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ABSTRACT Documentation of the status of the University of Nebraska-Lincoln Television Department's Cable Television Communications Research Project is provided, along with a report of an evaluation which was undertaken both to determine the impact and effectiveness of the EduCable program service to cable system subscribers and to assess the viability of continuing the specialized-programming cable system service. Background information explains the project objectives, which included the investigation of the appropriate relationship between a public television state network and local cable systems serving the same audience, and the development of a practical, operational and technical system to meet local needs. Activities are described for the following three project phases: (1) research and development (Phase I); (2) analysis of Phase I data and definition of communications and information strategies with governmental and civic agencies which could be supplying information; and (3) initiation of the EduCable program service. Additional sections provide details on the EduCable service, the evaluation process, findings and conclusions, and future project plans (Phase IV). Appendices include the EduCable Programming Evaluation Questionnaire, a letter of commitment from Cox Cable of Omaha, letters of support from governmental agency information suppliers, and a summary of EduCable Demonstration programming hours. (LMM)
EDUCABLE

Evaluation of Station KUON-TV, Lincoln, Nebraska
Cable Television Research Program Demonstration
September 1980.

CPB Technical Report #8006

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The following is both:

a status report of the University of Nebraska-Lincoln Television Department's cable television communications research project and

a report of the evaluation of a four-month demonstration of the EduCable program service.
TABLE OF CONTENTS

I. PROJECT BACKGROUND 1

II. CORPORATION FOR PUBLIC BROADCASTING RESEARCH AND DEVELOPMENT CONTRACTS
   Phase I Activity 5
   Phase II Activity 5
   Phase III Activity 6

III. THE EDUCABLE DEMONSTRATION 10

IV. THE EVALUATION PROCESS 18

V. FINDINGS AND CONCLUSIONS 21

VI. SUMMARY OF CONCLUSIONS 34

VII. FUTURE PLANS 37

VIII. APPENDIX 39
I. PROJECT BACKGROUND

It is almost universally accepted in the U.S. communications industry that cable television will become a vital force in American society by the end of the current decade. The vast majority of U.S. homes will have in excess of 70 cable channels which will carry a wide variety of specialized program services. Cable television (CATV) will assume an increasingly prominent position alongside single-channel broadcast television. Some predict that, at least in the major metropolitan areas, cable will replace broadcast distribution. In more sparsely populated areas of the country like Nebraska, cable and broadcast television will most likely operate side by side for many years to come. But, especially with the new satellite technology, CATV will be able to disseminate large numbers of specialized program services made available by all sorts of commercial and non-commercial interests.

It is, therefore, incumbent upon the University of Nebraska, as a land grant institution and in light of its mandate, to provide teaching, research and extension, continuing education and public service for all the people of the State. To do so, the University must take advantage of all available means of communication that can provide delivery of these services. The electronic communications media become particularly important to the University's mission.

With cable television destined to assume a position of considerable prominence in this society, it is both appropriate and necessary for the University systematically to investigate the potential that cable television offers for bringing its educational and informational services to the people of the State. Even more to the point, it is important that the University become involved and both take a position of leadership and assume a protective role. If the University does not move now to reserve channels with cable systems as they are being constructed or as older systems are being upgraded, enterprising outside organizations will be filling these channels and there...
will be no space available for Nebraska programs. In fact, this is already beginning to take place.

It is both important and appropriate, as well, for the Nebraska Educational Television Commission to cooperate with the University in this study. The Commission is charged by the Nebraska Educational Television Act to "...conduct educational television programs by standard broadcast or by closed circuits...". Cable television is a prime form of such closed circuit communication. Further, the Commission is charged to assist the Department of Education with the provision of educational television programming over cable systems.

Over the past several years there have been increasing requests for specialized programming to serve the multiple needs of the public. Requests have multiplied for programs for ethnic or linguistic minority audiences; for the blind, deaf, the handicapped, the learning impaired; for special instructional services for women; for those needing retraining opportunities or those reentering the work force, and for meeting the unique needs of shift workers. There are requests for more access to governmental information and for more parent education programs. The list goes on. All of these situations provide expanded opportunities for public telecommunications organizations to provide more services.

Historically, the only way such alternative programming could be delivered was through the construction of additional broadcast facilities, with all the attendant major costs of both construction and operation. Now it is possible, through the rapid growth of cable and the technological explosion, to provide on an extremely efficient and cost-effective basis an alternate program service to meet these varied needs. Through CATV — a narrowcast service paralleling the broadcast service — these additional, specialized programs can be brought to the public. And this can be done at a fraction of the cost of
a broadcast service.

Recognizing this need for a quantity of specialized programs, the Public Broadcasting Service (PBS) has reorganized its programming services into three member services: PTV-1 will include cultural programming, drama, series and specials - the PBS "showpieces"; PTV-2 will provide special interest programming for minorities and specialized audiences, public affairs programs and second language series; PTV-3 will bring children's programs and a variety of educational offerings.

In addition an increasing number of Nebraska-produced programs will help to serve the needs of these various audiences. Such programs as live coverage of the Unicameral bring unique opportunities to the people of the State.

In response to the need for alternative delivery systems and to capture the opportunity for bringing additional services to the public, the University of Nebraska-Lincoln, in cooperation with the Nebraska Educational Television Commission -- the two agencies which cooperatively operate the statewide Nebraska ETV Broadcast Network -- designed the cable research and demonstration project.

The UNL cable project has two research objectives: first, to demonstrate what local needs are not currently being met and which could be served by CATV and to explore the feasibility of providing services to meet those needs through cable television and; secondly, to undertake a demonstration to investigate the appropriate relationships between a public television state network and local cable systems serving the same audience and to evolve a practical operational and technical system.

After a series of discussions, an application was made to the Corporation for Public Broadcasting (CPB) in the summer of 1978 for funding to begin this research and demonstration project.
The Congress has directed CPB to investigate and demonstrate new communications technologies and their potential for the American public and instructional television. CPB selected six of 146 PTV licensees to undertake such research projects to determine the most appropriate relationships with cable systems. The University's KUON-TV was fortunate to be commissioned as one of those six, and is the only licensee investigating the relationship between a university licensee and a state PTV network and multiple cable systems throughout a state.
CPB Research and Development Contracts

Through a grant of $39,879 from the Corporation for Public Broadcasting (CPB) covering the period from September 1, 1978 to May 31, 1979, a research and development project was initiated to isolate, identify and test a number of potential informational and educational program needs for Lincoln, Lancaster County and the State of Nebraska.

During this first phase, cable subscribers, government and civic agencies, ETV Network personnel and cable system operators were queried as to what they perceived to be needs that could be served by television that were not then being met. After questioning the potential beneficiaries of such a specialized service, a period of study and planning followed. Project staff evaluated the potential for meeting those needs by securing or creating programming for cable systems, conducted and evaluated an audience measurements study, explored program source potentials, narrowed the scope of such a project to a workable design, established cost estimates for funding the technical system and the proposed spectrum of services, and formulated a proposed technical operating procedure.

Phase II of the project covered the period from June 1, 1979 to October 31, 1979. A CPB grant for $34,980 made possible additional analysis of information obtained under Phase I, more clearly defined communications and information strategies with governmental and civic agencies which would be supplying information. The concept of the project was broadened beyond the use of a single cable system and the interest of various cable operations investigated. Specifications for the purchase of necessary head-end control room equipment were prepared and possible formats for programming activities were designed.

Following the completion of Phase II, there was a brief period during which no further activity ensued, pending continuation funding for the project and activation of a program demonstration to test the feasibility of the
theories developed and to test, operationally, the validity of the planning. Arrangements were consummated with Lincoln Cablevision, the cable system serving the city of Lincoln, to use the public access channel, Channel 10, for a program demonstration. Cablevision cooperated fully with the research project. However, the city of Lincoln Cable Advisory Committee exercises certain controls as to use of this channel and one of the conditions of their approving the use for the demonstration was the requirement that they be permitted to preempt, upon adequate notice, any programming being presented for this demonstration. For a period of several years, Lincoln City Council meetings had been carried on this channel, as had round-the-clock Reuters stock market coverage. Cablevision's Channel 10 suffers severe degradation of signal in some parts of the city because of the co-channel interference, and the cable system presently has only a 12-channel capacity. All of these factors were fully considered by both Cablevision and the KUON-TV personnel in planning the demonstration.

Phase III of the project for the period from January 1, 1980, to October 31, 1980, began with the receipt of a grant of $65,000 from the Corporation for Public Broadcasting. The principle Phase III objective was to initiate a program service called EduCable, comprising the elements identified as valuable and desired in the previous research and ascertainment activities. Such a demonstration provided the basis for the practical test of operational methods, equipment suitability and dependability, and for the evaluation of the service from the viewpoint of cable subscribers, the cable system, the government agencies supplying information, and KUON-TV/the Nebraska ETV Network.

During this period, a program distribution demonstration was conducted and extensive study and planning given to the question of how a state public television network in a less-than-densely populated state could effectively and efficiently provide additional useful informational, educational public
television programming for distribution by multiple cable television systems serving the same clientele as the broadcast network.

The Nebraska Educational Television Commission at its January 1980 meeting approved cooperation with the University of Nebraska in the cable demonstration project, supported the University of Nebraska application for a federal grant for special microwave equipment to relay public television cable service from Lincoln to Omaha, and formalized submission of an application to the Federal Communications Commission for a license to operate that microwave system.

Notable during the early part of Phase III was contact with the Omaha City Council while it was developing its request for proposal for applicants for a cable franchise for the City of Omaha. As a result of these efforts, provision of a dedicated channel for EduCable was included in the proposal and became a weighting factor in the evaluation of competing applications. After the proposal was issued, all applicants who expressed an interest in the franchise were supplied with information about the program service. The majority of the competing firms contacted the EduCable project and made additional inquiry into ways which they could cooperate with the project or ways where they could augment the service. Although there were initially fourteen applicants, only six presented firm proposals by closing date. All six indicated willingness to provide the dedicated channel as part of their basic service.

