

Delivery Methods Preferred by Targeted Extension Clientele for Receiving Specific Information

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Results from this study of Extension clientele in North Carolina depict the need for Extension professionals to provide educational opportunities through multiple program delivery methods. Clientele's choice of methods was based on receiving information that was both subject and audience specific, yet the information could be received in an understandable and personally comfortable manner. Data were collected by Extension agents using a structured personal interview. Study respondents were mature adults; a majority had nonfarm professions as primary occupations, had completed some post secondary training, had at least some dependence on Extension for information, and had received Extension information for more than five years. Respondents indicated personal visits, meetings, newsletters, demonstrations, and workshops as most preferred delivery methods. Other major findings include: method demonstrations were preferred by younger, more educated clientele; clientele with less dependence on Extension and fewer years of contact with Extension preferred the videocassette; farmers preferred personal visits and meetings more than did individuals with other occupations; and clientele with the longest interaction with Extension and those perceiving Extension professionals as educators were more likely to identify computer software and computer networks as important program delivery methods.

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Introduction

Cooperative Extension education is based on nonformal program delivery with voluntary participants. As the land-grant university system evolved, printed materials, such as research bulletins, were made available at Experiment Stations for those persons who were aware of the Stations' existence and sought them out. Later, demonstrations were used extensively for successful Extension education delivery.

Although many of the original program delivery methods of Cooperative Extension are still used successfully, program delivery options and opportunities have expanded as communication technologies have changed. Some technologies that were unavailable in earlier years of Extension education, such as the telephone and radio, are now taken for granted as delivery methods. Now, computer networks, satellite transmissions, and other hi-tech communication systems are becoming a normal part of our daily living. Because of the continuously expanding means for reaching clientele, Extension educators will need to maintain current knowledge of available delivery methods not only to keep up with changing preferences of clientele but also to assess the utility of individual methods for achieving educational objectives efficiently and effectively.

Clientele Preferences

Over the years numerous studies have been conducted of both clientele preferences and the effectiveness of individual methods in delivering Extension information. In an Iowa study Martin and Omer (1988) reported that younger farmers preferred that Extension agents use group oriented methods, such as community meetings; office and telephone conferences were rated of less importance for receiving information. To obtain information about environmental issues, Bruening (1991) reported that Pennsylvania farmers most frequently preferred field demonstrations. County and local meetings, as well as magazines and printed material, also ranked high. Richardson (1989) reported that among North Carolina farmers the five methods most frequently used for receiving Extension information were newsletters, meetings, farm visits (agent to farmers), telephone calls, and on-farm tests and demonstrations. Richardson found traditional program delivery methods to be popular, but the farmer clientele also indicated an interest in using newer technologies, such as computers and videotapes, for receiving information in the future. Bulletins and magazine articles were perceived as less popular for receiving information.

Although North Carolina farmers expected to use some types of printed materials less, others, such as newsletters, remained popular.

Similar opinions were held in Oklahoma, where farmers preferred newsletters and fact sheets for receiving Extension information used to make decisions concerning alternative enterprises (Keating, 1990). For information on new and innovative farming practices, Idaho farmers preferred more interpersonal methods. These methods included demonstrations, tours, field trips, and group discussions. Mass media methods were the least preferred means for receiving this type of information (Gor, 1990).

When printed materials, such as newsletters and fact sheets, were used by educators, studies in Florida and Oklahoma confirmed that acceptance and use of these means of delivery can be significantly enhanced by targeting the audience and tailoring the message to that audience (Nehiley & William, 1980; Reisbeck, 1980). These studies demonstrate that the success or popularity of certain program delivery methods can be influenced by the efforts of the agent to package the message in a method meaningful to a specific audience.

Objectives

In this study we established the following objectives:

1. To determine the preferences of targeted clientele for receiving specific Extension information and the reasons for those preferences.
2. To determine if clientele perceived any program delivery methods becoming more important to them in the future, and why.
3. To determine if any program delivery methods were unfamiliar but might be used by clientele for obtaining information if Extension would help clientele become more familiar with the method(s).
4. To determine if Extension clientele perceived any program delivery methods as becoming less important in the future, and why.
5. To determine if relationships existed between selected demographic factors and the preferences for receiving specific information, both currently and looking to the future.

