

CREATING A COMPETITIVE ADVANTAGE IN HIGHER EDUCATION FOR AGRICULTURAL TEACHER EDUCATION

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We need to thank Dr. Max Amberson (1989), the 1988 AATEA Distinguished Lecturer, for having the foresight to direct our thinking toward the free market place concept. Today I will propose a way to strengthen the competitive position of agricultural teacher education in the free market place environment within higher education, and describe some of the challenges this poses. My focus is upon the internal environment of higher education. It is within this environment that we must maintain a competitive advantage if our programs are to remain healthy through the 21st century.

But first, I need to give you definitions of some terms I will be using. 'Agricultural education' includes food, fiber, agriculture, natural resources, and similar systems. It is a broad multidisciplinary education that transcends all grade levels and includes post-secondary and higher education. 'Vocational agriculture' includes technical education, and is limited to secondary education programs influenced by Federal vocational education legislation and the National FFA. 'Agriculture colleges' includes colleges of life sciences, natural resources, forestry, and the like. The terms 'academic' and 'higher education' are used interchangeably.

A View of History: Now, I need to establish a view of history for you. Liberty Hyde Bailey (1908), in his 1904 address to the Association of Presidents of Agricultural Colleges and Experiment Stations recognized the fundamental interdependence of humankind with the surface of the earth. History proves him correct. It is a fact that nations must have healthy food, fiber, agriculture, and natural resources systems before their citizens can be freed to develop additional sectors of the economy. Only then can their citizens move toward self-actualization. During the early development of nations this interdependence is visible to nearly all their citizens. But, as they move away from the land the citizens lose sight of this fundamental building block in the foundation of their well-being.

Liberty Hyde Bailey was a preeminent botanist and rural educator. When he became Dean of Cornell University's agriculture college, rural America was isolated from its urban counterpart. In rural areas, we saw broad based agricultural education develop within the schools at all grade levels as well as outside the schools. Naturalist education began to reach into some of our cities and their schools.

In 1904, agriculture colleges were becoming involved. According to Bailey (1908), state departments of education "... need to call on the agricultural colleges for help, especially in the training of teachers." He continued, "... the leading ones of these institutions are now doing all grades of educational service."

Prior to the passage of the Smith-Hughes Act in 1917, vocational agriculture was envisioned by some as a fundamental education designed to enhance the social, cultural, and economic well-being of rural students and their families. This education would be delivered in the context of the rural areas. After 1917, Bulletin 1 was issued by the Federal education office and contained the operating guidelines for "Smith-Hughes" vocational agriculture programs. The guidelines helped direct the agricultural education movement away from the concept of a broad based fundamental education.

Federal funds began to flow to agricultural colleges to support vocational agriculture teacher education programs. It is apparent that Smith-Hughes vocational agriculture soon became "the" agricultural education program in the schools and "the" agricultural teacher education program on our campuses. Interestingly, memoranda of understanding were developed at the national and state levels suggesting which audiences should be served by state education departments through vocational agriculture programs and which client groups should be serviced by state agriculture colleges through Cooperative Extension Service programs. During this time in history teacher educators in agriculture began to isolate themselves from elementary and secondary teacher education units, basic education units in state education departments, and from the Cooperative Extension Service.

Please keep this perspective of history in mind as I proceed. Remember, many of the traditions, values and aspirations we hold today as agricultural teacher educators would be different had agricultural education also continued on its early path as a fundamental education. As academicians,

we must open our minds and examine things as they are, not making prejudgements based upon past traditions. Our attention must now be directed toward the future.

Market Niche in Higher Education

It is my view that our emerging market niche in higher education is as behavioral scientists who focus upon the education issues related to the economic development of the food, fiber, agriculture, and natural resources systems within our nation. As behavioral scientists, we have a capacity to expand our market beyond the roles traditionally assigned by our institutions.

This unique and important positioning strategy expands our market and locates our programs within the central missions of agriculture and education colleges. The strategy has strength because it builds upon the good things we are already known for, but also contains distinct threats that may severely limit our ability to expand into new market segments. I will use examples to illustrate my point.

First, it is apparent that our academic programs must move beyond teacher education in agriculture and Extension Service professional development. For example, Love and Yoder (1989) recommend the establishment of regional Faculty Development Centers for agriculture colleges. And, we know that behavioral sciences, economics, sociology, and demography are dimensions that will be considered in future national initiatives for agricultural research. It is time for the AATEA to examine the market conditions and identify the special services and products that our programs must provide in order to maintain a place of excellence within the central mission of our colleges and universities.

Second, the National Research Council (1988) report refocuses our attention on fundamental agricultural education, a keystone in the foundation of the economic well-being of our nation, that is reaching into the schools at all grade levels. Our professional organization needs to improve its ability to sense changes that are occurring in this market segment both within and outside academic institutions.

