

Task Force Proposes Research

By K. Robert Kern

The Morrill Act of 1862 created public universities with specific responsibilities to the sons and daughters of the working classes—to provide higher education in agriculture and the mechanic arts. The Hatch Act of 1887 created experiment stations charged to emphasize research that would improve the lot of the farmer in the United States. The leaders and supporters for these two unique pieces of legislation envisioned the productivity-enhancing and burden-lightening possibilities of science applied to food production. A third stroke of genius in legislated action for agricultural development came with the enactment of the Smith-Lever Act of 1914. It created and institutionalized a reciprocal means of communication between the farmers and the scientists. The system that carried the news of new possibilities from advanced technology could also carry to the scientists the needs of the working farmer.

A landmark in creative public law, the Land-Grant College System of the United States is credited with the most significant role in development of American agriculture. The model has influenced similar systems through the developed societies of the world. Many developing societies attempt to imitate it, sometimes blindly and without sufficient understanding of its genius for two-way linking of persons with problems and persons capable of helping solve those problems.

The Cooperative Extension Service developed its communication

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system around a people orientation. The earliest county agents lived and worked among their clientele; their content resources were mainly carried in their own minds and experiences. Their direct contact with farmers presented and defined problems; their relationships with university teachers and experiment station researchers provided the access to problem-solving information. The county agent was the communication channel.

With time the agents found need for additional channels. One might make three or four farm visits each day, contacting as many clients. A scheduled demonstration, however, might attract a dozen or 20 persons, and the channel capacity was enlarged. Farmers accepted the county agent as a trustworthy, credible source of needed information. And they did not always wait for his visit to ask their questions or seek access to his knowledge. Personal discourse, either with individuals or with groups, was not sufficient to carry all the communications desired.

Less personal means of communication developed—first, perhaps, as publications prepared at the university for dispersion by the county agent. In a large sense, the agent remained the channel of communication, since the credibility of the pamphlet was often measured in relation to the credibility of the agent who passed it on.

Mass media, the ultimate in impersonal communication, entered the equation early. They were used to promote educational events, to strengthen the organizations that sponsored local extension work, and increasingly to offer problem-solving ideas via print. Locally, the use of mass media still invoked the credibility of the personal county agent—using his name, with its undergirding of readers associated with it. As the succession of newer (and increasingly mass) media appeared, many were brought into the system of communicating with Land-Grant audiences. The principle remained: information from the “college”—for perhaps most receivers—came “tagged” with the personal influence of the professional staff member.

It was not many years before the county agent had become a user of many channels in communication with his clientele. Many of the clientele conferred an increasing credibility on the subject matter he disseminated. They were willing to settle for less direct personal contact. Demonstrations and meetings prospered as efficient places for communication interaction; publications and specific but less personal measures took on stronger roles; the mass media became the leading first source farmers relied on for the newest in technological ideas.

An array of communication avenues has been available to the

county agent. And to an increasing degree, Land Grant communicators have used direct avenues—from state extension specialists or scientists to the farmer—taking some of the communication load off the county agent, the man at the end of the line. These more direct avenues have led to specialization for communication-writers, editors, graphics and other producers who could turn out effective and efficient communication products for direct consumption.

The "arsenal" of communication methods available to Cooperative Extension and its close Land-Grant System partners, the Agriculture and Home Economics Experiment Stations and the U.S. Department of Agriculture—has grown in numbers and probably in capabilities. The observation seems valid for the Land Grant System as source in communication. But little change has occurred in the avenues available to activate the reciprocal loop when the Land Grant System is receiver of communication from its clientele. Less inventiveness has been noted; pressure upon professional staffs—exerted by increasingly professional clients—has apparently caused some shift toward the one-way, outward bound dimension of the communication system.