On August 19, 1980, the City Council of Omaha awarded Cox Cable of Omaha the franchise for that city's cable operation. Immediately, Cox began preparations for installation of the system in anticipation of beginning to provide service within nine months. Cox has informed EduCable that they are legally bound to deliver all services proposed, including designating cable Channel 15 for EduCable. Channel 15 will be included in Cox Cable of Omaha's first tier of service which will be provided all homes without monthly charge.
During this same period, EduCable staff made contacts with cable system owners and operators in the suburban Omaha areas. Two systems already were under construction and several others (smaller systems) had received franchise awards and were anticipating becoming operational within a year. Because franchise legislation had already been passed, it was not possible to get EduCable carriage included as a requirement in these situations. However, all cable operators were receptive to the possibilities of adding EduCable to their list of program channels. Since several alternate methods of distribution were under consideration, no firm commitments could be secured at that time.

A close watch is being maintained in the case of other communities yet to address the matter of cable franchises so that, as in the case of Omaha, wherever possible, EduCable can be included as part of the initial legislation.

To date, one additional franchise has been issued in a small town in which the carriage of EduCable is a factor in the franchising selection process. Also, the renewal dates for older existing franchises are being watched so that the program service can be included in the negotiations for franchise renewal.

In order to provide service to Omaha, it is necessary to construct a microwave CABS-band, two-hop relay system from Lincoln to Omaha. Very early during Phase III, application was made to the National Telecommunications and Information Agency (NTIA) for funding this construction. Despite the extremely severe competition for the available dollars from this federal agency, NTIA approved the UNL/KUON-TV application. A grant of $59,245 toward a total cost of $97,747 was received through the NTIA’s Public Telecommunication Facilities Program. This approval underscores the value that the federal government places on this project, not only as a research activity to provide important data for future developments in public television cable service, but also as a major future program service to the major population center in Nebraska.
Prior to the start of the EduCable program demonstration, several promotional activities were initiated. As soon as a firm date for activation was possible, an envelope stuffer was developed and mailed to all Cablevision subscribers with the monthly billings. This outlined the types of programming, dates and general details of the new service. Another more elaborate brochure with specific programming schedules was prepared and sent to all cable subscribers as a direct mail piece. A news conference was held immediately prior to the start of the program service, which resulted in media coverage for the project: During the program demonstration, the complete EduCable program schedule was included in the television schedule in the Sunday and daily papers.

No additional direct contact with the cable viewers was possible because of a decision of the Cable Advisory Committee to deny the use of the subscriber list for any form of promotion or advertising.
III THE EDUCABLE DEMONSTRATION

From the outset of the project and throughout the EduCable demonstration planning process, major attention was given to the subject of operational costs. Not only was the service to be provided with a minimum of staff, but also, every economy was to be operationally practiced that would not adversely affect proposed quality. Administrative and clerical staff were recruited so that the multiplicity of activities relating to programming and direction could be accomplished with the smallest number possible.

The existing University of Nebraska-Lincoln campus closed circuit television console at the Nebraska Educational Telecommunications Center was the key to economical cable operations. The closed circuit control room was redesigned and reconstructed to accommodate the additional technical facilities required for origination of a cable service. The redesign and reconstruction made it possible for a single engineer to handle the operating requirements of both the closed circuit and the EduCable services. Therefore, the only additional technical personnel required was an engineer to handle weekend EduCable programming, because CCTV programming generally is not operating on weekends.

Early analysis had indicated that it would be important to install the EduCable head-end in the Telecommunications building. In this way, EduCable and closed circuit would both have access to a wide variety of record/playback equipment: quad 2", helical scan, other reel-to-reel configurations, video cassette, film chain and slide. The redesign made this possible without the need to purchase additional cable record/playback equipment. The resulting combined operating center for closed circuit and EduCable was a highly efficient, cost effective, versatile facility that could serve the requirements of both in an effective manner.
To originate the new EduCable service from the new cable control and feed the Lincoln cable system, a special RF cable interconnection was required. This was provided at the expense of Cablevision which also provided a return circuit for monitoring all Cablevision programming.

Because the program service is conceived as eventually becoming statewide in scope, it did not seem feasible to have the head-end control center in any location other than contiguous with the ETV Network operating center.

Additionally, it was necessary to install a direct line from the State Legislative chambers to the control center and to obtain Reuters data line. These services were secured through the local telephone company, as was a remote control switching circuit between the cable system head-end and the EduCable head-end.

In order to properly interface with Cablevision in view of the technical co-channel interference problem already mentioned, and in order to provide the varied and sophisticated program service intended and at the quality level desired, it was necessary to purchase specialized equipment. Specifications were completed and the equipment placed on order, using project equipment funds.

Unfortunately, by this time manufacturers of equipment had begun to experience an upsurge of orders that caused them to fall behind on delivery schedules. As a result, the specialized equipment required to start program distribution was not delivered as anticipated. This became a critical problem because of the imminent adjournment of the State Legislature, the live coverage of which was a key part of the planned service.

In spite of all efforts to accelerate deliveries, critical equipment items were still unavailable as the latest possible start date for program distribution was approaching.

By employing emergency measures and temporary procedures, the EduCable
program service was activated on March 31, 1980 and continued until July 31, 1980. Programming was provided from 7:30 a.m. until 9:00 p.m. weekdays, and on Saturdays and Sundays from 7:30 a.m. until noon. This format continued for the entire program demonstration period.

Based on previous ascertainment activities, a program service was planned that would incorporate a variety of programming which would be available at no additional expense. As the EduCable program service began, it was to include the following:

- **Gavel-to-Gavel Coverage of the Nebraska State Legislature**
  The Nebraska ETV Network's remote unit currently covers the Unicameral each day it is in session, recording all floor action and editing the videotapes for broadcast each evening the Legislature is in session. Here would be the opportunity through cable, and on a real-time basis, to bring the entire proceedings of the Legislature right into the living room and office. Each year large numbers of citizens have interest in legislation of special interest to them. For the first time, now, they would be able to monitor their State Legislature without the time and trouble necessary to travel to the Capitol. As Nebraska looks to a future which will require less travel and gas consumption, this gavel-to-gavel coverage of the Legislature will become increasingly important;

- **Public Hearings of Legislative Bills**
  The Nebraska Public Television Cable Program Service would also include coverage of public hearings of major new legislative bills being considered by various Unicameral Committees -- both during and in between sessions. While the audience for such public hearings is not sufficiently large to require broadcast television, cable television would be uniquely suited to handle this special program service which would make State government more accessible to the public;

- **Governor's News Conferences**
  The Nebraska Public Television Cable Program Service would also cover news conferences called by the Governor. The average citizen rarely, if ever, has the opportunity to attend such meetings where important briefings and announcements take place. The cable service would give them a front row seat in the Governor's office. Similarly, there would be opportunity for major State agencies to employ this new communications device to disseminate important information to the public;

- **State Agencies Alpha-Numeric Information Service**
  In yet another effort to bring state government and its available services readily to the people, a special cable program service would be developed to work closely with State governmental
agencies. This would be provided as alpha-numeric, letter and number characters in a print-like display on the television screen. This electronic bulletin board would bring a wide range of practical information into cable homes. Such material as notices concerning public meetings, announcements of special or new services, deadlines for filing reports or applications, information about office hours and locations, health information and a variety of other pertinent data would be provided. This alpha-numeric display would be changed regularly to reflect the latest information. The alpha-numeric format has the advantage over standard printed materials in its ability to display materials at varying rates of speed and introduce emphasis by flashing characters or words as well as the usual techniques of underscore, borders and larger type.

- University of Nebraska College-Level Instruction
- A wide range of college-level credit and noncredit telecourses would be provided regularly by the University of Nebraska-Lincoln's Division of Continuing Studies. Research studies have shown that increasing numbers take advantage of these distance learning opportunities, if they can be offered a number of times during daytime, evenings and on weekends to meet the convenience of adult learners. Cable is ideally suited to these repeat offerings. The special cable channel would offer repeats at varying times of all telecourses broadcast on the Nebraska ETV Network, as well as a number of other courses not available by broadcast;

- Specialized Graduate Level Courses
- The University could make certain of its specialized advanced courses available for cable distribution. A graduate level electrical engineering course was recently offered via closed circuit television to professional engineers in the Omaha area. With television cameras located in the classroom and a telephone line for return student communication, learners-at-a-distance were able to participate fully in the course and obtain credit for successful passage. This same approach would be even more feasible with a cable channel available. Adults who must work full time will also be able conveniently and economically to do graduate work at home;

- Elementary and Secondary Instruction
- The Nebraska Department of Education and its instructional television service could utilize the cable channel to provide additional services to the schools of Nebraska. More instructional series are requested by teachers than can be accommodated on the Nebraska ETV Network. Whereas, the amount of available broadcast time is limited, this supplemental program service would permit not only additional series of instructional programs to be viewed by school children, but would provide alternate viewing opportunities for broadcast instruction through scheduled repeat showings of broadcasts;

- Public Television Programs
- The Nebraska Public Television Cable Program Service would have a number of additional educational programs available for
distribution. The Public Broadcasting Service, in anticipation of this cable television expansion, is currently reorganizing to make three program services, instead of one, available to its member licensees such as KUON-TV and the Nebraska ETV Network. A variety of new quality educational courses and programs, as well as public television programs, will soon be distributed by PBS. With broadcast hours limited, many of these programs will be available for use only on cable channels. In effect, this means that the dedicated cable channel would be offering a number of programs on a first-run or unique basis.

Repeats of Nebraska ETV Network Prime Time Programs
In addition to the above, the Nebraska Public Television Cable Program Service would include repeats of a number of the most popular of PBS and Nebraska's own program originations. This offers the viewer additional opportunities to see quality programs missed during their regular broadcast times.

As the EduCable demonstration began, the Unicameral was fast approaching adjournment and the actions taking place in the chamber were somewhat less representative of the typical proceedings of the State's Legislative body. There were no public hearings on Legislative bills during the demonstration period.