Methodology

For this North Carolina study each of eleven Extension agents who were enrolled in a graduate course chose an applicable program for their county and developed educational program objectives and a list of targeted clientele to receive the specific educational information. The content of the respective county programs essentially covered a broad range of Extension's educational programming thrust, including programs in 4-H, home economics, agriculture and natural

resources, and community resource development. Some examples of the individual county programs follow. One objective focused on community leadership development programs for community leaders. Another focused on 4-H in-school educational enhancement programs led by adult professional volunteers. Yet another program focused on waste-stream reduction programs in an urban county through proper handling of lawn waste. Other individual county subjects included water quality, pasture management, swine waste management, Christmas tree production, after school day care provision, pesticide training, and beef cattle feeding programs.

Each of the eleven agents randomly selected seven persons from their audience list and personally interviewed the individuals chosen. The agents were trained to conduct interviews and used a pretested, guided interview form. Pretesting was conducted by the authors and cooperating Extension agents who were not involved in the research project. A total of seventy-seven clientele were interviewed. In order to provide clientele with a reference source, agents included an alphabetical listing of delivery methods (Figure 1). Responses were analyzed from each county and from all the counties combined. The sample was representative geographically, with all regions of the state included.

FIGURE 1: Program Delivery Methods in Extension Education

audience reaction team	game	personal visit
audiocassette	home study kit	photograph
brainstorming	interactive video	poster
book	interview	puppet
bulletin board	institute	radio
bulletin/pamphlet	journal article	result demonstration
cable television	leaflet/flyer	role play
case study	lecture	satellite conferencing
church bulletin	letter	seminar
computer network	listening team	show
computer software	magazine article	slide-tape
conference	meeting	speech
convention	method demonstration	speciality pub article
data analysis/results	movie/film	skit
discussion group	newsletter	teleconferencing
exhibit	newspaper	telephone
fact sheet	networking	teletip
fair	notebook	television
fax	novelty	tour
field day	office visit	videocassette
film strip	on-farm test	workshop
forum	panel	

Quantitative data were summarized, analyzed, and listed in Tables 1-4. The Student t-test sampling distribution was used for determining differences between selected program delivery methods by various demographic factors. Significance was determined at the .05 level. The most frequently listed methods were further analyzed by summarizing reasons clientele gave for preferring those methods.

Findings

Analysis of the various demographic factors indicated a mature audience with essentially an equal distribution of ages between 30 and 65 years. Respondents were relatively well educated, with more than sixty-five percent having completed some post-secondary training. Most clientele depend somewhat on Extension as an information source. Also, most have been receiving Extension information for more than five years. For most, farming is not their primary occupation. However, a high percentage (38.5%) listed part-time farmer as their second occupation. About 55% of clientele saw Extension agents as either service providers or consultants. About 45% saw agents as educators.

Clientele preferences for receiving specifically targeted information are generally compatible with previous research findings—i.e., personal visits, meetings, newsletters, demonstrations, and workshops ranked highest (Table 1). These methods may be considered traditional; however, a clearly popular newer technology among the clientele surveyed is the videocassette, which was listed by nearly one-fourth of those persons surveyed as one of their five most preferred methods for receiving specific information.

When giving reasons to justify their selections of specific delivery methods, clientele, regardless of the subject area, expressed a desire for delivery methods that provide subject and audience specificity. Also, across the broad range of audience types and program content, targeted clientele placed considerable value on program delivery methods that allow them to gain an experiential opportunity by being able to "see" and "do," as well as to "discuss," the information being provided.

Nearly all methods that clientele expect to become more important in the future are newer and emerging technologies. However, even here, newsletters, workshops, and on-farm tests and demonstrations are also seen as relevant in the future (Table 2). Reasons given for selecting these methods related mostly to speed, ease, and efficiency. About eight out of the ten most frequently identified unfamiliar methods clientele wanted Extension to help them use were the newer, high technology methods (Table 3).

