations ("raising the bar") and focusing recruitment efforts on enrolling high quality students as solutions to this problem.

The issue of availability of agriculture programs to all students manifested itself in several issues: "Program not offered," "scheduling problems," "students involved in other programs instead of agriculture," and "competition from other programs." Solutions such as implementing block adding scheduling. quality teachers, relations increased public efforts. cooperating with other programs and faculty, and an overall suggestion of making the program into one in which students want to be involved, were emphasized by group members. Likewise, an emphasis by state staff and teachers (through their teacher organizations) on the inclusion agricultural education programs in schools where programs do not currently exist, was suggested by participants.

Group members recognized that some students may not be interested in agricultural subject matter, even if an agriculture program were available. However, members suggested that if the focus of agricultural education moved from "production" to "consumption" agriculture, interest would be generated.

Sometimes a past negative history of a program is a deterrent to enrollment, even if the program has changed. Groups suggested that new curricula, new teachers, and an effective public relations program that promotes the "new" program to clients would address this issue.

The physical and aesthetic conditions of facilities were also listed as obstacles to recruitment. Members suggested that

teacher education faculty emphasize this aspect of an agricultural education program, and that teachers promote organization, both in their own activities and in those of their students.

The support given by administration was also listed as an issue to be addressed. An effective public relations program, quality curriculum that addresses state and national standards, and assistance given to beginning teachers and their principals, were listed as solutions by group members.

Group members indicated that oftentimes, even though a recruitment program is being used, the focus of the recruitment program is too narrow. The groups suggested that all students need to be recruited — males/females, students from farm/rural/suburban/urban backgrounds, ethnically diverse populations, students from various academic levels, etc.

Group members recognized influence of an active FFA chapter on student recruitment and listed an inactive chapter as an issue. It was suggested that teachers adhere to high expectations for students, encourage and reward participation, promote FFA to clients, provide opportunities early and often to students, and to use the FFA as an extension of the classroom – an application of learning.

The final issue identified by the focus groups was a lack of understanding of the FFA and SAE by teachers. Some groups expressed concern that teachers feel the need to participate in every FFA activity sponsored by state and national FFA organizations, leading to teacher, student, administration, and parent burnout. concern was also expressed that this also encourages teachers to primarily focus on competition rather than instruction. Likewise, it was expressed that SAEs have lost their experiential learning focus and have instead become merely record-keeping systems for students to attain awards and degrees. Solution to this issue focused around preservice and inservice education on the role of FFA and SAE in an instructional program, and on closely following the LPS framework for a total agricultural education program.

## **Summary**

Attracting and retaining quality students in agricultural education programs remains one of the most difficult problems faced by the profession. Much of the research that has been conducted to this point has focused on the identification of obstacles to successful recruitment. This study verified the findings of previous studies, but also focused on identifying solutions to those problems. Seventeen issues were identified through focus group interaction, and solutions were suggested to address each of those issues.

Based upon the input of focus group members, the teacher is viewed as the key component of a successful program. This places added importance on the role of university teacher education faculty in identifying and preparing quality individuals for a career in teaching. It also places local education agencies at the forefront of dictating recruitment program success through effective hiring strategies. Needs were identified in both the initial preparation of preservice teachers and in the continued support of teacher education through inservice programs. It is recommended that teacher education departments institute a program of preparation and continued reinforcement through inservice programs that emphasizes the role of the teacher in a successful program.

Leading the list of issues were teacher quality and commitment, program quality, focus on production agriculture, perceived career opportunities, salary considerations, image of agriculture and the program, and availability of agriculture programs to students. The image of agriculture, of the high school agriculture program, and of the agriculture teacher were also identified as key issues in recruiting students. recommended group members agricultural education move from production-oriented curriculum to one that is anchored in science and technology. addition, records of outcomes such as student placement, salaries, etc., should be kept and used as part of a public relations program to both secure support and to attract quality students.

