

HB

216

FISCAL NOTE

STATE OF ALASKA
1995 LEGISLATIVE SESSION

BILL NO. IIB 216

Revision Date: _____
 Title: An Act establishing Alaska education technology program and providing for an effective date "
 Sponsor: Kott, Brown
 Requestor: (H) HES

Department Affected: Administration
 BRU: Information Services
 Component: Computer Services
 COMPONENT SERIAL NO.: 72

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING EXPENDITURES	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES	0.0	0.0	0.0	0.0	0.0	0.0
-----------------------------	-----	-----	-----	-----	-----	-----

CHANGE IN REVENUES ()	0.0	0.0	0.0	0.0	0.0	0.0
-------------------------------	-----	-----	-----	-----	-----	-----

FUND SOURCE: (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1006 GF/MHTIA						
OTHER						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY 95) cost: \$ 0.0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

Fiscal impact is not known at this time.

HB 216 provides for the establishment of the Alaska education technology program to be carried out by schools and public libraries around the state through a fund established in the Department of Education. The fund can be used to 1) purchase, install, and maintain education technology in classrooms; 2) provide technology training for students and/or teachers, 3) provide access to networks for public schools or libraries; and 4) provide a percent of the cost of education technology, including computer and resource sharing systems, to publicly funded libraries.

Prepared by: Mark O. Badger
 Division: Information Services

Phone: 465-2220
 Date: _____

Approved by Commissioner: Mark Boyer
 Agency: Department of Administration

Date: 3/10/95

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE
 For further distribution information, call the Governor's Legislative Office

FISCAL NOTE

STATE OF ALASKA
1995 LEGISLATIVE SESSION

BILL NO. HB 216

ANALYSIS: (continued)

The Department of Administration manages a statewide data network to primarily serve state agencies and political subdivisions. The network currently extends to 36 communities in the state through leased circuits provided by long distance carriers. The data network is funded entirely from rates charged to customer agencies for use of the network. The network is currently not used at the point of maximum capacity in all areas. Therefore school districts and public libraries could be added to the network through the provision of the standard rate based services offered by the Division, consistent with the state the information systems plan adopted by the Telecommunications Information Council (TIC).

If funding opportunities are available for school districts and libraries, it is assumed that some of the school districts and libraries will seek access through the Department of Administration's data network. It is impossible to predict at this point, either projected use of or any increased cost to provide this access. It is assumed that costs would not increase substantially since there is an existing network structure in place. However, it is also assumed that any associated costs would borne by the requesting entity (schools or public libraries) through rates for services.

FISCAL NOTE

STATE OF ALASKA
1995 LEGISLATIVE SESSION

BILL NO. HB 216

Revision Date: _____

Department Affected: Education

Title: "An Act establishing the Alaska education
technology program"

BRU: State Library

Component: Library Operations

Sponsor: Representative Kott

COMPONENT SERIAL NO. 208

Requester: Representative Kott

Expenditures/Revenues:

(Thousands of Dollars)

OPERATING	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
PERSONAL SERVICES	42.7	42.7	42.7	42.7	0.0	0.0
TRAVEL	5.0	5.0	5.0	5.0	0.0	0.0
CONTRACTUAL	20.0	20.0	20.0	20.0	0.0	0.0
SUPPLIES	1.0	.5	.5	.5	0.0	0.0
EQUIPMENT	5.0	2.0	2.0	2.0	0.0	0.0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	73.7	70.2	70.2	70.2	0.0	0.0

CAPITAL						
---------	--	--	--	--	--	--

REVENUE FUND SOURCE:						
----------------------	--	--	--	--	--	--

FUNDING:

(Thousands of Dollars)

002 Federal Receipts						
003 GF Match						
004 GF	73.7	70.2	70.2	70.2	0.0	0.0
005 GF/Program Receipts						
006 GF/MHTIA						
Other						
TOTAL	73.7	70.2	70.2	70.2	0.0	0.0

POSITIONS:

FULL-TIME	1					
PART-TIME						
TEMPORARY						

Estimate of current year (FY95) impact: \$ 0.0

ANALYSIS: (Attach a separate page if necessary.)

Training will be essential for public libraries. The State Library's approach to training would be to develop a core of trainers around the state. The fiscal note is projected for four years in order to develop the materials and a cadre of trainers. Please see the attached sheet for further analysis.

Prepared by: Karen R. Crane, Director

Phone: 465-2910

Division: Libraries, Archives and Museums

Date: March 15, 1995

Approved by Commissioner: _____

Shirley Holloway

Agency: Education

Date: March 15, 1995

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE

For further distribution information call the Governor's Legislative Office

Training will be essential for public libraries. Unlike most schools, small and medium public libraries do not have technical staff to provide assistance in developing a plan for technology. These libraries will ask the State Library for assistance. Many libraries will also require assistance in setting up the technology and assimilating it into library operations and public service.

Libraries are also expected by their patrons to provide training in the new technology, demonstrating how to access resources. It is important to realize that more than 40 of the 109 public libraries have total annual operating budgets of less than \$15.0. Another 25 public libraries operate with budgets of between \$15.0 and \$30.0 annually. These libraries rely heavily on State Library support and training. They simply do not have the in-house expertise or resources to proceed without assistance.

The State Library's approach to training is to develop a core of trainers around the state. The plan is to train the trainers, developing a base of expertise in regional areas around the state. These trainers would then be able to function as a primary training resources. The State Library would also develop training manuals or tapes to provide a primary level of assistance.

The State Library also provides assistance to school libraries. While most schools have in-house technical expertise, they do not have expertise in content. The technology itself is a means to an end, its purpose to provide access to information. Librarians are expected to know how to utilize the technology once it is in place.

The fiscal note is projected for four years in order to develop the materials and a cadre of trainers. While not all libraries will be fully automated in four years, it is not possible in this rapidly developing field to project telecommunications, automation or training needs beyond the next three to four years.

POSITION INFORMATION HAS BEEN UPDATED AND FUNDING HAS BEEN UPDATED.

03/15/95 Position Information Inquiry/Update 16:12:23
Position: 05-05#011 Project: 0 Salary Costs: 29,736.00
Component: 05-00-09-02-00-00 Region: Benefits Costs: 13,004.32
Scenario: 2 FY: 96 COLA %= 0.000 Total Costs: 42,740.32

Quals not available (Status: UNKNOWN) Retirement Code: A

00/00/00 | Step: A for 12.0 months & Step: B for 0.0 months (total: 12.00)
0 | Merit Date; use merit defaults? N (0.0 @ & 0.0 @)
0 | Class/Sched Prefix: 2 Schedule: 2A (actual:)
| Bargaining Unit: GG Range: 13 (actual:)
| Location Code: AWA Place: JUNEAU
| Job Class Code: P3571 Title: LIBRARY ASSISTANT II
| Seasonal Indic.: F Type: -

Optional Override Salary Rates:

Monthly Rate: 0.00 for 0.0 months & rate of 0.00 for 0.0 months
Hourly Rate: 0.00 for 0.0 months Frozen at this rate? (Y/N): N
Press ENTER to update record; enter # or use PF key to go to another screen:
1=Premium pay info 2=Funding info 4=Code Translations 6=Calculations
7=MISC NEW POS DATA 8=Detail Report 12=Exit w/o update Selection: 0_

FISCAL NOTE

STATE OF ALASKA
1995 LEGISLATIVE SESSION

BILL NO. HB 216

Revision Date: _____

Department Affected: Education

Title: Education Technology Program

BRU: Education Program Support

Component: Basis Education and Instructional

Sponsor: Representative Kott

Improvement

Requester: Representative Kott

COMPONENT SERIAL NO. 171

Expenditures/Revenues:

(Thousands of Dollars)

OPERATING	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
PERSONAL SERVICES	54.5	54.5	54.5	54.5	54.5	54.5
TRAVEL						
CONTRACTUAL	16.5	16.5	16.5	16.5	16.5	16.5
SUPPLIES	1.0	.5	.5	.5	.5	.5
EQUIPMENT	5.0	2.0	2.0	2.0	2.0	2.0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	77.0	73.5	73.5	73.5	73.5	73.5

CAPITAL						
---------	--	--	--	--	--	--

REVENUE FUND SOURCE:						
----------------------	--	--	--	--	--	--

FUNDING:

(Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	77.0	73.5	73.5	73.5	73.5	73.5
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
TOTAL	77.0	73.5	73.5	73.5	73.5	73.5

POSITIONS:

FULL-TIME	1					
PART-TIME						
TEMPORARY						

Estimate of current year (FY95) impact: \$ 0.0

ANALYSIS: (Attach a separate page if necessary.)

House Bill 216 establishes the Alaska education technology fund within the Department of Education. The purpose of the fund is to provide project or grant money to a school district or a publicly funded library. In order to administer these grants, an additional department position is necessary. The Department of Revenue is designated as the official custodian of the fund. The contractual amount of \$16,500 is to offset the Department of Revenue's chargeback to the Department of Education.

Prepared by: Lois Stiedemeier, Education Specialist II

Phone: 465-8724

Division: Education Program Support

Date: March 15, 1995

Approved by Commissioner: _____

Shirley Holloway

Agency: Education

Date: March 15, 1995

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE

For further distribution information call the Governor's Legislative Office

POSITION INFORMATION HAS BEEN UPDATED AND FUNDING HAS BEEN UPDATED.

03/13/95 Position Information Inquiry/Update 16:18:24
Position: 05-05#012 Project: 0 Salary Costs: 39,048.00
Component: 05-00-02-04-00-00 Region: Benefits Costs: 15,448.72
Scenario: 2 FY: 96 COLA %= 0.000 Total Costs: 54,496.72

Actuals not available (Status: UNKNOWN) Retirement Code: A

00/00/00 | Step: A for 12.0 months & Step: B for 0.0 months (total: 12.00)
0 | Merit Date; use merit defaults? N (0.0 @ & 0.0 @)
0 | Class/Sched Prefix: 2 Schedule: 2A (actual:)
| Bargaining Unit: GG Range: 17 (actual:)
| Location Code: AWA Place: JUNEAU
| Job Class Code: P2270 Title: GRANTS ADMINISTRATOR II
| Seasonal Indic.: F Type:

Optional Override Salary Rates:

Monthly Rate: 0.00 for 0.0 months & rate of 0.00 for 0.0 months
Hourly Rate: 0.00 for 0.0 months Frozen at this rate? (Y/N): N
Press ENTER to update record; enter # or use PF key to go to another screen:
1=Premium pay info 2=Funding info 4=Code Translations 6=Calculations
7=MISC NEW POS DATA 8=Detail Report 12=Exit w/o update Selection: 0_

FISCAL NOTE

STATE OF ALASKA
1995 LEGISLATIVE SESSION

BILL NO. HB 216

Revision Date: _____ Dept. Affected: Revenue
 Title: An Act establishing the Alaska education technology program BRU: Revenue Operations
 Sponsor: Representative Kott Component: Treasury Management
 Requester: (H)HES COMPONENT SERIAL NO. 121

Expenditures/Revenues (Thousands of Dollars)

OPERATING EXPENDITURES	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	**	**	**	**	**	**

CAPITAL EXPENDITURES						
----------------------	--	--	--	--	--	--

CHANGE IN REVENUES ()						
------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other - Dept of Education	16.5	16.5	16.5	16.5	16.5	16.5
TOTAL **	16.5	16.5	16.5	16.5	16.5	16.5

Estimate of any current year (FY95) cost: \$ _____

POSITIONS

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

** Establishment of a \$10 million Alaska Education Technology Fund from the general fund will result in charges to the Dept of Education of \$16,500 for custodial, safekeeping and audit fees and personnel time.

Donations to the fund and earnings growth will increase Treasury's current level of expenditures, and these additional expenditures would be charged to DOE, with a net impact to Treasury of zero. As the fund grows through earnings and donations, the additional cost to Treasury and charge to DOE will be approximately \$1,000 per \$1 million increase in the fund size.

