extension and extension cords

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As a county agent and Extension educator, I often ask the question: Are we truly serving all individuals, groups, and organizations? If not, how could this task be accomplished? Some viable means lie within our grasp—they exist in the computer age of which we're all a part.

Using computers and other electronic equipment would help serve our clientele in many ways. Articles in the May/June, 1979, Journal of Extension demonstrated how computers have a useful place in Extension programming and provide a service to our clientele. Some of the articles pointed out problems in using computers. Others noted how computers could be used in program development. The need for training and understanding of computers by Extension personnel and their clientele was stressed in other articles. However, the articles didn't stress the current need for computers in Extension offices and the current need for support by the federal Extension Service in promoting and acquiring computers, along with other electronic equipment needed by Cooperative Extension personnel.

Are We Serving All?

There's considerable evidence that educational programs conducted by Extension aren't being provided equally among all people. From my experience, I found it difficult to continually provide equal service to all people. For example, having a close working relationship with an organized livestock producer association often created unequal service when compared to livestock producers who weren't members. Although the meetings and events conducted by the association were open to the public, most people attending were association members.

A recent study conducted in Missouri found evidence that Extension resources weren't distributed equally across

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all categories of farmers; in fact, Extension tended to work mostly with the highly productive farmers. As the number of farmers decreased and farm size increased, only a few large farmers used Extension. The study also revealed that when people moved from urban to the rural areas, Extension programs didn't reflect the change. ¹

These situations lead to a question that plagues many county agents. Do you work with organized groups and a few highly productive farmers in Extension, or do you spend equal amounts of time with all people requesting help? When looking at the purpose and philosophy of Extension, we see a conflict, since our legislation mandates that we work with all people equally.

There are other related issues. For example, over the past several years, fewer individuals have been attending Extension meetings. The increasing cost of transportation, ineffective programs, poor delivery systems, or extremely busy people are all possible reasons. Another plaguing issue is the fact that people want immediate answers to their problems. Almost every problem is projected as a crisis situation. Immediate answers may save a crop, a lawn, the selection of improper materials for a garment, or a 4-H Club member from selecting a wrong project. Thus, balance in serving people and meeting immediate needs are crucial challenges for Extension programming.

The implications for Extension in the electronic educational age are tremendous. . . . The challenges are waiting for Extension and we must accept them immediately and plan accordingly.

Computer Program Examples

To meet the challenges of the 1980s and beyond, Extension administration is presented with many exciting and new tasks. Several states have taken leading roles in meeting these tasks through their innovative computer systems. Program packages such as: BUGNET, TELPLAN, FACTS, and AGNET are currently being used to serve Extension clientele.²

One of these, "AGNET," is a computer program used by Nebraska Extension. The computer programs help answer a variety of questions for farmers, homemakers, 4-H Club members, and others using Extension. Many programs have been written and deal with topics like: crop and livestock production, grain handling, lawn care, home insulation, family budgets, health, and many others. The system has been recognized by other states and is currently being used by several in their information systems.

lowa is another state that uses computers to support its staff in the improvement of its delivery efforts. For example, Extension is in the process of placing a computer terminal in each of the state's district Extension offices. Each office will be staffed with qualified personnel to operate the equipment, thereby providing clientele throughout the state with instant access to a wide variety of information.

If Extension is to continue as a leader in the educational field, many other examples must be found. Experimental work has been conducted by community colleges with video learning systems for individual use and viewing on home television screens. They're presently designing credit courses and programs for home viewing.³

The trend toward the use of computers, cassette tapes, television, and other electronic advances in the educational process by citizens in and out of the home is increasing rapidly as prices for such materials decrease. Today, almost one-third of all homes in the United States have cable television. Predictions are that, in the near future, all homes will be serviced by cable making instant access a reality. Perhaps Extension will someday put back that total one-to-one contact through home to Extension office video hookups.

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Computer Technology

If predictions are accurate and homes will have all the electronic equipment necessary for a self-contained educational learning center, then the need for the services offered by Extension and its personnel may be even greater than it is today. For example, if an individual were interested in finding out how to control an insect in the garden, the person could make a telephone-televsion-computer hookup with the local Extension office and receive the information. Appropriate visual information would appear on the home television screen, verbal two-way communications between the clientele and agent could take place, and the learner would have the option of receiving printed copy by using a computer command

on the terminal. With this method, virtually everyone would have access to Extension information and personnel.

To carry this further, with all the sophistication that's currently available, or soon will be, there's no reason why a person asking a question couldn't have a video camera to transmit the problem to the county agent's television screen. Also, disks or cassettes could be made and purchased on a wide variety of problems and subjects. These could be made to operate in the home micro-computer systems such as the APPLE, PET, or "Radio Shack" systems. Sending and receiving correspondence over a computer is another possibility. There are many more possibilities and challenges. Will we be ready?

What Does the Future Hold?

The electronic age provides several interesting questions to Extension adminstrators. What will the employment qualifications of Extension personnel need to be in the year 1990, 2000, 2010? Will the job descriptions include such needed requirements as:

- · Knowledge of computers and electronic media?
- A minor or even a major in communication skills?
- Ability to design computer programs?
- The ability to develop educational programs for television and other media?

It's critical to answer these questions today so appropriate curricula can be prepared for individuals who want to join Extension.

Decisions also need to be made on the range of future uses of electronic educational equipment, and how it can be incorporated into the overall educational program. One suggestion for Extension would be to organize a "futuristic think tank." The United States Office of Education, in the Department of Health, Education, and Welfare, sponsored an adult education "think tank" in 1973 that helped promote the whole life-long learning movement. Such a project could be done by bringing together a group of progressive thinking individuals to look ahead and answer questions like:

- 1. How will national, state, and local programs be conducted in the future?
- 2. What characteristics and attributes must a future administrator and Extension worker possess?
- 3. What will Extension objectives be in the future?
- 4. How will recruitment of employees be conducted in the future?
- 5. What type of in-service training will need to be conducted to keep staff up to date?

Most authors dealing with the future agree that electronic equipment will play an important part in the education process. Some indicate that major changes will occur in the next 10 to 20 years. When these changes do occur, the process of education will have a different face.

Summary

The implications for Extension in the electronic educational age are tremendous. The idea that an agent will be able to observe a problem from his/her office without always making a farm or home visit adds a new dimension to public educational service. With the cost of electronic equipment decreasing, more people will be able to buy and use this equipment for educational purposes. The home will become an educational center used by all its members. Providing education to people will be challenging. The challenges are waiting for Extension and we must accept them immediately and plan accordingly.

Footnotes

- Edmond J. Gleazer, Jr., "The Future of the Community College," Intellect, CVI (October, 1977), 152-54.
- 2. G. Keith Douce, "A Blue-Sky Perspective," Journal of Extension, XVII (May/June, 1979), 11-15.
- Michael Nolan and Paul Lasley, "Agricultural Extension: Who Uses It?" Journal of Extension, XVII (September/October, 1979), 21-27.
- 4. George W. Bonham, "Education and the Telefuture," *Change*, XI (November/December, 1979), 12-13.