

Video Teleconference Evaluation at Land-Grant Universities

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This study was designed to examine trends in video teleconference evaluation at U.S. land-grant universities. It also examined the lack of published evaluation results. Surveys were directed to video teleconference producers at 50 land-grant universities. The responses indicate that almost two-thirds of the producers evaluated a majority of their 1993 productions. Program content, format, reception, attendance, and suggestions from viewers were commonly analyzed. Respondents who did not evaluate a majority of their 1993 productions said evaluation was not needed, not useful, involved too much work, or was too complicated. The survey also indicates that most producers treat evaluation results informally. This may explain the difficulty in finding information about the successes and failures of many video teleconference productions.

Introduction

Access to education is an important issue for many Americans. In an attempt to improve access, our nation's land-grant universities spend considerable amounts of time and money on the development of video teleconferences.

Video teleconferences present educational opportunities that may not exist in rural communities. They also provide city dwellers with opportunities to learn from and interact with experts across the nation. Now that agricultural communicators have had a few years to experiment with the technology, it is important to examine their successes and failures. One way to do this is through evaluation.

Many video teleconferences are proclaimed a success if they attract a few telephone calls, or are viewed in various locations around the country. Rarely do we hear how many people watched

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the productions, or whether viewers thought the programs were effective.

This investigator's hypothesis is that video teleconferences produced at our nation's land-grant universities are either not being evaluated, or are not being evaluated in meaningful ways. Despite taxpayer demands for accountability, land-grant universities are not presenting a solid case for continued spending on video teleconference production.

Literature Review

Patterson and Wykes (1992) broke new ground for agricultural communicators when they published evaluation results from a video teleconference on "building commissioning." The study focused on video teleconferences as an educational delivery method. It was the first time extension educators had published specific video teleconference evaluation results in a national journal. As of the writing of this paper, they remain the only ones to do so.

Since agricultural communicators are contributing so little to the literature on video teleconference evaluation, it may be useful to review related studies that were completed outside the land-grant system. In addition, since video teleconferences are another facet of extension programming, it may be useful to review some of extension's program evaluation studies.

On the importance of evaluation, MacKenzie, Postgate and Scupham (1975) wrote that evaluation and research are more important in distance education programs than in conventional classroom instruction. They said that innovative proposals require more documentation because they often involve considerable investments that may not be revised for a number of years. The authors also noted that evaluation is important because instructors do not have close contact with students. This makes it difficult to know when revisions are needed. Finally, the authors wrote that the high visibility of such projects requires careful planning and analysis.

In the early 1980s, Keegan and Rumble (1982) attempted to set evaluation guidelines for distance educators. They focused on the quantity, quality, status, and relative costs of learning through distance education programming.

Keegan and Rumble wrote that "quantity of learning" refers to issues such as widening access, reducing the number of drop-outs and satisfying national, local, and individual needs. They said "quality of learning" encompasses the learning materials provided, the effectiveness of learning at a distance, and the extent to which distance teaching is suitable for certain subjects. Keegan and

Rumble said the "status of learning" refers to the willingness of other educational institutions to award transfer credits for distance education programs, the acceptance of degrees and diplomas that are awarded to students, and the recognition of these awards by employers. Finally, the authors wrote that the "relative cost of learning" relates to the cost-efficiency of distance education versus conventional education.

Thorpe (1988) was adamant about the importance of evaluating "open learning" techniques. She defined "open learning" as a movement that "opens up" education and training, particularly for those who have not traditionally participated after initial education. Thorpe said evaluation can help increase the rates of participation in education and training. She also said evaluation can help improve the quality and extent of learning that participants experience:

Evaluation is about finding out the effects of our own actions, so as to judge their value. Its importance for learning is that it is an essential technique for fine-tuning our own behaviour as teachers or trainers, so that the learner is able to learn or learn better from the materials we prepare (Thorpe, 1988, p. 2).

Thorpe added, "In the short term, evaluation consumes resources; but in the long term, it contributes to satisfied customers and new developments."

