

**Transforming University Programs of
Agricultural Education**

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Thank you for this opportunity to address this prestigious audience. It is a great honor for me to be with you. It is always good to be at home. I expect to be here more regularly in the days ahead for I do not anticipate becoming a career administrator.

I appreciate Dean Sutphin's selection for me to present this distinguished lecture. When I consider the substantial influence of Dr. Sutphin's dissertation on the profession and his continuing contributions as a scholar and leader in agricultural education, I am indeed humbled that he would invite me to fulfill this important task this morning.

This opportunity, indeed this responsibility, has been given much thought. Certainly the profession deserves no less. It did not take long to select the topic for this lecture. The ease of selecting a topic was undoubtedly a product of my current college-wide administrative experiences and my own personal reflection about my career. Let me describe the context out of which the theme for this lecture emerges.

My professional life has been devoted to agricultural education. It has and continues to be a passion for me. I consider it a high calling to be able to prepare individuals to enrich the lives of all the students they teach. It is provocative; it is stimulating; it is rewarding. Importantly, it is worthwhile and it is satisfying. Given this personal stance, it is easy for my commitment to be unyielding to this discipline for what it has been, for what it is and especially for what it can be.

It is this area of what it can be which must consume our energy and imagination. As we know, all is not well with agriculture these days.

Current Situation

Generally, university departments and programs of agricultural education are small. They usually have three to four faculty. Undergraduate enrollment in recent years has been limited. The level of financial support for most units is meager.

Most often, the focus of the department is the preparation of teachers of agriculture for the public schools. This is the sole focus of many departments.

The faculty usually advise undergraduates, advise a student organization, teach an introductory course, a methods course, perhaps a curriculum course and FFA and/or SAE course, and operate a student teaching program. They provide inservice education for teachers of agriculture and usually offer a master's program. They also provide service to the campus, the teachers of the state, the profession and their community.

Agricultural education faculty also conduct research to the extent that time is available. The research is often accomplished primarily through their work of graduate student theses and dissertations. The nature of the research which is conducted is dictated

by the time faculty have available and the nature of that time. The amount of time is small and it is uneven in quality and the very nature of this time varies tremendously among the departments of agricultural education in the United States. In departments where there are only one or two faculty, it is extraordinarily difficult to have any "quality time" for research.

The cost of research studies in agricultural education is by necessity small. The research often addresses topics of personal interest which can be somewhat readily measured and easily analyzed.

Agricultural education faculty are doing more research than ever. They have made tremendous improvements in methodology and design but not nearly so much improvement in problem selection and specification.

There is no question that the state of research in agricultural education is what it is because of lack of funding, lack of staffing, lack of time of professors and lack of maturity as a discipline. But it is also because many faculty in agricultural education prefer to deal with people, to design curricula, and to teach and advise. They like these activities better than research. In many cases, so long as a faculty member can do enough research to get by, he/she is satisfied. Most faculty would seldom be satisfied with doing just enough to get by in teaching. Simply put, most agricultural educators do not have the passion for research that they have for teaching.

The trend of the last five years is one of slow declines in agricultural education programs at various universities. A few more each year or so give up their own methods courses and send their students to study methods with all vocational education majors or, in some cases, all secondary education majors. There is a similar trend with respect to agricultural education-specific student teaching programs.

Forces for Change

Forces for change are all about us. They are robust and pernicious and they are not likely to go away.

Declining Enrollments

Enrollments in high school and college agriculture programs continue to decline. There is an annual downsizing of high school programs. Multiple teacher departments quickly become single teacher operations. Often, in a relatively short period of time, the single teacher divides his or her time between two schools as we reinvent the old notion of "twin departments." In the early years, we embraced the idea of twin departments as a stepping stone to creating sufficient demand for two separate departments. These days, we embrace them as a way of stalling the inevitable. Likewise, colleges of agriculture face the prospects of abolishing or combining departments, examining the possibilities for regional delivery of programs and in some cases, merging with other colleges on their campus.

