would involve a comprehensive treatise of considerable proportions. His job is big; its importance to his peoples' progress and the country's welfare can hardly be overstressed. An attempt to summarize his responsibilities in a brief resume can only point up the inadequacy of such an effort. However, by outlining the areas of major endeavor, one can readily appreciate the scope of the administrator's job and realize the importance of priority assignment and efficient organizational procedure in administering state programs.

The administrator's success will be limited by his vision and measured in terms of how well he organizes imagery into reality.

Team-Teaching of Consolidated Courses in Animal Science

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One of the major trends that is current in undergraduate education in the agricultural sciences is the consolidation of courses and curricula. Courses have been consolidated, in both the animal and plant sciences, at the introductory levels as well as at the more advanced levels.

According to a study reported by Geyer (1966), approximately 70 per cent of the land-grant universities were offering a combined introductory course in animal science or had initiated plans for inaugurating such a course. Geyer further reported that very few of the non-land grant schools and departments had consolidated courses in progress or plans for such action.

A typical introductory course in the animal sciences, as outlined by Geyer, embraced subject matter relating to meat animals, dairy cattle, horses, and poultry.

Geyer, (1966) in the report on the consolidation of courses and curricula in the animal sciences presented to the conference on undergraduate education in dairy science, advanced several reasons for combining subject matter from two or more courses into one combined course. The reasons he gave were as follows:

 to give the student a broad exposure to the principles of animal science, since it is not feasible for very many students to take separate courses in each of the three or four major species areas;

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(2) to reduce or eliminate duplication in subject matter;

(3) to increase efficiency in the utilization of teaching personnel.

Geyer (1966) stated that the courses were either team or individually taught with an approximate fifty per cent distribution between the two methods. In many cases the teaching of the laboratory portion was divided among several individuals with one person responsible for the lecture presentation. Several courses were neatly divided into equal sections for the three major species groups with a specialist usually teaching each area.

It is possible that other plans for teaching consolidated, introductory courses have been proposed. It appears that some form of team-teaching would be necessary in most cases since very few individuals have the training and/or experience to adequately qualify as teachers of subject matter relating to meat animals, dairy cattle, horses, and poul-This diverse teaching assigntrv. ment should not be impossible for one individual, yet the extreme emphasis that has been placed on specialization for the past several decades appears to have created a sense of inadequacy on the part of most teachers of animal science when confronted with a teaching responsibility outside the very narrow limits of their graduate training. Certainly one should strive for depth in his speciality, but this training in depth should be accompanied by

training in breadth for the broad spectrum of the animal sciences.

Courses can be consolidated in an attempt to accomplish the broad objectives as outlined by Geyer, but as stated by Turk (1966) in a paper also presented at the conference on undergraduate education in dairy science, "The most essential ingredient responsible for the success in any proposed change is the teacher." Cowan (1966) in the opening address to the Conference on Undergraduate Teaching in Animal Sciences conducted by the Commission on Education in Agriculture and Natural Resources, National Academy of Sciences, National Research Council, stated that, "Great teaching is rare and good teaching is all too scarce on most campuses." He posed the question, "How do we stimulate teachers to greater effort?" He further added that if the conference delegates could in some manner generate improvement in the quality of teaching of the animal science courses listed in college catalogues that a near miracle could be accomplished in undergraduate teaching. Acker (1964) emphasized that the beginning student in animal science deserved top quality instruction and academic advising. He suggested that administrators choose, develop, and hold top faculty members for instruction and advising, especially at the freshman level. He proposed that attempts be made to recognize the values of a properly oriented introductory course in animal science by making sure that instructors know their fields and have reasonable and defensible goals clearly in mind.

It appears that those engaged in the administration of all higher agricultural education have an excellent opportunity through the consolidation of courses to advance the cause of teaching with mutual benefits being derived by both the teacher and the student. Team-teaching for consolidated introductory and advanced courses can certainly be a forward step in agricultural education. Many times teaching has lacked administrative support, possibly because department heads or deans have not had enough time to help teachers improve their work. Teaching is very difficult to evaluate and many teachers cherish their individual autonomy so much that administrators have often felt that more harm than good could be done if suggestions to the teacher by the administrator were interpreted as a complete lack of confidence in the individual's teaching capability.