Prepared by: Betty Martin, Comptroller Betty Martin
 Division: Treasury

Phone: 465-2350
 Date: 3/7/95

Approved by Commissioner: [Signature]
 Agency: _____

Date: 3/8/95

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE
 For further distribution information, call the Governor's Legislative Office

HOUSE COMMITTEE REPORT

(7)

Date Referred: March 1, 1995

FURTHER REFERRALS:

Finance

Date of Committee Action: 3/21/96

The HEALTH, EDUCATION AND SOCIAL SERVICES Committee considered:

HB 216

HOUSE BILL NO. 216

EDUCATION TECHNOLOGY PROGRAM

"An Act establishing the Alaska education technology program; and providing for an effective date."

recommends it be replaced with the following committee substitute CS HB 216 (HES) the same title a new title

additional referral to _____ Committee

attached amendment(s)

ADOPTS: _____ Letter of Intent

ATTACHES NEW FISCAL NOTE(S): (Dept) _____

APPROVES PREVIOUS: (Dept/Date) _____

fiscal note(s) _____

fiscal note(s) _____

zero fiscal note(s) DOE

zero fiscal note(s) _____

SIGNING WITH RECOMMENDATIONS	DP	DNP	NR	AM
<i>[Signature]</i>	✓			
<i>[Signature]</i>	✓			
<i>[Signature]</i>			✓	
<i>[Signature]</i>		✓		
<i>[Signature]</i>	✓			
<i>[Signature]</i>	✓			

CHAIR'S SIGNATURE

[Signature]

9-LS0765M
Ford
3/12/96

CS FOR HOUSE BILL NO. 216()
IN THE LEGISLATURE OF THE STATE OF ALASKA
NINETEENTH LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVES KOTT, Brown

A BILL

FOR AN ACT ENTITLED

1 **"An Act establishing the Alaska education technology program; and providing for**
2 **an effective date."**

3 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 *** Section 1. FINDINGS AND PURPOSE. (a) The legislature finds that**

5 (1) 75 percent of the labor force in the state is unprepared to deal with rapidly
6 changing technology;

7 (2) the education system and publicly funded libraries can help in creating a
8 trained and productive labor force;

9 (3) education technology has the potential to improve the academic
10 performance of students, to prepare students for work in a technological society, and to assist
11 with education reform;

12 (4) schools and publicly funded libraries lack adequate hardware, software, and
13 training for students, patrons, and educators in education technology;

14 (5) in order to implement effective education technology programs, teacher

1 training and active participation is essential;

2 (6) there is a need for a central agency to coordinate education technology
3 efforts in the state and to increase awareness of sources of funds and equipment for
4 developing education technology.

5 (b) It is the purpose of this Act to establish the Alaska education technology program,
6 to provide teachers, library staff, and other instructional personnel with training in how to
7 apply education technology in meeting instructional objectives, and to provide the necessary
8 equipment and materials to effectively utilize education technology within the adopted
9 curricula throughout the rural and urban schools and in publicly funded libraries of this state.

10 * Sec. 2. AS 14.30 is amended by adding new sections to read:

11 ARTICLE 12. ALASKA EDUCATION TECHNOLOGY.

12 Sec. 14.30.800. ALASKA EDUCATION TECHNOLOGY FUND
13 ESTABLISHED. (a) The Alaska education technology fund is established in the
14 department. The purpose of the fund is to (1) enhance the quality and equity of
15 education at public elementary and secondary schools by providing project or grant
16 money needed to purchase, install, and maintain education technology in classrooms;
17 (2) provide training in the use of education technology to help students and teachers
18 achieve student performance standards; (3) provide access to networks for public
19 schools and publicly funded libraries through the University of Alaska computer
20 network, the Department of Administration computer network, or other means
21 consistent with the program developed under AS 44.21.315(c); and (4) provide
22 education technology, including computer and resource sharing systems, to publicly
23 funded libraries. The fund consists of legislative appropriations to the fund and public
24 or private donations made for the purpose of the fund.

25 (b) A project or grant application shall be submitted on a form prescribed by
26 the department. A project or grant application may be submitted to the department by
27 a school district on behalf of a public school, or by a publicly funded library.

28 (c) The department shall award and administer grants and contracts under this
29 section.

30 Sec. 14.30.810. REQUIRED DUTIES OF DEPARTMENT. The department
31 shall

- 1 (1) develop and promote the use of education technology to
2 (A) improve student learning capabilities;
3 (B) foster collaboration between elementary and secondary
4 schools as well as postsecondary institutions; and
5 (C) provide access to training and support resources for students
6 and staff;
- 7 (2) recommend outstanding education technology programs or products
8 for use by school districts in the state;
- 9 (3) develop plans to utilize distance learning technology and provide
10 leadership in implementing the use of distance learning technology;
- 11 (4) encourage parental involvement in the use and development of
12 education technology;
- 13 (5) make recommendations to the board on plans, policies, programs,
14 and activities relating to education technology;
- 15 (6) identify methods to reduce the costs to school districts of
16 implementing education technology, including the costs of access to national and
17 international computer services; and
- 18 (7) advise school districts on sources of gifts or grants of education
19 technology and application procedures for receiving the gifts or grants.
- 20 Sec. 14.30.820. POWERS AND DUTIES OF THE COMMISSIONER OF
21 REVENUE. The commissioner of revenue is the treasurer of the fund and has the duty
22 to do all acts, whether or not expressly authorized, that the commissioner of revenue
23 considers necessary or proper in administering the assets of the fund.
- 24 Sec. 14.30.850. DEFINITIONS. In AS 14.30.800 - 14.30.850,
- 25 (1) "district" has the meaning given in AS 14.17.250;
- 26 (2) "education technology" means instructional equipment and materials
27 that are used to enhance the quality and effectiveness of teaching and learning, to
28 improve the development and training of teachers, and to enhance access to information
29 in libraries, including hardware, software, and telecommunications;
- 30 (3) "fund" means the Alaska education technology fund;
- 31 (4) "publicly funded library" means a library eligible for a grant under
32 AS 14.56.310.

1

* Sec. 3. This Act takes effect July 1, 1996.

Alaska State Legislature House of Representatives

COMMITTEE ASSIGNMENTS:

LABOR & COMMERCE, CHAIRMAN
MILITARY & VETERANS AFFAIRS, CHAIRMAN
COMMUNITY & REGIONAL AFFAIRS
RESOURCES
INTERNATIONAL TRADE / TOURISM
LEGISLATIVE COUNCIL



INTERIM:

10928 EAGLE RIVER ROAD, SUITE 141
EAGLE RIVER, AK 99577
PHONE (907) 694-8944
FAX 694-8949

SESSION:

STATE CAPITOL
JUNEAU, AK 99801-1182
PHONE (907) 465-3777
FAX (907) 465-2819

SPONSOR STATEMENT PROPOSED HESS CS FOR HOUSE BILL 216()

Alaskans and Alaskan students must start becoming more involved in the latest developments in technology, particularly in the use of computers. The original and continued intent of this bill is to provide a vehicle to allow Alaskans to learn and stay abreast of these technological changes.

The original bill set up an Alaskan Education Technology Program. Its intent was to establish a special Fund to allow this to happen, with a potential request of up to \$10 million dollars in general fund money to be established in the Fund through the operating budget. Because of this large sum, and the fiscal austerity we are now facing, it did not seem feasible that this kind of funding could be obtained in this legislature.

However, this proposed revised version of the bill eliminates this \$10 million appropriation, while still attempting to get the State more involved in educational technology than it currently is. The bill would establish the Fund, but without State money. The Fund would still be established because it is important to have a mechanism in place that could receive and, if needed, pass through funds from the private sector and the federal government. A similarly operating fund, the Alaska Children's Fund, has already been established.

The federal government recently made several billion dollars available in competitive grant money to states and school districts for educational technology. Additionally, the private sector, including computer companies, are also providing more and more funds and equipment through the granting process. It is important for Alaska to be able to access these funds.

This proposed CS would require the Department to develop and promote the use of educational technology through such things as collaboration with various groups, training, parental involvement, and making recommendations to the State Board. Most importantly, it would provide a coordinated, centralized place in the Department of Education to deal with statewide educational technology needs, and it would provide school districts with information on competitive grants and how to obtain them. Both the Department of Education and the Department of Revenue now have zero Fiscal notes.



Representative Pete Kott



Sectional Analysis
Proposed HESS CS for HB 216 ()
Version 9-LS0765/ G-

Section #1: Lists the findings and purposes of the bill, which deals with educational technology.

Section #2: Adds several new sections to the Alaska statutes, including:

Section AS 14.30.800, which establishes the Alaska Education Technology Fund and lists its four-fold purpose;

Section AS 14.30.810, which lists the duties of the Department of Education in relation to educational technology;

Section AS 14.30.820, which gives authority to the Department of Revenue to handle all assets relating to the fund; and

Section AS 14.30.850, which provides definitions for terms used in the bill.

Section #3: Provides for an effective date of July 1, 1996.

9-LS0765G
Ford
2/8/96

CS FOR HOUSE BILL NO. 216()

IN THE LEGISLATURE OF THE STATE OF ALASKA

NINETEENTH LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVES KOTT, Brown

A BILL

FOR AN ACT ENTITLED

1 "An Act establishing the Alaska education technology program; and providing for
2 an effective date."

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

4 * Section 1. FINDINGS AND PURPOSE. (a) The legislature finds that

5 (1) 75 percent of the labor force in the state is unprepared to deal with rapidly
6 changing technology;

7 (2) the education system and publicly funded libraries can help in creating a
8 trained and productive labor force;

9 (3) education technology has the potential to improve the academic
10 performance of students, to prepare students for work in a technological society, and to assist
11 with education reform;

12 (4) schools and publicly funded libraries lack adequate hardware, software, and
13 training for students, patrons, and educators in education technology;

14 (5) in order to implement effective education technology programs, teacher

1 training and active participation is essential;

2 (6) there is a need for a central agency to coordinate education technology
3 efforts in the state and to increase awareness of sources of funds and equipment for
4 developing education technology.

5 (b) It is the purpose of this Act to establish the Alaska education technology program,
6 to provide teachers, library staff, and other instructional personnel with training in how to
7 apply education technology in meeting instructional objectives, and to provide the necessary
8 equipment and materials to effectively utilize education technology within the adopted
9 curricula throughout the rural and urban schools and in publicly funded libraries of this state.

10 * Sec. 2. AS 14.03.120(e) is amended to read:

11 (e) A district shall, by October 31 of each year, provide to the state board, and
12 make available to the public, a report on the performance of each public school and
13 public school students in the district. The report must be entitled "School District
14 Report Card To The Public" and must be prepared on a form prescribed by the
15 department. The report must include

16 (1) the percent of district students in the top and bottom quarter of
17 standardized national achievement examinations; results under this paragraph shall be
18 disclosed in a manner that does not reveal the individual identities of students;

19 (2) the percent of students who are not promoted to the next grade;

20 (3) student, parent, and community member comments on the school's
21 performance;

22 (4) the annual percent change in enrollment and the percent of
23 enrollment change due to student transfers into and out of the district;

24 (5) attendance, retention, and graduation rates;

25 (6) the ways in which meaningful parent involvement in school
26 performance was achieved;

27 (7) a summary and evaluation of the environmental education
28 curriculum described in AS 14.30.380;

29 (8) uses of education technology by classroom teachers;

30 (9) other indicators of school performance required by the state board;

31 and

1 (10) [(9)] other indicators of school performance selected by the
2 district.

3 * Sec. 3. AS 14.30 is amended by adding new sections to read:

4 ARTICLE 12. ALASKA EDUCATION TECHNOLOGY.

5 Sec. 14.30.800. ALASKA EDUCATION TECHNOLOGY FUND
6 ESTABLISHED. (a) The Alaska education technology fund is established in the
7 department. The purpose of the fund is to (1) enhance the quality and equity of
8 education at public elementary and secondary schools by providing project or grant
9 money needed to purchase, install, and maintain education technology in classrooms;
10 (2) provide training in the use of education technology to help students achieve student
11 performance standards; (3) provide access to networks for public schools and publicly
12 funded libraries through the University of Alaska computer network, the Department
13 of Administration computer network, or other means consistent with the program
14 developed under AS 44.21.315(c); and (4) provide education technology, including
15 computer and resource sharing systems, to publicly funded libraries. The fund consists
16 of legislative appropriations to the fund and public or private donations made for the
17 purpose of the fund. The department may not use money in the fund to pay the
18 administrative expenses of the fund.