Decker (1990), an extension educator, agreed with that thinking:

A comprehensive approach to program evaluation is a key to interpreting the reasons why a program doesn't meet expectations. It's necessary to plan the evaluation before solidifying the program design and to carry out some evaluative activities before initiating the program. This isn't the approach taken by many people. Often extension educators wait until the program is well underway, possibly near completion, before considering their evaluation needs. This approach makes it impossible for the programmer to use evaluative information to adjust and fine-tune the program during implementation. (Decker, 1990, p. 20)

Casey (1991), another extension educator, offered evaluation advice for any type of educational programming:

Agents who continually produced successful programs looked back. They reflected on what they'd done and looked for strengths, weaknesses, and ways to improve programs. They used both formal and informal methods to obtain feedback and evaluate their programs. (Casey, 1991, p. 11)

Methodology

Surveys were sent to the directors of agricultural communications

units at each of America's 50 land-grant universities. The cover letter asked that the questionnaire be forwarded to the person most often involved in video teleconference production. Two days later, "follow-up" post cards were sent to each institution.

The 13-question survey asked about the number of video teleconferences produced by each institution during 1993, the primary audiences for those programs, the methods of evaluation, the people responsible for various aspects of evaluation, the elements of each program that were evaluated, and how the evaluation results were used. The survey also asked video teleconference producers why they may have chosen not to evaluate their programs.

Each questionnaire carried a code that was used to determine which institutions responded to the survey. Three weeks after the initial mailing, a second letter and a replacement survey were sent to all who had not responded.

Completed surveys were received from 46 of the 50 universities, a 92% rate of return.

Results

The respondents reported that they produced a total of 937 video teleconferences during 1993: Two universities were responsible for two-thirds of these programs, while 31 institutions produced the other third. Thirteen respondents did not produce a video teleconference during 1993.

Because two institutions produced two-thirds of the video teleconferences reported in this survey, it is important to distinguish between trends at these universities (hereafter known as the "Big Two") and trends at other institutions. When it is important to make this distinction, this study presents overall results, along with results that exclude the "Big Two."

Survey respondents who produced video teleconferences during 1993 said 63% of their programs targeted statewide audiences, 21% of the programs were intended for national audiences, and 16% targeted regional audiences.

This trend varies if you eliminate the "Big Two." The other 31 respondents said 43% of their video teleconferences targeted statewide audiences, 29% targeted regional audiences, 27% targeted national audiences, and 1% targeted "other" audiences.

Considering the primary purpose of these video teleconferences, respondents categorized 58% as classroom instruction, 18% as Extension Service programming for the general public, 15% as Extension Service programming for extension employees, 4% as

special events, 2% as "other" types of programming, 2% as university sports programming, and 1% as general university programming.

Again, this trend varies if you eliminate the "Big Two." The other 31 respondents categorized 49% as Extension Service programming for the general public, 19% as Extension Service programming for extension employees, 13% as classroom instruction, 12% as special events, 6% as "other" types of programming, and 1% as general university programming.

When asked whether someone usually evaluated the video teleconferences produced during 1993, 64% of the respondents said the programs were evaluated. Thirty-six percent said the programs were not evaluated.

Respondents who usually did not evaluate the video teleconferences they produced during 1993 gave multiple reasons for not doing so: Sixty-seven percent reported evaluation was not needed, 42% said it was not useful, 42% said it was too much work, 33% said it was too complicated, 17% said it was too expensive, and 17% said they failed to evaluate for "other" reasons (Table 1).

For those who evaluated their video teleconferences during 1993, printed questionnaires were the most popular form of evaluation. Eighty-six percent used printed questionnaires, 9% used "other" methods, and 5% used electronic mail.

TABLE 1:

Respondents who reported they did not regularly evaluate video teleconferences during 1993 (N=12) were asked to identify all reasons that explain why they did not evaluate their video teleconferences.

