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ABSTRACT

This report summarizes information gathered during an interim study of the Schools' TeleLearning Service (STS), a cooperative effort of the Nebraska State Department of Education (NDE) and the Nebraska Educational Telecommunications Commission (NETC) to provide instructional television programming for students in Nebraska. The study, which sought to review and evaluate STS and the Japanese Distance Learning Program, included: a review of the current and historical funding, utilization, cost effectiveness, and administration of STS, the Japanese Distance Learning Program, and Nebraska's participation in the Satellite Educational Resources Consortium (SERC); an examination of projected future funding needs, utilization, and administrative responsibility for STS and Japanese Distance Learning programs; and an examination of the future viability of alternative delivery mechanisms for those programs. The report includes a letter recommending the continuation of STS as a joint partnership of NETC and NDE, expanding the STS concept of including alternative distance learning technologies and strategies, providing for a written partnership plan to include goals, agency roles, and responsibilities and resources, and providing for the joint development and submission of a budget request to be considered separately from the budgets of each agency. Appendices (more than half of the document) include: the text of Legislative Resolution 373 (LR373), narrative description of the background and history of Instructional Television (ITV) and STS Statutes, 1994 Research Associates executive summaries, STS Survey usage analysis, comparison of NDE and NETC responses on an ideal program, SERC course offerings 1989 to 1996, and a joint letter from NDE and NETC. (SWC)

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# LR 373

## THE SCHOOLS' TELELEARNING SERVICE

AND

## THE JAPANESE DISTANCE LEARNING PROGRAM

December 1996

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**LR 373**

**THE SCHOOLS' TELELEARNING SERVICE  
AND  
THE JAPANESE DISTANCE LEARNING PROGRAM**

**INTERIM STUDY REPORT**

**Presented to the  
Appropriations Committee  
and the  
Education Committee  
by the  
Legislative Fiscal Office**

**Kathy Tenopir  
Sandy Sostad**

**December 1996**

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## **BACKGROUND AND PROCESS**

Since FY 1988-89, the Nebraska Educational Telecommunications Commission (NETC) and the State Department of Education (NDE) have had a contractual relationship for the provision of the Schools' TeleLearning Service (STS) whereby NDE reimburses NETC for certain services. Under the annual contractual agreement, NETC is responsible generally for program acquisition, broadcast, and technical services, while NDE is responsible for program selection, development of ancillary materials in support of programming as well as informational and promotional materials.

The impetus for a study of the Schools' TeleLearning Service was a budget request by the Nebraska Educational Telecommunications Commission for general funds to replace declining cash fund revenue which had previously been provided by the State Department of Education to support annual operating contracts for STS. The Department had supported these contracts with a combination of state general funds and federal Chapter 2 dollars. NDE indicated its intent to reduce the amount of the STS contract with NETC due to a decline in federal Chapter 2 revenue, so NETC requested a general fund replacement.

The Appropriations Committee included \$70,280 general funds each fiscal year in its FY 1995-97 biennial budget recommendation for NETC to replace a decline in cash fund revenue from NDE for the Schools' TeleLearning Service. The 1995 Legislature adopted the recommendation which was subsequently vetoed by the Governor. The veto was not overridden.

In the fall of 1995, during the next budget cycle, the Commission submitted a deficiency request for \$70,282 general funds in 1995-96 and \$70,742 general funds in 1996-97 to replace cash funds for STS. By December of 1995, NETC had corresponded with the Chairperson of the Education Committee and NDE regarding a proposal to transfer all of STS from NDE to NETC, along with appropriations for the Japanese Distance Learning (JDL) Program.

Since the budget issue to replace cash funds with general funds for STS had expanded into a larger policy issue with implications for the administration of telelearning services, the Appropriations Committee opted to introduce a study resolution to identify alternatives for STS and JDL. In order to maintain the status quo, intent language was included in LB 1189 (1996) requiring that STS remain as a responsibility of NDE in FY 1996-97 and that the annual contract with NETC be no less than the amount expended by NDE in FY 1995-96 for the same purpose.

The LR 373 interim study (see Appendix A) was initiated in early June 1996 with a written request to solicit responses from NDE and NETC to a list of questions identified by legislative staff. The information was prepared and returned to legislative staff on July 19th. A followup memo requesting additional information was sent on August 22nd and agency responses were received by early September. Agency representatives and legislative staff met in mid-September to discuss the study and telelearning services. An October meeting with staff was initiated by the Commissioner of Education and General Manager of the Nebraska Educational Telecommunications Commission to discuss the study. Staff also visited distance learning classrooms in Grand Island, Broken Bow and Callaway with Department staff in late April.

The following report is a summary of the information gathered during the interim study. Actual information requests and agency responses are available for review in the Legislative Fiscal Office.

## THE SCHOOLS' TELELEARNING SERVICE

### **What is the Schools' TeleLearning Service?**

The Schools' TeleLearning Service (STS) is a cooperative effort of the State Department of Education (NDE) and the Nebraska Educational Telecommunications Commission (NETC) to provide instructional television programming for students in Nebraska. The two agencies have worked in partnership for twenty-five years to provide instructional television services to students in the state. In 1988, the partnership was strengthened by the formal establishment of STS by means of a contract entered into by NDE and NETC. The cooperative venture requires the Department to select instructional television programming and provide curriculum input. The Commission is responsible for acquisition and transmission of programming.

### **What is the history of instructional television in Nebraska?**

Appendix B is a detailed history of the evolution of instructional television programming in the state since its inception shortly after the activation of KUON-TV (University Television) in November 1954. According to the history provided by the Commission, initially in the late 1950's the first instructional television programs were funded with private grant funds and broadcast to a few schools located in the KUON-TV area. During the 1960's a nonprofit entity called the Nebraska Council for Educational Television (NCET) was formed by six schools, the University Extension Division, the State Department of Education, University Teachers College and KUON-TV. This organization developed instructional television services throughout the state for the next decade and was designated as the elementary and secondary instructional programming agency and advisory group to the Nebraska Educational Television Commission when the Commission was statutorily created in 1963.

The Legislature made the State Department of Education responsible for instructional television in 1971. Sections 79-2110 to 79-2114 outline the Department's statutory responsibilities to provide instructional television programming to elementary and secondary schools. The statutes require NDE to consult and cooperate with NETC to coordinate the transmission of programming to Nebraska schools. A copy of these statutes is included as part of Appendix B.

### **What are the primary services provided by the Schools' TeleLearning Service?**

#### Program Acquisition and Broadcast.

STS acquires and broadcasts approximately 150 instructional television series over the Nebraska Educational Telecommunications Network each year. Instructional television programs are broadcast on a weekly basis during the 33-week school year from 9:00 a.m. to 11:30 a.m. and 1:00 p.m. to 4:00 p.m. This provides about 27 hours per week of classroom instruction or teacher inservice training. An overnight block feed of programs begun in FY 1995-96 allows schools to receive and



tape programs for later use. The block feed is aired on the NET Network from 1:00 a.m. to 5:00 a.m. on Tuesday through Friday during the first semester.