There were no Governor's news conferences called during the four months, so demonstration of this type of programming was not possible.

In total, however, the EduCable demonstration presented a varied program schedule which brought materials appropriate to all audiences and reflected the areas of interest and need indicated in the prior ascertainment studies.

In the final phase of developing program schedules, several factors evolved that prevented full implementation of EduCable plans. To begin with, the availability of PBS programming was severely reduced because of a decision by their legal advisors that proper clearances had not yet been obtained for use of these materials via cable. This was a severe blow to programming plans of any public television operation expecting to have access to this very valuable resource. Although it put PBS on notice as to the need for future actions to secure such rights, it did not help the EduCable demonstration.

However, in order to fill this void a considerable number of Federally
supported programs produced under the auspices of the Emergency School Aid Act were available. These provided new multi-cultural programs not previously included in the EduCable schedule. Other sources also were located from which to acquire informational programming. These made it possible to provide a wide range of public television programs during the demonstration.

A very time consuming part of the programming process proved to be the production of the alphabetic portion of the cable service. Fourteen Nebraska government and civic agencies provided materials for the demonstration. The list included:

1. Nebraska Department of Labor
2. Lincoln City Parks and Recreation Department
3. University of Nebraska-Lincoln Division of Continuing Studies
4. Cooperative Extension Service
5. Nebraska Energy Office
6. Nebraska Commission on the Status of Women
7. City Clerk's Office
8. Area Agency on Aging
9. Lincoln/Lancaster County Department of Health
10. Mayor's Office
11. Nebraska Department of Economic Development, Division of Travel and Tourism
12. State Department of Public Welfare
13. City/County Personnel Office
14. Legal Services of Southeast Nebraska

Although each agency cooperated fully, the material supplied for this electronic information service still required some editing before it could be entered into storage equipment for playback. In some cases, such as the City Council agenda and Legislative agenda, the data was in raw, unedited form and required a total rewrite. Within the capabilities of the alpha-numeric equipment, considerable imagination was employed to provide variety, emphasis and interest in presentations. The end result was a creative presentation of what could otherwise have been both dull and uninteresting.

As has been noted, because of previous Lincoln Cablevision access channel commitments for City Council coverage and stock market coverage, and because of other priorities established for public access programming, it was necessary
to maintain close liaison with Cablevision engineering control. A control circuit plus the normal phone service were used for communication. A very fine cooperative spirit existed throughout the project, and only a minimal amount of difficulty was experienced.

In order to provide the stock market service for those who had become accustomed to using it over Channel 10, several adjustments in programming were necessary, both by EduCable and Cablevision. Through the cooperation of the two agencies, a compromise arrangement was worked out so that during the legislative coverage the service was provided on another cable channel. However, this arrangement made it necessary for EduCable to contract for the Reuters data service at considerable project expense in order to supply this information to subscribers during the time that programming was being supplied by EduCable. The coordination of switching procedures between EduCable and Cablevision would have otherwise been impossible, without this arrangement.

For almost the entire four months of the demonstration, remodeling and revision of the control room area continued, as items of equipment were received and as practical experience dictated operational changes that would provide greater efficiency or improved quality. By the conclusion of the programming demonstration, a highly efficient, extremely flexible, quality cable distribution center had evolved -- a facility that could have been developed only through such practical experience.

The cable control center was operated in much the same manner as a broadcast operation. A detailed operations log was prepared for the entire daily schedule, including channel identification at least on an hourly basis, or between program changes. Switching was handled manually between all program sources in exactly the same manner as a broadcast network, and a signed log noting discrepancies was filed at the end of each day. In total, the technical operation was professional in every manner.
Throughout the Phase III time period, cable activities in cities and towns in a radius of twenty-thirty miles of Lincoln and Omaha were monitored in order to determine how and when to work with the appropriate governing agencies or groups in order to have the greatest impact on the cable franchising process and to assure ultimate availability to EduCable. A constant liaison was maintained with existing cable franchise holders to determine technical requirements and arrangements necessary for these cable systems to access the EduCable program service. Because of the diversity of operating situations, probably no single method will meet the needs of all potential users of the program service. Again, the only empirical evidence would be subjective evaluations of the persons making the contact and success in getting cable systems to access the programming.
IV. THE EVALUATION PROCESS

The EduCable evaluation was designed to examine a number of demonstration activities. There was need to determine the impact and effectiveness of the four-month demonstration program service and to assess the feasibility of continuing the project and ultimately initiating a regular, full-time service. The evaluation was, also, to ascertain probable operating costs, determine operating procedures, and verify equipment suitability and dependability. Also, the overall goals of the project -- investigating new communications technologies and their potentials for PTV, and establishing viable interrelations between a state public television network and multiple cable systems in the state and between a public television facility and a city governing body -- were evaluated.

To assist in the formal evaluation of the program service, the University of Nebraska-Lincoln Department of Educational Psychology and Measurements was asked to give direction. The department agreed to provide this counsel and assigned a graduate student to assist on the project. After study of the initial phases of the project and the Phase III proposal and after conferences with project staff, a plan was developed that would secure the data to provide statistically viable information about the program service.

The following information was sought:

1. The awareness of the public to the cable program service.
2. The overall degree of use of the service.
3. The specific programs watched.
4. The usefulness and value of the service as perceived by cable subscribers.
5. The degree to which the service was a factor in influencing decisions or in encouraging/enabling subscribers to participate in activities on which information was provided.
6. The degree to which alternative viewing scheduling (repeat showings) of programs was useful as to:
   a) repeats of current popular prime-time Network broadcasts
   b) repeats of programs available only on EduCable
   c) reruns of high quality "favorites" previously aired on the Network, but not currently scheduled for broadcast

7. Indications of other types of programming desired.

8. The degree to which EduCable is desired on a permanent basis.

9. The degree to which EduCable was a factor in a decision to subscribe to cable service.

10. The readability of the alpha-numeric programming.

To implement the plan, a concise questionnaire was developed. Then a randomly selected list of cable subscribers was developed and each person was contacted by phone to secure his/her willingness to serve as a designated evaluator of the project.

Following telephone acceptance, a personal letter was sent to each evaluator thanking him or her for willingness to participate and, again giving full instructions as to what was requested. A packet of materials consisting of a complete program listing for the next two weeks, a program viewing log, a copy of the questionnaire and a prepaid reply envelope was included. Subsequently, each evaluator received a program listing for each week for a period of two months, to help establish viewing habits.

Three separate responses were required: one after eight weeks of programming, one after thirteen weeks, and a final report at the end of the demonstration period of eighteen weeks. Phone calls were made several times during the demonstration period and letters were sent to keep contact with the evaluators. During the first two months, a weekly program schedule was sent to each viewer to help establish awareness to the various program features and to encourage as much viewing as possible.
The complete evaluation, report and analysis of the Department of Educational Psychology and Measurements is attached as Appendix A.

One evening was reserved for a phone-in based on an announcement in the alpha-numeric portion of the programming. Unsolicited calls were received from time to time, as viewers had comments on program services.

Government agencies supplying information for the alpha-numeric programming were requested to determine the benefit of this service to their own agency's program and mission.

The program department of Cablevision also noted responses received from viewers, as did the ETV Network Information Office.

To determine operating procedures that would be most cost effective and still provide quality service, several procedures were tested. Various combinations of alpha-numeric programming segments were used to test the most efficient method of use and suitability of the associated equipment. Various programming situations employing video cassette quad and alpha-numeric playback equipment were tried in order to determine the workability of having one engineer handle the required activities.

All data gathered and the resulting observations and conclusions will be provided to the Corporation for Public Broadcasting and be available to public television stations and state public television networks throughout the United States and to other concerned groups.
FINDINGS AND CONCLUSIONS

The findings and conclusions gleaned from the four month EduCable demonstration are contained in four sections – General, Programming, Technical and Operations.

General

Based on the evaluation of the EduCable program demonstration and from the experience gained from an operational viewpoint, there is considerable evidence that EduCable is a viable program service which can provide valuable informational, educational and cultural programming to Nebraskans. As indicated in Appendix A, a significant percent (82%) of the evaluators expressed this viewpoint, while only 12% expressed the opinion that the service was of no value to them. As to continuance, 69% felt that the service should continue, while only 7% definitely felt that it should not. The balance of 24% did not express an opinion. The percent of viewers recommending continuance consistently increased during the demonstration period. This would possibly indicate that EduCable's perceived value increased as viewers became more aware of the program services.

On the whole, 18% of weekday viewing time was spent watching EduCable, or an average of one hour per day. Weekends showed only half as much viewing. There was a significant decrease in viewing between the first report period and the next two. Possible explanations could be the ending of the Legislative coverage, which commanded high interest, and the fact that there was no continuing EduCable promotion, with a consequent decline in viewer awareness of special programs. Another factor could have been a decline in quality programming caused by the acute shortage of available material.

One fact is clearly evident. If an EduCable program service is to be fully successful and reach the potential possible, it is mandatory that a dedicated channel be provided for the total period of the day in which it
is being programmed. The confusion and annoyance to everyone caused by the interruption of established services, such as the stock market and City Council coverage, is more than such a service can tolerate. Additionally, the preemption of EduCable programming by occasional public access requests is unacceptable. There was no clear-cut way to identify the interjected public access programming. In no case were the public access programs unethical or offensive, but content was not always compatible with University Television and Network philosophies. In at least one case, a viewer was impelled to question the advisability of continuation of the EduCable service, not realizing that the program to which she objected was a public access program and not an EduCable program. Except under the most extreme circumstances, only when a dedicated channel is assigned by a local cable system should such a service be provided.

Because of the lapse of three months between Phase II and Phase III while funding was being secured to enable continuation, much of the momentum generated from earlier activities was lost. It was necessary to reestablish contacts with many of the governmental agency information sources. Any lapse in the project should be avoided if at all possible. An intermission in programming might be tolerated, but only if promotion activity to the public and liaison with cable systems continue at a high level.