19 (b) A project or grant application shall be submitted on a form prescribed by
20 the department. A project or grant application may be submitted to the department by
21 a school district on behalf of a public school, or by a publicly funded library.

22 (c) The department shall administer grants awarded under this section.

23 Sec. 14.30.810. REQUIRED DUTIES OF DEPARTMENT. The department
24 shall

25 (1) develop and promote the use of education technology to

26 (A) improve student learning capabilities;

27 (B) foster collaboration between elementary and secondary
28 schools as well as postsecondary institutions;

29 (C) provide access to training and support resources for students
30 and staff; and

31 (D) assist in educating non-English speaking parents;

1 (2) collaborate with education institutions, professional associations, and
2 business groups to determine priorities for education technology funding and in
3 identifying educational uses for education technology;

4 (3) recommend outstanding education technology programs or products
5 for use by school districts in the state, including the use of distance learning programs;

6 (4) encourage parental involvement in the use and development of
7 education technology;

8 (5) make recommendations to the board on plans, policies, programs,
9 and activities relating to education technology;

10 (6) identify methods to reduce the costs to school districts of
11 implementing education technology, including the costs of access to national and
12 international computer services; and

13 (7) advise school districts on sources of gifts or grants of education
14 technology and application procedures for receiving the gifts or grants.

15 Sec. 14.30.820. POWERS AND DUTIES OF THE COMMISSIONER OF
16 REVENUE. The commissioner of revenue is the treasurer of the fund and has the duty
17 to do all acts, whether or not expressly authorized, that the commissioner of revenue
18 considers necessary or proper in administering the assets of the fund.

19 Sec. 14.30.850. DEFINITIONS. In AS 14.30.800 - 14.30.850,

20 (1) "district" has the meaning given in AS 14.17.250;

21 (2) "education technology" means instructional equipment and materials
22 that are used to enhance the quality and effectiveness of teaching and learning, and to
23 enhance access to information in libraries, including hardware, software, and
24 telecommunications;

25 (3) "fund" means the Alaska education technology fund;

26 (4) "publicly funded library" means a library eligible for a grant under
27 AS 14.56.310.

28 * Sec. 4. This Act takes effect July 1, 1996.

DRAFT

FISCAL NOTE

STATE OF ALASKA
1996 LEGISLATIVE SESSION

BILL NO. Proposed HESS CS for HB 216 ()

Revision Date: _____

Department Affected: Education

Title: Establishing the Education Technology

BRU: Education Program Support

Fund and Program

Component: Basic Education and Instructional

Sponsor: Representative Kott

Requester: House HESS

COMPONENT SERIAL NO. _____ 171

Expenditures/Revenues:

(Thousands of Dollars)

OPERATING	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
----------------------	--	--	--	--	--	--

CHANGE IN REVENUES						
--------------------	--	--	--	--	--	--

FUND SOURCE

(Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
Other						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year (FY96) impact: \$ 0.0

ANALYSIS:

The proposed HESS CS for HB 216 () establishes the Alaska Education Technology Fund within the Department of Education (DOE). Deposits to the fund can be made from private, public and legislative appropriations. This legislation will create a funding mechanism which will enhance the quality and effectiveness of teaching and learning through technology and will enhance access to information. DOE will administer and award appropriations from the technology fund.

Prepared by: Kimberly Homme, Special Assistant

Phone: 465-2803

Division: Commissioner's Office

Date: March 19, 1996

Approved by Commissioner: Richard S. Cross, Acting

Richard S. Cross, Deputy Commissioner

Agency: Education

Date: March 19, 1996

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE

For further distribution information call the Governor's Legislative Office

DRAFT

**Summary of
Alaska Instructional Technology Survey
March 1995**

Lois Stiegemeier

Alaska Department of Education
801 W. 10th Street, Suite 200
Juneau, Alaska 99801-1894
(907) 465-8724

Tony Knowles
Governor

Shirley J. Holloway, Ph.D.
Commissioner
Alaska Department of Education

Nancy Buell, Ph.D.
Director
Division of Education Program Support

Lois Stiegemeier
Education Technology Specialist

Alaska State Board of Education

Stowell Johnstone, Chair
Anchorage

Abbe Hensley, First Vice-Chair
Anchorage

Mike Williams, Second Vice-Chair
Akiak

Marilyn Webb
Juneau

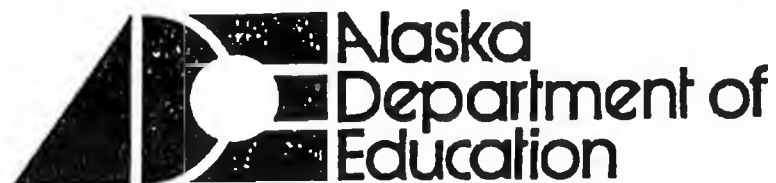
Robert Gottstein
Anchorage

R. Weaver Ivanoff
Unalakleet

Susan Stitham
Fairbanks

Dr. Roger O. Jarvis GM-14, USAF
Military Advisor
Anchorage

Chelsie Venechuk
Student Advisor
Healy



Executive Summary

In March 1995, the Alaska Department of Education conducted an instructional technology survey of all schools and school districts. The purposes of the survey were to:

- Collect data on the numbers and types of technologies currently employed in Alaska schools for instruction.
- Collect information on utilization of the technologies.
- Determine the level of priority for instructional technology's in Alaska's schools.
- Determine what needs must be met in schools in order to effectively employ technologies in instruction.
- Collect data that could be compared to similar data collected from schools in 1993.

Information from the survey will be used by the Department in developing the Goals 2000 State Educational Technology plan and working with districts in the area of instructional technology. Information will also be used in responding to information requests regarding the level of technologies in Alaska schools and in responding to proposed legislation involving instructional technology.

Major Findings

- Wide disparities continue to exist across the state in the kinds of technologies available in schools.
- Schools are attempting to upgrade the technologies they use, but are limited by the lack of funding available to them for that purpose.
- The use of technology in schools with students is seen as a high priority by the majority of superintendents and school principals.
- Establishing school and district networks is a new priority of districts; however, only 24% of schools have networks in place.
- Achieving access to the Internet is also a new priority for school districts indicating a movement towards educational use of the "Information Highway"
- Teacher training remains one of the highest needs for schools in the area of technology.

Recommendations

School districts should continue to plan for the implementation of technology. Those plans should be comprehensive and include such elements as strategies for integration into the curriculum, teacher training, technology upgrades and replacement, budgets, timelines, and staffing patterns.

Teacher training in technology must be continued on all fronts: University courses, district inservice, pre-service courses, workshops and institutes. Technology's power for teachers can only be realized when teachers have acquired the skills to make the best instructional uses of these tools.

The state and districts must work together to fund the technological needs of schools. Educational equity will not exist until all students in the state have access to the opportunities that technology and telecommunications affords. The state should actively pursue all means by which districts and schools have access to the funding necessary to effectively implement technology in the classroom

The state should examine its role in modernizing the telecommunications infrastructure needed across the state for schools to connect to the Information Highway. Awareness and interest in access to the Internet has created a gap between the desire of schools to connect and the available telecommunications infrastructure. The state should work on behalf of schools to work with regulatory agencies, telecommunications providers and others to ensure that schools have access to high speed, affordable telecommunications connectivity.

Overview

In March 1995, the Alaska Department of Education conducted an instructional technology survey of all schools and school districts. Staff designed two survey instruments to collect data on the instructional uses of technology. The purposes of the survey were to:

- Collect data on the numbers and types of technologies currently employed in Alaska schools for instruction.
- Collect information on utilization of the technologies.
- Determine the level of priority for instructional technology's in Alaska's schools.
- Determine what needs must be met in schools in order to effectively employ technologies in instruction.
- Collect data that could be compared to similar data collected from schools in 1993.

Questionnaires were mailed to all districts and schools by the Department of Education in March 1995; no follow up questionnaires were sent. By June 1, responses were received from 48 of the 54 district offices and by 290 of the state's 467 schools. That represents a response rate of 88% for districts and 62% for schools. The 1995 survey elicited a higher response rate than the 1993 survey from which responses were received from 84% of districts and 53% of schools. Schools responding to the survey closely paralleled the demographic profile of all schools in the state. An analysis of respondents was made on the basis of building enrollments and grade levels in the school as well as the number of responses from the five largest school districts to see if the data was representational of all schools in the state or if any type of school or district was overrepresented. While some differences may exist between respondents and non-respondents, the demographic analysis indicates that respondents can be viewed as generally representative of all schools in the state.

Table 1 shows the correlation of schools by size of enrollment represented in the survey and the statewide demographics of building enrollments.

**Table 1
Responses by Building Enrollments**

Building Enrollment (Number of Students)	Schools Responding		All schools	
	Count	Percent	Count	Percent
1-25	44	15%	74	16%
26-50	34	12%	56	12%
51-100	40	14%	68	14%
101-300	72	25%	117	25%
301 or more	100	34%	155	33%

Table 2 shows the percentages of the type of schools responding to the survey as compared to statewide demographics of schools by grade level.

Table 2
Responses by School Types

School type	Schools responding		All schools	
	Count	Percent	Count	Percent
Elementary	117	40%	177	38%
Middle/Jr. High	13	4%	29	6%
Middle/High School	17	6%	32	7%
High School	24	8%	47	10%
PE-12	119	41%	185	39%

Table 3 shows the number of respondents from the five largest school districts (Anchorage, Fairbanks, Kenai, Mat-Su and Juneau) as opposed to respondents in other districts compared to the total numbers of schools in the largest districts:

Table 3
District Size

	Schools Responding		All schools	
	Count	Percent	Count	Percent
Five Largest Districts	111	38%	185	39%
Other Districts	179	62%	285	61%

As can be seen by the three tables, respondents mirrored very closely the overall demographics of schools in the state. Although there may be some differences between respondents to the survey and non-respondents, the demographic picture of the respondents is representational of all schools in the state. Thus, result of the survey can be assumed to generally apply to all schools in the state. Schools responding to this survey represent a total of 4099 classrooms in the state and 78,690 students.

Information from the survey will be used by the Department in developing the Goals 2000 State Educational Technology plan and working with districts in the area of instructional technology. Information will also be used in responding to information requests regarding the level of technologies in Alaska schools and in responding to proposed legislation involving instructional technology. The information has been collected in such a way as to be easily updated in the future.

Major Findings

- Wide disparities continue to exist across the state in the kinds of technologies available in schools.
- Schools are attempting to upgrade the technologies they use, but are limited by the lack of funding available to them for that purpose.
- The use of technology in schools with students is seen as a high priority by the majority of superintendents and school principals.
- Establishing school and district networks is a new priority of districts; however, only 24% of schools have networks in place.
- Achieving access to the Internet is also a new priority for school districts indicating a movement towards educational use of the "Information Highway"
- Teacher training remains one of the highest needs for schools in the area of technology.

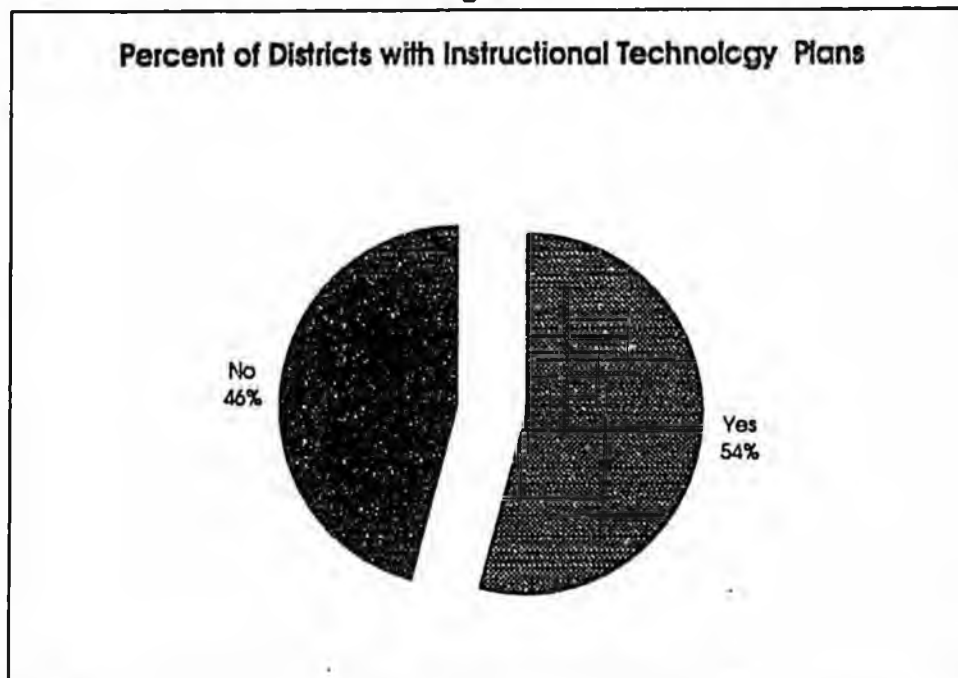
Superintendents Survey

Superintendents were asked a limited number of questions regarding technology in their districts. These questions were designed to elicit information regarding district level planning, priorities and communications networks.