Tape Library/Teacher Guides/Schedules/Newsletter/Inservice.

STS has a tape library with in excess of 300 series which are available to schools for classroom use. Tape dubbing is also a service provided by STS. A bimonthly newsletter, "*Insights*," provides news regarding schedules and articles relative to the broadcast service. Broadcast schedule books are available free of charge to teachers. Teacher curriculum program guides are available at cost to teachers for each series. Teacher inservice training is provided regarding classroom utilization to schools upon request.

Professional Development/Inservice.

STS coordinates the purchase of or provides three professional development programs. An inservice program called Teacher-Administrator Programming (TAP) is broadcast over the NET Network from 3:00 to 4:00 p.m. on Monday through Friday. This is a free service. STS also coordinates a group buy of staff development programming from the Satellite Educational Resources Consortium (SERC) for schools opting to purchase the service. Satellite-Delivered Utilization (SDU) is programming provided by STS staff at NETC which covers the use of instructional television programs that are broadcast and other issues relating to the delivery of programming. Schools need a satellite dish to receive this programming at no cost.

Technical Support

A technician is funded through the Commission to provide support to schools and educational service units with regard to the design of technical systems, reception of programming and orientation to technology equipment.

**What is the current and historical utilization of the Schools' TeleLearning Service?**

STS conducts a User's Survey each year to determine program usage prior to configuring the next year's schedule of course offerings. The User's Survey is a voluntary unscientific survey which is completed by classroom teachers who use STS programs. While this data is useful to determine priorities for programming it does not indicate trends in the number of teachers and students actually using the instructional service.

In 1994, a study was conducted by Research Associates of Lincoln, Nebraska for NETC and NDE to measure the use of STS in the state. The results of this study were compared with data from a similar usage study compiled by Selection Research Center, Inc. of Lincoln, Nebraska in 1986. Both studies were statistically valid telephone surveys of a random sample of teachers in the state. The Research Associates study

also included a mail survey to supplement the telephone survey. The Executive Summaries from the 1994 Research Associates study are attached as Appendix C. The Executive Summary from the telephone survey includes figures from the 1986 Selection Research telephone study for comparison purposes.

The data from the surveys indicates a decline in the number of teachers using STS in their classrooms from 57% of respondents in 1986 to 36% in 1994.\*

In 1994, approximately 47% of both elementary school and K-12 teachers used the service while 23% of secondary teachers were users. This was a decline from the 1986 study when 79% of elementary teachers and 35% of junior and senior high teachers used STS. The latest survey showed a preference for use of the service by rural over urban teachers. Data showed that 31% of urban teachers and 40% of rural teachers used STS with more than half (54%) of rural elementary teachers using the programs in 1994.

In terms of frequency of use, there was a decline in the overall average usage of lessons in the classroom from 8.4 per month in 1986 to 3.8 per month in 1994. Elementary teachers were more frequent users of STS (4.6 sessions/month) than secondary (2.1) and K-12 (2.7) teachers. The survey also found that the frequency of use was higher in urban (4.2) than in rural areas (3.4).

Also of interest is the trend away from direct use of programs at the time of broadcast to a use of lessons previously recorded. An interesting interpolation of data by Commission staff from the Research Associates study is included as Appendix D. The data interpretation estimates the number of student exposures to STS to be 37,400 students per school day. If this analysis is reliable, then on a daily basis approximately 11% of the students in the state receive STS instruction.

\*There is a perception by STS staff that respondents may not have taken into account tapes produced by STS for use in the classrooms in answering the usage questions.

**What is the staffing and funding level of the Schools' TeleLearning Service?**

Staff. The Department has two staff, a director and a consultant assigned to STS. In addition, a secretary provides staff support for STS and the educational technology center. The consultant also provides some staff support on technology planning for the educational technology center.

The contractual arrangement between NDE and NETC provides funds for NETC to employ a director and a secretary to staff STS. The outreach technician who is available to schools and educational service units is also employed by the Commission.

Funding. As indicated on Chart 1, page 4, in FY 1995-96, approximately \$1.3 million was expended for distance learning activities to include Schools' TeleLearning Service, the Japanese Distance Learning Program (as funded by SERC), the Technology Center and pilot projects. It should be noted that this does not include the various capital distance learning projects at the elementary/secondary level which were funded through NEB\*SAT and the lottery. Approximately 55% of the expenditures were supported by the General Fund, 5% were supported by miscellaneous cash funds and the remaining 40% were supported by various federal funds including funding for the Japanese Distance Learning Program (SERC). As has been indicated by the Department, federal funds are either declining or are being eliminated. As indicated in the next section, SERC funding will not be continuing since the Japanese Distance Learning program has been discontinued. If current levels of state support continue, there should be approximately \$700,000 to continue STS activities.

**NEBRASKA DEPARTMENT OF EDUCATION  
SCHOOLS' TELELEARNING/DISTANCE LEARNING**

	<u>1988-89</u>	<u>1989-90</u>	<u>1990-91</u>	<u>1991-92</u>	<u>1992-93</u>	<u>1993-94</u>	<u>1994-95</u>	<u>1995-96</u>
<b>EXPENDITURES</b>								
NDE/STS	171,594	207,782	165,351	227,486	276,717	230,067	242,514	248,441
ETV/STS Contract	165,048	168,548	209,253	171,787	174,330	176,232	162,563	154,876
Subtotal	336,642	376,330	374,604	399,273	451,047	406,299	405,077	403,317
SERC/Distance Learning	402,058	557,353	914,330	807,939	767,537	701,100	786,749	679,035
Ed. Tech./Tech. Center	193,602	215,660	141,385	153,098	150,437	155,723	111,756	144,457
Pilot Match	0	0	0	36,988	67,494	22,356	26,086	65,949
Total Expenditures	<u>992,302</u>	<u>1,149,343</u>	<u>1,430,319</u>	<u>1,397,298</u>	<u>1,436,515</u>	<u>1,285,478</u>	<u>1,329,668</u>	<u>1,292,758</u>
<b>REVENUE</b>								
General Funds	466,685	469,937	458,029	486,593	470,678	523,645	569,960	590,546
ETV Contract	139,224	119,557	145,293	105,758	106,737	107,891	107,711	107,711
General - Total	605,909	589,494	603,322	592,351	577,415	631,536	677,671	698,257
Cash	53,875	81,651	18,851	52,698	48,635	31,583	29,829	63,398
Federal	105,563	132,014	140,929	153,098	150,437	141,364	97,811	104,133
ETV Contract	25,824	48,991	63,960	66,029	67,593	68,342	54,842	47,165
SERC	178,316	283,165	602,446	507,316	458,418	405,046	454,385	394,166
Federal - Total	309,703	464,170	807,335	726,443	676,448	614,752	607,038	545,464
Total Revenue	<u>969,487</u>	<u>1,135,315</u>	<u>1,429,508</u>	<u>1,371,492</u>	<u>1,302,498</u>	<u>1,277,871</u>	<u>1,314,538</u>	<u>1,307,119</u>



**What services would the Schools' TeleLearning Service provide, given unlimited restrictions and funding?**

Both NDE and NETC were asked to describe what STS services would be provided given unlimited restrictions and funding. The services described by both entities were nearly identical as shown in Appendix E. Given no restrictions on time, money and staff expertise, the services that would be provided by STS can be summarized as follows.

