Evaluating Mississippi Non-Industrial Private Forest Landowners Acceptance of an Interactive Video Short Course

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Abstract
An interactive forest landowner short course was held in Mississippi in the spring of 2001. Participants evaluated the interactive video versus traditional short course delivery methods. Ninety-five percent of participants said that they would attend another interactive program in the future if given the opportunity. Technical problems were the main reasons cited for not preferring the interactive video format. Results indicate that several subject areas not currently covered in traditional short courses were requested for future interactive programming. Travel costs were significantly reduced. Suggestions for ensuring the success of future interactive programs are given.

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Introduction

The Extension program of the Department of Forestry at Mississippi State University has traditionally utilized field days, short courses, and other direct contact educational methods for instructing forest landowners (Londo & Monaghan, 2002). However, Extension professionals have acquired new tools of information delivery over the past several years in the form of electronic media and the Internet (Hawkins & Southard, 2001; Tennessen, PonTell, Romaine, & Motheral, 1997). There are a number of benefits to using these new delivery techniques. Chief among them are the reduction in costs and accompanying increases in productivity compared to traditional direct contact educational methods (Kelsey & Mincemoyer, 2001).

We examined the use of Interactive Video as an alternative delivery method for a forest landowner short course in Mississippi in the Spring of 2001. To determine the effectiveness of interactive video as a program delivery method, an evaluation form was developed and given to all attendees. In addition to the standard evaluation questions asked (Londo & Monaghan, 2002), participants who attended traditional forest landowner short courses in the past were asked to compare the interactive video short course with the traditional short course delivery method. Results of these questionnaires, along with suggestions for future programming, are discussed.

Methods

Short Course Description

An interactive video forest landowner short course titled Timber Tax Fundamentals was conducted starting January 22 and ending February 5, 2001. This short course consisted of 2-hour sessions held on three consecutive Monday nights, originating on the Mississippi State University campus and broadcast live to 15 counties throughout the state (Figure 1).

Evaluation Form

An evaluation form was developed and given to all participants (n=310) on the last night of the short course to determine program effectiveness and value. Participants were asked questions concerning the quality, effectiveness, and monetary benefits they expect to receive from the information learned in the short course (Londo & Monaghan, 2002). 195 participants (64%) stated that they attended a short course in the past. They were in turn asked to answer four additional questions comparing the interactive video and traditional program delivery methods. These four questions are as follows:

Q1: Which forest landowner short course(s) have you attended in the past?

Q2: Compare the traditional extension forest landowner short course to the interactive video short course. This was a sliding scale from 1 (not very useful) to 5 (very useful).

Q3: Would you attend another interactive video forest landowner short course: Why or why not?

Q4: What short course would you like to see presented in an interactive video format in the future?

Data Analysis

Data were summarized based on the 195 participants who had attended a forest landowner short course previously and were summarized on a statewide basis by question. The number of respondents varied for each question, with some questions having multiple answers from each participant and other questions not answered by all participants.

Results and Discussion

Q1: Which Forest Landowner Short Course(s) Have You Attended in the Past?

Many interactive video short course participants (n=195) stated that they had attended Extension forestry landowner short courses in the past. The median value was 2 previously attended short courses for the participants in the interactive video timber tax short course. Short courses attended previously by interactive video short course participants can found in Table 1.

Table 1.
Previously Attended Extension Forest Landowner Short Courses

Forest Landowner Short Course	Past Attendees
Forest Investment and Analysis	44
How to Manage your Conservation Reserve Program (CRP) Pine Plantation	36
Introduction to Forest Management	34
Forest Regeneration: An investment in the future	33
Forest and Wildlife Management for Recreation and Profit	32

Forest Herbicides	31
Profitable Marketing and Harvesting of Timber	29
Hardwood Management	25
Forest Stewardship and Management Plan Development	18
Longleaf Pine Management	7
Total	**289**

The number of repeat attendees for the forest landowner short courses indicates the popularity of these courses across the state. Short courses most frequently attended in the past by attendees of the interactive timber tax short course dealt forest economics and management. The only short course not listed is the Master Tree Farmer (MTF). MTF is an interactive video short course originating at Clemson University in the spring. MTF was first made available to all the states in the southern region in spring of 2000. Counties participating in the interactive Timber Tax Fundamentals had not participated in the MTF as of that time.