"We see the need and hope next year to develop a technology plan"

Research has shown that planning for the inclusion of instructional technologies in schools is critical to its successful implementation and curriculum integration. Superintendents were asked if their district had a district wide instructional technology plan.. Over half the districts responding (54%) indicate that they have a plan as shown in Figure 1.

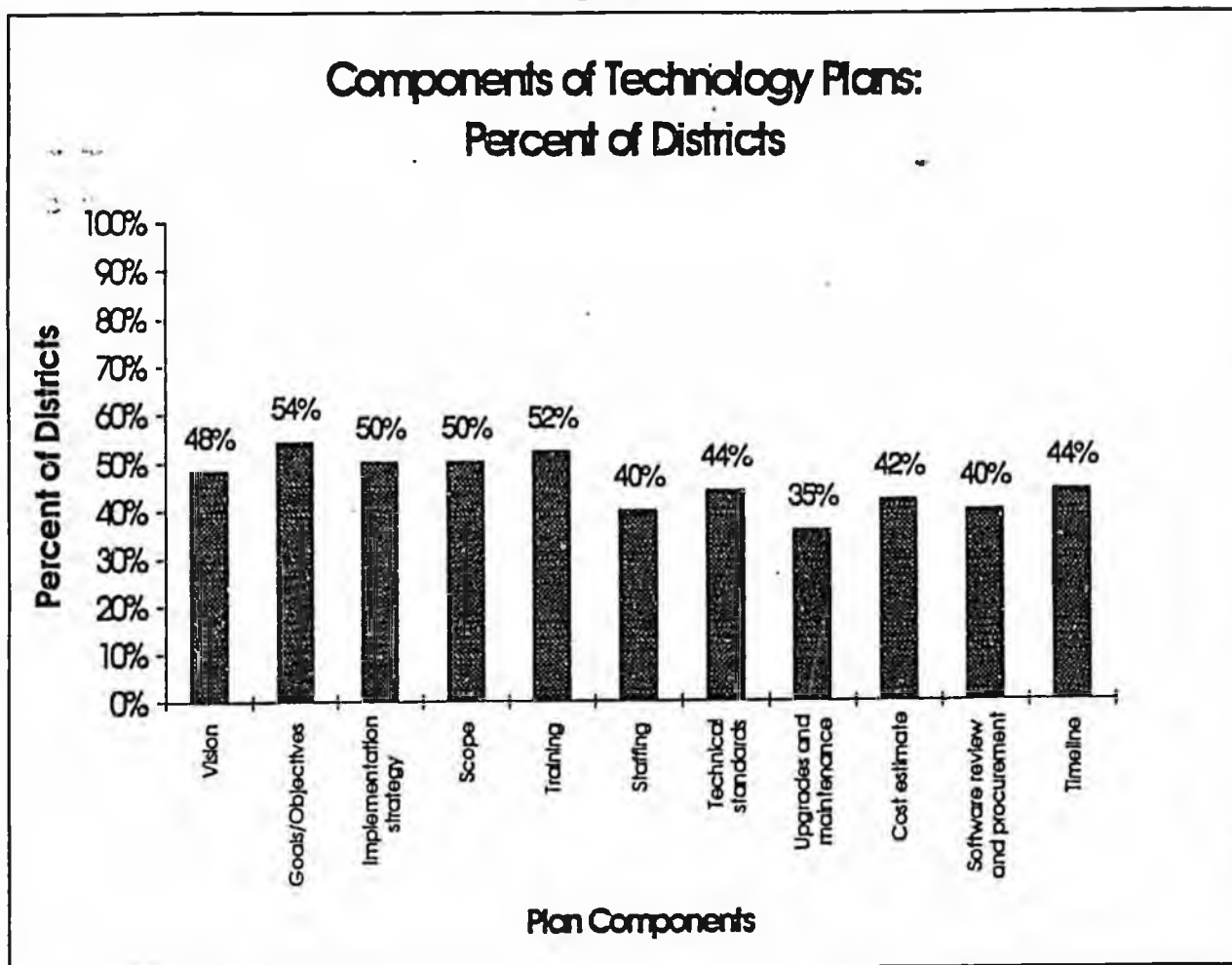
Figure 1



"Our first technology plan will be part of our Goals 2000 Plan. It will be for a four year period. When or if additional funds become available, we will be able to accelerate the plan."

Those districts indicating having a technology plan were asked a follow-up question designed to elicit information about the components included in the district plans. These components are typically found in successful technology plans. Figure 2 indicates the different components respondents report including in their plans. It may be significant that only 35% of the plans include strategies for obsolescence and hardware upgrades. In today's world of rapidly changing technologies, school districts would be wise to include upgrade cycles in their plans.

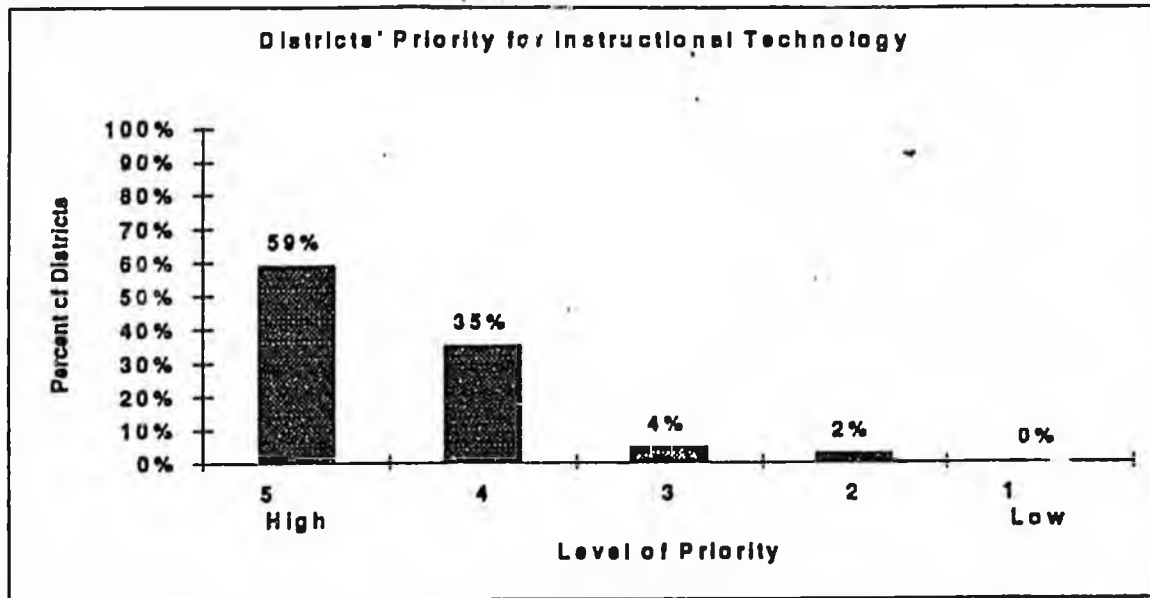
Figure 2



"Albeit our district's funding is minimal and in further jeopardy of reductions, we continue to move forward on all fronts regarding educational technology."

Of the superintendents responding, 94% see the use of instructional technology as a medium high to high priority. Only two districts felt that use of instructional technology is a medium low priority for their district as indicated in Figure 3. More superintendents in the 1995 survey report that instructional technology is of high importance; in 1993 47% saw the use of technology as a high priority.

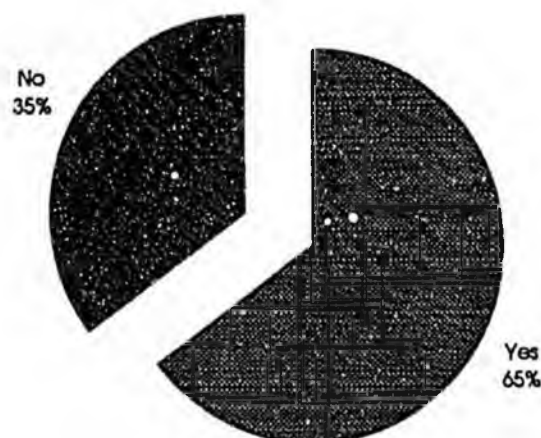
Figure 3



Superintendents were asked if the schools in their district are connected by a local area or wide area network. Sixty-five percent of the Superintendents indicate that a computer network is in place as shown in Figure 4. In 1993, slightly over 40% of superintendents reported that their district had a communications network. However, in 1993, superintendents included fax machines, quickmail and UACN in their descriptions of networking while the 1995 survey was more specific in its definition of a network.

Figure 4

Percent of Districts with Computer Networks

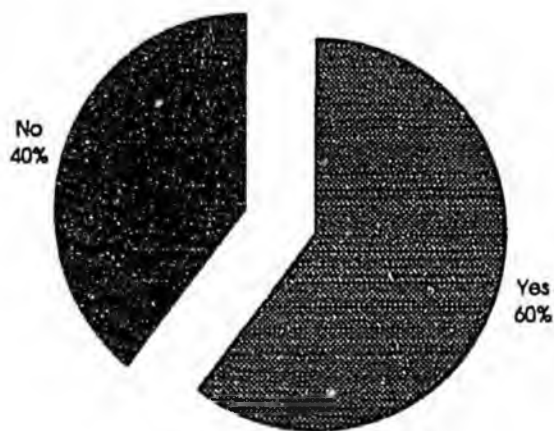


"(We are) frustrated at the limited functions and budget cost of UACN and the state's lack of support for rural technology development. Videoconference or computer access development is available at the urban centers rather than rural."

Superintendents were also asked if schools in their districts connected to the Internet, and if so in what manner. Figure 5 shows that 60 % of the responding districts do connect to the Internet, but a follow up question indicated that the majority of school districts have dial-in access only.

Figure 5

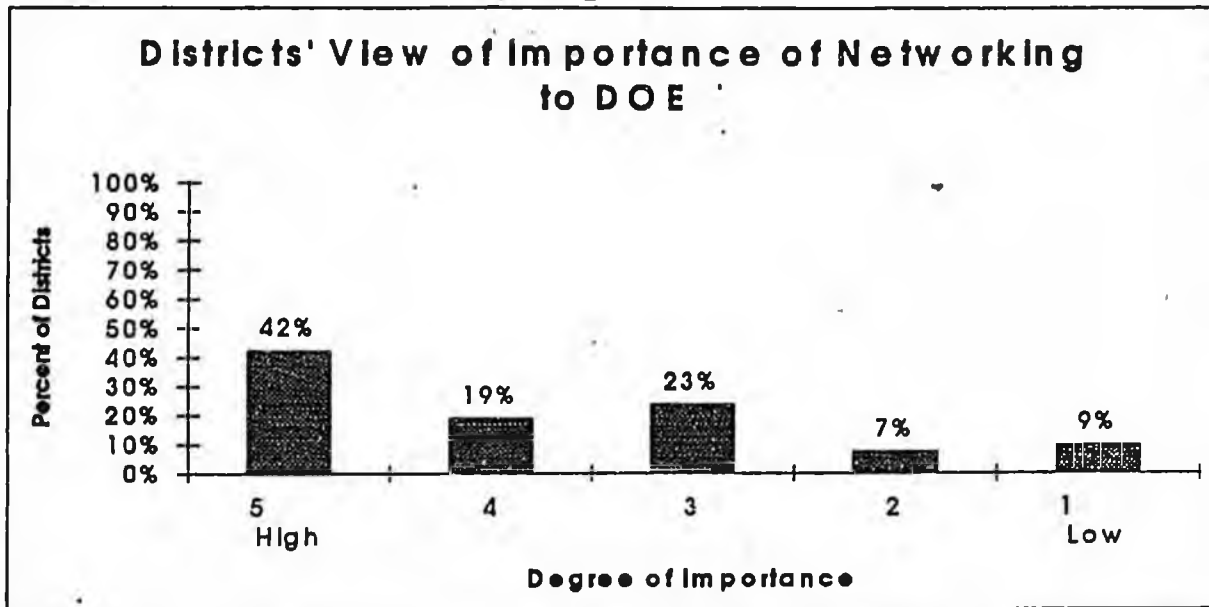
Percent of Districts with Internet Access



"I think this village needs a local connection. Even our classified staff have purchased their own Powerbooks and we have a Mac(Intosh) per student. . . a modem for each classroom and NO budget for phone calls."