From the point of view of the University of Nebraska and the Nebraska ETV Network, EduCable means an opportunity for the University at minimum cost to provide a wide variety of specialized programming to segments of the public that cannot be served adequately now by broadcast television. This offers an additional way for the University, in addressing its Land Grant responsibilities, to bring a wide variety of information and instruction to Nebraskans.

To the UN-L Division of Continuing Studies EduCable offers a means of increasing the effectiveness of its activities. First, courses could be
provided that will generate specialized audiences too small to be economically served by broadcast television. Professional post graduate courses are good examples. Secondly, courses originally broadcast or being broadcast via the Nebraska ETV Network can be cable-repeated at several alternate viewing times and days to give more options to the viewer for receiving the course materials. Additionally, courses for which broadcast time cannot be secured can be offered on cable, thus increasing the variety of studies which a student may engage in both for credit or noncredit. This category could also include repeat offerings of recently broadcast courses to give students opportunity for review or for make-up of incompleted courses. Any of these possibilities would greatly increase the degree of service DCS can provide to Nebraskans.

It is standard procedure for all schools in cable TV service areas to be provided connection at no cost to the school systems. EduCable, therefore, contains considerable potential importance for the Nebraska Department of Education. In effect, this means additional ITV service for the schools of the State at very little additional cost. This is particularly appropriate, since, according to the Nebraska ETV Act, the Department is charged to assist with arrangements whereby all Nebraska schools would have access to a minimum of two instructional services: one through open circuit, the Nebraska Educational Television Network; the other, each cable system which provides educational television programming other than that simulcast by means of open circuit.

The elementary/secondary ITV programming segment of the demonstration was severely minimized, because the period during which programming was provided did not correlate with the school year. However, indications are that, during a period of full program service and with adequate advance planning, the elementary and secondary schools of the State could have a cable ITV program service to complement the broadcast Network schools service. Additional
programming could be provided, and both broadcast and narrowcast series could be repeated to increase teacher use. Also, specialized programs for small group teacher in-service or school administrator orientation would be possible and economically and operationally feasible by cable.

From the cable system operator's point of view, the feeling is generally that of perceiving value in the service. The suburban Omaha operators are willing to grant dedicated channel space and are willing to purchase receiving equipment, as soon as the programming is available to them. Lincoln Cablevision has expressed willingness to provide a dedicated channel as soon as its expanded system is operational. Other cable operators throughout the State also have expressed interest if the service can be made reasonably available.

Cox Cable Company of Omaha, as previously mentioned, has given wholehearted commitment for channel space and is cooperating in every way possible to expedite the inclusion of this service in their system (Appendix B).

Programming

Adequate sources of programming properly cleared for cable origination did not exist at the time of the program demonstration. Therefore not all the needs of the public that were identified in the early phases of the project were served. However, PBS and all producers of public television material are becoming increasingly aware of the need to secure full rights whenever new programs are produced or acquired. Strong pressures from all fronts are bearing on this. The reorganization of PBS and its three discrete program services means additional programming in the near future for cable use. Regional PTV networks which secure their programs from individual public television stations or through group buys will produce their new materials with full clearances. Some program producers will go back and renegotiate rights to include cable. The future looks much brighter. A growing understanding of the need for programming by the many public television stations interfacing
with cable systems will generate improved policies and procedures. The need for programming is growing; ways to meet this need will evolve.

Cooperative efforts of public telecommunications agencies, both those currently supplying programming to cable systems and the many others just emerging in this area of activity, must be promulgated in order to ensure an adequate supply of suitable PTV programming cleared for cable origination.

Although the State Legislature was in session less than three weeks after the start of the demonstration programming, evidence points to the high viewer interest and perception of the value to this program service. Legislative coverage ranked highest in value in the opinion of the viewers, with 79% of respondents so indicating. This same high value was sustained even after adjournment, which would indicate a lasting opinion even though there was not the continuing coverage to reinforce this viewpoint. More people indicated this segment of EduCable programming as being the most watched of any portion of the service. Additional support for this fact is the phone inquiries when the Legislative coverage was not being carried (on days they did not meet) and viewers were not aware of the recess, or on days when there were temporary interruptions because of breaks in the Legislative sessions.

There is no question that gavel-to-gavel Legislative coverage is a valuable part of the EduCable program service. Not only is it important from the standpoint of enabling an informed public, but it has implications for energy conservation. Except for the people living in the shadow of the Statehouse, fuel must be used to bring people to the Capitol. This opportunity to follow Legislative action on matters that have special importance will enable each person to keep informed of the Legislative progress without travel to the State Capitol and without the attendant cost and use of energy. As energy conservation and costs become a more important factor in our lives, the value of gavel-to-gavel Legislative coverage will assume even greater
Since the number of hours of programming of various types was not equal (Appendix D), the only valid measurement is the viewers' opinions of value of each type. Using this as the criterion, the next most valuable segment of EduCable programming was that of the reruns of previous quality public television programs not presently being carried on the Nebraska ETV Network. Of the respondents, 76% indicated that this type of programming was perceived to be of value. This indicates that the quality prime-time programs produced by KUON and the Nebraska ETV Network have a continuing value, and viewers welcome the opportunity to see once again, the unique Nebraska programs which the Network is unable to broadcast because of time constraints.

Similarly, 71% of the respondents indicated that EduCable repeats of selected current ETV Network programs to provide alternative viewing opportunities is of value to them. This is especially meaningful in view of the fact that only three program series were repeated.

Approximately the same percent (69%) indicated the government agency information (alpha-numeric) service to be of value. Although viewers did not perceive that this kind of information had motivated them to participate in any civic events or influenced any decisions, evidence from some of the information suppliers proved to the contrary. The State Job Service and City-County employment office have evidence that applicants applied for particular jobs that they had seen via the alpha-numeric programming. All agencies felt that the service had produced results for them and all endorsed the project and recommended that the service be continued (Appendix C).

Over one-half of the evaluation responses (55%) indicated that programs available only on EduCable - not currently or previously carried by the ETV...
Network and exclusive of the Legislative coverage — were considered to be of value. These programs were largely informational in nature, although many did have a multi-cultural trace. This would still indicate that there is a need for this type of program, if at least half of the population sample considered them of value.

Broadcast television must be programmed with large viewing audiences in mind — programs that satisfy the largest common denominator. Cablecasting, on the other hand, can be programmed to serve a number of small specialized groups. In addition to the program types that received major viewer support, all other segments of the EduCable program service were perceived to be of value to some group. Though the percent (one-third or less) would have been too small to be practicable for broadcast television, it was certainly feasible for cable service. This underscores one of the advantages of cable.

College level courses, hearings on legislative bills, and ethnic or minority language programs all received a "valuable" rating by about one-third of the evaluators. Considering the demographic composition of the audience, this represents a high percent of some of the population groups which would most benefit from this programming. This points to the need for including these elements in an EduCable program schedule.

Only news conferences and briefings by government officials received minimal ratings (17% and 19%, respectively). One reason for such a low ranking could have been that no illustrations of this type of programming were included in the demonstration period. Perhaps were an illustration available, the opinions would have been different.

There is consistent evidence that all types of programming carried by EduCable met needs and were perceived to be of value by various segments of the viewing population. All of which indicates both the appropriateness and necessity of using the "narrowcasting" capabilities of EduCable.
As noted earlier, the use of Cablevision Channel 10 for EduCable faced problems that were fully recognized by all concerned. Although both Cablevision and EduCable made adjustments and compromises, there were still some conditions that were not solvable. From the attempted solutions and compromises it was found that either there is a large number of people who are using the stock market service or there is a small number of very vocal people. Viewers indicated a desire for black and white presentation with a large format ticker-tape crawl. Any other format appears not to be satisfactory. Also, some people use only the ticker-tape crawl; others the economic news service. Neither can be eliminated.

Although a wide range of programming services were provided during the demonstration and essentially all areas met with acceptance, just as with broadcast programming it is necessary that there be continued ascertainment of the cable television audience needs. Perhaps, because of the greater diversity of audiences, the need is even greater.

Technical

In general, all equipment performed according to specifications. Comparatively little down time was experienced because of equipment failure or malfunction. Nothing more than routine maintenance was required.

This is not to say that there were no problems from a technical point of view.

During the demonstration, it became apparent that specifications determined on a theoretical basis were not always appropriate to the requirements of actual operations. Most notable of these was the character generator and associated equipment used for the alpha-numeric information service. The character generator itself was very simple to operate but provided only two options - large caps and small capitals. The characters were quite readable, but lines were limited to 24 characters per line and ten lines per
frame. The display process was the most restrictive. The only options were eight read-out rates, with no provision for instantaneous full page display or for crawl. This somewhat restricted the preparation of material in that each "page" had to be complete in itself. There was provision for flashing words or lines, for underscore and a variety of borders. Storage and recall functions were the most unsatisfactory. Although 300 "pages" of information could be stored on a single cassette, efficient recall was restricted to sequential display or forward motion only — no random display of "pages" in other than a direction from beginning to end. The memory unit to program this selection process was quite limited and very cumbersome in operation, requiring considerable time to prepare and to enter into the memory bank. For the amount of information that was programmed, this particular equipment was not satisfactory. The equipment itself is tempermental in operation, and memory storage of display directions is erratic and undependable.

Future study needs to be given to alternative methods of providing alphabetic-numeric information service. At present, one design of automated program switching equipment is being investigated. Other options in computerized design or in other storage devices must be explored, if the amount of alphabetic-numeric service is to assume any major proportions.

Because of the co-channel interference condition, a phase-locked modulator was required. This performed very well and provided a noticeably improved picture over what had been possible with Cablevision's own programming. Even this did not totally remove the problem in areas of the city where the commercial channel 10 signal was exceptionally strong. After the local cable system is expanded and another channel is available to EduCable, this will no longer be a problem, of course, although it will require replacement of the modulator with one of a different frequency assignment.

As previously noted, the anticipated format for the display of the Reuters
data line information proved inaccurate. Therefore, the equipment specifications for the data line converter proved incorrect and the color display and size of characters it provides is not what viewers request. This equipment, then, is not satisfactory. In view of the recommendations relative to the future appropriateness of providing stock market and economic news services, attempts to modify this equipment seem illogical.