The repeat attendance at short courses indicates that the traditional short course format has been successful in these counties in the past. However, the repeat attendance may also indicate that our actual clientele base is lower than attendance numbers may indicate due to repeat participation. It may be necessary for future program evaluations to ask whether participants had attended programs in the past.

The low attendance number for the longleaf pine management and forest stewardship and management plan development short courses may be misleading. Longleaf pine grows exclusively in southern Mississippi, on limited acreage and with limited ownerships. Consequently, this short course is only held infrequently in the southern part of the state and not in others. All remaining short courses are relevant throughout the state and are conducted on a regular basis. The forest stewardship and management plan development short course was offered for only a few years on funds secured from the Mississippi Forestry Commission. This course was offered on a limited basis during 1999-2002.

Q2: Compare the Traditional Extension Forestry Short Course to the Interactive Video Short Course

Usefulness of these two programming methods was on a scale ranging from one (not very useful) to five (very useful). The median ranked response to the interactive video and traditional short course was 4 for both, while the means were 3.8 and 4.3 respectively. From this, we inferred that participants preferred the traditional short course format to the interactive video, based on mean values. Reasons given for the preference for the traditional short courses included lack of knowledgeable instructors on hand and technical problems associated with the interactive video.

Future programs at remote sites need to have experienced personnel in attendance to help answer questions. Also, many sites experienced blackouts, static, and other technical problems that reduced the quality of the program. Most of these sites were at locations not owned by Mississippi State University. Future interactive video programs may need to be conducted at MSU locations only, to minimize technical problems.

Videos of the original broadcast were made and distributed to all sites to help solve the technical problems. Many sites that experienced problems with the original broadcast used the videos to provide make-up nights following the short course.

Q3: Would You Attend Another Interactive Video Forest Landowner Short Course: Why or Why Not?

Ninety-five percent of respondents (n=187) stated they would attend another interactive video forest landowner short course in the future. The reasons include the timeliness and usefulness of the information, as well as the quality of instruction. Reasons for not attending in the future mainly dealt with technical problems associated with the delivery of the interactive video short course. In addition, there was some difficulty in hearing the presenter and asking questions interactively.

The desire to attend another interactive program indicates that our current client base will support the use of interactive video programming in the future. It is critical that qualified personnel be on site to help answer questions and to guide discussions so that the one-on-one atmosphere of the traditional short course can be maintained. All locations for the interactive video short course were

facilitated by the county Extension agent, and most also had a local volunteer accountant to assist with questions.

If interactive video is to be used more in the future, it is imperative that the technical problems be eliminated. This would improve the quality of the programming as well as the learning experience for our clientele.

Q4: What Short Courses Would You Like to See Presented in an Interactive Video Short Course in the Future?

Forty-five percent of respondents (n=89) stated that they would like to see all the short courses currently offered in an interactive video format. In addition, there were many other subject areas mentioned that were not currently covered in short courses (Table 2).

Table 2.
Topics Suggested for Future Interactive Video Programs (Topics in bold are currently covered in existing forest landowner short courses.)

Topic	Number of Requests
Wildlife Management	11
Hardwood Management	9
Pine Plantation Management	8
Harvesting and Marketing	7
Forest Herbicides	6
Forest Stewardship and Management Plan Development	6
Forest Investment and Management	4
Longleaf Pine Management	2
Planting	2
Timber Stand Improvement	1
Taxation	1
Regeneration	1
Anything	9
Less Complicated Taxation	6
Estate Taxes	3
Timber Prices	3

Legal Issues	3
Insecticides	1
Basis (taxation)	1
Government Programs	1
Internet-Based Programs	1
Total	**86**

The breadth of requested subject areas not currently covered in existing forest landowner short courses indicates some unmet needs in forestry education for our clientele**.** Gunter, Bullard, Doolittle, & Arano (2001) indicate that 35% of Mississippi forest landowners have attended Extension forestry programs in the past. Conversely, nearly two thirds of forest landowners in the state have not. This is a large enough client base to justify increased use of video technology to enable us to reach them.