Superintendents were asked how important it is to have the ability to connect electronically to the Alaska Department of Education. Figure 6 indicates the response to this question. The average importance of networking to the Department of Education was 3.77 indicating a fairly high need by districts.

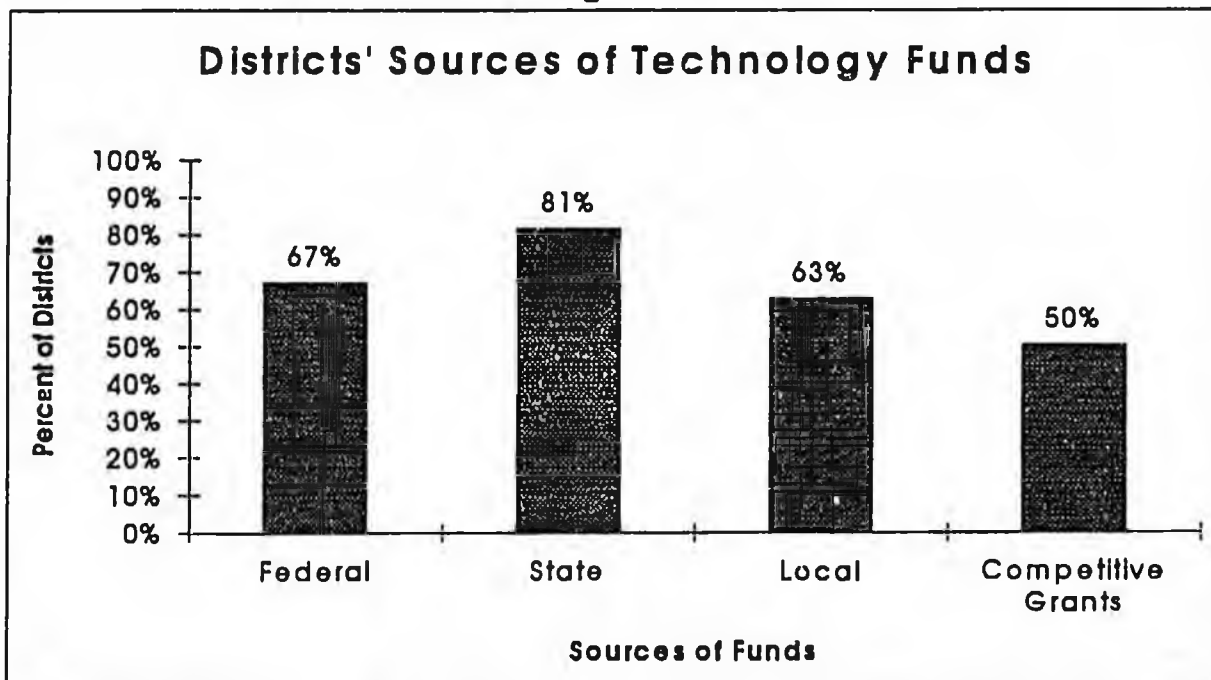
Figure 6



"Our technology came directly as the result of two back-to-back grants of \$100,000 each. Were it not for these two grants, we would be sorely lacking."

Districts show that a mix of funds are currently being used to support technology in the schools. Four-fifths of the districts report using state funds, and half of the districts responding to the survey are using funds they have secured through competitive grants. Figure 7 shows percent of districts responding using federal, state, local funds and competitive grants to fund educational technology.

Figure 7



In general, superintendents are increasingly supportive of the use of technology in instruction, and are seeking multiple means of financing the cost of technology.

School Survey

The principal's survey was intended to elicit information regarding the kinds of technologies in each individual school, and the ways in which teachers in that school were utilizing the technologies available to them. In addition to detailing the kinds of technologies they utilize, principals were asked to determine the level of priority they placed on instructional technology and whether or not the school has a technology plan. Respondents were also given an opportunity to discuss the highest needs in instructional technology.

Computer Technologies:

Principals were asked a number of questions regarding the configuration and uses of computer based technologies in the schools. The following information summarizes the responses from those questions.

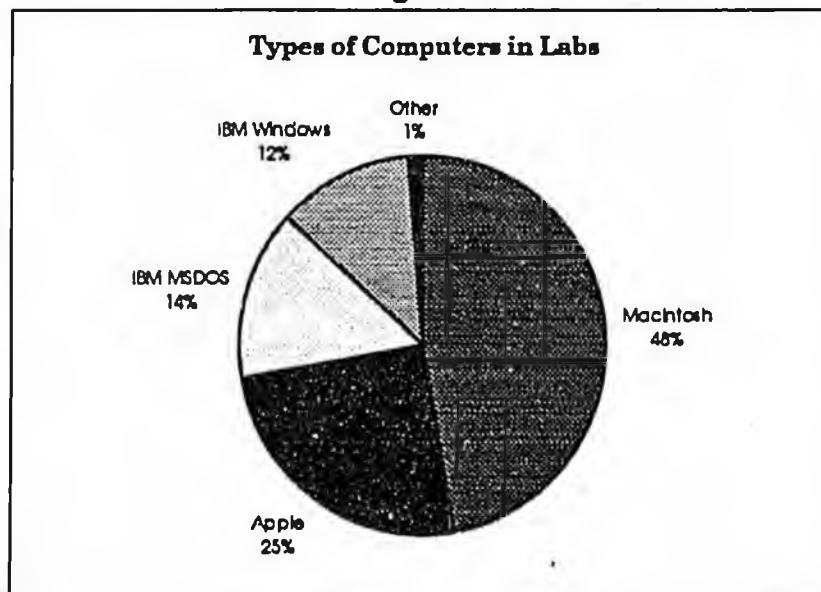
Labs:

"We are in dire need of a computer lab and/or at least computers in every class for easy student access."

Computers are often configured in computer labs in schools. A computer lab consists of space for a number of computers which are generally networked with printers, often with file servers, modems, and other devices (laser disks, cameras, etc.). Labs generally serve many classes of students and are scheduled for use by teachers. Principals were asked to give the number of labs in each school and to give information on the types of computers used in the labs.

A total of 397 labs were reported in 209 schools; 72% of the schools responding to the survey have at least one computer laboratory. The highest number of computer labs reported in a school was 10, the average number of computer labs per school is 1.5. Nearly half of the schools responding (46%) report that their school has one computer lab. Most labs use Apple brand computers with nearly half of the total computers being Macintosh computers. IBM labs accounted for nearly 26% of the total labs; nearly half of the IBM labs are running Windows operating system. Figure 8 shows the breakdown of labs by kind. In comparing this information to the data collected in 1993, the percent of labs with IBM computers is relatively constant. Schools seem to be replacing older Apple model computers with more powerful Macintosh computers; 1993 data shows 32.8% of the labs were Macintosh and 24.8% of the labs were Apple with 11% mixed Apple and Macintosh.

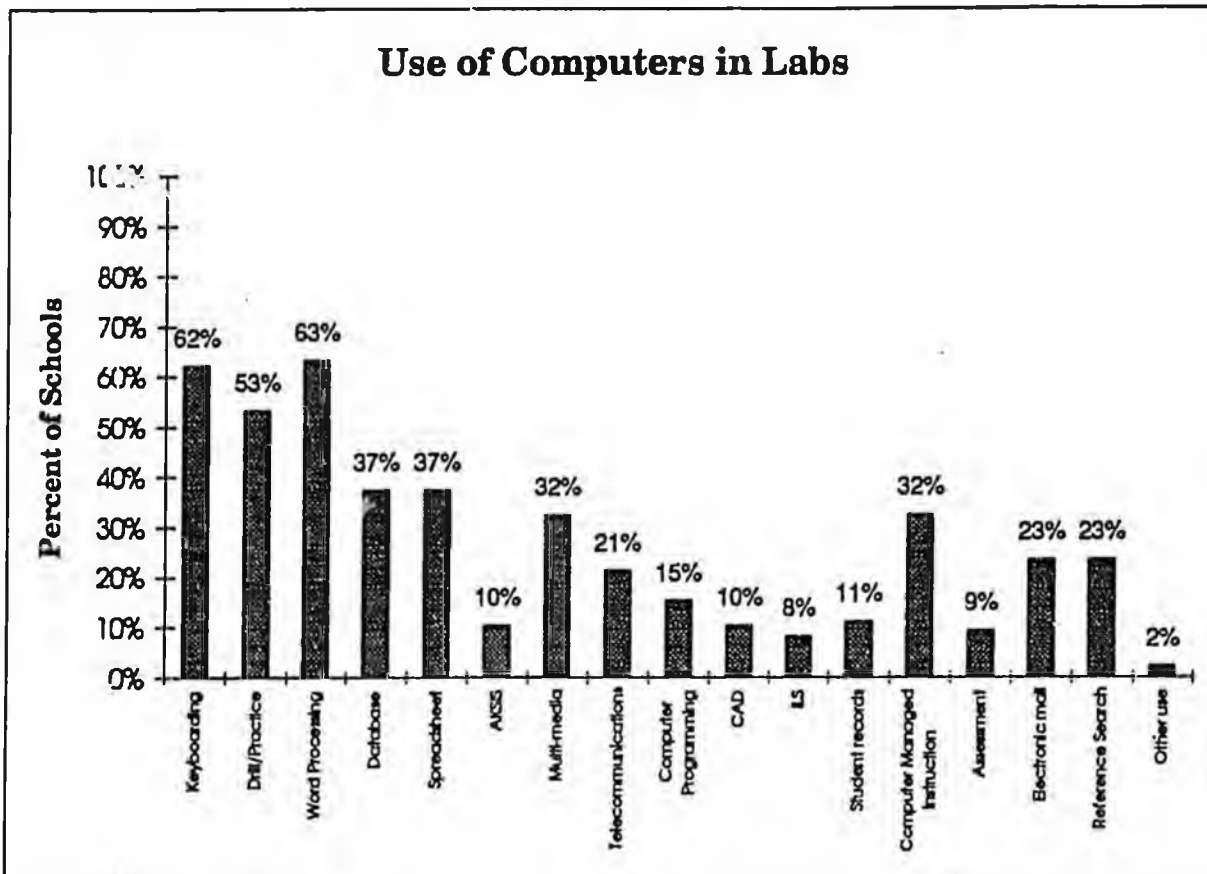
Figure 8



CD-ROM technology offers a wide range of powerful software for students and teachers; 121 schools or 58% of schools with computer labs reported having CD-ROMS drives in the computer lab. A total of 648 CD-ROM drives were reported in those labs; the most CD-ROM drives found in a computer lab was 80. Thirty-five schools report having only one CD-ROM drive in their computer labs.

Principals also were asked to indicate the uses for their labs as represented in Figure 9. Computer labs which generally accommodate many teachers representing multiple curriculum areas are utilized for multiple functions. The most prevalent uses for all types of labs are word processing, keyboarding, drill and practice, databases, and spreadsheets, these are generally regarded as tool-based applications.