The practice of team-teaching is not new to agriculture, but it appears that the many facets of this teaching method should be more completely explored, particularly with the advent of consolidated courses. It is possible that the quality of instruction in the consolidated or the general course, could be greatly enhanced by employing the team basis rather than relying upon one individual to conduct the course.

A team may consist of only two or three teachers, or it may be a large group of individuals including a leader, several outstanding teachers, professional specialists, and laboratory supervisors. Team composition would vary among colleges and universities.

Team-teaching requires a cooperative effort where all persons involved should plan the course together, with each one assuming different degrees of responsibility within the group. They should be encouraged to plan and carry out instructions with an opportunity to observe each other. Subsequent discussions should be held in order to place some evaluation upon the degree of cffectiveness of the team-teaching.

Under team-teaching, the individual teacher would be able to study and benefit from the strengths of his colleagues. Each could likewise profit by giving and receiving constructive criticisms. This certainly should contribute toward making each a better teacher.

Beginning teachers can have an opportunity for apprentice training under veteran teachers by sharing some responsibility for the conduct of the course; however, the greatest share of the responsibility should be assigned to teachers who are more knowledgeable and experienced in accepting leadership. Less expert teachers can study under effective leaders and can prepare themselves to assume more responsibility in the future. This is somewhat the pattern that has been followed, so successfully, in the research laboratory for centuries.

The teaching program could be organized by the administration into a formal pattern with the greatest rewards and prestige assigned to the highest position. New titles such as master teacher, senior teacher, and cooperating teacher could be established. This might help to strengthen the present undesirable image that is commonly held of the person who prefers teaching to research.

Since teaching is so difficult to evaluate, the team plan might enable the administrator to better evaluate the performance of each member of the group rather than upon some vague concept of merit which has been the basis for recognition in all too many cases where one individual in an independent manner is totally responsible for the instruction in the course.

Team-teaching could provide the type of organization in which parttime professional personnel and laboratory supervisors could be used with maximum efficiency. There is widespread agreement that too much of a teacher's time is spent in routine chores, but there is still the problem of finding ways to introduce other personnel for effective relief. Remarkable advances in the use of mechanical teaching aids, projectors and tape recorders can be used to a greater extent with team-teaching. Through planning and coordination on the part of the team members no lecture or laboratory time should be wasted assembling or disassembling mechanical aids thus making it possible for instruction to proceed with precise continuity.

Under team-teaching, the student is no longer totally dependent upon the competence of one teacher. In case one teacher is not as good as the others, the student would not be entirely short-changed for the entirety of the course as he would be under the individual plan of teaching.

Consolidation of courses and team-teaching *can* create more problems than are solved. The mere reorganization and re-arrangement of courses and personnel will accomplish very little. The entire team must support such a venture with enthusiasm, plan wisely, and above all continue to evaluate the status of the progress.

The consolidated course arrangement may reveal many inadequacies in the original separate courses. Many revisions in course content will be necessary. As a result, teachers may become overwhelmed by the increased work load. Teachers should not be asked to perform new roles and accept new responsibilities without the training and experiences that would fit them for these tasks. It is possible that consolidation of courses and teamteaching should be avoided if a highly qualified faculty team cannot be assembled who can design and execute the course effectively and subsequently spend much time in comparative evaluation based on the class response from the teamteaching versus the previous method of individual teaching.

Team-teaching will certainly cost as much if not more than individual teaching. There is little prospect for significant advances in education without increased costs. Improvements, or attempts to make improvements, means more time, more hard work, new facilities, and most of all a more thorough attempt to interpret the results than has been given up to the present time.

Under the usual organization of an individual teacher per course, personnel problems among teachers have been minimized. The emphasis has been placed upon the teacher to student, and the student to student relationships.