When clientele were asked to identify any methods they expect to become less important in the future, only a few methods were identified more than once. For example, newspaper and fax were named by three clientele, and result demonstration, personal visit, leaflet/flyer, conference, computer network, and teletip were listed twice by clientele. Nineteen other methods were listed once. The low numbers as well as the wide variety of reasons given by clientele for listing a specific method prevented any conclusive analysis, except that most delivery methods are acceptable for providing information if they are accessible to the clientele.

TABLE 1: Delivery Method Chosen by Clientele as Among Five Most Preferred for Receiving Specific Information From Extension

Method	Times Chosen	% of Clientele Selecting Method
Personal visit	36	46.8
Meeting	32	41.6
Newsletter	30	39.0
Method demonstration	26	33.8
Workshop	20	26.0
Video cassette	18	23.4
Bulletin/pamphlet	16	20.8
Field day	16	20.8
On-farm test	16	20.8
Seminar	12	15.6
Fact sheet	11	14.3
Lecture	10	13.0
Tour	9	11.7
Telephone	8	10.4
Leaflet/flyer	7	9.1
Group discussion	7	9.1
Letter	7	9.1
Office visit	7	9.1
Data analysis/results	6	7.8
Slide-tape	6	7.8
Newspaper	6	7.8
Specialty publication	6	7.8
Notebook	5	6.5
Brainstorming	4	5.2
Book	3	3.9
Magazine article	3	3.9
Result demonstration	3	3.9
Methods chosen twice such as interviews, movie, exhibit, radio, etc.	18	23.4
Other methods selected once such as conference, teletip, poster, show, etc.	13	16.9

Factors Impacting Preferred Methods

Age

Younger clientele preferred how-to methods, such as a method demonstration, to printed materials. Yet, middle age clientele preferred printed materials such as a bulletin/pamphlet.

Education

College graduates were found to have a significantly higher preference for method demonstrations and videotapes than did persons who have less than a college education. College graduates also held a significantly higher preference for videocassettes than those who had completed some college.

TABLE 2: Methods Identified by Clientele as Becoming More Important in the Future for Receiving Information From Extension

Method	N	% Clientele Listing Method
Computer software	26	33.8
Computer network	22	28.6
Fax	19	24.7
Video cassette	12	15.6
Newsletter	10	13.0
Workshop	9	11.7
Satellite conferencing	8	10.4
On-farm test	8	10.4
Personal visit	7	9.1
Meeting	7	9.1
Group discussion	6	7.8
Leaflet/flyer	6	7.8
Method demonstration	6	7.8
Interactive video	5	6.5
Seminar	4	5.2
Result demonstration	4	5.2
Tour	4	5.2
Newspaper	4	5.2
Data analysis/results	4	5.2
Cable television	4	5.2
Bulletin/pamphlet	4	5.2
Field day	3	3.9
Teleconferencing	3	3.9
Methods chosen twice such as radio, television, etc.,	8	10.4
Other methods selected once such as forum, book, fair, teletip, etc.,	14	18.2

Years receiving Extension information

Years clientele had received help from Extension was found to be a significant factor in the popularity of videocassettes. Those with less than 10 years involvement indicated much more interest in videocassettes than did those clientele with a longer involvement with Extension. On the other hand, people who had between 10 and 20 years of Extension interaction significantly preferred on-farm tests compared to persons with longer involvement.

Dependence on Extension

Some significant differences also existed between clientele who had much or great dependence on Extension and those who did not. Those who had high levels of dependence preferred meetings and on-farm tests. Yet, paradoxically, videocassettes were significantly more preferred by those with less dependence than by those with higher levels of dependence.

Role of agent

Appreciation of method demonstration differed significantly among the respondents. Those identifying the agent as a consultant

TABLE 3: Delivery Methods Extension Clientele Are Unfamiliar With But Willing to Use If Extension Helps Them to Become Familiar With These Methods

Method	N	% Clientele Identifying Method
Computer software	21	27.3
Computer network	13	16.9
Fax	8	10.4
Satellite conferencing	6	7.8
Teleconferencing	6	7.8
Home study kit	5	6.5
Teletip	5	6.5
Video cassette	5	6.5
Interactive video	4	5.2
Networking	4	5.2
Leaflet/flyer	3	3.9
Notebook	3	3.9
Brainstorming	3	3.9
Group discussion	3	3.9
Other methods chosen twice such as fact sheet, seminar, etc.	10	13.0
Methods selected once such as tour, on-farm test, filmstrip, etc.	10	13.0

preferred the method demonstration significantly more than did those persons who saw agents in a service role.