Figure 9



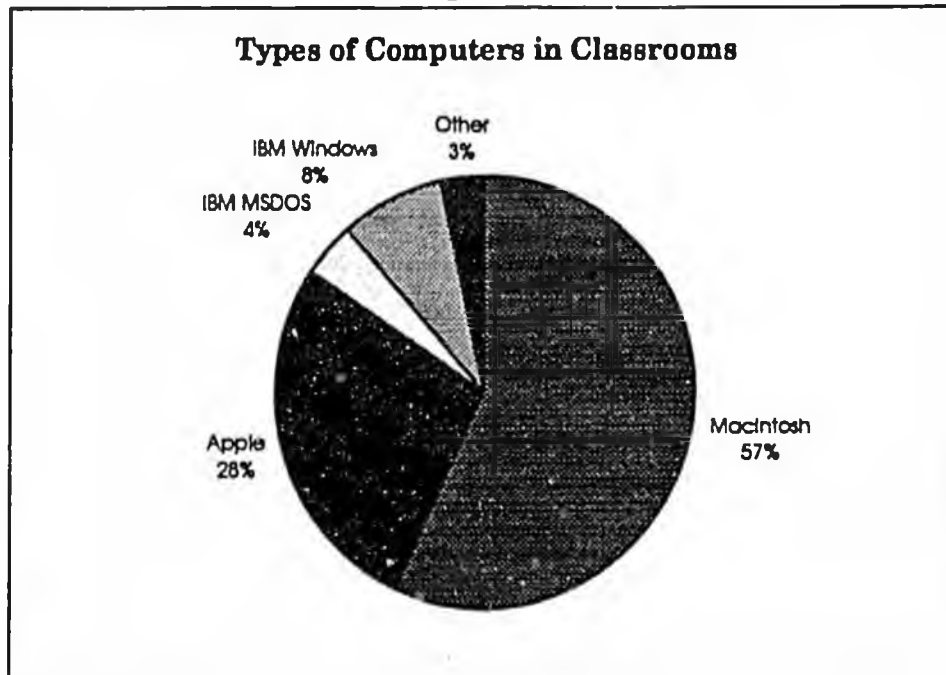
Classroom Computers

"Improving technology and integrating it into the classroom has been one of our school improvement goals"

The average number of computers found in the classroom is two; however, the number of computers in classrooms ranged from 0 to 53. Again there is a wide disparity in the numbers of computers located in classrooms where most students spend most of their time. Twenty schools report that the typical classroom has no computers. An additional 91 schools report that the typical classroom has only one computer.

Figure 10 shows the distribution of computers in the classroom by type. Most computers found in the classroom are Apple brand with IBM/IBM compatible computers lagging behind. Comparing this distribution to data collected in 1993, it is notable that Macintosh computer has increased by 21% its share of classroom computers. Apple computers have correspondingly decreased by 17%, again pointing to the trend of schools replacing older model computers with more powerful computers of the same brand.

Figure 10

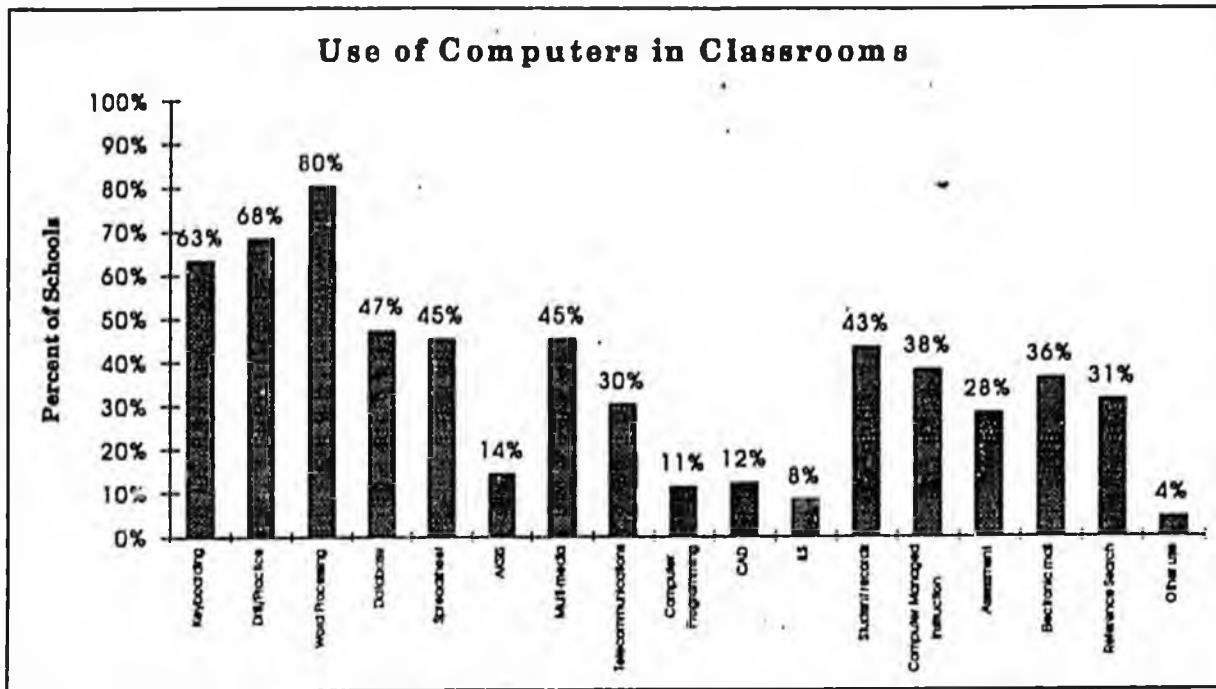


Fifty percent of the schools responding to the survey (145 schools) have at least one classroom with a CD-ROM player. Ten schools reported having no CD-ROM drives in the classroom. The school reporting the highest number of CD-ROM drives located in classrooms has 54 spread among 26 classrooms. Twenty-eight schools or 19% of those with CD-ROM drives in the classroom, report having enough CD-ROM drives to have one per classroom.

"We need technology—our teachers use the Title I lab, but it is not available a lot. We need classroom computers with portable laptops for individual use."

Very little difference is seen in the uses of computers in the classroom and uses in the lab as noted in Figure 11. The top use of computers in the classroom is word processing, followed by drill and practice and keyboarding, database, spreadsheet and multimedia use. Classroom computers are used far more than lab computers for student records, assessment tools, e-mail and reference searches.

Figure 11



Library/Media Center:

The third general configuration of computers in most schools are those in the library/media center. Figure 12 shows the distribution of computers in the library by type. Library configurations are notable in that IBM/IBM compatible computers are more prevalent than in other areas of the school. As in both labs and classroom, Macintosh computers have increased (8%) while Apple computers have decreased (6.5%) over the last two years. IBM computers running either DOS or Windows accounts for 46% of all computers in the library, as compared to 37% in 1993.

Figure 12

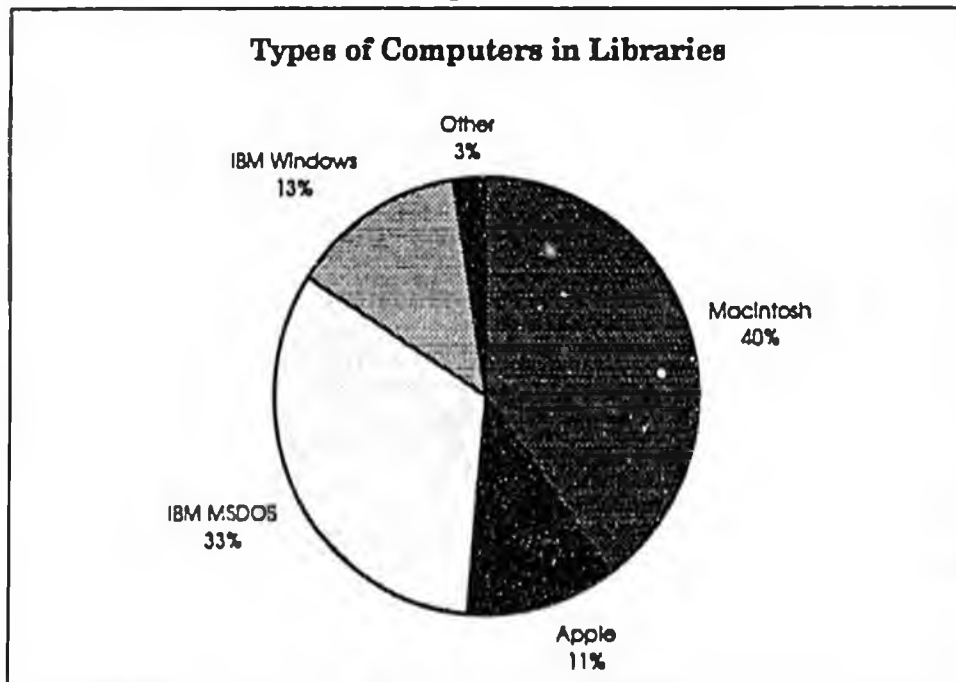
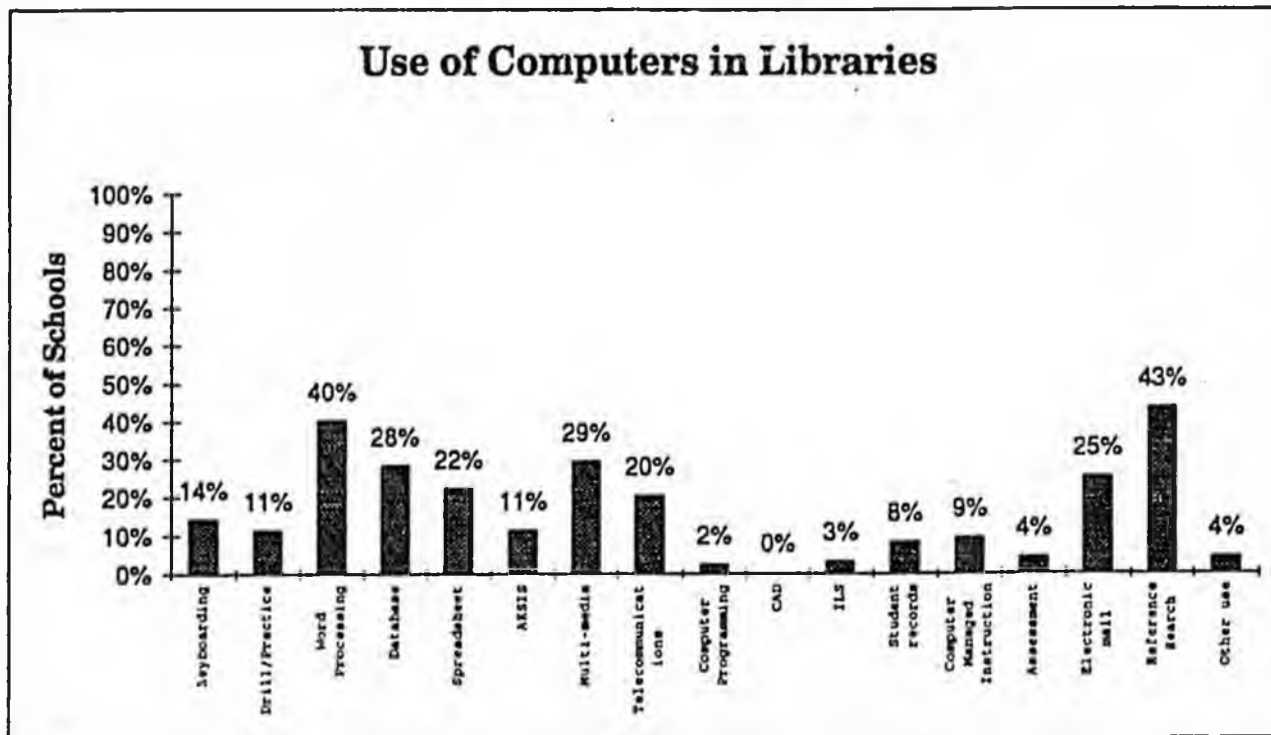


Figure 13 shows the reported uses for each type of computer located in libraries. Computers located in libraries are used more for applications commonly connected to the library such as conducting reference searches. The two highest uses of computers located in libraries are, reference searches, word processing. Other predominate uses of computers in the library include multi-media, databases, electronic mail, spreadsheets and telecommunications.