Demise of Agricultural Education in State Departments of Education

Agricultural education sections of state departments of education are being demolished. The few personnel who are left have had their charters so severely restricted that they have neither the time nor the clout or resources to help transform agricultural education programs in their states.

Less Demand for Teachers

As there are fewer students studying agriculture in the public schools, there is less demand for additional teachers in agriculture. With this reduced demand, there are fewer students studying agricultural education at most universities.

When a university department or program has a narrow focus, small and declining numbers of students enrolled and is linked with a system for which the graduates who are prepared is adrift, then that program is extraordinarily vulnerable.

Vulnerability of the Current Situation

Too many agricultural education departments/programs are too small in terms of the number of faculty and number of students served. Under these conditions, a unit is very vulnerable to being merged with other education units or in some instances to being abolished. Concomitant with being abolished, adjoining states will be offered the opportunity of meeting the needs of students interested in agricultural education. Perhaps a worse prospect is the possibility of facing a prolonged period of neglect before tenured faculty vacate a line, at which time this line is lost.

One thing to which such programs are not apt to be vulnerable is having a dean come in and tell them how to change in order to enhance their ability to compete and thrive. Deans are far more likely to take the resources allocated to declining programs and reallocate them to growing programs.

While my review of the "current situation" and "force of change" seems to be all doom and gloom, it need not be. We, as agricultural educators in the universities, possess a solid core of expertise. We have fundamental knowledge of people and how they learn. We are excellent at directing processes in organizations. We have unique strength in organizing and presenting subject matter. Most of us have a strong experiential background in leadership and youth development. As a group, we are people oriented, keenly committed to teamwork and known for our willingness to work hard. The creative genius with which we have built educational delivery systems is unsurpassed. The challenge before us is to tap into these core strengths and values and transform our programs and position them so they flourish rather than flounder; embrace emerging priorities and needs instead of defiantly holding onto that which is declining. We can do it if we take the action which is required of us.

Action Required

Agricultural education units at the university must make a number of key changes if

they are to prosper. They need to broaden their programs, add depth to their scholarship and accept the responsibility to lead the transformation of public school programs of instruction in agriculture.

Broadened Programs

Only departments of agricultural education which broaden their programs will thrive. It will no longer be possible even to survive with a one dimensional program targeted to one client group. Departments which intend to prosper must scan the horizon and identify needs which are not being adequately served and foster relationships with new client groups.

As this is done, much care must be exercised to be sure new ventures are sufficiently undergirded by a constantly developing knowledge base. Our demise will be if we try to serve new purposes with inadequately developed and mastered content.

In most cases, such broadening of programs will require some measure of retraining of existing faculty. Current faculty will need to use their sabbaticals and other leave opportunities to develop new areas of expertise. As has often been our case, much of this may have to be a bootstrap operation unless some of you are able to convince someone like the Kellogg Foundation to assist. A foundation or benefactor may be willing to underwrite a national initiative to provide for the retraining of professors of agricultural education if there is a well developed plan which is national in scope. It will be the exception where new dimensions can be added to the department's role solely by employing new and differently educated faculty. Noting this need, departments with doctoral programs will serve their graduate students well if they encourage them to develop sub-specialties beyond teacher education and extension education. It may be this new wave of talent which becomes pivotal in transforming existing departments of agricultural education.

A word of caution is due. It is not enough to broaden the program, even with attention to retraining which is required to develop a sufficient foundation of expertise, unless a research agenda is developed that accompanies the new thrusts. It will be perilous to attempt to offer new courses/programs for new purposes without an accompanying research base. To attempt such would just reinforce the existing negative stereotypical image of agricultural education. That is the last thing the profession needs.