Team-teaching forces teacher to teacher contacts that require greater cooperative efforts and create situations where one teacher receives directions from other teachers. Under these conditions there could be an increase in personnel problems similar to those that exist in industry. All members of the team need to receive training or possess natural understanding of such topics as (1) conditions that influence morale, (2) the handling of misunderstandings, and (3) the exercise of authority.

Teachers who have not been accustomed to close association with their colleagues and whose own teaching has never been examined by their associates might find conditions of team-teaching both disturbing and frightening. It seems to be generally characteristic of teachers to prize their independence and many see no special advantage in close professional relationships with their associates. If this attitude cannot be overcome by any member of a team, and an alternative faculty member is not available. then team-teaching or consolidation of courses could well be undesirable.

It is recognized that the teamteaching system for consolidated courses in animal science has many limitations, yet it seems that the advantages that could accrue from such a practice by far outweigh the disadvantages.

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Interns in Academic Administration

By

ROY JOE STUCKEY Academic Intern

American Council on Education

Under a \$4,750,000 grant from the Ford Foundation, the American Council on Education has undertaken a five-year program "to strengthen leadership in American higher education by enlarging the number . . . of prospects for key positions in academic administration. Specifically, the program is intended to identify qualified individuals . . . and afford them an experience designed to develop their potential for effective performance in administrative positions directly related to academic areas."

Dr. Logan Wilson, President of the American Council on Education, says: "Each year this country needs 200 new college presidents. The greater need for administrators at all levels is critical and growing. These young administrators are an attempt to supply that need."

The candidates are nominated by the Presidents of their home institutions, asked to write an essay on their philosophy of Academic Administration, and to complete an extensive questionnaire. After the initial screening process, about 150 nominees are selected and invited, in groups of 25 each, to regional meeting places for two-day interview sessions conducted by teams of college presidents and members of the staff of the American Council on Education.

The first year (1965-1966), twentythree individuals completed their internships and almost all returned to their home institutions, to positions of greater responsibility. The present class is made up of thirty-three men and eight women, including five Catholic Sisters. A list of the class members, their home institutions, and their host institutions, is appended.

The class for 1967-1968 has already been selected and will include nearly fifty people.

For those individuals interested in applying for the program, the time is now appropriate to consult your President to request nomination for the class to be assembled for the year 1968-1969. His letter of nomination should be as strong as possible and should be submitted by September 1, 1967.

The following is a quotation from the American Council on Education statement on Qualifications for Nomination:

"College and university presidents and selected association members of the American Council on Education will be asked to make nominations. Each person nominated should be either a member of the faculty or staff of the nominating institution or someone not currently employed by an educational institution whom the president considers to be an outstanding pros-pect. The preferred age for nom-inees is between 30 and 40; however, nominations of persons not over 45 will be accepted. Because the emphasis of this program is on the development of academic officers, it is expected that nominees will hold a doctorate or a generally recognized terminal professional degree (e.g., LL.B., M.D., M.Arch.) and will have been a member of a faculty for a minimum of two years. Individuals without these two qualifications but with other outstanding qualifications indicative of high potential for successful careers as academic officers may be nominated. Nominees should have some administrative experience or have demonstrated potential in the broad field of administration. Administrative experience may include service as assistant to a dean or member of the executive staff, as departmental chairman, or as chairman of a major faculty committee. Administrative potential may be demonstrated by a faculty member's contribution as a committee member or as a leader in shaping faculty opinion or policy. Persons currently in specialized administrative positions (e.g., business office, student personnel, development, etc.) are eligible for nomination if they have the qualifications to be academic officers."

Each of the Interns receives a stipend equal to the salary, plus five percent, which he received for the most recent school year at his home institution. He also receives travel cost, moving, and other miscellaneous expenses.

To me, the program has been one of constant excitement, challenge, and ever-widening experience which perhaps I can best describe in chronological log form.

The interview at St. Louis University (February 18-19) was a stimulating one carried forward by Ver-