NEW DIMENSIONS FOR THE INSTITUTE OF AGRICULTURE

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We face a two-fold task: first, analyzing the Land-Grant philosophy in our present dynamic setting; and, second, re-examining our purposes, our policies, our programs and our resources in establishing future courses of action.

What is our philosophy? One of the first concepts that we encounter is that of "universal education;" that is, giving everyone a chance, an equal chance, for education. We must seek further answers, then, concerning this philosophy. Does the Land-Grant philosophy measure up to the educational challenges we face now and in the future? Are there elements of the Land-Grant philosophy which we simply must retain? Are there some that we can expand? Are there some that we should discard? How do we identify them?

The second concept that we encounter is the concept of the "totality of the problems." We must consider the setting, the environment, and the changing conditions that surround all of the problems on which we work. And "totality," I think, must be a guide. You know, it's rather interesting when one visits a foreign country. The first thing one asks oneself is: "What is the culture of this country? What are the beliefs and values that these people hold?" And then one is moved to ask further questions: "How is the country organized? How do you get things done in this country? ... in this culture? ... in this environment?" Too often we fail to step back from our day-to-day tasks and ask these same questions of ourselves, as we work in the counties, or as we labor in a region of the State, or as we toil on one of the University's campuses.

These two concepts prompt a series of questions to which we should address ourselves. There is one group of questions: What opportunities does the Institute of Agriculture have in its programs of continuing education? In what direction do we orient and focus our attention? What approaches, what programs can we formulate -- and which do we modify -- to meet the educational needs as we look at present and future economic and social problems? There is a second group of questions: How do we fortify our organizational structure to expedite fully our educational programs and our educational mission? What changes are occurring in the organizational structure? What functional emphasis are we building into the Institute? And what future changes in administrative structure and relationships are being planned?

Let's first turn to a brief, but I think a pertinent, review of the Land-Grant university philosophy. What is our Land-Grant university philosophy? We have mentioned the very basic term, universal education. This is a milieu of borrowed and indigenous ideas. We have successfully nurtured and developed these ideas to the point where they are a part of our present

system of public education. Universal education was really at the very roots of the philosophy of Jefferson when he stated, "We should have an aristocracy of the mind, created not by birth, but from the strength of individual minds and talents."

Aside from teaching, the Land-Grant colleges also gave emphasis to research. And here, we were eclectic in our development, for this idea or concept we took from Germany. In our history, the Land-Grant colleges assumed the primary responsibility for institutional research throughout the United States, bringing research results from the agricultural colleges to all farmers and citizens. This philosophy has, of course, continued with us today. Notice that I emphasized "throughout the United States," because the framers of this idea, the people who first implemented it, had a lot of ingenuity and insight. They devised a very delicate formula in the handling of the resources that fostered the development of research enterprises in every state of the Union. This permitted small institutions, such as South Dakota State College from which I was graduated, to develop competencies as well as the Cornells, the Wisconsins and the Minnesotas. We can compare this with the experience, for example, of the National Science Foundation which has sought to build competencies where it thought they were present or where it thought they could be built. And the result has been, I think, a number of inequities. Part of the inequity has been the spawning of self-generating institutions, or nuclei of institutions, confined primarily in the Northeast and in the Southwestern part of the United States with little regard for the many institutions scattered throughout our entire country. The latter group of institutions are really producing the bulk of the research Ph.D's in this age.

The Land-Grant philosophy has been critically tested and tempered over time. It was conceived nearly two centuries ago; the idea was given life a hundred years ago by President Lincoln and by Justin Smith Morrill. With this philosophy, the Land-Grant colleges of agriculture have been most influential and have exerted a profound impact upon the changing technology, the changing economic environment and the changing social structure of the past century.

But what assurances do we have that past progress and successes will automatically meet the challenges that we face tomorrow? What are, then, some of the guidelines for the future? I think we need to embrace a sound philosophy of universal education, of viewing problems in their totality, and of sensitivity and responsiveness to changes. This means sensitivity to the social, economic and technological changes taking place in our society. This means education that is close to the people.