The data line service feed suffered two interruptions during the period of the program demonstration -- one for more than 24 hours.

All other technical equipment proved satisfactory during the demonstration, and no changes are recommended.

Operations

It is difficult totally to separate operational activities from those of programming and the technical area, because they are so integrally related. However, one stands out very clearly. That is the matter of promotion. The progression of information gathered from the three questionnaires would indicate that, without continuing promotion about forthcoming programs, viewing will decline. It is, therefore, necessary that a deliberate process be established for maintaining a flow of information about the various kinds of services EduCable provides. Special emphasis needs to be directed to both the unique features of the service and to specific series or programs. Promotional information must alert both those who already may be consistent watchers of EduCable as well as the casual viewer or one not yet aware of the new service. Awareness - or the lack thereof - is a major concern in promoting a new service.

Although previously mentioned in part, the ability of one engineer to handle the operating requirements of both closed circuit and EduCable programming is a major accomplishment. This will make possible a cost effective operation requiring only minimal personnel and equipment. By pooling the entire playback/record facilities of the Telecommunications Center, there is
provided access to a wide choice of equipment, redundancy to provide back up requirements in cases of equipment breakdown, and no need for excessive duplication of equipment with the attendant costs and space requirements.

As determined from the EduCable demonstration, it appears that staff requirements for regular program service will include a director, a writer/programmer, a secretary/assistant and engineering assistance beyond 40 hours per week.

Based on experience to date, an operating budget would probably be in the $75,000 to $80,000 range, including engineering, administrative and support staff costs and allowances for certain promotional activity. This would be exclusive of any program acquisition costs or future equipment purchases. Operating costs, except for promotion, should remain constant regardless of whether EduCable is servicing one or multiple cable systems. As the coverage area is enlarged, promotion expenses would necessarily increase slightly because of the larger number of subscribers to be contacted and the increased geographic area involved.

From the outset of the project, the plan has been to have operational costs borne by participating cable systems on some sort of a pro rata basis, once the experimental phases had been concluded. Considering, the total number of subscribers ultimately receiving EduCable program service, the cost to the cable systems on a per subscriber basis could be quite small. Already, all capital costs for cable system receiving equipment to access the EduCable programs have been assumed by the cable operators.

Future expansion of the EduCable distribution grid could be from funds requested from the National Telecommunications Information Agency Public Telecommunication Facilities Program. Also, Senate Bill 2827, an amendment to the Communications Act of 1934, includes provision for funding rural telecommunications both for planning projects and for facilities construction.
Additionally, the bill has other provisions to stimulate the growth of rural telecommunications, and to formulate policies that will not impede the expansion of such services and would encourage the development of telecommunications services and facilities throughout a state. This could have important implications for Nebraska.

In contacts with various city and town governing bodies, it became very evident that, except for Omaha, there was very little understanding of the intricacies and potentials of cable service franchising. It is quite apparent that, in order to assure that EduCable becomes available throughout the State, it will be necessary to closely monitor the development of cable interest in all places not yet with cable franchises, and to counsel with cable system operators as they plan, develop and activate franchises they hold. The results of this type of activity with the City Council of Omaha and with the applicants for this franchise, especially the successful one, conclusively prove the need for this type of activity, if public telecommunications organizations are to secure the place they deserve in cable services. Counsel with city governing bodies during cable franchising deliberations must be continued, to assure proper relationships with the successful applicant and to reserve channel space for EduCable.

Two other findings that pervade every facet of the project are the matters of adequate lead time and continuity of operations.

Continuing research and demonstration are necessary to provide the practical experience necessary to improve the effectiveness and scope of a public television cable program service. New technologies must be explored in technical areas, both for distribution and for program control, as well as for operational practices.

Additional program service opportunities have been identified during the demonstration period. Not only can the UN-L Division of Continuing Studies expand its capabilities for service, other departments and other campuses of
the University system can benefit. Both the University of Nebraska-Omaha (UNO) and the University of Nebraska Medical Center can use EduCable for course instruction and information. The Institute of Agriculture and Natural Resources can increase its extension activities, as well as provide special services for 4-H activities. Further investigation during Phase IV of the research/demonstration project should disclose additional program service opportunities for the University and for other State agencies.

The Corporation for Public Broadcasting, funding agency for the project, and all public television licensees will benefit from the findings of this research project. In fact, several state public television systems have already received assistance in their planning and are incorporating appropriate processes or recommendations in their project plans. The New Hampshire Public Television Network, the Wisconsin ETV Network, Kentucky Educational Television, and the Rocky Mountain Center for Public Television have all been in contact with project staff, as have individuals from public stations in Green Bay Wisconsin and New York City. Two consultants doing extensive work with public television activities - Dr. Elinor Richardson and Jim Robertson - have conferred with staff about the demonstration. With the completion of this report, all public television licensees and state ETV Networks will have access to the findings.
VI SUMMARY OF CONCLUSIONS

It has been appropriate for the University of Nebraska and the Nebraska ETV Commission to engage in this educational/public television cable investigation and demonstration and to pursue development of an alternate distribution method. The University, the ETV Commission and the State are fortunate to have secured external funding with which to conduct the investigation and to develop experience. The public television cable investigation and demonstration have generated a substantial amount of important and useful information.

As the result of evaluation to date and from the experience gained during Phase III of the cable television project and the EduCable program demonstration, the following conclusions emerge:

1. A public television cable program service does provide a vehicle for serving additional needs of the viewing public not now being met through broadcasts of the ETV Network or through any other manner.

2. A dedicated channel on participating cable systems is mandatory.

3. There is interest on the part of Nebraska cable system operators in providing this special program service to their subscribers and in making a dedicated cable channel available for EduCable.

4. There is need to further investigate new and evolving technologies whereby distribution of the EduCable program service to cable systems in sparsely populated areas of the state will be economically feasible, and to determine the appropriate relationships between the state public television network and these cable systems.

5. There is need for the Public Broadcasting Service and other program agencies to secure cable origination clearance for all programs produced.
6. Cable viewers do find value in the specialized programming possible in the cable program service, and will make use of the EduCable service.

7. It is operationally sound to combine the UNL cable control and closed circuit operations for more efficient use of manpower and equipment.

8. There is need for further study into suitable equipment and methods for providing efficient alpha-numeric information services.

9. Regular and substantial promotion of the EduCable program service is necessary, in order to insure maximum viewer awareness.

10. It is inappropriate for EduCable to include Reuters stock market and economic news services.

11. There is need for public television involvement in local franchising activities of city councils. There is a need for public television organizations to become involved in the cable franchising activities of city governing bodies.

12. There is additional need to test EduCable operational methods and programming services provided to multiple Nebraska cable systems.

13. There is need for further investigation into additional programming which should appropriately be included in the educational/public cable service.

14. There is need further to refine EduCable operational costs and the feasibility of cable franchise holders supporting those costs in a manner equitable to both the distributors and the provider of the service.

15. The EduCable program service can be increasingly useful in helping the University of Nebraska, the Nebraska ETV Commission, the Nebraska Department of Education, and other agencies of State government meet their service obligations for the people of the State.
16. The proposed federal legislation concerning rural telecommunications should be closely monitored and its implications for Nebraska and EduCable carefully studied.

And finally, as Phase IV approaches, the need for continuing the program service as a full-time activity becomes increasingly important. Every day brings new evidence that the predictions of the industry are accurate - that through expansion of service, cable will touch the lives of the vast majority of the people by the end of the decade. Also, almost as often there is evidence of additional demands on channel capacities of even the new systems being planned. This makes it even more important, that public telecommunications facilities establish a beachhead with such program services as EduCable and secure space reserved on the wires of the nation. Technology may not present another opportunity if this one is lost.
VII FUTURE PLANS

Based on the preceding recommendations and conclusions, plans are already underway for the continuation of the EduCable project.

An application for Phase IV funding in the amount of $65,000 has been forwarded to the Corporation for Public Broadcasting to support the continuing research and demonstration activities for a 12-month period from October 1, 1980, through September 30, 1981. The following work assignments are outlined in the proposal:

1. Plan immediately to reactivate the EduCable program service to begin January 2, 1981, coincident with the opening of the State Legislature to carry at least: a) gavel-to-gavel coverage of the Legislature, including hearings on important bills, b) ethnic and minority language programs, c) children's programs, d) governmental alpha-numeric information, e) college courses, both credit and non-credit, and f) adult informational and cultural programming.

2. Conclude arrangements with Lincoln Cablevision for carrying EduCable on a dedicated channel as soon as their expansion is completed and through temporary arrangement in the interim.

3. Purchase and install the two-hop CARS-band microwave system that will bring the EduCable program service to the UNO tower.

4. Purchase and install an ITFS transmitter at the Commission's tower site at UNO to enable EduCable distribution to the suburban cable systems serving Ralston, La Vista, Papillion and Bellevue.

5. Finalize arrangements with suburban cable systems at La Vista and Bellevue to secure reception equipment to access the EduCable program service and supply it to their subscribers on a dedicated channel.
6. Culminate arrangements with Cox Cable of Omaha for their reception of EduCable as soon as they become operational.

7. Undertake a study to determine engineering requirements and to assess technological advancements that impact on distribution service to other parts of the State.

8. Continue efforts to pursue all potential program sources and to obtain cable origination clearances on both new and existing programs, in order to expand the service to include all possible materials. This will include the Public Television's new PTV-2 and PTV-3 programming.

9. Monitor all other cable system development in eastern Nebraska so that, as new systems become operational, they can be provided the EduCable service as quickly as possible.

10. Give additional study to possible methods of providing alpha-numeric information programming, in order to increase the efficiency and effectiveness of its operation.

11. Continue efforts to see operating costs of the EduCable program service borne by the participating cable systems, once EduCable completes its experimental period. This might be accomplished in phases.

