### SPECIAL FEATURE - DEBATE THE ISSUES

This issue of The Journal presents another in the series of "debate the issues" articles authored by leaders in agricultural education. The focus in this debate is on the location of research efforts in agricultural education: Should they be affiliated with teacher education departments or in separate units? The authors are Ronald A. Brown, Mississippi State University, and S. Douglas Patterson, Alabama State Department of Education

# RESEARCH IN AGRICULTURAL EDUCATION SHOULD BE HANDLED BY TEACHER EDUCATION DEPARTMENTS

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To try to stimulate interest and improvement in research in agricultural education, I agreed to present and justify a case for research being conducted by teacher educators in agriculture. Some comments about the perspective from which I am writing will probably help me present a clearer picture of this side of the issue.

Research, as one of the functions of a land-grant institution, is an integral component of my position description, and, as a problem identification and solution procedure, research is an important and complementary ingredient in my philosophy of education. With these two points, I will now present some of the advantages I see for research in agricultural education being handled by teacher education departments.

#### Advantages

1. Research in agricultural education should directly or indirectly improve secondary and postsecondary vocational education programs in agriculture. It should grow out of a continuing development program which includes teaching and direct contact in the (continued on page 8) Brown--continued from page 2

field. One prerequisite for this to occur is the accurate and adequate identification of research problems, questions that need to be answered, information that is needed, or practices and procedures which need to be developed, tried, and evaluated in the profession. When compared to most research units separate from teacher education, teacher educators are closer to the day-to-day operation of vocational agriculture. They are in direct contact with preservice students in classrooms and laboratories; with teachers in credit and non-credit inservice activities and graduate programs; with secondary and post secondary students in speech clinics, judging contests, and field trips; and with supervisory staff in various vocational agriculture/agribusiness and FFA activities and joint planning conferences.

These contacts help enable teacher educators to identify relevant research needs and to plan, conduct, and implement programmatic research.

- 2. Research in agricultural education should be programmatic, as opposed to fragmented. Programmatic research is planned and directed toward the achievement of a long-term goal, and usually involves a variety of participants and/or phases. In agricultural education, graduate student theses and dissertations, staff studies, funded departmental research, and consortia-type efforts could all be directed toward one long-term goal. Research of this type can best be handled by teacher educators because of access to and continuous contact with the various participants.
- 3. Another consideration of where agricultural education research should be handled is critical mass of researchers. It is important for researchers to interact with other individuals regarding research efforts. In most cases a teacher education faculty is comprised of three, four, or more individuals, which provides a critical mass of researchers interested in agricultural education. Research units separate from teacher education may have a large critical mass of researchers. However, researchers in such units often have across-the-board vocational responsibilities, or only one or two people may be assigned to agricultural education, limiting the critical mass available for interaction.
- 4. Research, when handled by departments of agricultural teacher education, helps to improve instruction in several ways. It improves the instructional ability of professors by providing up-to-date ideas about the profession and information about current problems and solutions. Several teacher education departments have been weakened because faculty members failed to actively participate in current activities of the profession. Professional development of faculty in agricultural teacher education can and

should be aided by involvement in research. Without a doubt, the application of specific research findings will improve undergraduate, graduate, and inservice teacher education programs. In addition to professional contributions, graduate student involvement in research contributes to their professional development as future researchers and teachers.

- 5. Access to library and computer facilities may differ between teacher education departments and separate research units. One of the determining factors is location of the separate unit. If a research unit is located in a State Department of Education, for example, and it is 100 miles from a major library, the research effort could be more difficult because of lack of easy access. Availability of computer facilities and other equipment is a similar concern which may influence the degree of difficulty of conducting high quality research.
- 6. The historical coordination between agricultural research stations and land-grant institutions has produced tremendous improvements in agriculture and society. This example of success offers evidence for the need of a strong tie between research and teacher education in agriculture. This joint relationship can best be developed by and through individuals who have joint responsibilities in teacher education and research.
- 7. The most significant advantage for research being handled in teacher education is that recognized teacher education functions support good research--support it like the functions of no other branch or unit of the profession. The life and breath of research is the degree to which findings of research are adopted, thus one of the functions involved in good research is dissemination. To avoid having research die on the shelves of research units, potential users must be helped through the diffusion-adoption process. Who better than teacher educators can make agricultural educators aware of and interested in research findings? Where better than in pre- and in-service instruction can educators be provided an opportunity and encouraged to make a mental evaluation and actual trial of research findings? Finally, who better than teacher educators can help to make research in agriculture/agribusiness education worthwhile, who better can facilitate adoption? The most effective adoption, though, does not occur apart from the other components of the research process, but is planned as an integral part. Teacher education participation in the total research effort more likely leads to effective dissemination and, in turn, effective application and use of research findings.

#### Summary

Several advantages have been offered for research being handled by departments of teacher education in agriculture. When

we pause long enough to look at the whole instead of the smaller parts, we have to realize that the ultimate purpose of teacher education and research is learning. They are actually inseparable when effectively conducted.

We, in teacher education, should strive to instill in our students both the spirit of inquiry and the concept of critical thinking, while we teach the latest developments. Can we separate this from research? We should exhibit and create enthusiasm for learning, it's contagious. Can we do this and not participate actively in research?

The answer is an obvious "no." For the ultimate benefits of our students and the profession, research in agricultural education should be handled by teacher education departments.

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