The role of FFA and SAE as integral components of an agricultural education program was validated by the focus groups; however, the current utilization of those programs was listed as an issue. While the FFA provides opportunities for generating student interest in an agriculture program, some focus group members expressed concern that disproportionate emphasis is placed on competition over learning. As such, teachers often get caught up in trying to participate in all activities sponsored by the FFA at the expense of a quality instructional program. Likewise, focus group members expressed concern that too much emphasis is placed on the recordkeeping component of SAE programs rather than the experiential learning value. It was expressed that this focus on productionoriented recordkeeping contributed to the image of agricultural education as only a program for those returning to the farm.

Solutions to the issues identified by the focus groups primarily centered on the preparation and hiring of quality teachers, adapting the curriculum to more accurately identify agriculture with science and technology, recruiting high quality students, providing meaningful activities and instruction, and promoting the agriculture program. Success will necessitate a partnership between teacher educators, state education staff, teachers, and local administrators. Each must institute a plan for effectively working with its client base.

The findings of this study concurred with previous studies on identifying obstacles to recruitment (Bell & Fritz, 1992; Breja & Dyer, 1999; Breja, Ball, & Dyer, 2000; Croom & Flowers, 2001; Gliem & Gliem, 2000; Hoover & Scanlon, 1991a, 1991b; Jones & Bowen, 1998; Newson-Stewart & Sutphin, 1994; Talbert & Larke, 1995; Thompson & Russell, 1993). The issue of the poor image of agriculture in general, and of agricultural education programs specifically, again surfaced as a major concern in the recruitment of students.

The major contribution of this study to the research base is its identification of possible solutions to the recruitment issues facing agricultural education. Based upon the findings of this study, teacher education programs should include units of instruction in the preservice program that teach students to develop consumer-oriented, agriscience curricula; develop and implement an effective public relations program; more effectively and accurately integrate FFA and SAE instruction into the total program; identify and recruit for student quality; and document program success. In addition, a continuing education program is needed to update the skills of current teachers.

#### References

Bell, L. C., & Fritz, S. M. (1992). Deterrents to female enrollment in secondary agricultural education programs in Nebraska. *Journal of Agricultural Education*, 33(4), 39-47.

Breja, L., & Dyer, J. (1999). Attitudes of Agriculture Teachers, Teacher Educators, and State Staff Toward Recruitment. Paper presented at the 26th Annual National Agricultural Education Research Conference, Orlando, FL.

Breja, L. M., Ball, A. L., & Dyer, J. E. (2000). Problems in Student Retention: A Delphi Study of Agriculture Teacher Perceptions. Paper presented at the 27th Annual National Agricultural Education Research Conference, San Diego, CA.

Cano, J., & Bankston, J. (1992). Factors which influence participation and non-participation of ethnic minority youth in Ohio 4-H programs. *Journal of Agricultural Education*, 33(1), 23-29.

Conroy, C. A. (2000). Reinventing career education and recruitment in agricultural education for the 21st century. *Journal of Agricultural Education*, 41(4), 73-84.

Croom, D. B., & Flowers, J. L. (2001). Finding and keeping members: Perspectives of FFA members and non-members on the effectiveness of FFA programs and services. Paper presented at the 28th Annual National Agricultural Education Research Conference, New Orleans, LA.

- Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). Group techniques for program planning: A guide to nominal group and Delphi processes. Glenview, IL: Scott, Foresman.
- Dyer, J. E., & Breja, L. M. (2000). A Delphi study of agriculture teacher perceptions of problems in student recruitment. Paper presented at the 48th Annual AAAE Central Region Reserach Conference and Seiminar in Agricultural Education, St. Louis, MO.
- Dyer, J. E., Breja, L. M., & Wittler, P. S. H. (2000). *Predictors of student retention in colleges of agriculture*. Paper presented at the 27th Annual National Agricultural Education Research Conference, San Diego, CA.
- Dyer, J. E., & Osborne, E. W. (1994). The influence of science-based agriculture courses on the attitudes of Illinois guidance counselors. Paper presented at the 48th Annual Central Region Agricultural Education Research Conference.
- Fanno, W., & Cole, R. L. (1999). Survey of early leavers: Implications for recruitment and retention. Paper presented at the 26th Annual National Agricultural Education Research Conference, Orlando, FL.
- Gliem, R. R., & Gliem, J. A. (2000). Factors that encouraged, discouraged, and would encourage students in secondary agricultural education programs to join the FFA. Paper presented at the 27th Annual National Agricultural Education Research Conference, San Diego.
- Hoover, T. S., & Scanlon, D. C. (1991a). Enrollment issues in agricultural education programs and FFA membership. *Journal of Agricultural Education*, 32(4), 2-10.
- Hoover, T. S., & Scanlon, D. C. (1991b). Recruitment practices: A National survey of agricultural educators. *Journal of Agricultural Education*, 32(3), 29-34.