But what, you ask, is happening in terms of social, economic and technological change? What characterizes the world in which we live and in which we earn our daily bread? Increased agricultural productivity, for example, continues to free people from farming for other occupations. In other words, we are losing, or we are transferring, about 800,000 people a year from rural areas to other sectors of our economy. This process, of course, is the very essence of economic growth in any country. Other nations look upon the process in the United States with a great deal of envy. However, it is not accomplished without stresses and strains and problems.
We have a labor force with a continual unemployment of 5 to 6 percent; we have new technologies which demand from us new skills for those that are seeking initial employment as well as different skills for those who seek redeployment. There is pressure for further technical development. Education and research are expected means of obtaining a more productive and a more satisfying life. And a knowledgeable and a demanding public places pressure, in turn, on our educational institutions.

As we look to the future, it can be predicted that there will come into being a whole series of new bodies of knowledge. Some physical scientists predict that within two decades the store of our knowledge will quadruple. Looking at these prospects from an educational institution point-of-view, scientific progress, then, will accelerate the obsolescence in course content, of research findings, and of extension programs. And some of this will be human obsolescence in the academic community of which we are all members.

Does the Land-Grant philosophy measure up to the forthcoming educational challenges we will be facing? As we stated earlier, our Land-Grant system has been responsive to the changing environment and the changing social structure. The Land-Grant philosophy can continue to be responsive to change, and that responsiveness creates the opportunity available to the Land-Grant university to provide education in totality. In establishing our guidelines for the future, we must orient our progress to the full meaning implied by universal education, assist society to bear the burdens, and exploit the opportunities that our leadership -- and, in a sense, our responsiveness -- has created.

What are our opportunities in continuing educational programs? First, I think we would agree that the Agricultural Extension Service is one of the most distinctive inventions in American education. I have stated that much of American education is eclectic, but in this instance we have a contribution from our culture. Resources of the University can be taken directly to all people in every county of the state. This permits a sensitivity to the needs of those it serves. Of course, the reverse is also true in that the system has the ability to bring people and their problems into contact with the University.

As an institution we are capable of responding, then, to national needs, national purposes, State needs and State purposes. In a large measure Extension has been successful because it deliberately attempted, or oriented its educational programs to the specific needs of people. Today society expects that modifications will be made in extension programs to meet the many changed situations. Concurrently, the traditional Extension roles must be adjusted and modernized to meet the changed needs of the clientele it serves. Our opportunities for successful programs and for more satisfying roles in continuing education are contingent, in no small part, upon our ability to reaffirm the role of successful planning. If we are to retain this unique ingredient of the Land-Grant philosophy and are to add new dimensions to our future efforts, we need to identify problem areas, marshall all of our staff resources, establish priorities, initiate programs, and review all programs periodically with considerable scrutiny.

Within our areas of responsibility we can point to programs which do exhibit continuing education characteristics that are essential to success.
Examples of continuing education in depth are found, for example, in our Farm and Home Development series; the organized area schools in swine, dairy, beef, soils and crop management; in our sequential education to agri-business, dealing with the agricultural suppliers and agricultural marketing firms; in the proposed pilot efforts in consumer education; and in our rural-urban leadership seminars in the area of public affairs. The approach in these programs recognizes problem areas, is responsive to our State's current and prospective problems, embraces an inter-disciplinary effort, and displays an efficient use of staff. As a further illustration, we are facing the challenge of the quickening pace of changes in our rural, social and economic structure through our efforts in Rural Areas Development, which embraces the full array of natural -- that is, forestry, water and recreation -- resources and the human resource.

Our efforts should enable us to bring together institutional expertise in consonant with public demands. Clearly, there are many opportunities for continuing education programs which permit interdisciplinary attacks to problem-solving and decision-making, use a wide variety of resources in various combinations and embody the essential elements of informal education. Continuing educational programs are no small task. The development of sound programs is a powerful force in meeting the expectations of the Institute of Agriculture.

Now as the programs take shape, what of the organization that is required to carry out these programs? What changes have occurred in the organization structure of the Institute? Looking at the structure of the Institute, we have three major functional areas. These are Resident Instruction, Research, and Continuing Education. These share a coordinate responsibility for the educational efforts of the Institute. Shortly we hope to add a fourth dimension, which will be International Agricultural Programs. The men in charge of these areas are Dean Keith N. McFarland, assisted by Dr. John A. Goodding, in Resident Instruction; Director H. J. Sloan, assisted by Dr. William F. Hueg, Jr. in Research; and, of course, you know the leadership in the Agricultural Extension Service with Skuli Rutford and Roland H. Abraham, Director and Associate Director respectively.