The opportunity is at hand. The potential for efficient and economical service exists. EduCable can, in the future, be of prime importance to the University of Nebraska, the Nebraska ETV Commission, the Department of Education and various other state agencies and, most importantly, to the citizens of Nebraska.
APPENDICES

A  EduCable Programming Evaluation

B  Letter of Commitment from Cox Cable of Omaha

C  Letters of Support from Governmental Agency
    Information Suppliers

D  Summary of EduCable Demonstration Programming
    Hours
EduCable Programming Evaluation

The purpose of the evaluation was to determine the impact and effectiveness of the EduCable program service to cable system subscribers and to assess opinions as to the feasibility of continuation of the cable program service. To determine this, the following factors were considered: 1) the awareness of the public to the cable program service; 2) the overall degree of use of the service; 3) the specific programs watched; 4) the usefulness and value of the service as perceived by cable subscribers; 5) the degree to which information provided by the programs was a factor in influencing decisions or encouraged/enabled subscribers to take covert action; 6) the degree to which alternative viewing opportunities (repeat showings) of programs was useful; 7) additional programs or services not being provided that are desired; and 8) the degree to which EduCable service is desired on a permanent basis.

A questionnaire (Exhibit A) was devised in order to obtain the information outlined above. In general, questions were of the multiple choice type or value scales which were provided for the respondents' convenience.

To obtain evaluators a random sample of viewers was drawn from Cablevision's subscriber list. Each person on the random sampling was contacted by phone and asked if he or she would be willing to serve as an evaluator for the project. Forty-four percent of those contacted agreed. Additionally, in the promotional materials mailed to cable subscribers before the start of programming, requests had been included for volunteers. Several people telephoned their acceptance of this request.

Each of these individuals was then sent a confirming letter and a packet of information describing the EduCable program service, the purpose of the evaluation, the requirements of the evaluator, a detailed program guide for the first two weeks of the demonstration, a program viewing log, and a copy of the questionnaire with a prepaid return envelope to be used for the.
first report.

Thereafter during the first evaluation period ending May 31, each individual received weekly advance program guides. One week before the first report was due a letter was sent each evaluator reminding each person of the due date for return of the questionnaire and enclosing a second questionnaire with prepaid return envelope and viewing log to be used for making a second report on June 30.

During the second evaluation period each evaluator was sent a letter urging his or her participation and stressing the importance of the report in the evaluation process. At the end of that period (June 30) each evaluator received the questionnaire and viewing log to be used for making the third report.

Once more during the survey period each evaluator received a reminder letter and request for participation in the evaluation. One week before the end of the program demonstration each evaluator received a personally addressed letter thanking him/her for participating. Enclosed was also an additional copy of the questionnaire, the viewing log and a stamped business reply envelope. This was followed by a telephone call again urging the completion of the questionnaire. This process was more successful in eliciting returned questionnaires than were the other two.

No compensation was given to any of the evaluators.

Initially, 82 evaluators agreed to participate in the project. However, during the extended time of the evaluation eight dropped out due to moving from town, accident, illness and a death in the family. The return rate at the end of the first evaluation period was 22%; at the end of the second period it was 23%; at the end of the project it was 49%. This quite clearly indicates that the more aggressive follow-up was helpful in securing more activity from the evaluators. Actually, at least one return was received from
75 of the 82 evaluators, thus giving a 91% response in the total.

Because all evaluators did not return all three questionnaires one of the hoped-for outcomes of the evaluation -- the change in attitude of viewers to the program service -- could not be measured to any degree of confidence.

One fact that definitely can be concluded is that during the period when the Legislature was in session and being carried by EduCable the viewing time was considerably greater than after the Legislature adjourned. (See Table 1)

For the purpose of interpretation of results, the returns were tabulated separately for each evaluation period and for the composite of the three questionnaires from the 75 evaluators. The results of the tabulations follow:

Question 1 and 2 asked the respondent to indicate total hours of TV viewing for a weekday and for a weekend. Table 1 compares the average number of hours of TV viewing during each of the three evaluation periods. Since the programming was so vastly different after the first period, the composite value would be meaningless.

<table>
<thead>
<tr>
<th>Category</th>
<th>Questionnaire 1</th>
<th>Questionnaire 2</th>
<th>Questionnaire 3</th>
</tr>
</thead>
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<tr>
<td>Week-day TV</td>
<td>4.8 hrs</td>
<td>6.2 hrs</td>
<td>5.5 hrs</td>
</tr>
<tr>
<td>Week-day EduCable</td>
<td>30%</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>Week-end TV</td>
<td>6.8 hrs</td>
<td>5.8 hrs</td>
<td>5.2 hrs</td>
</tr>
<tr>
<td>Week-end EduCable</td>
<td>12%</td>
<td>10%</td>
<td>7%</td>
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</table>

It is interesting to note that total hours of viewing TV increased during the months of June and July (second and third evaluation periods) for the weekday, but dropped off during the week-ends. This reflects two factors -- the increasing tendency for greater TV viewing as a replacement for entertainment and at the same time indicates more outdoor activity during the summer months. EduCable viewing decreased somewhat more than TV viewing in general.

Questions 3 and 8 should be considered together. Question 3 inquired as to what type of EduCable programming was watched most; question 8 asked for
perceived value of the same type of programming. (See Table 2 and Table 3)

Although the gavel-to-gavel coverage of the Legislature ranks second by a very small margin, in the amount of time viewed, it must be considered that this programming was available for only part of three weeks while the other types were available for the entire eight weeks covered by the first evaluation period. Table 3 which indicates the perceived value of each type of programming shows a strong indication of the perceived value of Legislative coverage.

<table>
<thead>
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<th>2</th>
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<tr>
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<td></td>
<td>ETV Repeats</td>
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<tr>
<td>Favorites</td>
<td></td>
<td>2.8</td>
<td>ETV Repeats</td>
<td>2.5</td>
</tr>
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<td>Agency Info</td>
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<td></td>
<td>Ethnic</td>
<td>4.5</td>
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<tr>
<td>Ethnic</td>
<td>5.3</td>
<td></td>
<td>Grad</td>
<td></td>
</tr>
</tbody>
</table>

(The lower the number, the more viewing)

Also, considering the fact that programs available only on EduCable (See Appendix D) represented considerably more hours than those of reruns of previously telecast favorites, it is obvious why more hours were spent viewing the "EduCable only" programs as compared to the "Favorites" reruns. Yet, in Table 3, which indicates perceived value of the various classes of programs, the reruns of the quality favorites shows a significantly higher rating than does the "EduCable" programming.

Therefore, the most meaningful evaluation is represented in Table 3 since the biasing factor of unequal amounts of programming of each type is eliminated in this tabulation.

Continuing with the perceived value of the various types of programming others that received high perceived value ratings are repeat showings of popular programs currently being carried on the broadcast network, hearings on
<table>
<thead>
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<th>Type of Program</th>
<th>Questionnaire</th>
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<th>Not Valuable</th>
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</thead>
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<tr>
<td>UNL Courses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>35%</td>
<td>65%</td>
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</tr>
<tr>
<td>2</td>
<td>29%</td>
<td>71%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>41%</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>37% (7)</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>Grad Instruction</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1</td>
<td>39%</td>
<td>61%</td>
<td></td>
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<tr>
<td>2</td>
<td>14%</td>
<td>86%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>11%</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>19% (9)</td>
<td>81%</td>
<td></td>
</tr>
<tr>
<td>Legislature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>74%</td>
<td>26%</td>
<td></td>
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<tr>
<td>2</td>
<td>86%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>79%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>79% (1)</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Hearings</td>
<td></td>
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<td></td>
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<tr>
<td>1</td>
<td>47%</td>
<td>53%</td>
<td></td>
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<tr>
<td>2</td>
<td>29%</td>
<td>71%</td>
<td></td>
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<tr>
<td>3</td>
<td>37%</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>38% (6)</td>
<td>62%</td>
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<tr>
<td>Briefings</td>
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<tr>
<td>1</td>
<td>29%</td>
<td>71%</td>
<td></td>
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<tr>
<td>2</td>
<td>14%</td>
<td>86%</td>
<td></td>
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<tr>
<td>3</td>
<td>12%</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>17% (10)</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>ETV Repeats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>61%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>86%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>69%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>71% (3)</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Agency Info</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>56%</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>85%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>70%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>69% (4)</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Ethnic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>53%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>14%</td>
<td>86%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>38%</td>
<td>62%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>37% (7)</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>EduCable Programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>67%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>67%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>44%</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>55% (5)</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Quality Favorites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>72%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>80%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>76%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>76% (2)</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>
Legislative bills, ethnic programs and college courses. The two lowest ratings were for government official briefings and graduate level courses.

Questions 4 and 5 were designed to elicit information relative to the effect the governmental information service exercised in influencing action or participation. It is quite evident that only a very few were motivated to take any covert action, (See Table 4) yet from Table 3 the expressed value shows quite high. It is an interesting dichotomy that although the expressed influence decreased during the total demonstration, the perceived value increased. This will require further investigation.

**TABLE 4**

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Questionnaire</th>
<th>Influence</th>
<th>Some</th>
<th>Little</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>21%</td>
<td>79%</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td>9%</td>
<td>91%</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td>8%</td>
<td>92%</td>
</tr>
</tbody>
</table>

The sixth question related to the alpha-numeric information display. Not all respondents answered this question. Those which did express difficulty in reading the information indicated the fault was fuzzy, blurred or unclear picture. This is a result of the co-channel interference problem with the local commercial television station which would have more of an effect on lettered material that is to be read than on pictoral material that has motion.

The seventh item which requested suggestions for other kinds of programs was also not completed by all respondents. The general consensus was for more "how to" programs. The specific type of program was not assessed and more research is necessary to determine content requirement.

The most important questions of the set were numbers 9 and 10. These related to the overall opinion of the value of the program service and the
recommendations to continue or not. (See Table 5) The general perceived value increased somewhat during the demonstration due largely to the change in attitude of those who initially had no opinion. The percentage that felt the program service was of no value to them remained essentially the same throughout the entire demonstration period. The trend in the opinions as to continuing/discontinuing was not as well defined, but the number who had no opinion did decrease consistently and there was a small percentage change in attitude about discontinuing.