- The existing delivery system (broadcast of video programming) would be maintained particularly in support of rural elementary schools.
- Begin utilizing a variety of technologies to deliver programs and coursework including Internet/WWW, CD-ROM, video discs, video on demand, satellite, tap delivery, etc.
- Design, produce, and deliver appropriate staff development programming for teachers, media specialists and administrators, including training in the use of new technologies.
- Provide leadership in the development of an appropriate mix of state, regional and local networks and infrastructure. It is important that STS provide leadership for coordinating such infrastructure.
- Design and implement an expanded educational telecommunications information system. Such information would include broadcast and satellite schedules, information about programming, utilization tips, and information on new technology developments and telecomputing.
- Work with schools to utilize electronic delivery of information to diminish the need for printed "hard copies" which are currently being published.
- Investigate new technologies and determine their relevance to school curricula.
- Develop a means for schools to acquire needed technology. An incentive grant program is proposed to match school funds for equipment purchases.

**THE SATELLITE EDUCATIONAL RESOURCES CONSORTIUM**  
**AND THE**  
**JAPANESE DISTANCE LEARNING PROGRAM**

**What is the  
Satellite  
Educational  
Resources  
Consortium?**

The Satellite Educational Resources Consortium (SERC) is an eighteen state consortium of state departments of education and state public television networks. The consortium was formed in 1988 to make quality instruction in math, science and foreign languages available to students via a satellite delivery system. The Commissioner of Education and General Manager of the Nebraska Educational Telecommunications Commission are members of the SERC board. Funding for SERC is derived from membership fees from participating states (\$15,000 currently for Nebraska), grants and tuition fees from member schools.

The consortium launched its pilot semester in January 1989 with the help of a \$9 million federal Star Schools grant. Nebraska was the producer of one of the three initial pilot projects which was a course entitled "An Introduction to Japanese." The Legislature appropriated \$247,000 general funds in FY 1988-89 for the initial Japanese production. The state has continued to fund production costs for this course as well as a Japanese II course developed by Nebraska and offered beginning in the 1991-92 school year. Annual total production costs for these two courses have averaged \$696,000 from FY 1988-89 to FY 1995-96. Revenue from SERC, tuition from participating schools and federal funds have paid approximately \$412,000 of the average annual cost for the courses. General funds have picked up the remaining \$284,000 average annual cost.

**What course  
offerings are  
available and  
how many  
schools/  
students have  
participated in  
SERC courses?**

School districts which become members of SERC receive access to courses and staff development offerings. Tuition is charged for each student accessing a SERC course. In FY 1995-96, the tuition fee per student per course was \$500. The producing state received \$300 of the fee and \$200 was retained by SERC.

Member schools also can elect to receive teacher training and staff development offerings. During FY 1996-97, SERC will offer 88.5 hours of programming at an annual cost of \$625 for districts with greater than 300 teacher FTE and \$375 for districts with less than 300 teachers. The number of Nebraska schools using this service has ranged from a high of 48 schools in FY 1992-93 and FY 1993-94 to a low of 33 schools in FY 1996-97.

Appendix F is a listing of SERC course offerings from 1989 to 1996. The following chart shows the participation rate of Nebraska schools in SERC courses and the national usage rate. The data indicates that the

peak student usage of SERC courses was in FY 1991-92 at the national and state level. Since then usage has declined by 34% in Nebraska and 21% on a national basis.

	<u>Nebraska</u>		<u>National</u>	
	<u># of Schools</u>	<u># of Students</u>	<u># of Schools</u>	<u># of Students</u>
1989 (pilot)	6	35	--	--
1989-90	38	179	320	--
1990-91	78	281	* 797	4,759
1991-92	94	356	470	4,792
1992-93	87	325	491	4,266
1993-94	87	331	485	4,391
1994-95	NA	275	500	3,849
1995-96	57	236	452	3,778

\*Includes staff development enrolled schools.

**What will be the future participation of Nebraska in the production and usage of SERC programming?**

The Japanese I and II courses were two of the most popular course offerings of SERC. However, because the courses involved three live instructional broadcasts per week and two days of telephone conversation with telephone aides, the production costs of the programs were high. In May 1996, NDE and NETC requested \$175,000 in order to continue production of Japanese II in FY 1996-97. SERC owed the state \$382,000 for FY 1994-95 and FY 1995-96 production costs. When SERC indicated it could not pay the funds, NDE and NETC decided to discontinue production of both courses on June 30, 1996.

At this time NDE and NETC plan to continue Nebraska's membership in SERC. The agencies propose that the state's annual membership fees (\$15,000) be deducted from the amount owed by SERC to the state. This will allow school districts which want to access SERC programming to continue to do so in FY 1996-97. Thereafter an annual evaluation of the usage and offerings will be made to determine continued participation.

NDE and NETC had sufficient funds to cover all production and delivery costs of Japanese I and II courses during FY 1995-96 by using carryover funds received from SERC in past years. The agencies are proposing that any future receipts of revenue from SERC be used in the identification and production of another pilot distance learning project.

## SUMMARY

The State Department of Education (NDE) and the Nebraska Educational Telecommunications Commission worked in partnership for twenty-five years to provide instructional television services to schools in the state. There is, however, a decline in the utilization of these services overall with a preference for the use of the service by elementary and rural over secondary and urban teachers. Both the State Department of Education (NDE) and the Nebraska Educational Telecommunications Commission (NETC) have proposed through this study and the biennial budget request process, an enhancement of the services provided.

The following page outlines alternatives identified for STS pursuant to the study. Appendix G is a joint letter from the Commissioner of Education and General Manager of the Nebraska Educational Telecommunications Commission recommending study alternative A2 which would:

- 1) continue STS as a joint partnership of NETC and NDE;
- 2) expand the STS concept of include alternative distance learning technologies and strategies;
- 3) provide for a written partnership plan to include goals, agency roles and responsibilities and resources; and
- 4) provide for the joint development and submission of a budget request to be considered separately from the budgets of each agency.