Figure 13



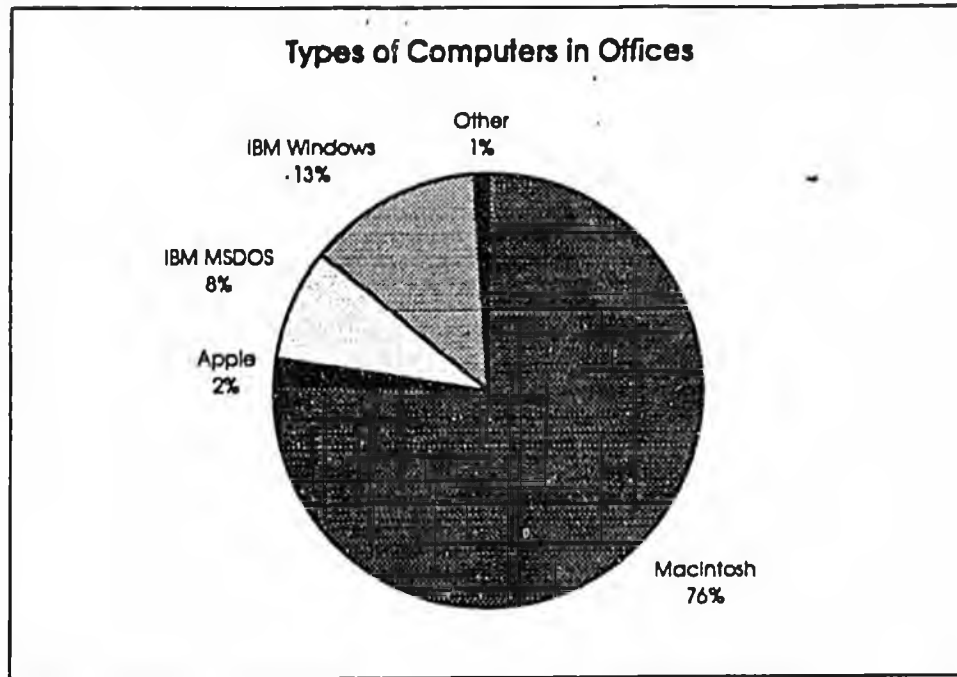
"At our school the library aide is responsible for software, computer maintenance and overseeing the computer lab. . . This person has an inordinate amount of responsibility and duties."

Over half (59%) the school libraries of schools responding to the survey are not automated. Of the automated school libraries, 83% report having automated (computerized) card catalogs and 27% report automated circulation systems. CD-ROM drives are often found in libraries where reference materials can be stored on CD-ROMS; 42% of the schools responding to the survey report having at least one CD-ROM drive located in the library. The highest number of CD-ROM drives reported located in the library was 14.

Office Computers

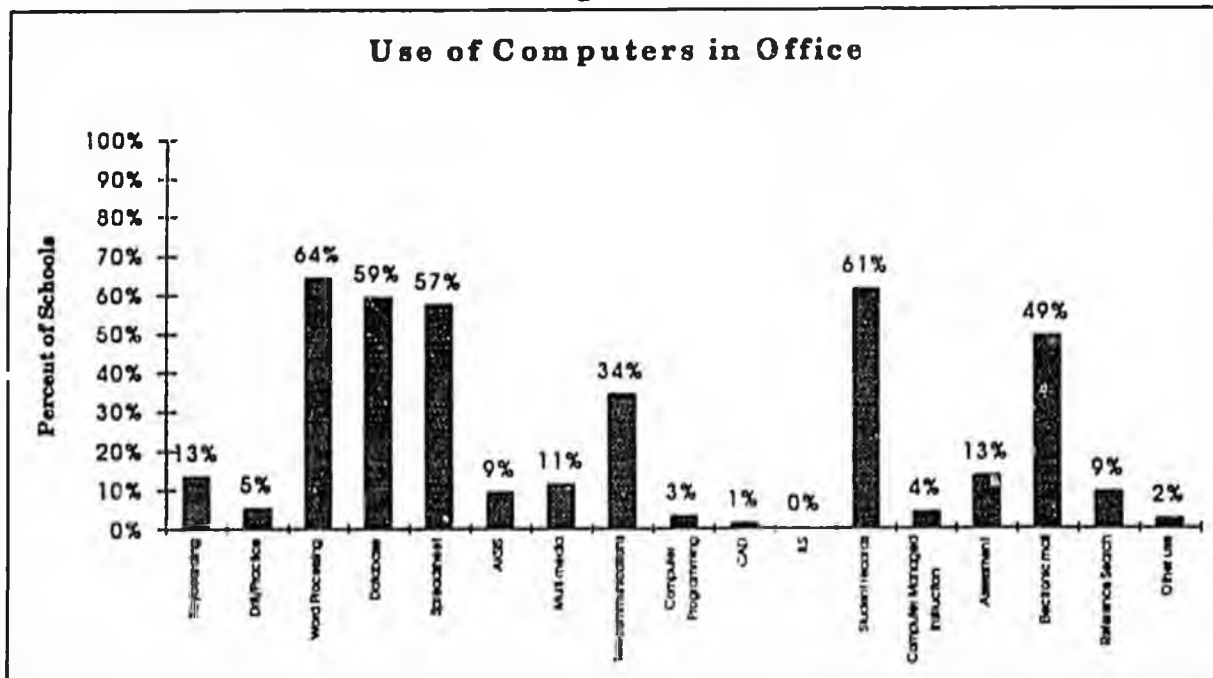
Schools were asked in the 1995 survey to identify types of computers and their uses in school offices. This data was not collected in 1993. Macintosh computers accounts for over three-fourths of the computers in school offices. IBM running both DOS and Windows accounts for nearly all the other computers in school offices as shown in Figure 14.

Figure 14



As would be expected, the uses of computers in school offices is somewhat different than the uses in classrooms, computer labs and libraries as shown in Figure 15. While the use of basic tool applications of word processing, databases and spreadsheets predominate in offices, one of the largest uses of computers in school offices is for student records. Electronic mail and telecommunications also are large functions of computer in school offices.

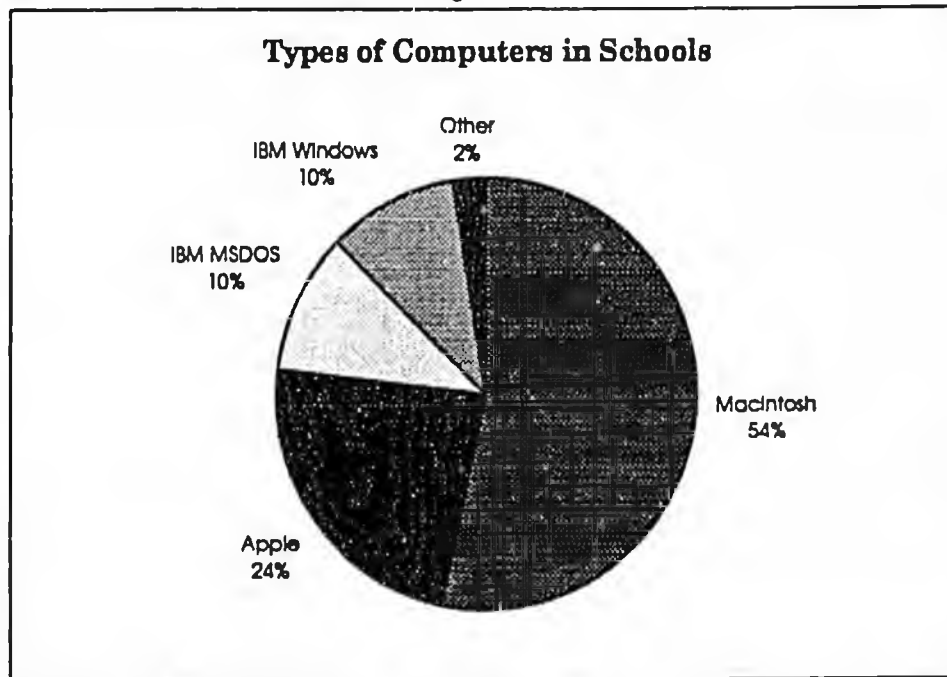
Figure 15



Total Computers

In 1993 many of the computers noted in all three general configurations were older Apple IIe and IIc computers especially in the classroom where Apples represented 45% of the total number of classroom computers. These computers were being used heavily for drill and practice. Two years later, it seems that many schools are upgrading those computers to Macintosh computers which generally are capable of higher level applications such as multi-media, desktop publishing, and other sophisticated uses. Figure 16 denotes the total percentages of all computers in schools by type of computers.

Figure 16



Totals from the 290 schools that responded to the survey:

Total number of labs	350
Highest number of labs in one school	10
Lowest number of labs in one school	0
Total Classrooms in Survey	4099
Grand Total Number of Macintoshes	7591
Grand Total Number of Apples	3351
Grand Total Number of IBM DOS	1488
Grand Total Number of IBM Windows	1461
Grand Total Number of CD-ROM Drives	2066
Grand Total Number of Other Computers	336
Average number of computers in typical classroom	2

"Our school uses our computers to the limit of their capability and capacity. We need, desperately to upgrade..."

Calculators:

The National Council of Teachers of Mathematics (NCTM) has recommended students have available to them and use calculators to perform certain kinds of math functions. Principals were asked to report on the number of different kinds of calculators in their schools. Most calculators in use by schools are basic four function calculators. Figure 17 shows the breakdown of the types of calculators reported in the school. During the two years since the last data was collected, there has been a slight rise (1.5%) in the percentage of scientific calculators reported, but the most significant rise has been in the percentage of graphing calculators which is up by over 6%.

Figure 17

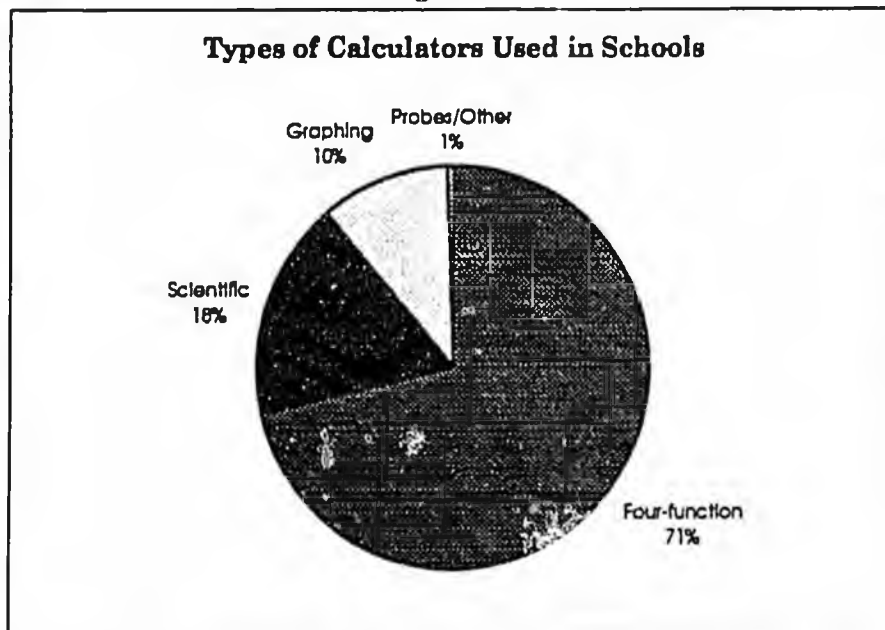


Figure 18 shows the prevalence of each type of calculator in different types of schools. This information shows as secondary schools increase the sophistication and difficulty of mathematical calculations, the total calculators include a mix from four-function to graphing. In elementary schools the most prevalent calculator is the simpler four-function calculator.