TABLE 5

<table>
<thead>
<tr>
<th>Overall assessment of value</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useful</td>
<td>76%</td>
<td>76%</td>
<td>88%</td>
<td>82%</td>
</tr>
<tr>
<td>Not Useful</td>
<td>14%</td>
<td>12%</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>No Opinion</td>
<td>10%</td>
<td>12%</td>
<td>2%</td>
<td>6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Continue/Discontinue</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue</td>
<td>67%</td>
<td>59%</td>
<td>75%</td>
<td>69%</td>
</tr>
<tr>
<td>Discontinue</td>
<td>0</td>
<td>12%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>No Opinion</td>
<td>33%</td>
<td>29%</td>
<td>18%</td>
<td>24%</td>
</tr>
</tbody>
</table>

The evidence is significant in that a sizeable majority of respondents in both cases indicate value in the EduCable program service and a recommendation for its continuance.

The last two questions were demographic in nature. Table 6 shows the tabulation of this information. Within the households surveyed the predominant ages fell between 25 to 49. A slightly smaller percent were 50 and over than were 24 or less. This was due to a fairly large group in the 12 and under age span. The number of television sets in the household varied slightly from expected norms with 71% indicating only one set. Some returns remarked that because there was only one set, higher priorities for other programs eliminated viewing of EduCable programs that were of interest. This would indicate a need for more alternate viewing opportunities.
TABLE 6

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>No. of TV Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-49 (27%)</td>
<td>1 (71%)</td>
</tr>
<tr>
<td>25-34 (26%)</td>
<td>2 (24%)</td>
</tr>
<tr>
<td>12-19 (19%)</td>
<td>3+ (5%)</td>
</tr>
<tr>
<td>50-64 (11%)</td>
<td></td>
</tr>
<tr>
<td>65+ (7%)</td>
<td></td>
</tr>
<tr>
<td>12-18 (6%)</td>
<td></td>
</tr>
<tr>
<td>19-24 (4%)</td>
<td></td>
</tr>
</tbody>
</table>

The completion of the viewing log was very low. Therefore, no fully viable information can be gathered. However, from the information obtained, the programs identified most often indicate that those relating to Nebraska's heritage were popular. Family living programs met an interest as did general informational programs. Children's programs, especially the multi-cultural type were indicated frequently.

In summary, the evidence is quite positive in that evaluators found Edu-Cable a valuable supplement to their television viewing opportunities and that the majority of them, also, felt the service should continue. The evidence is quite strong that the gavel-to-gavel coverage of the Legislature was by far the most valuable part of the programming and that viewing dropped considerably after adjournment. Other types of programming met needs of some segments of the audience.

It is apparent, however, that there is need for further investigation into specific programming requirements, both as to content and scheduling. In future investigation processes a shorter time span for each evaluation period should be employed. The month-long period covering each report is too long for sustained interest. A four-month total span becomes a burden and there is considerable change of influencing factors over that length of time. If any extended period is used, some motivation of a monetary nature should be attached.
EduCable

Evaluation Questionnaire

1. a) On an average week-day how many hours per day did you watch television during the past month? __________ hrs per day
   
   b) On an average week-day how many hours per day did you watch EduCable during the past month? __________ hrs per day

2. a) On an average week-end (Saturday & Sunday) how many hours did you watch television during the past month? __________ hrs total per week-end
   
   b) On an average week-end (Saturday & Sunday) how many hours did you watch EduCable during the past month? __________ hrs total per week-end

3. Rank these types of EduCable programs in the order of how much you watched each. Place a 1 next to the type of program that you watched most often, a 2 next to the type of program that was the second most watched program, and so on.

   ______ University of Nebraska College-Level Instruction
   ______ Graduate and Professional Instruction
   ______ Gavel-to-Gavel Coverage of Nebraska Legislature
   ______ Public Hearings of Legislative Bills/Council Meetings
   ______ Official Briefings and News Conferences
   ______ Repeats of current Nebraska ETV programs such as Backyard Farmer RFD, Capitol View, etc.
   ______ Government Agency Information Service
   ______ Ethnic Related Programs
   ______ Programs available only on EduCable such as Vegetable Soup, Infinity Factory, etc.
   ______ Repeats of high quality favorites previously broadcast on ETV such as Shadows on the Grass, Nishardt, Marie Sandoz, etc.

The Nebraska ETV Public Television Cable Program Service (EduCable) is a project funded under a research grant from the Corporation for Public Broadcasting.
4. Since the start of EduCable, has the information provided influenced decisions you made or did you participate in an event (public hearing, recreational activity, etc.) as a result of EduCable programs?

Yes, very often ( ) Yes, sometimes ( ) No, very little ( ) No, hardly ever ( )

5. Did the information provided help you to improve your understanding of your civic responsibilities?

Yes, very much ( ) Yes, somewhat ( ) No, very little ( ) No, hardly at all ( )

6. Did you have difficulty in reading the electronic display information?

Yes ( ) No ( ) Sometimes ( )

If Yes or Sometimes, explain.

7. Would you like to see these additional kinds of programs/services carried by EduCable?

"How to" programs ( )

Participant recreational programs ( )

Interviews with governmental agency personnel ( )

Federal agency information ( )

Please list additional programs/services you would like to see carried.
8. Rate the value of the following types of EduCable programs to you according to the scale: Very Valuable, Valuable, Not Valuable

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>Very Valuable</th>
<th>Valuable</th>
<th>Not Valuable</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Nebraska College-Level Instruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate and Professional Instruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gavel-to-Gavel Coverage of Nebraska Legislature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Hearings of Legislative Bills/Council Meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official Briefings and News Conferences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeats of current Nebraska ETV programs such as Backyard Farmer RFD, Capitol View</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Agency Information Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Related Programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programs available only on EduCable such as Vegetable Soup, Infinity Factory, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeats of high quality favorites previously broadcast on ETV such as Shadow on the Grass, Neihardt, Marie Sandoz, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Overall, how valuable/useful was EduCable to you?

Very Valuable ( ) Valuable ( ) No Opinion ( ) Slightly Valuable ( ) Not Valuable ( )

10. Based on your evaluation of EduCable, would you like to see this service continued on a permanent basis?

Yes ( ) No ( ) Not sure ( )

The following questions are optional:

11. How many people in your household are under 12 years of age? ____ 12-18?

12. How many TV sets do you have in your home? ___

13. Please give any additional comments about EduCable.
September 25, 1980

Jack McBride
Director of Television
Nebraska ETV Network
P. O. Box 83111, Lincoln, NE

Dear Jack,

We thought it would be appropriate to renew our commitment to you to carry the Nebraska Public Television Cable Channel on our system in Omaha. Channel 15 is designated for your service. It is on Tier I, our Life Line Service, which is available to subscribers for a one-time installation charge of $25 and no monthly charge. This channel alignment will insure that you will have the maximum amount of exposure for your specialized cable television programming.

I am looking forward to the special quality you will bring to our cable television service as well as to a long and beneficial relationship with you personally and professionally.

Warm regards,

Hugo G. Schmidt
General Manager

HGS/ln
Mr. L. Tracy Clement  
Cable Project Director  
P.O. Box 83111  
Lincoln, Nebraska 68501  

Dear Mr. Clement:

On behalf of the Division of Employment, I want to express my sincere appreciation to you and your staff for the assistance you provided during the recent Alpha-Numeric Information Project.

According to our Public Relations Officer, many applicants in our local Job Service office responded to job openings seen on Educable.

I am cognizant of the fact that it is through the cooperation of individuals such as yourself that we are able to assist those individuals that need our service the most.

We look forward to working with you and NTV in the future and if we may be of service to you, please do not hesitate to let me know.

Sincerely,

Vern Malolepszy  
Executive Director
April 30, 1980

Mr. L. Tracey Clement  
Director of Cable Project  
P.O. Box 83111  
Lincoln, Nebraska 68501

Dear Mr. Clement:

On behalf of the Nebraska Department of Labor, Division of Employment I would like to thank you and your staff for including our Agency in the Alpha-Numeric Information Service in Educable.

I have been advised by the Lincoln Job Service Manager that some applicants have seen the job openings listed and have responded accordingly.

I want to personally thank Ms. Gayle Loeber for all the help she has provided our Agency in this project. Her innovative ideas have assisted us immensely in getting our message across to the viewing public. I am sure it must be gratifying to you, as Director, to have someone as competent as Ms. Loeber on your staff.

Again, thank you, and we look forward to our continuous working relationship.

Sincerely,

Floyd Colon  
Public Information Officer
Dear Mr. Clement:

I want to take this opportunity to express my appreciation to you and to the staff of NTV for including our Agency in the Alpha-Numeric Information Service in Educable.

It is with the cooperation of individuals such as yourself and the Nebraska Television Network that Agencies, such as ours, are able to tell our stories more efficiently.

It is my understanding, according to Mr. Floyd Colon our Public Relations Officer, that Ms. Gayle Lober was of invaluable assistance in the preparation of our format.

Again, many thanks to you and a special thanks to Ms. Lober for her technical assistance and we look forward to working with you in the future.

Sincerely,

John Hanlon
Commissioner of Labor

JRH/vt
City-County Personnel Department

555 South 10th Street  •  Lincoln, Nebraska 68508
Affirmative Action/Equal Opportunity Employers

July 30, 1980

Chris Conrad
City-County Employment
555 South 10th Street
Lincoln, NE 68508

Gayle Loeber
EduCable Editor/Researcher
1800 North 33rd.
Lincoln, NE 68508

Dear Ms. Loeber:

The City-County Personnel Department feels that the extra exposure provided by the EduCable Project was an asset in our recruiting process.

We were involved with EduCable for only a period of seven weeks and during that time the Employment Office received numerous telephone calls from people who said they had seen the position advertised on cable and wanted more specific information. We also require that each applicant complete an Applicant Characteristic Survey. On this survey we ask the question, "How did you learn about this job?" The Employment Office had several applicants indicate cablevision in the 'other' category. Although this is a small percentage of applicant referral there is something of interest in the quality of applicants attracted through EduCable. We noticed that these applicants were generally interested in high level types of positions.