## **STUDY ALTERNATIVES**

### **A. NO CHANGES IN Schools' TeleLearning Service.**

1. Retain current Schools' TeleLearning Service statutory and contractual relationship between the State Department of Education and the Nebraska Educational Telecommunications Commission.
2. Retain current Schools' TeleLearning Service statutory and contractual relationship but require a joint State Department of Education/Nebraska Educational Telecommunications Commission budget request and reporting process.

### **B. TRANSFER Schools' TeleLearning Service TO The Nebraska Educational Telecommunications Commission.**

1. Change the current Schools' TeleLearning Service statutory and contractual relationship where the Nebraska Educational Telecommunications Commission would have primary Schools' TeleLearning Service responsibility and the State Department of Education would have programmatic responsibility.
2. Retain current Schools' TeleLearning Service statutory and contractual relationship but transfer the responsibility of certain activities to the Nebraska Educational Telecommunications Commission.

### **C. ELIMINATE the Schools' TeleLearning Service and funding.**

# APPENDIX A

## LEGISLATIVE RESOLUTION 373

Introduced by Appropriations Committee: Wehrbein, 2, Chairperson; Brashear, 4; Brown, 6; Crosby, 29; Engel, 17; Hillman, 48; Lynch, 13; Maurstad, 30; Schrock, 38.

**PURPOSE:** The purpose of this resolution is to review and evaluate the Schools' TeleLearning Service and the Japanese Distance Learning Program which are administered by the State Department of Education in partnership with the Nebraska Educational Telecommunications Commission. The study shall include, but not limited to:

(1) A review of the current and historical funding, utilization, cost effectiveness, and administration of the Schools' TeleLearning Service;

(2) A review of the current and historical funding, utilization, cost effectiveness, and administration of the Japanese Distance Learning Program and Nebraska's participation in the Satellite Educational Resources Consortium;

(3) An examination of projected future funding needs, utilization, and administrative responsibility for the Schools' TeleLearning Service and the Japanese Distance Learning Program; and

(4) An examination of the future viability of alternative delivery mechanisms for the Schools' TeleLearning Service and the Japanese Distance Learning Program.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE NINETY-FOURTH LEGISLATURE OF NEBRASKA, SECOND SESSION:

1. That the Education and Appropriations Committees of the Legislature shall be designated to conduct a joint interim study to carry out the purposes of this resolution in cooperation with the State Department of Education and the Nebraska Educational Telecommunications Commission.

2. That the committees shall upon the conclusion of the study make a report of their findings, together with their recommendations, to the Legislative Council or Legislature.

## APPENDIX B

## 1. NARRATIVE DESCRIPTION OF THE BACKGROUND AND HISTORY OF INSTRUCTIONAL TELEVISION (ITV) AND THE SCHOOLS' TELELEARNING SERVICE

Instructional television programming has been an important element of NET's broadcast day, beginning shortly after the activation of KUON-TV in November, 1954, and continuing through the activation of the statewide Nebraska Educational Television Network which began in 1963.

The first instructional television programming was telecast during the 1956-57 school year by KUON-TV in cooperation with the University of Nebraska Division of Continuing Studies (then referred to as the Extension Division). Initial funding was provided through the Fund for the Advancement of Education (a subsidiary of the Ford Foundation) for an experimental approach which would combine televised instruction with the more traditional correspondence study. Initially, five schools in the KUON-TV coverage area participated in a secondary school algebra class.

This program was expanded during the 1957-58 school year to include seven courses, representing a total of 12.5 hours per week, directed to a total of 24 Nebraska schools located within the KUON-TV coverage area. The seven courses expanded to 11 courses, totaling 15.5 hours per week during the 1958-59 school year, with the number of participating schools increasing to 32.

This initial focus of televised instruction coupled with correspondence study concluded in the spring of 1960 when funding through the Fund for the Advancement of Education was terminated. All instruction during this period was produced and transmitted "live" to participating schools. No pre-recorded programming was offered as part of this project.

This experimental use of televised instruction was then extended to an effort that was developed by KUON-TV in cooperation with the Lincoln Public Schools. During the 1959-60 school year four secondary school courses were offered to students in the three Lincoln high schools. A team approach was implemented that included daily live instruction by a television teacher, with follow-up instruction provided by a classroom teacher at each participating school. The Lincoln Public Schools project continued for several years.

The next major development in instructional television occurred in May, 1960, when the Nebraska Council for Educational Television (NCET) was formed as a non-profit 501 (c)(3) corporation by six Nebraska school systems, the University Extension Division, the Nebraska Department of Education, University Teachers College, and University Television (KUON-TV). A single course in elementary science was offered during the 1960-61 initial year of operation.

The NCET organization was the entity which carried the major responsibility for the development of instructional television services throughout Nebraska for the next eleven years, through 1971. During this period the number of participating school districts increased to 270, serving over 120,000 students. Programming increased from the initial single series in 1960 to over 40 different series in 1971, and included twelve program series produced by NCET in cooperation with NET, as well as 28 reproduced instructional series acquired from producing organizations throughout the United States. Funding for the NCET activities was provided by a base fee of \$300

per participating school, plus an assessment of \$2.00 per student enrolled in each member school.

The financial viability of NCET was enhanced by the establishment of the statewide Nebraska Educational Television Network, eventually providing ITV access to all school districts throughout Nebraska. The Nebraska Educational Television Commission, established by the Legislature in 1963, designated NCET as the basic elementary and secondary instructional television programming agency and advisory group to the Commission.

The success of NCET became the pattern for the creation of a similar organization serving the Omaha area. In 1964 the Metropolitan Omaha Educational Broadcasting Association (MOEBA) was created. Cooperative agreements were created between NCET and MOEBA for the exchange of programming as well as the joint acquisition of pre-produced programs.

In 1971 responsibility for elementary-secondary instructional television was vested by the Legislature in the State Department of Education and the first Legislative appropriation for school television was provided. This responsibility is identified in statutes 79-2110 through 79-2114.

**79-2110. STATE DEPARTMENT OF EDUCATION; INSTRUCTIONAL TECHNOLOGY; DUTIES; RULES AND REGULATIONS.** The State Department of Education shall, with funds specifically appropriated for instructional telecommunications by the Legislature and such other funds which may be available, make provision for the planning, developing, producing, leasing, disseminating, and utilizing of instructional technology in the elementary and secondary schools of Nebraska.

Funds appropriated or acquired for the purpose of providing such programming to the elementary and secondary schools shall make provision for the employment of a director and such additional employees as may be necessary for the State Department of Education to assume the designated responsibilities of instructional technology and to perform the assigned functions in an efficient manner. Funds may be used to contract with organizations designed to plan, produce, and acquire instructional telecommunications programming for elementary and secondary school use. The department may publish or cause to be published such informational material as it deems necessary, and it may, at its discretion, charge appropriate fees therefor. The department shall make such materials available at cost to all individuals, schools, private and public institutions, and organizations. The proceeds of all such fees paid to the department shall be deposited in a State Department of Education Fund and shall be used by the department for publishing such informational material.