In continuing the work begun by Dean Macy, we are adopting provisions which will make for closer communication and coordination between these functional areas. If there has been any change made in recent months, it has been an effort to place the responsibility for these functional areas on the men whose leadership is most directly involved. At the same time, we must provide the necessary mechanism for coordination so that all staff affected by administrative decisions are adequately informed. We trust we are making progress, but there are still a good number of problems to be resolved. I am certain that as we gain experience more and more problems will be resolved below the Institute and University levels. In the re-structuring of administration that has taken place to date, there has been a concerted effort to align the Schools of Agriculture and our outlying Experiment Stations closer to the overall operations of the Institute. In some respects, we are beginning to look upon them in about the same manner as we do the departments on campus. This is not quite true. It is true in terms of coordination and communication. It is not true in the sense of operations, because their programs are much more diverse than a single department's operation on the Saint Paul campus.
Let me comment a bit further on each of these functional areas. In Resident Instruction, the Dean or Director is in charge of the teaching programs at both the collegiate and the subcollegiate levels. In other words, problems of educational programming of the College of Agriculture, Forestry and Home Economics as well as the Schools of Agriculture come directly under Dean McFarland's supervision.

At the present time, the College curricula are being examined by a special Curriculum Review Committee, chaired by Dr. William P. Martin, Head, Department of Soil Science. At times I think we overlook the problems that we face in this area. We are a professional school. This means that we wish to turn out men and women with the best competencies that we can provide in the professional areas of agriculture, forestry and home economics. At the same time, we are part of a university, and we have the responsibility of bringing forward the so-called "educated man." The liberal arts school, I think, has an easy job in this regard. But we try to superimpose on a sound, well-thought-out, general education program the competency that leads to a profession. We are vitally interested in providing that competency but we are also concerned that our graduates are prepared to make their contributions as citizens of the community and citizens of the world. The Curriculum Review Committee will search for ways in which we can best structure and administer our curricula to meet our present and future educational objectives.

The area of Research Instruction is also giving considerable attention to recruitment of potentially promising students. I know Dean McFarland and his staff will look on many occasions to the Agricultural Extension Service for assistance and counsel. The same is true in the placement of graduates. We have taken notable strides in these activities in the last two or three years, but you still can be of tremendous help to the College on these matters.

As we look at Research, the Institute's relationship with the outlying agricultural stations, as indicated earlier, has been altered. All research of the outlying stations is now coordinated through Director Sloan's office with Assistant Director Hueg having assumed the coordinator's role. This new coordination gives us some definite advantages. It will serve to reduce the duplication of our research projects. It enables us to establish priorities on research projects on a state-wide basis. It provides flexibility in the outlying experiment stations' attacks on area problems. Each station's program is not a singular operation, but it is part of a coordinated State effort with some shifting of resources permitted as situations require.

In the area of Continuing Education, the Agricultural Extension Service has given expanded duties and responsibilities to the newly-created position of State Leader for Extension Program. The gentleman who fills this new role is the chairman of this morning's session; it is our good friend, Hal Routhe. This change is expected to give leadership in the development of new techniques and new approaches for Continuing Education in the Institute as a whole.

The Department of Agricultural Short Courses works closely with the Agricultural Extension Service with on-campus, branch station and off-campus short courses. The Foreign Participant Training Program, part of the Short Course operations, has been designed to stimulate a better
understanding of American agriculture and people, and to provide the opportunity for staff and people of this State to become better acquainted with persons and cultures of other nations.

There has also been another change in the Institute which provides for an Assistant to the Dean rather than an Associate Dean. I indicated that we wish to place primary responsibility for programs, operations and budgeting upon the men who head up these functional areas. However, there is much coordinating that must take place in the Dean's office. To formulate a program is one thing; to execute it and to see it followed through is another. One also finds that the Institute of Agriculture is a very amorphous organism with a lot of appendages. The matter of outlying real estate is an interesting case in point. We are responsible for the Itasca Biological and Forestry Station, the Cedar Creek Natural History area, the Crane Lake Natural History area, the Arboretum at Excelsior and a number of other installations. All these require a lot of attention if the programs are to go forward. We have plucked one of your colleagues, Dr. James A. App, to serve as my assistant. I believe that Jim possesses a rather wide-ranging eye and the capacity required to follow up on a number of things that we supervise or on the programs that we intend to initiate.