Part of the increasing pressure on the communication system has come from mandates that pointed it toward new audiences and new responsibilities. A system created for a fairly delimited social reality has since been directed to serve other audiences. The organization spent its evolutionary, developmental years in a fairly homogenous rural audience and environment, emphasizing a fairly straightforward message: Improve farming (homemaking) by encouraging people to make it a habit to get and use new ideas. Now the organization is charged to serve a wide variety of audiences with a similarly wide variety of messages. Perhaps one of its most difficult tasks is to reinstitute the full two-way nature of its system, regaining the involvement of its target audiences in the formulation of the programs and processes by which problems and problem-solvers get together.

Today the Land Grant worker's environment presents an almost incalculable number of options for communication. With any one audience and subject combination, many communication avenues are available, ranging from the most personal one-to-one consultation to the most impersonal, a fragment of an idea carried over a mass medium. Each audience-subject-avenue combination has its own "valence": the impact of the communication on its audience (or the audience's impact on the system) is itself a variable.

At the 1963 annual conference of the Agricultural Communicators in Education (then the American Association of Agricultural College Editors), one paper predicted the eventual calculation of a "linear

program" to help the communicator optimize communication effort. That prediction has not materialized. Yet practitioners work as though there were a linear program. Each worker, each program developer, each demonstrator or teacher allocates the resources of time according to an informally derived set of output coefficients. Some research studies push back the shadows from a limited corner of that world. In the 1930's, Wilson and Gallup produced their classic treatise comparing the relative power of several different methods to achieve practice change by clients. No one has attempted to replicate or extend that work.

The Agricultural Act of 1977 mandated a national study of the impact of Cooperative Extension in the United States. A task force of the Extension Committee on Organization and Policy is at work now, charged to report its findings by March 1, 1979. It is anticipated that the study will deal with the significant and broad question of national payoff due to public investment in Cooperative Extension programs. It is doubtful that the study will provide data that can help the individual worker to make more enlightened selections of methods for high input-output ratios.

An increased number of Land Grant universities have formed full departments of extension education or have identified extension as a component interest in an education or adult education unit. Numerous studies of extension programs have accumulated as a result of this emphasis. A number of agricultural journalism departments have researched some aspects of dissemination and application of scientific and technological information—within the system and on to clientele. However, these generally have been limited studies, specific to a small part of a program in one state. The fragments of emerging literature influenced other students in the field, but no broad syntheses of such studies have yet appeared to guide the practicing worker at his daily tasks of planning and conducting his work.

In part due to its orientation to clientele and their problems, the Land Grant System developed as a highly decentralized entity. As a result, it has never been easy to gather information about the details of operation. Only the broadest generalities can be stated concerning methods, even concerning the staff time devoted to various methods and subjects. The current management information systems provide gross subject-method data in terms of time spent. However, content cannot be specified beyond a few dozen broad topics, and the impact of a given subject-method combination cannot be inferred from the data. No information is provided concerning the communication strategy of a given effort; nothing is disclosed concerning audience reaction so that the experience can be instructive to anyone but the staff most closely involved in

that situation.

Approximately 18,000 professionals, plus many hundreds of paraprofessionals, communicate daily and hourly with clientele of the Land Grant System. They make decisions from data largely assembled and evaluated on an individual basis; only occasionally system efforts seek to offer a common knowledge base for the methods of communicating with specific audiences.

These professionals deal with an increasingly complex base of information and with an increasingly heterogenous and changing clientele. The experiment station communicator who once dealt mainly with applied practices in animal husbandry now must convey concepts on cell biology. The extension agriculturist must disseminate and encourage use of practices that do not apply uniformly across all potential clientele. Demands for service to small farmers, disadvantaged and minority families and youth; to communities from crossroads to urban societies lay a complex responsibility upon the disseminator today. At the same time, today's communicator still must meet the non-abating needs of long term audiences. The need is obvious for help in developing knowledge based on a method-result analysis that will lead to more effective use of the time and talent of the thousands who bear this responsibility.

Two groups of professionals are typically given the mantle of leadership for methods in dissemination and application of Land Grant information: Training officers—who concentrate especially on person-to-person and group methods, including the vital feedback link in program planning; communication specialists, who produce vast amounts of impersonal and mediated communications as well as serve as trainers of other professionals in communication skills.