And third, the report also tells us that vocational agriculture must be modernized. It should become a major component in the human resource development arm of our nations food, fiber, agriculture, and natural resource systems. These systems need entrepreneurs, work force members, technologists, and scientists to make the them competitive in a world market system. Our profession must improve its capacity to consider an array of factors both within and external to the academic environment in order to identify our clients and potential clients, and to determine the services we should provide. I bring a sense of urgency with my message. We must position our programs appropriately and in a timely fashion in the free market place in higher education. But, I believe the window of opportunity to maintain a competitive advantage within higher education is closing fast in some states.

Academic Strategic Planning

I propose that the AATEA test my market niche theory by using a process called academic strategic planning. On my campus, I have been involved for the past eighteen months in a fascinating planning process described by George Keller (1983) in the book Academic Strategy: The Management Revolution in American Higher Education.

According to Keller, academic strategic planning is a dynamic, participatory management process that gives an organization the ability to sense changes. It considers an array of factors including changes in higher education's internal and external environments. Academic strategic planning prevents an organization from surrendering to market conditions, and consequently giving up its values and traditions in order to go with the flow. It is highly tolerant of controversy and capitalizes on the entrepreneurship and idea generating abilities of its members. Academic strategic planning produces a plan which is a framework for decision making rather than a detailed blueprint for everyone to follow. The plan is more than a list of wants and needs submitted by each special interest group compiled and edited. The plan is a guide for members of an organization to use in developing implementation schemes.

Internal Environment: Academic strategic planning addresses an organization's internal and external environments. Traditions, values and aspirations within the internal environment of institutions are major forces that shape their character, their reason for being. You will have to examine the internal environment of your institutions, I cannot do this for you.

What I will do today is identify internal forces at work in every college and university, and amplify this part of my lecture with observation from New England. Why New England? Because trends in agricultural education have historically emerged either first in New England or on the west coast, as I was reminded by Dr. William Annis (1989), University of New Hampshire, during his keynote address at the 1989 Annual Conference of Maine, New Hampshire and Vermont Teachers of Agriculture.

The most important elements in goal setting within academic institutions are the abilities and priorities of the leaders. I have identified five overarching priorities of today's institutional leaders:

Institutional Priority 1: Attracting students with superior Scholastic Aptitude Test scores to the institution;

Institutional Priority 2: Supporting programs that generate an appropriate number of student credit hours of instruction;

Institutional Priority 3: Supporting faculty who conduct research and publish in refereed professional journals

Institutional Priority 4: Supporting faculty who attract extramural funding that provides indirect cost pass-through to colleges and departments to supplement base operating budgets

Institutional Priority 5: Supporting programs that help the central administrations market the institution and attract funding.

What are some trends in New England's agriculture colleges? Land grant colleges and universities have long had admission requirements that discriminate against students who participate in vocational education. Agricultural teacher education programs are perceived as being associated with high school vocational education curricula that do not prepare students for the 4 year college applicant pool. This places our programs at a competitive disadvantage within our institutions. Love and Yoder (1989) report that the word agriculture in the titles of agriculture colleges hinders efforts to recruit students. Our academic program titles place us at a competitive disadvantage.

In New England, the undergraduate enrollment in agricultural teacher education programs is small. Due in part to the weak competitive positions within some institutions, Fairchild (1988) reports that a Task Force appointed by the New England Deans has recommended the development of a regional delivery system. One proposed innovation is that interactive television be used to deliver three New England agricultural teacher education courses.

The campus environments are changing. Maine has a capacity to prepare vocational agriculture teachers but does not have a formal agriculture teacher education program. New Hampshire's agriculture teacher education program is in the Department of Resource Economics and Community Development. Vermont proposes to create a Department of Rural Economic Development which will include Agriculture and Resource Economics, agriculture teacher education, and parts of another social science unit.

Agriculture colleges are shifting resource allocations toward the biological sciences. In some agriculture colleges the social sciences and the traditional production oriented programs are losing their competitive advantage. I am not sure whether an agriculture college of the future will have a capacity to prepare teachers in the needed subject matter areas. Nor am I sure that students who are interested in a teaching career in agriculture will be attracted to the institution.

It is clear to me that agriculture teacher education programs in many states are presently at a competitive disadvantage within their academic environment. This situation is not limited to New England.

External Environment: Returning to Keller's (1983) model, we must develop antennae which are capable of forecasting trends in our external environment. This includes technologies, demographics, the economy, and the politico-legal and sociocultural segments of our society. Coupled with this forecasting ability is the need to be able to analyze the market performance of our programs in terms of:

1. Market segmentation (discrete blocks of clients and potential clients);
2. Perceptual mapping (the perception of teacher education programs held by a variety of audiences);
3. Positioning (building upon the position already owned, known strengths, known perceptions);
4. Overall cost leadership (cost effectiveness within an institution and competitive advantage in external market places);
5. Market differentiation (providing distinct products or services which are in demand); and,
6. Market focus (providing special products or services for a market segment).