How should programming in agricultural education departments be broadened? Several suggestions are obvious, needed and possible. As the needs in each state are examined, undoubtedly additional possibilities will be discovered. The assumption is that most departments will continue to prepare agriculture teachers for the secondary schools. Hopefully they will prepare them for roles beyond providing vocational instruction. In addition, I hope they will prepare them to provide instruction at the middle school and elementary levels. Teachers of agriculture must also be prepared for teaching at the post-secondary level, if this is not already occurring. To me, all of this is teacher preparation. However, only one facet of it is currently being pursued at most universities.

Higher Education in Agriculture

An area of opportunity that is right on our doorsteps is providing instruction and

research which deals with topics related to higher education in agriculture. Current agriculture faculty need substantial inservice education in order to more competently fulfill their instructional role. Graduate students in the various disciplines of food, agriculture and environmental studies represent another audience. Graduates who aspire to become professors need assistance which agricultural educators are ideally equipped to provide. Yet on most campuses, agricultural educators have not embraced this opportunity.

International graduate students who will return to serve in educational roles in their home country represent another audience. They may be majors in animal science or agronomy or another discipline but they can be well served by enrolling in one or more well developed courses in agricultural education which prepare them for leadership roles in education in their country.

For some departments, there is an opportunity to offer course work and inservice activities which address administration in higher education. Agricultural education departments are in a unique position to develop and offer such courses and/or programs.

Every college of agriculture in the United States is struggling with how to recruit additional students. Almost no empirical work is being conducted to determine which strategies are effective. Agricultural education faculty are ideally suited to provide the needed answers. Likewise, they should conduct research which examines teaching effectiveness in colleges of agriculture, sheds light on needed curriculum reform and many other such topics.

Leadership Programs

Another area of opportunity is courses and programs in leadership. Current undergraduates in agriculture would be well served to participate in courses and non-course experiential activities that develop and enhance their leadership capacity. No area of the campus is better equipped to meet this need than agricultural education departments. Extension agents need additional work in this area; so do other faculty. In a number of states, extensive agricultural leadership programs for alumni are available. Too few of these programs are housed in agricultural education departments. We also need leadership development approaches for graduate students. They are well prepared as scientists, but have little help with developing their leadership capacity.

On most campuses, the activities such as those enumerated, if offered at all, are offered in quite a number of pockets within the organization, none of which are undergirded with sustained scholarship. A persuasive argument can be made to center all such leadership efforts in an academic department. I believe the department of choice is agricultural education.

Extension Education

More of our agricultural education departments should offer extension education programs. These need to be comprehensive extension education programs that receive billing and resourcing that is equal to that provided to the teacher preparation program.

Likewise agricultural education departments must embrace the opportunity to provide ongoing inservice education for extension agents.

Agricultural Communication

A reasonable number of programs should add agricultural communication to their portfolio. These will undoubtedly be joint programs with colleagues in journalism and/or communication. Such programs should exploit opportunities to provide basic instruction in communications for agriculture students in addition to offering courses for majors in agricultural communication. Providing such service courses will enhance the quality of the college's graduates and represent a valuable contribution to the general education portion of the curriculum.

International Development

Another area of growth potential is in international development. This area can be developed at the undergraduate and graduate level. Agricultural education departments can provide a sound program of study to prepare a cadre of professionals to serve in educational roles abroad. Furthermore, agricultural education faculty need to lead efforts on their campuses to help faculty throughout the college figure out how to internationalize their courses.

Now, without doubt, many will quickly identify reasons why these ways of broadening the program are undesirable. A chief objection may be that too many of the options represent too much of a service-course mentality that pulls the department away from its disciplinary heritage. This may be true, but the alternative is to stay with the narrowly defined discipline until there is so little need for its propagation that the program is abolished.