It is possible to incorporate some of the new subject areas listed in Table 2 into current forest landowner short courses and other existing programs. However, many of these topics provide a unique opportunity for us to explore the use of new technologies as delivery methods for forest landowner education.

One-night programs could be done interactively and offered more frequently on narrower subject areas. This may attract more attendees who would not be willing to commit to a multi-session program. Also, since approximately 34% of southern forest landowners are retired (Birch 1996), 1-day programs may provide a viable option for this demographic group. Other subject areas currently covered in existing short courses, but listed in Table 2, could be conducted in a single-evening or traditional multi-evening session.

Table 2 also indicates interest in making programming available on the Internet. While many publications are available at the Mississippi State University Extension Service Web site <http://msucares.com/pubs/index.html>, more organized educational programs on specific topics can be made available in an on-line format. Once created, this site could be easily updated, providing programming and information at a relatively low cost and in a timely manner to clientele not only in Mississippi, but on a regional and national level as well.

Efficiency of the Interactive Video Short Course

As budgets become tighter, the need for more efficient programming methods will become increasingly important (Cecil & Feltes, 2002; King, 1999). For this discussion, we are using a reduction in mileage costs for teaching the timber tax short course in a traditional manner as a measure of efficiency.

Two campus-based faculty members served as instructors for each session. Because the interactive program originated on campus, no travel costs were incurred. If this short course were conducted in the traditional manner, these two faculty members would have had to travel to each of the 15 counties included in this study. This would have resulted in nearly 24,000 miles traveled, representing over $8,200 in mileage costs alone. The total travel costs would have likely been higher, because many of the participating counties are several hundred miles away from campus. There would certainly have been additional hotel and food expenses as well. Direct costs associated with using the interactive program are not considered here because they are part of overhead costs that are paid regardless of use.

On-site personnel do not have to be Extension personnel. Local accountants, foresters, and other professionals with experience in the subject matter (in this case forest taxation) could be utilized. Such people regularly donate their time for traditional programs (Monaghan & Londo, 2001). The use of these non-Extension personnel would provide support and credibility to the program.

Keys for Future Successful Interactive Video Programs

The success of interactive video as a program delivery tool depends on many factors. As with any Extension program, the topic should be determined by a needs assessment. This is necessary so that the material being presented is pertinent and based on local needs. Second, it is imperative that equipment function properly at all sites. Technical difficulties can reduce interest and participation in the program, as well as diminish the credibility of interactive video and the personnel conducting the program. Experienced presenters and personnel at remote sites to facilitate question and answer sessions.

Conclusions

The results of our study indicate that the interactive video format can be used for future Extension forestry programming in Mississippi while maintaining our current client base. Additionally, the interactive video format may allow us greater flexibility in scheduling short courses while increasing the efficiency of program delivery by reaching participants in several counties at once with minimal travel costs.

Interactive video may also enable us to produce single-night programs on subject areas not currently covered or that are seasonal in nature. The interactive video format may also enable us to provide needed information in the event of catastrophic damage (wildfire or storm damage) to counties or areas of the state in a timely and efficient manner. A one-session format may increase our productivity by attracting participants who are not willing to commit to attending a multi-session program. A one-session format may also allow us to increase the utilization of a variety of non-Extension experts for a state wide program who would be unable or unwilling to participate in individual county and multi-session programs.

Web-based programming is another area cited by some attendees of the interactive video short course as a needed programming area. Through the use of Web-based programming we can make information available in a timely and inexpensive manner to clientele across the region and state. An expanded Web site with PowerPoint and other types of program offerings would increase the overall outreach capability of the forestry Extension program at Mississippi State University.

Interactive video and other technologies should increase productivity of Extension personnel by potentially reaching more clientele at one time while reducing travel costs. The use of emerging technologies, such as the Internet and interactive video, will likely also increase as budgets decrease and staffing levels are limited nationwide. However, technical difficulties experienced with interactive video and other distance learning programs can reduce their effectiveness and impact.

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