Both these groups—and their mentors in academic instruction—work from a fragmented and incomplete theoretical and research-based literature. No professional society and no academic institution has emerged to gather, integrate and then extend such a literature. None has had the resources to undertake the first task on a system-wide basis: describing the existing situation and drawing from it the operational principles that are probably there to be found. Similarly, a second task remains to be undertaken: to explore and to integrate from the scattered research and scholarship new models or strategies for effective communication. With accomplishment of those two large tasks, a third task would be possible: widespread training for current communicators in the understanding and application of this knowledge base.

The Agricultural Communicators in Education (ACE) is the professional society for communication specialists in the Land Grant Universities and the U.S. Department of Agriculture. More than half

the eligible persons belong to the association. The association serves as the principal line of communication among persons who have communication responsibilities; it takes the lead in stimulating inservice training and exchanging research information. Its committee structure provides a means of focusing intellectual resources onto problems that affect individual members and the relationships of the individuals to the larger system.

The background statement presented above and the proposal that follows came from a special task force created and supported by ACE.

Proposal

The Agricultural Communicators in Education proposes—and invites other relevant units of the Land Grant/USDA System to join—to form a **national commission** to examine the operation of the Land Grant/USDA agricultural, forestry, home economics, youth and community development communication/information system. That would become the further development of communication models, organization, training or other elements that would enhance the effectiveness of the system.

The commission would be responsible for defining the specific avenues and specific objectives of its task, within the broad goal of improving the communication/information system. Through it the Land Grant/USDA institutions serve the people of the nation—and contribute to the well being of other international societies.

It is believed that the commission's task would involve at least the following:

Describe the Current Situation

1. Identify the principal models and methods of communication in use throughout the system—including personal contact, the various personal-impersonal and mass media channels available.
2. Bring together such information as is now available—but widely scattered—that relates communication models and methods to impact on the parties in the communication activity.
3. Devise a comprehensive research approach that would generate additional data to quantify both communication activities in use throughout the system and the impact of those activities on both the audiences and system itself.
4. Conduct pilot studies to test the comprehensive research approach and to gather data essential to fuller objective description of the current situation.

Seek Alternative Communication Models

1. Bring together (through literature search, conferences with communication theorists, or other means) alternative communication models and consider their applicability to the communication needs of the Land Grant/USDA System. Seek creative adaptations from existing theory to the special programs of the system.
2. Encourage researchers to devise and test communication models under the conditions imposed by the Land Grant/USDA System.

Make Recommendations to the System

1. Propose communication/information training throughout the Land Grant/USDA System, making the proposal role-specific in terms of communication behaviors relevant to the several roles: by identifying the communication understanding and skill desired in principal staff positions for optimum performance and then providing the training needed.
2. Propose areas of basic and applied communications research needed to keep the system current and effective.
3. Propose a strategy of communication training for prospective, newly employed and continuing staff, dealing with pre-employment education, orientation and inservice training with such strategy developed to be role-specific. Recommend organizational mechanisms to encourage the development and continuation of such training.
4. Encourage establishment of Land Grant/USDA System communication as an area of continuing research and teaching emphasis in the relevant department throughout the system. Give attention to the means of financing and research and teaching and of fostering its spread throughout the system and to any others for whom it may be useful.

It is proposed that the national commission be comprised of interested, knowledgeable representatives of segments of the Land Grant/USDA System in which communication/information activities are of significance, together with representatives from outside the system whose professional expertise would enhance the commission's work. Suggested representatives are:

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Experiment Station Committee on Organization and Policy
Extension Committee on Organization and Policy
Resident Instruction Committee on Organization and Policy
United States Department of Agriculture
Agricultural Communicators in Education (3 representatives)

Extension Training Officer—appointed by ESCOP
Communications Research Scholar—appointed by ESCOP
National Association of Country Agricultural Agents
National Association of Extension Home Economists
National Association of Extension 4-H Agents

Representatives From Outside System

International Council of Communication Societies
National University Extension Association
Communication Research Scholar—non-Land Grant
Adult Education Association

Staff

Director
Assistant Director
Research Assistants
Clerical