The State Department of Education shall adopt and promulgate rules and regulations for approving the type and number of credits for telecommunications courses which are offered to elementary and secondary schools. (Laws 1971; 1984.)

**79-2111. INSTRUCTIONAL TELECOMMUNICATIONS; DIRECTOR; QUALIFICATIONS; APPOINTMENT.** The Commissioner of Education shall appoint a director of instructional telecommunications subject to confirmation by a majority vote of the members of the State Board of Education. The

appointment shall be made on the basis of recognized and demonstrated interest in and knowledge of instructional telecommunications. He or she shall have a minimum of three years of successful elementary or secondary school experience and shall hold a Nebraska Administrative and Supervisory Certificate. (Laws 1971; 1984.)

**79-2112 INSTRUCTIONAL TELECOMMUNICATIONS; DIRECTOR; DUTIES.** The duties and responsibilities of the director of instructional telecommunications shall include, but not be limited to, the following:

(1) To administer the elementary and secondary instructional telecommunications responsibilities as provided by law under the direction of the Commissioner of Education;

(2) To act as contract agent for the State Department of Education in instructional telecommunications business;

(3) To provide a liaison between the State Department of Education and educational organizations to which instructional telecommunications has application;

(4) To consult and cooperate with the Nebraska Educational Telecommunications Commission so as to coordinate in an effective manner the transmission of instructional telecommunications programming to elementary and secondary schools;

(5) To consult and cooperate with State Department of Education personnel so as to make the most efficient use of instructional telecommunications within the elementary and secondary curricula and in the improvement of Nebraska education;

(6) To provide for the evaluation of the fulfillment of school needs through instructional telecommunications programming;

(7) To assist in the arrangements whereby all Nebraska schools would have access to a minimum of two instructional telecommunications services: One through open-circuit, such as the Nebraska educational telecommunications network, and each cable system, which provides educational telecommunications programming other than that simulcast by means of the open circuit; and

(8) To designate such ad hoc committees as may be needed and to charge these committees with special tasks in carrying out assigned responsibilities. (Laws 1971; 1984.)

**79-2113. INSTRUCTIONAL TELECOMMUNICATIONS; ADVISORY COMMITTEE; EXPENSES.** The Nebraska Educational Telecommunications Commission or its designated representatives shall serve as an advisory committee to the Commissioner of Education and the director of instructional telecommunications on matters pertaining to instructional telecommunications. The members of the advisory committee shall receive no compensation for their services, but may be reimbursed for actual and necessary expenses incurred in attending meetings or incurred in the performance of duties as

directed by the State Department of Education as provided in sections 84-306.01 to 84-306.05 for state employees. (Laws 1971; 1981; 1984.)

**79-2114. INSTRUCTIONAL TELECOMMUNICATIONS; ADVISORY COMMITTEE; DUTIES.** It shall be the duty of the advisory committee to:

(1) Assist in the study of needs of the schools and recommend appropriate program development;

(2) Help correlate operations between the Nebraska Educational Telecommunications Commission, the State Department of Education, the program development agencies, and the schools of Nebraska;

(3) Recommend appropriate instructional telecommunications production centers;

(4) Recommend appropriate program agencies for instructional telecommunications planning and development;

(5) Assist in the development of long-range, cooperative plans for instructional telecommunications in Nebraska;

(6) Assist in developing coordinated broadcast schedules for the available transmission sources;

(7) Submit nominations of candidates for director of instructional telecommunications; and

(8) Consistently keep the State Department of Education adequately informed on technical and transmission capabilities. (Laws 1971; 1984.)

The transfer of responsibility for instructional television to the Department of Education via statute led to a period of prosperity for ITV in Nebraska. Day-long schedules for delivery to schools provided an ITV broadcast from 9:00 to 11:30 a.m. and 1:00 to 3:30 p.m. or five hours per day throughout the school year or approximately 900 hours of programming per year. The broadcast was delivered statewide via the Nebraska ETV Network, originating at KUON in Lincoln. A separate schedule, though comprised of many of the same programs, was broadcast in the Omaha metro area via KYNE at the University of Nebraska at Omaha. The KYNE schedule has gradually evolved to the current point where the schedule is simulcast with KUON with the exception of three 15-minute time slots.

During the time from 1972 to 1985 Nebraska produced much of the material which appeared on the ITV service. Productions included a 32 program series on Nebraska Studies for Grade Four and Literature series comprised of 33 15-minute lessons at Grade Kindergarten, One, Two, Three, Four, Five, and Six. Productions also included elementary and middle school science programming and Health series at all levels from kindergarten to junior high. Many of the series are still in use despite advancing age because they consistently achieve good ratings and because we own them and do not have to pay rights fees.

Nebraska was also a consistent participant in consortium products, mainly through the Agency for Instructional Technology in Bloomington, Indiana. The consortium process is one in which a state pays its share of production money up front to help finance a project



and then has review rights over programming and perpetual rights to use of the products. Total control over the production process is lost in the a consortium but participation cost is a fraction of the cost of producing programs alone. Nebraska participated in more than 20 AIT projects and received rights to many series that are still being used.

Rising production costs coupled with the state budget crisis in 1985 to stop production of ITV programming in Nebraska. Production money was removed from the ITV budget and never returned. Nebraska did continue to participate in the consortium process, a more economical alternative to homegrown production, through 1991.

Since 1991 Nebraska has depended on purchasing programming from vendors to maintain an ITV schedule. This is more economical than production but the purchaser has no control over the programming other than take it or leave it. The purchase of programming takes place each year through a group buy sponsored by the Central Educational Network of which Nebraska is a member. Using the accrued purchasing power of 13 midwestern and eastern states, the group is able to purchase programming at a 10 to 15 percent discount off of regular vendor prices.

In 1984 Nebraska ITV began a process known as block feeding. This change was made possible by the increased use of the VCR in schools. The block feed is a process through which an entire series of programs is broadcast back-to-back. The concept behind the block-feed is that a school can tape the entire series for use at the most appropriate time in that schools curriculum instead of when the program happens to be scheduled for broadcast. Nebraska had been using the block feed approach to send out new programming during the Fall Pre-Feed each year. The Fall Pre-Feed takes place the two weeks after Labor Day with the idea of getting all of the new programming out to the schools for immediate use. Noting the success of the Fall Pre-Feed it was decided to devote Friday of each week to block feeding of other programming. The block-feed was the predecessor of the overnight feed which began during the 1995-96 school term. Almost all states use some variation of block-feed now but Nebraska was among the very first to institute the process as part of the regular schedule.

In 1987 negotiations began which resulted in the creation of the Schools TeleLearning Service which was a formalization of the relationship between the Nebraska Department of Education and the Nebraska Educational Telecommunications Commission. The creation of the Schools TeleLearning Service brought about a cooperative venture in the broadcast of ITV programming as well as Nebraska participation in the Satellite Education Resources Consortium (SERC).