Obviously no one program will have the capacity to add all of these possible dimensions to its current activities. Teacher preparation will probably continue to be the common denominator among departments of agricultural education. Choices will have to be made. Priorities must be set. Intraregional planning and collaboration is required. Within a region, a given department devotes its energy to developing expertise in international development. Every department will not be able to specialize in preparing teachers for two-year post secondary institutions. However, one or two per region could. As departments coordinate their efforts, they most assuredly must include the option of sharing their courses among institutions via satellite delivery of instruction. There is no reason a small consortium of agricultural education departments could not offer a first-rate master's degree for extension personnel using satellite technology for delivery. Ag*Sat has offered this opportunity but, thus far, the agricultural education community has shown little interest. Similar efforts should be launched in agricultural communication and agricultural education in higher education. In addition, agricultural education departments should take the lead in helping professors of agriculture master the use of this medium for instruction. Yet to date, not much has been forthcoming. Distance education as a way to serve unmet needs is developing rapidly. But agricultural education is not in the forefront. As distance education rapidly evolves, a whole host of research questions are emerging. Agricultural educators need to lead the research efforts which will be required in this area.

Adding Depth

As if the challenge to broaden programs of agricultural education is not enough, we must also simultaneously deepen our program content. I believe that the factor which haunts us most as agricultural educators is the imbedded image that colleagues have of us as scholarly lightweights. This shackle, this albatross, can only be shaken with a demonstrated track record of sustained discoveries that reach a critical mass. I believe this is the reason in which we are most vulnerable to criticism. There may be plenty of reasons for the condition which exists. But we simply must make a quantum leap forward in improving the stature and reputation of our scholarship.

I recently read an account of a retiring professor of horticulture who specialized in vegetable crops. As he reflected over his long and distinguished career he indicated that his work had been guided by his passion to use his research program to do for the vegetable producers what the corn breeders had done for the corn growers. By any objective measure, he had been quite successful. His long line of discoveries had helped the vegetable growers in his region of the country to improve production and quality and profit.

Then I reflected over my own career. I reviewed my list of publications and my doctoral students' dissertations. There just was not much of a parallel. My string of publications did not "hang together" too well. They did not "add up" easily. They were rather disjointed.

Now perhaps I am the exception. Maybe a review of a cross section of all full professors in agricultural education would yield a different conclusion. I doubt it.

What are we to do? We know the limitations of our research efforts. They were described earlier. There are some fixed realities. We do not, in the main, have large faculties. We have very limited time and resources. We teach widely disparate courses. How can each of us or even each department possibly have depth in every area for which we are responsible? We cannot.

A Different Approach to Research Programs

We must embrace a different approach to research in agricultural education. We've talked about it before but we have not made much progress.

We must each develop a well defined program of inquiry to which we will commit over the long haul. Such a strategy is clearly feasible for all who are associate or full professors.

Partnerships need to be developed among the states for a limited number of well defined areas of research. We do not have the staffing levels to allow us to achieve excellence in a large number of areas of inquiry. We must be willing to narrow the array of possible research topics. We cannot all go about such a process independently. There must be some coordination.

There must be a master plan. Someone must step forward to lead the effort. An approach needs to be designed that can harness the resources of the larger departments and yet include the substantial talents of faculty in the smaller departments. Past efforts to accomplish this kind of collaboration have been futile. This kind of a collaborative approach to research will require far more energy and persistence than we have previously given. The availability of electronic mail, telephone conferencing and facsimile transmission can facilitate the kind of cooperation which is necessary. It may also be necessary to devote substantial time at existing meetings to furthering such cooperative planning. And this must be an ongoing effort, not a one-time attempt. We must also be willing to use professional leaves to enhance the planning needed to make progress. With some advanced planning, one or more faculty could arrange to be at a common university during the same period of time. In addition, quite a few faculty could arrange two to four week periods away from their campus to meet at a host institution with others who are working in a common area of scholarship.

For sure, every department and every faculty member cannot try to go his or her own way. Each program of inquiry must be guided by a passionate vision as in the case of the vegetable crops professor mentioned earlier. One's research program must be embraced with the idea of making an impact that will be helpful to some target audience. Also, we must be willing to provide answers to the broad questions with which policy makers in agriculture and education struggle rather than confirming our efforts to investigating the questions which happen to intrigue us individually.