These are some of the things that have occurred. Now, what changes in the administrative structure and relationships are being planned? First, let us focus our attention on the Agricultural Extension Service and, more particularly, our Extension Specialists. The background, training and qualifications of our Extension Specialists is very similar to the department staff engaged in research and on-campus teaching. We pride ourselves on the complementary working relationships that we have in our departments. That is, these men and women are researchers and teachers. They carry on research and are able to translate this experience directly into the classroom situation. I see very little difference between these staff members and our Extension Specialists. Extension Specialists are also engaged in teaching -- teaching in terms of adult education. One of your colleagues has stated that this is a task that is far more difficult than teaching in the classroom. He may be correct. However, Extension Specialists, under our present arrangement, have little or no opportunity for research. They have little chance to keep "razor sharp" by being actively engaged in technical research. To forstall human obsolescence, specialists, I believe, need to be engaged in on-going research projects and programs, as well as possibly doing some teaching on or off campus. At the present time, an all-Institute committee has been established to study and to make recommendations on the relationships of Extension Specialists to our regular academic departments. This committee is functioning, has contacted a number of Midwestern Universities, and plans to discuss the problem with the Federal Extension Service. You will get some inside tips on the thinking of this committee when Dr. Clarence L. Cole, Head, Department of Dairy Husbandry and Chairman of the Committee, addresses you two mornings hence.

Regarding the development of "area specialists," there appears to be a great need to develop patterns wherein Extension Specialists can conduct educational programs on a regional basis and work on problems that are relevant to a geographic area larger than a county. The problems to be attacked on a special area basis may be, for example, beef herd management. It may be dairy nutrition; it may be crops and soils; it may be farm
management or community development. In the development of such efforts, it may be desirable to consider locating the area specialists, or at least some of them, at our branch stations. However, there certainly would be a core of Extension Specialists on the St. Paul Campus. But again, it’s a matter of getting close to where the problems are and to where our people are.

The county extension staff, of course, is a member of the academic community, and our county extension staffs are concerned also with the problem of "human obsolescence." To approach this problem a task force, a Professional Improvement Committee, composed of staff members from Agricultural Extension, departments on campus, the General Extension Division and the Graduate School are looking into the problem. Mr. George Gehant, County Agent, Lac qui Parle County, represents the county agents in this regard. The committee has the responsibility of assaying current and future educational needs of the professional agricultural, home economics and forestry workers in Minnesota. This includes our county extension staff, the vocational agricultural and home economics teachers, foresters, people who are engaged by the Farmers' Home Administration, production credit associations, the Soil Conservation Service and so forth. The Committee also has the responsibility of outlining educational programs which most effectively and efficiently meet the various needs. That is, it will have to identify the scope and the characteristics of the subject matter that should be offered, the type of staffing required, and the coordination required to offer these courses both on and off campus.

There is also the matter of Institute relationships with our vocational-agricultural instructors. We have recently established a position of Educational Specialist in the Agricultural Extension Service to strengthen the service of the Institute to secondary schools. This, we believe, is the first program of its kind undertaken by a state Agricultural Extension Service. We have found, after we initiated this, that two federal agencies, the U. S. Department of Agriculture and the U. S. Department of Health, Education and Welfare, were thinking along similar lines and had made somewhat similar moves. Dr. Deane Turner will head up the work in this State. His responsibilities include promoting the development of teaching materials for use by the high school vocational-agriculture instructors based on information that is current in the research program of the Institute of Agriculture. Of course, the materials developed will be of direct benefit to our county agents as well. This position, then, includes the responsibility of assisting our rural and civic community leaders in gathering information and identifying problem areas relating to formal educational programs for rural people. In this undertaking, there will be ample opportunity to work very closely with our 4-H Clubs.