The contract forming the Schools TeleLearning Service created a partnership in which NDE was responsible for curriculum input and selection of programming and NETC was responsible for acquisition and delivery of programming. An educational director and staff assistant were housed at NETC and paid through the STS contract. This personnel served at counterparts to the STS personnel at NDE and consulted in publications and programming while handling questions concerning schedule logs and program delivery.

In addition to maintaining the strength and ratings of the broadcast schedule and archive which now hold rights for schools to use over 300 ITV series, the Schools TeleLearning Service brought three major innovations to instructional television in Nebraska and is in the process of a fourth innovation.

The first major innovation is the Teacher Administrator Programming, or T.A.P, that is ITV for teachers. Specifically put, STS provides one hour, from 3:00 to 4:00 p.m. or in-service or staff development programming each day. Programming may be taped by teachers and used anytime throughout the school year. Many other states now provide staff development as part of their regular schedule but Nebraska was the first. STS also coordinated the SERC Staff Development Consortium through which in-service programming is delivered at a nominal fee, to all satellite school which join the consortium. For credit courses are offered through the SERC Consortium. STS also provides its own in-service programming via satellite through Satellite Delivered Utilization or SDU's. Monthly programs in varying staff development areas are offered as are Commissioners Update programming. At a time when budgets are stretched, the provision of staff development without travel and release time for teachers is, we think, a timely and valued service.

STS also pioneered the Perspectives Program. Perspectives utilized speakers brought to the University of Nebraska by the Thompson Forum. The speakers did a half-hour interview specifically for students using questions supplied by a panel of social studies teachers. Sixteen Perspectives programs have been completed over the past three years. Early efforts included a satellite hook-up between schools to allow students to discuss the questions of the program but budget considerations have quelled that effort.

A third innovation occurred during the 1995-96 school year STS-ITV began the overnight feed consisting of four hours, 1:00 a.m. to 5:00 a.m. Tuesday through Friday during the first semester. The basic idea is to serve the schools better by getting more material downloaded to them as quickly as possible. Reaction to the overnight feed has been favorable from media specialists who find that it makes their job of taping and distributing programming in the schools much easier.

The overnight feed allows the use of the morning hours, 9:00 to 11:30 a.m. for PBS Ready to Learn, ITV for pre-schoolers and for possible future interactive distance learning programming while maintaining the afternoon hours of 1:00 to 4:00 p.m. for regularly scheduled ITV programming and staff development.

Finally, STS-ITV is acquiring new programming that utilizes multi-media with internet addresses where students can "chat" with scientists on an expedition and takes part in experiments and field trips which would ordinarily be out of their reach.

The Schools TeleLearning Service continues to provide over 900 hours of quality instructional programming via the statewide network which can reach into each school district. STS programming is available to the 320,000 students and 25,000 teachers/administrators of Nebraska at no charge with subsidiary material provided at cost.

## APPENDIX C

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## Study Description

Research Associates completed 650 telephone interviews with randomly selected elementary, secondary and K-12 teachers in Nebraska between April 19 and May 11, 1994.

The instrument used in this study was custom designed specifically for this study by Research Associates, NETV and NDE.

This report contains frequency distributions of the total sample of 650, as well as frequency distributions by urban/rural; grade level; and rural elementary.

The chart below shows maximum error ranges of some sample sizes that will be encountered in the various frequency distribution tables.

650	+/- 3.8%
325	+/-5.4%
300	+/-5.7%
142	+/-8.2%
30	+/-17.9%

The relative percentage is the percentage of the total number of respondents in the sample. The adjusted percentage subtracts any missing observations (no response category) from the calculation.

Percentage columns may not always total exactly 100% due to rounding.

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## Executive Summary

Research Associates completed 650 interviews with randomly selected elementary, secondary and K-12 teachers in Nebraska. The following results relating to the use of Instructional Television were identified. For comparison purposes, figures from the 1986 study are included in italics.\*

- Approximately one-third (36%) of all respondents indicated they currently use the ITV Schools Telelearning Services provided by NETV and NDE in their classroom. *This figure compares to 57% who indicated they were using ITV in the 1986 study.*

Nearly half (47%) of both elementary school teachers and K-12 teachers use the service, while 23% of secondary teachers use ITV. *In 1986, 79% of elementary teachers and 35% of junior and senior high teachers were using ITV.*

About one-third (31%) of the urban teachers use ITV, while 40% of the rural teachers indicated they use it.

More than half (54%) of the rural elementary teachers use the ITV programs.

- Overall usage averaged 3.8 lessons per month. Frequency of usage was somewhat higher for elementary teachers (4.6) than for secondary (2.1) and K-12 (2.7) teachers. Usage frequency was also somewhat higher in urban areas (4.2) than in rural areas (3.4). *Usage was down from the 8.4 lessons per month reported in 1986, but consistent with that report's indication that usage was higher at the elementary level than at the junior and senior high level.*
- Nearly two-thirds (60%) of those using the lessons indicated they would prefer to receive ITV lessons recorded off-air for use at a later time, while another 37% preferred block feed of all lessons and only 4% preferred to receive the lessons over the air, using them while they are broadcast.

Very similar results were obtained from both elementary and secondary teachers on this issue.

For urban teachers, 65% preferred lessons recorded off-air, 33% preferred block feed, and 1% preferred to receive lessons over the air.

For rural teachers, 55% preferred lessons recorded off-air, 40% preferred block feed, and 5% preferred to receive lessons over the air.

- Primary reasons given for using ITV programs include: lessons support the curriculum (62%); student motivation (16%); and improvement and updating of the lessons (9%).
- More than half of the teachers using ITV lessons (56%) indicated they had used them for 7 or more years, which represented 20% of all respondents; 28% had used them for 3-6 years, and 16% for less than 3 years.