The products of our efforts must be cumulative. The results must add up to more over time than is currently the case. Our scholarship must be able to respond robustly to the often asked "so what?" with concrete answers that are persuasive.

As we build momentum in adding additional depth to our scholarship, we must be sure that the product of our effort is adequately disseminated. We desperately need to make certain that there is a greater connection between our scholarship and our teaching. Far too often, students sit in our courses and do not benefit from an explicit examination of our research activity and the important literature that informs it. Also, our various client groups need to receive a more steady stream of reports of our discoveries. They must see the benefit of our time devoted to scholarship.

If we can respond to this key change, we will greatly enhance our prospect for prosperity. If we fail to enhance our scholarship, we will hasten our demise.

Providing Leadership for Change

Finally, I would argue that even as agricultural education programs in the universities are broadened and add depth, they must step forward with bold, unrelenting and persuasive leadership for the existing programs of agricultural education in the public schools. As I survey the condition of public school agricultural education in this country, I am concerned about what I see.

Agricultural educators in our universities cannot afford to wait for someone else to provide leadership and direction for public school agricultural education programs. We have been too slow to assume a sustained proactive role in this area.

Perhaps we suffer from a psychosis born of our history where the "feds" for so long laid down the law. Perhaps we are paralyzed into inaction from feeding from the umbilical cord for state department of education coffers for so many years. Whatever the problem, we must bolt from our inaction to transform the nature of local programs of agricultural education.

Agricultural education professors cannot successfully lead the required transformation of local agricultural education programs single-handed. Attempting such would be folly. We must enlist the aid and support of state and local policy makers. The magnitude of change which is required cannot be accomplished without the direct involvement of state and local boards of education as well as state and local superintendents. It will also be necessary to team up with the political "movers and shakers" in the various states. We must forge a coalition with farm bureaus, key consumer advocates, the environmental lobby, commodity groups and others. Deans of agriculture must be enlisted if we are to be successful to developing such coalitions.

Whatever the reticence, it must be overcome. Professors of agricultural education are the individuals who have the philosophical base, the substantive credibility and the passion to see the desired outcome achieved. They must articulate their vision and use their well known ability to develop a plan of action that is politically supportable. Perhaps most importantly, they must muster the courage and the commitment to complete this urgent task.

We cannot just stand by and wait to see if local programs survive. Teachers urgently need our help. We are the only ones left. I believe teachers agree with Ralph Waldo Emerson when he said, "Our chief want is someone who will inspire us to be what we know we could be." I believe agricultural education professors are that someone.

As we devote our energies to this leadership challenge, we must be more demanding of our colleges of agriculture for assistance with technical content. If local programs are not strong, you can bet it will have a negative impact on the college(s) of agriculture in the state. The vice president or dean of agriculture has a vested interest in this effort. You must build the case for more help and convince him/her to redirect some of the time of existing personnel to this cause. You will have to develop a specific plan and take the initiative to present it to the vice president or dean. Then you will have to tenaciously follow-up this request. These leaders are busy. The persistent request which is carefully conceived will be successful; the one-time superficial request will falter.

Closing

Jane Traux has said:

"Botanists say that trees need the powerful March winds to flex their trunks and main branches, so that the sap is drawn up to nourish the budding leaves. Perhaps we need the gales of life in the same way, though we dislike enduring them. A blustery period in our fortunes is often the prelude to a new spring of life and health, success and happiness, when we keep steadfast in faith and look to the good in spite of appearances."

We in agricultural education, are in just such a blustery period. As we embrace the challenges which face us, let us remember the words of General Douglas MacArthur: "There is no security on this earth; there is only opportunity."

This opportunity is ours. We have the capacity to respond. As we do, we need to heed the words of Ralph Waldo Emerson: "What lies before us and what lies behind us are small matters compared to what lies within us."

You, as agricultural educators, have "within you" the very stuff which is needed to transform agricultural education departments in the universities into what they must be now and in the future. I hope you will commit yourself to a noble effort.