Reason for not evaluating	Percentage of respondents
Not needed	67%
Not useful	42%
Too much work	42%
Too complicated	33%
Too expensive	17%
Other	17%

Survey respondents who evaluated their video teleconferences also indicated that their evaluations involved a number of people. Eighty-six percent of those who evaluated their video teleconferences during 1993 said program viewers helped evaluate the programs. Eighty-one percent said viewing site coordinators were involved, 71% mentioned the program's content specialist, 67% said the video teleconference producer participated, and 19% said "other" people were involved.

When asked who was most often responsible for *developing* evaluation for video teleconferences produced during 1993, 38% named the program's content specialist, 33% mentioned "other" people, 24% named the video teleconference producer, and 5% said this was the viewing site coordinator's responsibility (Table 2).

Thirty-eight percent said the program's viewing site coordinator was most often responsible for *administering* the evaluation. Twenty-four percent said this was the responsibility of the program's content specialist, 19% named the video teleconference producer, and 19% listed "other" people (Table 2).

Tabulating evaluation results was usually the responsibility of the program's content specialist. Thirty-eight percent said the content specialist handled this job, 33% named "other" people, and 29% said this was the video teleconference producer's responsibility (Table 2).

TABLE 2:

Respondents who reported regular evaluation of video teleconferences during 1993 (N=21) were asked who was most often responsible for developing, administering, tabulating, and analyzing evaluation results.

	Developing Evaluation	Administering Evaluation	Tabulating Evaluation	Analyzing Evaluation
Content Specialist	38%	24%	38%	53%
Teleconference Producer	24%	19%	29%	14%
Viewing Site Coordinators	5%	38%	0%	0%
Other	33%	19%	33%	33%

The survey also shows that the program's content specialist generally takes the lead in *analyzing* evaluation results. Fifty-three percent named the content specialist as the person most often responsible for analyzing evaluation results, 33% listed "other" people, and 14% mentioned the video teleconference producer (Table 2).

Respondents who usually evaluated their video teleconferences during 1993 collected data on a number of program elements. One hundred percent said they evaluated program content (i.e., usefulness to viewers), 90% asked for suggestions from viewers, 86% evaluated the program's format (i.e., the value of panel discussions, video segments, viewer participation, etc.), 81% asked questions about program reception (i.e., clear video and sound), 76% made note of the attendance, 24% mentioned "other" elements that they evaluated, and 19% asked participants about the appropriateness of admission charges or downlink fees (Table 3).

Once the evaluation results were gathered, 52% of the respondents said interested parties informally reviewed the information, then used it as a reference for future video teleconferences. Nineteen percent listed "other" uses for the results, 14% said they published the information for interested parties to review, and 14% said the results were filed away and forgotten after an informal review by interested parties (Table 4).

TABLE 3:

Respondents who reported regular evaluation of video teleconferences during 1993 (N=21) were asked to identify all program elements that they, or someone else, usually evaluated.

Program element evaluated	Percentage of respondents
Content	100%
Suggestions from viewers	90%
Format	86%
Reception	81%
Attendance	76%
Appropriateness of admission charges	19%
Other	24%

Summary

Seventy-two percent of those who responded to this survey said their university produced at least one video teleconference during 1993. Two of these 33 universities produced two-thirds of the programming.

Most of the respondents' video teleconferences targeted statewide audiences. The "Big Two" of video teleconference production put much of their effort into classroom instruction. The other 31 institutions put much of their effort into Extension Service programming for the general public.

Nearly two-thirds of the video teleconferences produced by respondents during 1993 were evaluated. Printed questionnaires were the most popular way to collect this information.

The respondents indicated that evaluation required a cooperative effort. Team members varied from university to university, but they generally included program viewers, viewing site coordinators, the program's content specialist, and the video teleconference producer.

Survey results show the program's content specialist was most often responsible for developing evaluation for video teleconferences produced during 1993. Viewing site coordinators were usually responsible for administering the evaluation tool, while the program's content specialist was generally responsible for tabulating and analyzing the evaluation results.

TABLE 4:

Respondents who reported regular evaluation of video teleconferences during 1993 (N=21) were asked to select one choice that best describes how evaluation results were used at their institution.