- 
- Half of the respondents (48%) indicated 1-10% of the programs are used at the time of broadcast, and another 36% indicated 0% are used at time of broadcast. Only 7% used direct broadcast 91-100% of the time. *In 1986, one-third of all respondents used only direct broadcast.*
  - Three-fourths of the respondents (73%) indicated their usage would not be affected if daytime direct broadcast of ITV programs were to stop. Another 11% indicated that usage would increase, while 17% indicated usage would drop somewhat or significantly.
  - Programs listed most often as being used by teachers included *Letter People, Tales in a Treehouse, Assignment: The World, Once Upon a Time, Strawberry Square, What's in the News, Books from Cover to Cover* and *Celebrate*. These titles were listed by 10 to 25 teachers.
  - Three-fourths of all teachers (72%) indicated they use the whole ITV lesson.
  - The teachers were asked to rate the importance of ITV to teachers on a scale of 1-7. Three-fourths of the respondents (73%) rated it above the mid-point, while only 12% rated it below the midpoint. The mean (average) score was 5.152 on a 7-point scale. *Results from the 1986 study showed that 65% rated it above the midpoint and 13% rated it below the midpoint.*
  - Relating to the impact of ITV on student achievement, 20% said it had great impact and 75% indicated moderate impact. In terms of student motivation, 31% said ITV had great impact and 64% said it had moderate impact. *In 1986, 11% indicated ITV had a great impact on student achievement; 75% said it had a moderate impact. In the same study, 23% said ITV had a great impact on student motivation, while 64% said it had a moderate impact.*
  - Comparing current standards to those of three years ago, 37% said the ITV lessons are better now in terms of facilitating student learning; 40% said the lessons are better now in terms of production quality; and 24% said they are better now in terms of assisting teachers in the instructional process. Virtually none of the respondents said the lessons are worse now in any way. *In 1986, two-thirds of the respondents said the production quality was better than three years before. Two-thirds also said the lessons were better in terms of facilitating student learning and in assisting the teacher in the instructional process than three years before, and essentially none said the lessons were worse than three years before that time.*
  - One in five of the teachers (20%) indicated they use the teachers guides most of the time, while 29% use them some of the time and 11% always use them. One-fourth (25%) indicated they seldom use the guides, while 14% said they never use the guides, or they are not available. *In the 1986 study, 85% of the respondents indicated the teacher's guides were available to them, and 69% reported using the guides.*
  - The following results were obtained from a list of cued reasons that might keep teachers from using ITV programs: scheduling, 44%; time to preview programs, 32%; offerings don't complement curriculum, 31%; need to share equipment, 17%; nobody is available to operate the equipment or program the VCR, 5%; school does not have sufficient tape stock, 5%; quality of programs is not adequate, 5%; lack of support of TV use by administration, 4%; videotape recording process is too complicated, 2%.
-

- 
- Nearly three-fourths of the teachers (71%) indicate they have a videotape duplication library and access to CD-ROM. One-fourth of the teachers (25%) teach at a school that has a satellite dish. Half of all respondents (56%) have access to a video disc player, but all but 3% share it. Nearly all (93%) have a videotape recorder available, but 81% share it. *The 1986 study showed that 90% of the respondents had a videotape recorder at that time.* More than one-third (39%) have access to electronic mail capabilities.
  - Three-fourths of the respondents (75%) indicated they would use computerized information about ITV use if they had access to it.
  - Half of the respondents (51%) indicated they use services provided by their ESU's either on a weekly or monthly basis, while another 35% indicated they used it less than that and another 14% never use it.
  - The respondents were nearly equally divided by grade level taught, with 48% elementary teachers, 47% secondary teachers, and 5% K-12 teaches.
  - Most of the teachers taught in schools having either one (21%), two (21%), or three (19%) sections of each grade.
  - The researchers controlled for the variable of urban/rural, with 50% in each setting.

\* \* \*

\* *(Note: Information pertaining to results from the 1986 study was taken from a narrative executive summary provided by NETV.)*

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## Study Description (Mail Study)

Research Associates mailed 700 questionnaires to randomly selected elementary, secondary and K-12 teachers in Nebraska on August 17, 1994. The mailing was evenly divided between rural and urban teachers. The completed returned responses totaled 183.

The instrument used in this study was custom designed specifically for this study by Research Associates, NETV and NDE.

This report contains frequency distributions of the total sample of 183, as well as frequency distributions by urban/rural; grade level; and ITV users.

The chart below shows maximum error ranges of some sample sizes that will be encountered in the various frequency distribution tables.

183	+/- 7.2%
99	+/- 9.8%
91	+/- 10.3%
79	+/- 11.0%
76	+/- 11.2%
69	+/- 12.0%

The relative percentage is the percentage of the total number of respondents in the sample. The adjusted percentage subtracts any missing observations (no response category) from the calculation.

Percentage columns may not always total exactly 100% due to rounding.

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## Executive Summary (Mail Study)

Research Associates received 183 completed questionnaires from elementary, secondary and K-12 teachers in Nebraska. The following results relating to the use of Instructional Television were identified.

- About two-thirds of the mail survey respondents (68%) indicated they use some type of television in their classroom.
- Just over one-third (38%) of all mail survey respondents indicated they currently use the ITV Schools Telelearning Services provided by NETV and NDE in their classroom.  
  
Other television use included: video purchase, 49%; video borrowing, 36%; recorded public television programs, 36%; ESU programs, 34%; video rentals, 27%; recorded commercial television programs, 25%; videos from a library, 20%; and recorded cable programs, 15%.
- Frequency of usage was somewhat higher for elementary teachers than for secondary teachers. Usage frequency was also somewhat higher in urban areas than in rural areas.
- Nearly two-thirds (62%) of those using the lessons indicated they would prefer to receive ITV lessons in a block feed format, while another 28% preferred the lessons be recorded off-air for use at a later time, and 7% preferred to receive the lessons over the air, using them while they are broadcast.
- Primary reasons users gave for using ITV programs include: lessons support the curriculum (49%); student motivation (16%); updated lessons (17%); and the idea that some concepts are best taught visually (15%).
- Two-thirds the teachers using ITV lessons (67%) indicated they had used them for 7 or more years; 16% had used them for 3-6 years, and 15% for less than 3 years.
- Half of the ITV-user respondents (55%) indicated that none of the programs are used at the time of broadcast, and another 26% indicated that 1-10% of the programs are used at the time of broadcast. Only 3% indicated use of direct broadcast 91-100% of the time.
- Half of the respondents (57%) indicated their usage would not be affected if daytime direct broadcast of ITV programs were to stop. Another 17% indicated that usage would increase, while 22% indicated usage would drop somewhat or significantly.
- ITV programs listed most often as being used by teachers included *Letter People*, *Tales in a Treehouse*, and *Zoo Zoo Zoo*.
- Three-fourths of all ITV users indicated they use the whole ITV lesson.
- When asked to rate the importance of ITV to teachers on a scale of 1-7, half of the users (57%) rated it above the mid-point, while 16% rated it below the midpoint. The mean (average) score for users was 4.815 on a 7-point scale.
- Relating to the impact of ITV on student achievement, 13% of the users said it had great impact and 57% indicated moderate impact. In terms of student motivation, 23% of the users said ITV had great impact and 67% said it had moderate impact.

- 
- One in four of the ITV users (24%) indicated they use the teachers guides most of the time or always, while 52% use them some of the time, 15% seldom use the guides, and 6% said they never use the guides, or they are not available.
  - The following results were obtained from a listed of cued reasons that might keep teachers from using ITV programs: scheduling, 59%; time to preview programs, 52%; offerings don't complement curriculum, 42%; and the need to share equipment, 33%.
  - Slightly more than half the respondents (54%) indicated they would need a printed program schedule even if the ITV programming schedule were provided in a computerized format. Similar results were obtained for a similar question about teacher guides (53%).
  - Slightly more elementary teachers responded (51%) than secondary (42%), with 7% being K-12 teachers.
  - Slightly more rural teachers (56%) responded than urban teachers (44%).