Before presenting my observations and recommendations, I will comment upon the National Strategic Plan for Agricultural Education. The Council for Vocational Technical Education in Agriculture has been instrumental in bringing together groups representing the organizations traditionally associated with vocational agriculture. At this point in time, the planning process being used is more important than producing a written strategic plan. For example, people involved in this process learn to respect the views of others, gain a better understanding of the internal environments in which others must work, and become tolerant of controversy. We must applaud and support this effort.

Also, we must acknowledge that the National Strategic Plan for Agricultural Education is not a substitute for an academic strategic plan. As teacher educators in agriculture we need to develop our strategy, a plan that addresses our emerging role as behavioral scientists on our campuses; is sensitive to the academic environment; and is not limited to agricultural education and vocational agriculture. The National Strategic Plan for Agricultural Education represents a part of our external environment, a part that we must analyze in terms of market potential.

In my opinion, only when we overcome the challenges of the free market place in higher education will we be well prepared to strengthen the "revolution" proposed by the National Strategic Plan for Agricultural Education.

Observations and Recommendations

It is time for me to share with you several observations that may help you better understand my recommendations for action.

The academic environment in which we thrive permits, and often demands discussion of controversial issues within scientific and professional academies. It is time to consider the strengths and the threats brought to our academic environment by such sacred areas as the FFA, Federal vocational education legislation, and our association with vocational units within state departments of education.

I suggest that we evoke a framework described by Bailey (1908) and debate within the AATEA the strengths and threats to agricultural teacher education. He said, "We must first disabuse our minds of all prejudgments and consider the conditions as they actually exist and in their relations to the general progress of the race. Our outlook must be forward rather than backward. We must overcome the influence of many phrases and trite statements that have long been public property."

Our association must face head on the fact that every state was not created equal. At this moment I raise as a serious question whether the AATEA will choose to effectively serve all states, knowing that the opportunity to do so exists.

It is time for the AATEA to define a set of principles and establish a few points of view which will lead to a national renaissance for our behavioral science programs in colleges and universities. But, while a national presence is nice, we must remain keenly aware that when change occurs, it occurs in our states within our institutions.

It is evident that the AATEA has the capacity to become the national coordinating agency for our academic strategic planning. The organization is competent, it is sympathetic toward the cause, and with the cooperation of The Council it can obtain necessary funding.

Recommendations: I now present to you four recommendations that will give us the capacity to create a competitive advantage in higher education for our programs. The AATEA should:

Establish the AATEA Higher Education Policy and Leadership Institute. We need to build upon the vision of Dr. Charles Hill and others who helped establish a center for agricultural education leadership and research at the Ohio State University, prior to the establishment of the National Center for Research in Vocational Education.

Immediately form the AATEA Higher Education Advisory Council. This group should include representatives from the National Association of State Universities and Land Grant Colleges policy committees on resident instruction, Cooperative Extension, and research, and representation from the Deans of agriculture and education colleges. Taking its lead from the National Advisory Committee to the Agricultural Education Division, which operated between 1974 and 1982, this committee would function much like a think tank and advise our agricultural teacher education profession. We would not ask this group to solve the problems of our profession for us.

Establish an AATEA Small States Consortium that will assess the strengths in, threats to, and opportunities for agricultural teacher education programs in colleges and universities in the smaller states. This group would serve as regional antennae for small states, feeding information to the National Higher Education Policy and Leadership Institute.

Immediately establish an AATEA New England/New York Task Force to pursue the implementation of a 'regional' higher education delivery system for agricultural teacher education. I recommend the inclusion of New York because the chief state school officers in New England and New York have proposed a 'common market' for the preparation of teachers.

In closing, my final words to you are in the form of another quote from Liberty Hyde Bailey (1908). He said, "There are too many schemes already. No man can determine the details for the future. All he can do is enunciate principles (if he has the penetration to discover them) and establish a few points of view."

Today, I hope I have established a few points of view.

References

- Ambersson, M. L. (1989) Reorienting Agricultural Education Towards a Free Market Model Emphasizing Economic Understanding, Journal of Agricultural Education, 30 (1) 2-9.
- Annis, W. H. (1989) Agricultural Education in the Northern Tier of New England, Unpublished paper, University of New Hampshire, Durham.
- Bailey, L. H. (1908) The State and the Farmer, New York, NY: Macmillan Company. 42, 56 - 66, 106, 107.
- Fairchild, T. P. (1988) Report of the New England Task Force on Vocational/Agricultural Teacher Education for New England, Unpublished report, University of New Hampshire, Durham.
- Keller, G. (1983) Academic Strategy: The Management Revolution in American Higher Education, Baltimore, MD: Johns Hopkins Press. 140 - 163.
- Love, G. M. and Yoder, E. P. (1989) An Assessment of Undergraduate Education in American Colleges of Agriculture, Pennsylvania State University, State College, vii - vii.
- National Research Council (1988) Understanding Agriculture: New Directions for Education, Washington, DC: National Academy Press.