The City-County Personnel Department sincerely hopes that the EduCable Job Service Program will be continued. As it gains more popularity and more people are referred to our office, we may be able to cut down on our advertising costs. This would benefit not only the Employment Office but also the taxpayers of Lincoln and Lancaster County.

Sincerely yours,

Chris Conrad
Employment Specialist
July 23, 1980

Gayle Loeber
Nebraska Educational Television Network
Lincoln, Nebraska

Dear Ms. Loeber:

It has been a pleasure working with you the past several months the Cable Project has been on the air. Your professionalism and helpfulness have been much appreciated.

In talking with various members of the Division of Continuing Studies I have found a feeling that the Cable Project is a useful tool for reaching the public and making them aware of opportunities available through the Division. We have used the Cable Project to publicize the continual stream of conferences and institutes held to serve a variety of interests of people in the state. We've also used it to make viewers aware of the independent study and night courses available to those who must work during the day; to inform people that the Division has a program for adults and younger persons working on a high school degree; to make them aware that a college counselor is available to help adults returning to school; and to disseminate many other pieces of information we feel is helpful to persons seeking to best use the University's services.

The Cable Project, with its quick turn-around from when the information is submitted to when it appears on the air, provides a flexibility both in time and market which is not always available elsewhere. Should the Project continue in a similar form, we would like to continue to be part of it.

Sincerely,

Judy Nelson
Information Specialist
UNL Division of Continuing Studies
MEMORANDUM

TO: Whom It May Concern

FROM: Jean O'Hara, Executive Director

RE: EduCable Grant Application

August 1, 1980

The Nebraska Commission on the Status of Women supports the EduCable's grant application to continue providing informational and educational announcements to Nebraska citizens. Since employing EduCable's services in March of 1980, the Commission has found their service beneficial to reach interested parties with our publications, workshops, and activities. This service has also provided a means to gain wider visibility for NCSW as well as an opportunity to announce other women's groups' activities. EduCable has kept women informed of important events and issues affecting them. This is evident by the calls and letters we receive requesting information.

We feel EduCable provides free ETV public broadcasting service to all groups and airs the information in a timely fashion. The Commission on Women has appreciated the service and cooperation shown by the EduCable staff and supports the continuation of the EduCable Project.
August 12, 1980

To Whom It May Concern:

We here at the Lancaster County Office of the Cooperative Extension Service recommend continuation of the EduCable project.

We have just begun to obtain feedback on our programs. The comments have been favorable.

We would like to include EduCable in our public awareness and leader training programs. The fall and winter months are the best for us.

If you can change to another channel it might help increase the number of viewers. Channel 10 is lost under the ghost of Channel 11 on many TV sets unless they are detuned.

We have appreciated the opportunity to be on EduCable and would look forward to the chance to continue.

Sincerely,

Don D. Miller
County Extension Agent,
Chairman

DDM:dn
Dear Gayle:

I want to commend you for the work done with the Edu-cable Project. I feel that this is an innovative effort.

As an educator, I am always looking for ways to bring timely information to the public. I put emphasis on the use of the media, and the use of Edu-cable offers an opportunity for expansion of my efforts.

During our initial project, I used the Alpha-Numeric Information Service. I also combined the alpha-numeric information with pre-recorded video cassettes.

In the future, I think Edu-cable would be an excellent use of slide programs, films, filmstrips and video cassettes, developed by educational agencies, such as Cooperative Extension. Edu-cable is likely to reach audiences that may or may not otherwise be reached by our more traditional efforts.

I will look forward to the expansion of Edu-cable, and to working with you.

Sincerely,

Kathleen Parrott
State Extension Specialist
Housing/Interior Design

cc: Roberta Sward
Dear Gayle:

It has been a pleasant and rewarding opportunity to have an association with the alpha-numeric system of the Edu-Cable project. This resource for health awareness information is looked on as one more important method for us to get out the message to consumers.

At the same time that I offer appreciation and thanks for being allowed to participate in the Edu-Cable, I offer a strong desire and recommendation that it continue. At a time when budgets for university and government agencies such as ours are being reduced, the service you provide for us gives us an excellent outlet and resource.

I offer strong support for Edu-Cable and hope that it can continue in a model that includes agencies and programs such as ours.

Sincerely,

Leon H. Rottmann, Ph.D.
Extension Specialist
(Human Development)
July 25, 1980

Gayle Lotber  
EduCable Editor/Researcher  
NETV EduCable Project  
P.O. Box 83111  
Lincoln, Nebraska 68501

Dear Gayle,

On behalf of the Division of Travel and Tourism and the Department of Economic Development, I would like to take this opportunity to thank you for your assistance in airing special notices, information on attractions, community happenings and various other items important to your audience.

We feel this is an excellent resource for in-state tourism promotion and hope that you will be able to continue this service again in the near future.

Sincerely,

[Signature]

Lois Ehlers  
Staff Assistant  
Division of Travel and Tourism
Gayle Loeber  
EduCable  
P. O. Box 83111  
Lincoln, NE 68501  

Dear Gayle:  

This letter is written to express the support of Legal Services of Southeast Nebraska for the continuation of the EduCable project.

Although Legal Services has not been a part of the demonstration project since its inception, we have appreciated the opportunity to use EduCable as another vehicle for publicizing our services. Because of our recent involvement in the program, we can provide no statistics on the number of people who have been reached by the information we have provided to EduCable. However, we have found in the past that almost one-fourth of our clients cite publicity as the reason they have come to our office for help.

We are very hopeful that the EduCable project can be continued and expanded in the future. Our program provides free legal aid to low income people in 17 counties in southeast Nebraska, and the greater the number of people we can reach, the greater the use that will be made of our services. One of our priorities has been Community Education, which includes not only letting people know about Legal Services of Southeast Nebraska, but educating them concerning their legal rights and responsibilities, so that they can prevent future legal problems. EduCable is one resource we would like to continue using to achieve these purposes.

We would also like to see the EduCable services expanded across the state, because there are two other Legal Services programs in Nebraska which would be able to benefit from this resource.

The only suggestion I would make concerning EduCable would be to publicize its availability in more places, to let greater numbers of people know what EduCable is and how it can be used.
We would like to thank those responsible for allowing us to use EduCable, and we hope that the program will be continued and expanded.

Sincerely,

Robin Hadfield
Community Information Officer
August 7, 1980

Gayle Leiber
Educable
NETV
1800 North 33rd St.
Lincoln, Nebraska 68503

Dear Gayle:

I want to express appreciation to you for including Parks and Recreation Programming in Educable.

We are constantly searching for new avenues to get timely word of places and activities to the general public. Educable provided us with a great deal of coverage. This use of the medium of television was different than ways previously available to us.

Having a coordinator give helpful instructions and suggestions was of tremendous value. Should we continue with the program in the future, I hope that the Educable Coordinator and the Parks and Recreation Staff person who provides departmental information, could continue to work together to provide the best possible material. My suggestion to Parks and Recreation Department will be that this be a regular part of the duties of at least three people, so that there can be variety in presentation and continuity in the supply of items.

Thank you very much for giving Parks and Recreation the opportunity of participating.

Sincerely,

Esther Bennett
Assistant Superintendent
Outdoor Education/Recreation

68
August 13, 1980

Gayle Loeber
NETV Cable Project
P.O. Box 83111
Lincoln, NE 68501

SUPPORT FOR EDUCABLE

Gayle, I certainly appreciated the opportunity to prepare valuable health information messages for use during the Educable project. I know how difficult it is to conduct an evaluation of how many persons were reached with the messages but on the basis of inquiries we received following showing of particular information it is evident that people were reached.

From our standpoint it is important to continually keep the public health message "in front" of the public. On any given day the public may feel that the message is not for them but on that day when they need help it can be the way to a new life. Please be assured that you have my support and encouragement for the efforts to continue production of this valuable community resource.

Terrence L. Lyman, M.P.H., Chief
Division of Health Education

TLL: cjc
September 29, 1980

Gail Leber
Nebraska ETV Network
1800 N. 33rd Street
Lincoln, NE 68503

Dear Gail,

This letter is being written to express the interest of the Nebraska Department of Health's High Blood Pressure Control Program in the "Educable" project with which you are working. The long-range goal of our program is to decrease both the morbidity and mortality rates due to uncontrolled high blood pressure. To accomplish this goal, it will be necessary to improve the level of awareness among the population of Nebraska. It has been estimated that about 40% of the people in Nebraska who have high blood pressure do not know it. (over 100,000 people) One way these people can be reached is through a media campaign which includes educational programs and announcements about high blood pressure.

It is our belief that the "Educable" system would be very useful in reaching the general public as well as the diagnosed hypertensive. Our staff could help develop programs and messages to be used in this endeavor.

Good luck in implementing next year's project, and I will be looking forward to hearing from you in the near future.

Sincerely,

Ray Olson
Health Educator

RO/mp
### SUMMARY OF EDUCABLE DEMONSTRATION PROGRAMMING HOURS

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative Coverage</td>
<td>48</td>
</tr>
<tr>
<td>Alpha-numeric Information</td>
<td>328</td>
</tr>
<tr>
<td>Ethnic Programming, children and adult</td>
<td>173</td>
</tr>
<tr>
<td>Children's Instructional Programs</td>
<td>118</td>
</tr>
<tr>
<td>Adult Informational</td>
<td>87</td>
</tr>
<tr>
<td>College Level Courses</td>
<td>42</td>
</tr>
<tr>
<td>Repeats of Current Network Programs</td>
<td>26</td>
</tr>
<tr>
<td>Reruns of Popular Favorites</td>
<td>62</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>884</strong></td>
</tr>
</tbody>
</table>

**74 hours**

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Council and other public access programs</td>
<td>82</td>
</tr>
<tr>
<td>Stock Market News and Ticker Tape</td>
<td>388</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1354</strong></td>
</tr>
</tbody>
</table>

**74 hours**