Primary occupation

Primary occupation was also a significant factor in determining method preferences. Primarily, farmers preferred personal visits and meetings more than did individuals in other occupational groups. Homemakers preferred method demonstrations, workshops, and videocassettes significantly more than did farmers. Other clientele preferred method demonstrations and videocassettes more and meetings less than did farmers. Retired people had less interest in personal visits and meetings than did farmers but greater interest in workshops. Retired people also preferred workshops and field days more than did "other" clientele such as day care providers, business leaders, teachers, and others with a variety of occupations. Yet the "other" clientele preferred personal visits significantly more than did retired persons.

Factors Impacting Choice of Methods Becoming Important in Future

Years receiving Extension information

Long-time recipients of Extension information (15+ years) held a significantly higher preference for computer software than did those with less than 15 years of involvement with Extension. No other significant differences existed in testing this variable.

Role of agent

Two factors—perceptions of the Extension agent's role and methods identified by clientele as important in the future—showed significant differences between clientele who selected computer software and computer networks and those who preferred other methods. The clientele selecting the two computer oriented methods saw agents in an educator role or in a consultant role significantly more than did those perceiving a service role. Interestingly, those individuals who perceived agents in a service role preferred newsletters significantly more than did those who saw them as educators.

Discussion

Some of the findings of this research are similar to those of previous reports. Perhaps most noteworthy in this research is the strong interest that farm audiences have for high technology delivery methods such as computer technologies. Also, although these audiences continue to prefer personalized, interactive, hands-on methods, their willingness to stay abreast of new technologies does not wane as they continue their interactions with Extension. Thus, it

remains imperative for Extension professionals to stay abreast of newer technologies and integrate these newer delivery methods into educational programming activities.

Use of the newer technologies was seen by some clientele as fast, efficient, and easy for obtaining information. However, by others it was seen as unnecessary, unavailable, complex, or useless. The findings of this research indicate that persons who have at least some college education see newer technologies, such as computer networks and fax, becoming more important in the future.

Those with less than college training do not view these newer technologies as favorably as the more educated group. Therefore, Extension will need to educate its clients about the benefits of newer delivery methods. During this process Extension audiences will need to receive two-dimensional programs that include the customary content as well as information focusing on awareness and use of these newer program delivery methods.

Although many clientele continue to prefer interactive delivery means, many people wish to receive information from Cooperative Extension but do not strongly depend on Extension to meet their educational needs. Those individuals who had little dependence on Extension were found to have less preference for direct, interactive program delivery methods. Persons with lower dependence had a greater preference for videocassettes than those with a higher dependence on Extension.

Conclusions

The findings demonstrate the need for continued efforts by Extension to provide educational opportunities through multiple delivery methods. Yet, educators should be aware that some methods, such as videocassettes, may be seen by the public as simply a library resource, with little or no personal loyalties or support forthcoming to Extension for having provided the educational opportunities. Under these circumstances, Extension should provide a marketing segment in the videocassette to assure appropriate recognition.

Perhaps the strongest message that clientele gave for preferring certain delivery methods was the importance of its relevancy and specificity to their individual needs. In addition to preferring methods that are audience and subject specific, they also emphasized preferences for delivery methods that give them an opportunity to receive understandable information comfortably.

Furthermore, although certain methods were preferred more than others, a delivery method's availability and relevance were always important considerations of the clientele. Perhaps this prevalence

helps explain why 49 of the 65 delivery methods were chosen at least once as one of the five preferred methods for clientele to receive needed information.

These findings underscore the notion that successful implementation of Extension education programs in the future will require considerable knowledge of the targeted audience, its characteristics, and its level of knowledge. Agents will need to make skillful selections and use appropriate delivery methods for the targeted audience and the subject matter to be presented.

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