Now, permit me to say a few words about the so-called fourth dimension, or the International Agricultural Program. The University of Minnesota has made a commitment to strengthen substantially its international program. I think that now is the time when the Institute must think through, plan, develop and explain its international commitment. Dean William M. Myers, formerly Head of the Department of Agronomy and Plant Genetics, now coordinates all such functions as Dean of International Programs for the University as a whole. The President has authorized the Institute of Agriculture to establish an administrative unit in the area of international programs.
There are some questions that we must ask as we enter into this commitment. Is it possible to engage in overseas educational programs without lessening the quality of the on-campus and off-campus efforts? What kind of commitments, in terms of scope and magnitude, duration, and resources are desirable to develop a core of experienced faculty and to provide for staffing flexibility? Can the efforts in international educational development be undertaken without drawing upon state resources? Aside from the technical knowledge and skills, can the University and Institute staff be an effective instrument in fostering the broader goals of the democratic way of life in the developing nations? These are some of the questions with which we must wrestle.

While we are talking about administrative matters, there was a study undertaken of the administrative organization of the Institute of Agriculture. The committee was appointed by the President to explore alternative forms of organization for the Institute of Agriculture. The study was completed about a year ago. One of the alternative proposals combined a proposal for the establishment of a College, rather than a School, of Home Economics. It was recognized that the clientele that the home economists serve is not primarily agricultural; that, in fact, they attract more students from urban areas than rural. It has also been advanced that the home economists' community of intellectual interest is not overpoweringly oriented toward the areas of forestry and agriculture. This particular development will receive consideration at greater length as we look to the future of the entire St. Paul Campus. A greater concentration of students is being planned for the St. Paul Campus. A student population of approximately 10,000 is likely as the result of decentralizing some of the classroom instruction on the Minneapolis campuses or utilizing the Saint Paul Campus for programs that are not administratively related to the Institute of Agriculture. This would indicate, then, a broader utilization of Saint Paul Campus facilities and resources. In this context the matter of the home economics situation will be further explored.

Regarding the overall University's continuing education efforts, an all-University Committee has been constituted recently to study and to recommend a model for coordinating all major University continuing education efforts. This includes the General Extension Division, the Agricultural Extension Service and the Department of Agricultural Short Courses. At the present time, working with the leadership in the Agricultural Extension Service and with Dean Willard L. Thompson of the General Extension Service, coordination has reached the point where we have agreed to have liaison in our various staff meetings. I am certain that some form of coordinated all-University extension service will be developed. I cannot visualize at this point just what this may be. It might be that in certain areas, particularly those that are predominantly urban, there will be one point of contact for the University of Minnesota. The director of that office would be a man whose qualifications and technical competence represent those of the General Extension Division as we know it today and the Agricultural Extension Agent would be a member of that staff.

I can also visualize that in many of the counties which are primarily rural, the operations will continue pretty much as they are today. The county agent, or the leader of that particular office for the University of Minnesota, will have some expanded responsibilities and duties. In certain
situations, one person may be stationed in the county but may have responsibilities for subject matter in one or more counties. In any circumstance, I feel strongly that the technical competence that we have in our Agricultural Extension Service must continue at its high plane.

I can add, rather parenthetically, that in the area of continuing education we are looking forward to the development of the Earl Brown Continuation Center on the Saint Paul Campus. This will serve the continuing education activities of the Minneapolis Campus as well as the Saint Paul Campus.

Let me summarize briefly. In the last 100 years the Land-Grant system has advanced a unique and, I think, a valuable philosophy which has become a part of our heritage. It has brought new and useful knowledge to higher and continuing education. I am sure that it far exceeded the fondest dreams of those who brought it into being. We realize that in our philosophy, programs and organizational structure there is a very close interaction or instruction between Research, Resident Instruction, International Programs and Continuing Education. The magnitude of unsolved problems and the magnitude of tasks to be performed is truly great.

There is perhaps some validity in the statement that if our approaches to problems are modest, more importantly, our standards and ambitions will be modest. This is to invite mediocrity. We are on a search and this is why we ask and encourage your help and counsel. Our search is for an improved Institute of Agriculture which will discover, interpret, organize and disseminate intelligence of theoretical and practical use in the furtherance of man's economic, social and cultural objectives. From time to time we must, as a group, engage in self scrutiny. We must foster within ourselves the unsettled state of doubt that leads to inquiry. We must formulate questions and offer our own answers to them. To shy away from this responsibility would mean that we relinquish the role of intellectual leadership that is rightfully ours to pursue and to cherish. Thank you very much.