- Jones, K. R., & Bowen, B. E. (1998). A qualitative assessment of teacher and school influences on African American enrollments in secondary agricultural science courses. *Journal of Agricultural Education*, 39(2), 19-29.
- Marshall, T., Herring, D., & Briers, G. (1992). Factors associated with enrollment in agricultural science and membership in the FFA in Texas. *Journal of Agricultural Education*, 33(4), 17-23.
- Myers, B. E., Dyer, J. E., & Breja, L. M. (2002). Recruitment strategies and activities used by agriculture teachers. Paper presented at the 29th Annual National Agricultural Education Research Conference, Las Vegas, NV.
- National FFA Organization. (2002, January). *National FFA Organization* 2001-02 selected statistics. Indianapolis: Author.
- National Research Council. (1988). *Understanding agriculture: new directions for education*. Washington, D.C.: National Academy Press.
- Newson-Stewart, M., & Sutphin, H. D. (1994). How tenth grade students perceive agriculture and environmental science: Comparison by gender and ethnicity. *Journal of Agricultural Education*, 35(3), 50-56.
- Reis, R., & Kahler, A. A. (1997). Factors influencing enrollment in agricultural education programs as expressed by Iowa secondary agricultural education students. *Journal of Agricultural Education*, 38(2), 38-48.
- Speer, T. L. (1998). Agriculture education: A bumper crop of students. *Techniques: Making Education & Career Connections*, 73, 30-32.
- Sutphin, H. D., & Newson-Stewart, M. (1995). Student's rationale for selection of agriculturally related courses in high

School by gender and ethnicity. *Journal of Agricultural Education*, 36(2), 54-61.

Talbert, B. A., & Balschweid, M. A. students (2001).Engaging in the agricultural education model: Factors affecting student participation in the National FFA Organization. Paper presented at the 28th Annual National Agricultural Education Research Conference, New Orleans, LA.

Talbert, B. A., & Larke, A. (1995). Factors influencing minority and non-

minority students to enroll in an introductory agriscience course in Texas. *Journal of Agricultural Education*, 36(1), 38-45.

Thompson, J. C., & Russell, E. B. (1993). Beliefs and intentions of counselors, parents, and students regarding agriculture as a career choice. *Journal of Agricultural Education*, 34(4), 55-63.

Turner, J., & Herren, R. V. (1997). Motivational needs of students enrolled in agricultural education programs in Georgia. *Journal of Agricultural Education*, 38(4), 30-41.

BRIAN E. MYERS is an Assistant Professor in the Department of Agricultural Education and Communication at the University of Florida, 305 Rolfs Hall, P.O. Box 110540, Gainesville, FL 32611-0540. E-mail: <a href="mailto:bmyers@ufl.edu">bmyers@ufl.edu</a>.

LISA M. BREJA is an Institutional Researcher at Iowa Valley Community College District, 3702 S. Center Street, Marshalltown, IA 50158. Email: <u>Lisa.Breja@iavalley.edu</u>.

JAMES E. DYER is an Associate Professor in the Department of Agricultural Education and Communication at the University of Florida, 305 Rolfs Hall, P.O. Box 110540, Gainesville, FL 32611-0540. E-mail: <a href="mailto:jedyer@ufl.edu">jedyer@ufl.edu</a>.