Evaluation uses	Percentage of respondents
Informal review by interested parties, then used for future reference	52%
Informal review by interested parties, then filed and forgotten	14%
Published for interested parties to review	14%
Filed away with no follow up	0%
Other	19%

Respondents said their evaluation efforts usually focused on program content, suggestions from viewers, program format, program reception, and attendance.

The survey indicates that most evaluation results are reviewed informally by interested parties, then used as a reference for future video teleconferences.

About one-third of the respondents said their institutions usually did not evaluate the video teleconferences produced during 1993. Most people in this group said evaluation was not needed, presented too much work, was not useful, or was too complicated.

Discussion

This investigator's hypothesis was that video teleconferences produced at our nation's land-grant universities were either not being evaluated, or were not being evaluated in meaningful ways. This hypothesis did not hold true.

Nearly two-thirds of the respondents' video teleconferences produced during 1993 were evaluated. The producers also report that program content, format and reception, suggestions from viewers, and attendance were usually examined as a part of the evaluation process.

However, the survey shows a majority of these evaluations were reviewed informally. Few were published or shared with anyone outside the video teleconference producer's institution.

One explanation for this lack of shared results might be that the video teleconference producers did not believe their findings would be useful to others. They may have believed their colleagues were too busy dealing with their own projects and did not have time to learn about someone else's work.

Another explanation might be that the video teleconference producers would have liked to share their findings, but did not have the time or resources to publish them.

A third explanation might be that video teleconference producers did not want to publicize unflattering evaluation results. As agricultural communicators learn to use this technology, there are bound to be setbacks. Still, few producers enjoy publicizing that viewers questioned the program's usefulness, or that it was not cost-effective.

Whatever the explanation, there is a lack of shared evaluation results.

Agricultural communicators can learn a lot from the successes and failures of their peers. Program quality could improve at many universities if video teleconference producers made a better effort to report evaluation results in professional journals and share them at professional meetings.

In the tradition of sharing mistakes, this investigator would like to share two problems that arose in this study.

In tallying the results, it became apparent that some respondents counted a series of video teleconferences as one production. Others counted each program within a series as an individual program. For example, two separate universities may have produced a series of 10 one-hour broadcasts on farm safety. One respondent may have reported this series of related broadcasts as a single video teleconference production. Another respondent may have reported the broadcasts as 10 individual video teleconferences. An explanation of how to quantify a series of related programs may have produced a more accurate total regarding the number of video teleconferences produced.

In another question, the investigator asked whether the program's content specialist, video teleconference producer, viewing site coordinators, program viewers, or others usually helped evaluate the video teleconferences produced during 1993. The intent was to discover which people actually analyzed the program's successes and failures. One survey respondent pointed out that a person could help with evaluation by developing the survey, administering it to participants, or tabulating the results. He or she would not have to be involved in analyzing the evaluation results. The question should have asked whether these people usually helped *analyze* the program's successes and failures, rather than asking whether they helped *evaluate* the program.

Recommendations

This investigator recommends further studies regarding the lack of published video teleconference evaluation results. Video teleconference producers responding to this study indicated that a majority of their programs are being evaluated. The next step is to determine why those results are not being reported. Future studies might explore whether various incentives would encourage better reporting of video teleconference results.

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DAKOTA DATA

North Dakota population density: 9.3 people per square mile in 1990.

Fifth in nation in elbow room
(after Alaska, Wyoming, Montana, South Dakota)

NCSS Extension Communication

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North Dakota's state tax burden* is 38th-heaviest in the nation—

*per capita, excise, severance and corporate income tax

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DAKOTA DATA

In North Dakota 1.45 fatalities occur per 100 million vehicle miles of travel.

This is 15% below the national average.

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or below happens

about 65 days by the Canadian border

about 25 days to the southern border

NCSS Extension Communication

The weekly cost to North Dakota is about three hours of production time and \$10 for reproduction. Newspaper editors are supplied with both a double- and single-column piece for their convenience. The information conveyed is designed to produce a startling and thought-provoking response from the reader. Congratulations on your award, Barry.