\*\*\*

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## APPENDIX D

**STS - ITV SURVEY USAGE**  
 (Data derived from Research Associates Survey - 1994)

	<b>Total # of Teachers</b>	<b>Percent Who Use ITV</b>	<b>Average # Lessons Per Month</b>	<b>Total # of Uses Per Month</b>	<b>Average Class Size</b>	<b>Estimate # of Student Exposure</b>
<b>Elementary</b>	11,683	47%	4.6	25,259	27	681,993
<b>K - 12</b>	1,150	47%	2.7	1,459	10	14,590
<b>Secondary</b>	9,680	23%	2.1	4,675	27	126,225
						<hr/>
				<b>Total Student Exposures Per Month</b>		<b>822,808</b>
				<b>Total Student Exposures Per School Day</b> (Assuming 22 school days per month,)		<b>37,400</b>



## APPENDIX E

**DEPARTMENT OF EDUCATION**

**NEBRASKA EDUCATIONAL  
TELECOMMUNICATION**

**1.) Maintain the existing delivery system at least until such time as alternative delivery and programming is in place and easily attainable by all clients.**

**Although the statewide broadcast of video programming will always play a role in the support of instruction, particularly in rural elementary schools, new delivery methods offer tremendous opportunity.**

**2.) Explore alternative sources of delivery including CD-ROM, Video Discs, Video on Demand which will ultimately allow each client to tailor our services to their needs**

**Design and deliver instruction that fully utilizes the instructional power of the technology.**

**3.) Work closely with the ESU's and individual districts to provide in-service for personnel to make the transition to alternative delivery efficient for an overworked educator to accomplish.**

**Provide training to teachers, administrators, and media specialists to support local staff development efforts, including training in the use of new technologies.**

**4.) Work with schools to utilize electronic delivery of information to diminish the need for printed "hard copies" which are currently being published.**

**Design and implement an expanded educational telecommunications information. In addressing the need to provide information to the schools it is important to recognize the migration from print-based resources to electronic means.**

**5.) Continue the work now being done to help schools in the utilization of new technologies as called for in the statewide technology plan.**

**It is important for STS to monitor educational trends and needs and provide a clearinghouse of technology and curriculum information.**

**6.) Continue to work with regional networks within Nebraska (educational pods) and nationally (Central Educational Network) so that Nebraska schools have access to current planning, information and materials.**

**Provide leadership in the development of an appropriate mix of state, regional and local networks and infrastructure.**

**7.) Continue to work through the State Technology Plan to help schools identify and provide appropriate technology to meet curricular needs.**

**Investigate new technologies and determine their relevance to school curricula.**

**lr373b**

**Develop means for schools to acquire needed technology.**

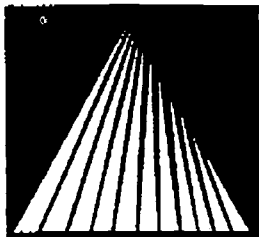
# APPENDIX F

## SERC COURSES OFFERINGS 1989-PRESENT

<b>Alabama</b>	World Geography (1990-1994) Integrated Science 6,7,8 (1991-1994)
<b>Georgia</b>	Interdisciplinary Seminars - (1994) pilot
<b>Kentucky</b>	German I and II (1990-present) Latin I & II (1990-present) Physics (1990-present) Calculus (1992-present) Probability & Statistics (1990-1995) Discrete Mathematics (1990-1995)
<b>Louisiana</b>	Science Out of This World (1996) - grades 5-8 , Humanities (1996)
<b>Michigan</b>	Work in the 21st Century -- (1996), middle school
<b>Mississippi</b>	Precalculus (1993-present)
<b>Nebraska</b>	Japanese I & II (1989-1996) (PPCM) Practical Pre-College Mathematics -- (1993-1995) ?
<b>North Dakota</b>	Spanish III, (1993- 1995) Spanish I & II, (1995-present)
<b>South Carolina</b>	Russian I & II (1989-present) AP Economics-- Microeconomics, Macroeconomics (1989-present) Math in the Middle - (1994-present) Discrete Mathematics (1990-1995)



## APPENDIX G



# NEBRASKA DEPARTMENT OF EDUCATION

Douglas D. Christensen, Ph.D., Commissioner  
Polly Feis, Deputy Commissioner

• 301 Centennial Mall South • P. O. Box 94987 • Lincoln, Nebraska 68509-4987  
• Telephone • 402-471-2295 (Voice/TDD) • Fax 402-471-0117

**TO:** Appropriations Committee of the Legislature  
Education Committee of the Legislature

**FROM:** Rod Bates, Secretary/General Manager  
Nebraska Educational Telecommunications Commission

Doug Christensen, Commissioner  
Nebraska Department of Education  
*D. Christensen*

**DATE:** December 4, 1996

**SUBJECT:** Response to the Interim Study Report on Schools TeleLearning Services  
(STS)-LR 373

We have reviewed the draft report of the Schools TeleLearning Services as prepared by Kathy Tenopir and Sandy Sostad for the Interim Study called for in Legislative Resolution 373. We find the report an accurate and fair representation of the history and current status of the Schools TeleLearning Services (STS).

We have reviewed the alternatives outlined on page 9 and agree that they are viable options to be considered by the Committees.

As you discuss the various options outlined, we jointly recommend the following:

- That STS continue as a joint partnership of the Nebraska Educational Telecommunications Commission (NETC) and the Nebraska Department of Education (NDE).
- That the STS concept be expanded to include not only those current STS programs and services that remain viable and relevant, but also expansion into alternative distance learning technologies and strategies jointly determined by the partnership.
- That NETC and NDE put in writing a partnership plan and agreement covering Schools TeleLearning Services/Distance Learning, (STS/DL), including definition of goals and objectives, planning processes and activities, agency and personnel roles and responsibilities, and allocation of resources.

---

State Board of Education

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on equal opportunity agency

**MEMORANDUM**  
**December 4, 1996**  
**Page 2**

- That the partnership budget for STS/DL be cooperatively developed and submitted to the Appropriations Committee of the Legislature.
- That the budget for STS/DL be considered separately from the budgets of each agency, with the program funded jointly and managed jointly, holding both agencies responsible for the budget proposal and the expenditure of the funds appropriated.

We feel that distance learning in Pre K-12 education will be best served by pooling of the capabilities and resources of both agencies. Providing for distance learning through an STS/DL partnership will best utilize the strengths of both NETC and NDE.

cc: Kathy Tenopir  
Sandy Sostad

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Office of Educational Research & Improvement (OERI)  
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