Figure 18

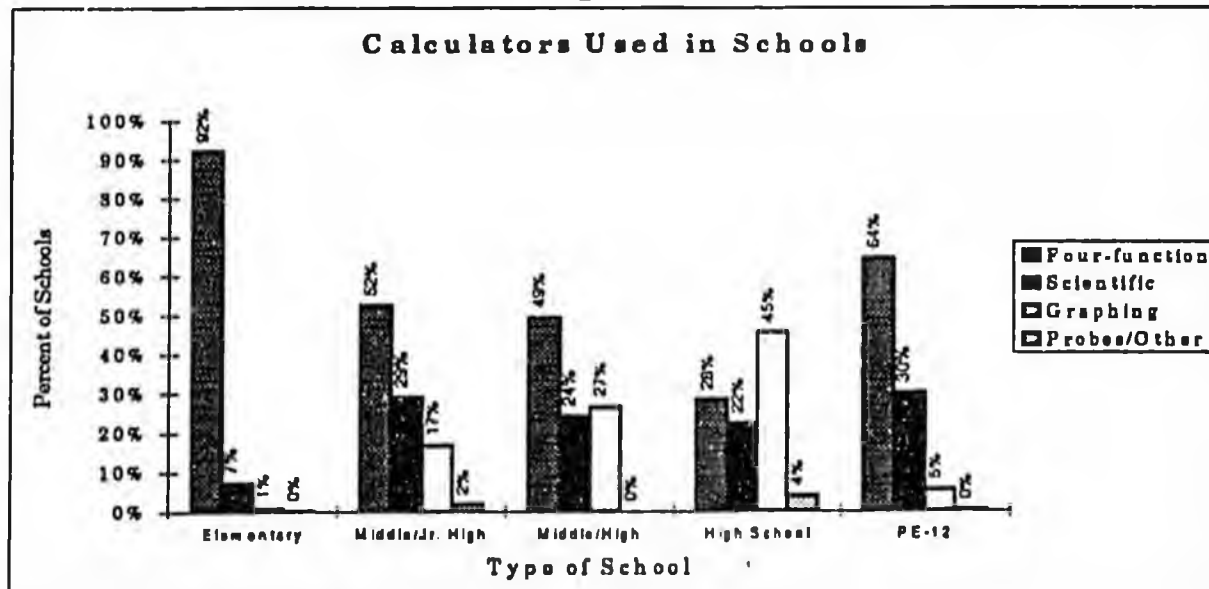
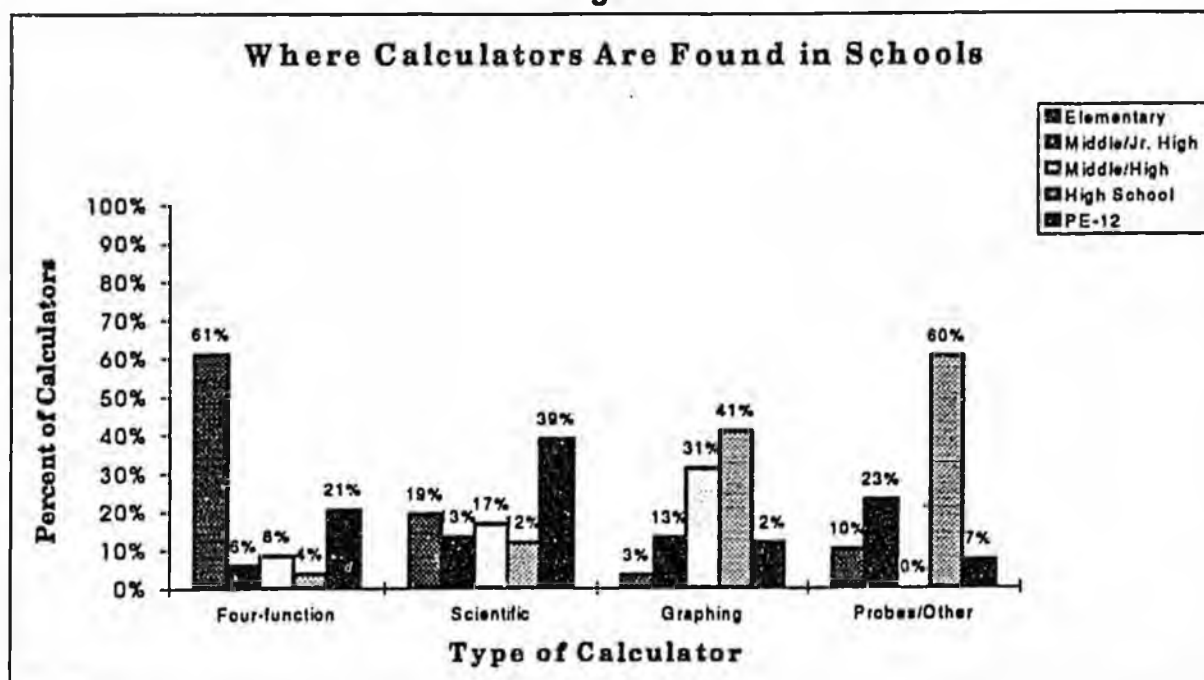


Figure 19 shows where the total number of calculators are located. The largest percent of scientific calculators are found in PE-12 schools, the rest are evenly distributed among all types of schools. However, middle/jr high schools represent only a little over 6% of survey respondents but have 17% of the scientific calculators and 31% of graphing calculators.

Figure 19



Graphing calculators which are generally used in more advanced classes are found predominantly in secondary schools with a total of 41% located in high schools. Again, since high schools account for less than 10% of survey respondents, this shows that the highest concentration of these tools is where one would expect them. No graphing calculators were reported in 234 schools or 81% of the schools responding to the survey. New technologies such as calculator based laboratory devices are almost totally found in high schools (60%).

Many schools (50%) report that they encourage students to purchase and use their own calculators at school. An estimated 18% of students in schools responding to this survey use their personal calculators in school.

Telecommunications and Connectivity

Schools in Alaska as elsewhere are increasingly becoming wired for networking and telecommunications. In this section of the survey, principals were asked to report on the networking capabilities and telecommunications use in their schools.

Networked Buildings:

In order to realize the efficiencies of technology that businesses already employ, schools need to be wired for networks that ideally, are capable of carrying voice, video as well as data. Networking allows for easy exchange of information within the building via internal e-mail as well as sharing resources such as

software and CD-ROM's. In addition, networks will allow entire buildings to access telecommunications services without the expense of individual classroom data lines and modems.

"We passed a bond and will begin a renovation project this spring. Included in the plans area LAN, cable wiring and telephones in every classroom as well as a computer lab and automating the school library."

The 1995 survey data shows that 24% of the respondents have some type of building network. Of those with a network, 93% of those networks are carrying data while only 28% include voice (telephone) and 19% of those networks include video. This information indicates that most Alaska schools still need to be wired for networks

Internet and On-line Access

Schools were asked if they connect to the Internet, a vast connection of computer networks which allows users to access information. Nearly half (47%) of schools responding to the survey indicate that they connect to the Internet. Of those however, only 11% or 15 schools connect directly through high speed lines; 82% report that they dial-in to the Internet. Eleven percent also report having a library connection to the Internet. Internet access has made great strides over the past two years; in 1993 only 10% of the schools responding to the survey indicated that they use the Internet.

"We are a rural village in Alaska. I have seen Netscape in action. I feel it is a disservice to the students in villages not to have the same capabilities."

Schools were also asked to identify the kinds of on-line services they use to connect to the Internet. More schools responding to this question use the University of Alaska Computer Network (UACN) than any other identified network (54%). Other means of connecting to Internet services include the State Library Electronic Doorway (SLED) which was named by 45% of the respondents, and commercial services which was identified by 29% of those responding to this question.

"We were fortunate to have limited access to the UACN for part of the year. Our budget cannot meet the high cost of phone line hook-up to file servers in the state."

Telephones and Modems:

In order for most schools in Alaska to access on-line computer services and networks it is necessary for schools to have telephones and modems. Modems were reported available in 444 of the 4099 classrooms covered by this survey (11%). Forty-five schools (16%) reported having no modems which is a marked improvement from the 1993 survey which showed that 38% of the schools had no modems. The maximum number reported available for instructional use by schools was 4.

Answers to the question what percentage of your classrooms have phones generated a wide disparity of responses. Thirty-eight percent (38%) of the schools responded that none of their classrooms had phones which compares to nearly 50% in 1993. Twenty-two percent (22%) of the schools responded that all of their classrooms had phones, an increase of only 2% in the last two years. Thirty-six percent (36%) of all the classrooms covered by the survey have telephones. Schools also reported on the number of fax machines in their buildings; 87% of the buildings report having fax machines. This represents a significant increase of the availability of Fax machines in schools over the past two years; in 1993 only 38% of the schools had FAX machines.

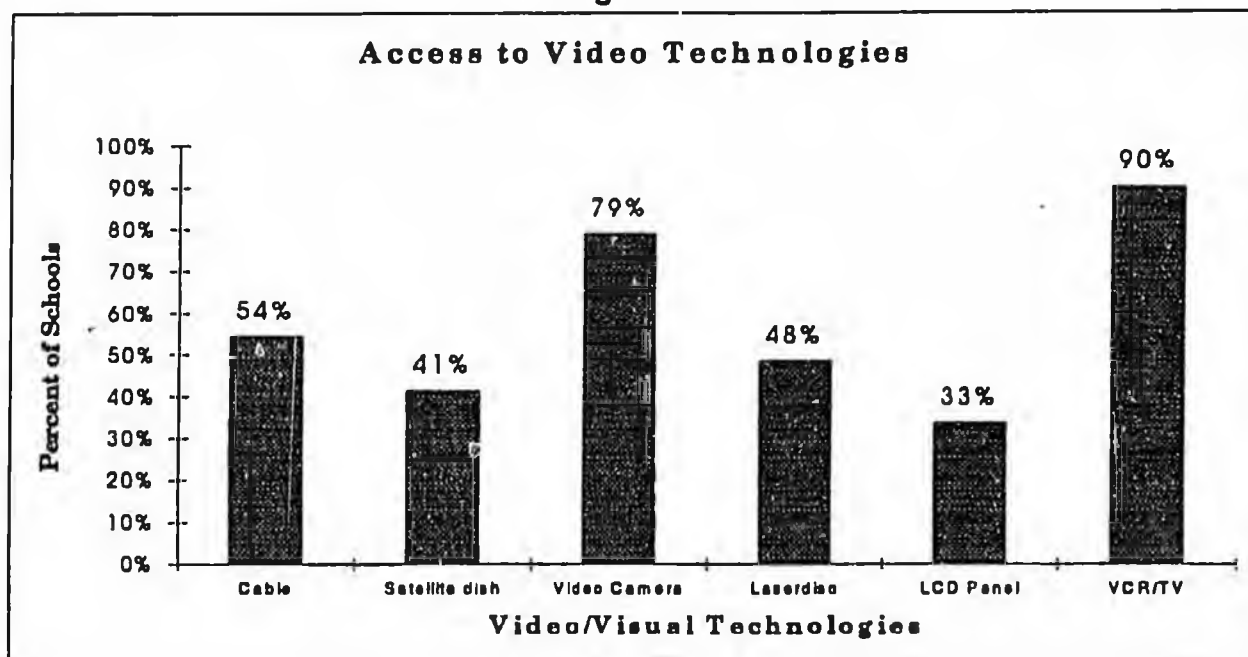
Video/visual based Technologies:

Digitization and compression of video technologies are quickly changing the video technology landscape. Use of digitized video over fiber optic networks will allow 500+ channels of entertainment and information in the home. Plans are currently underway for services on these networks that will allow video on demand, more extensive home shopping, electronic medical house calls, electronic banking, access to databases and electronic libraries, and highly interactive games. These new networks have vast potential for use by schools, however most schools do not have the infrastructure to capitalize on the potential these networks hold for education.

"This is a 100% Native school. We are isolated. There is little opportunity to find out about the outside world. There is a very high dropout rate. Increased technology-multimedia could decrease the dropout rate by providing alternative methods of instruction for these children."

Figure 20 provides information on the prevalence of video based technologies in the responding schools. In the two years since the last survey, increases in the availability of these technology has increased by an average of 10%. VCR's/monitors have increased by 9%; satellite dishes by 7%, videocameras by 7%, laserdiscs have increased by 11% and LCD panels have increased by 10%.

Figure 20



Most schools responding to the survey reported having the "basic" technology of videocassette recorders and monitors; although 34 schools (11%) report having no video cassette recorders (VCR's) or television/monitors, the maximum reported was 45 VCRs/monitors in a school.

"Distance education (Star Schools) is imperative for the rural school education program."

As is the case with telephones in schools, there is wide disparity among schools with cable television. While 54% of the schools report they have a cable connection to the school, only 32% of the classrooms represented by the survey have access to cable. The lack of cable in many schools may be due in part

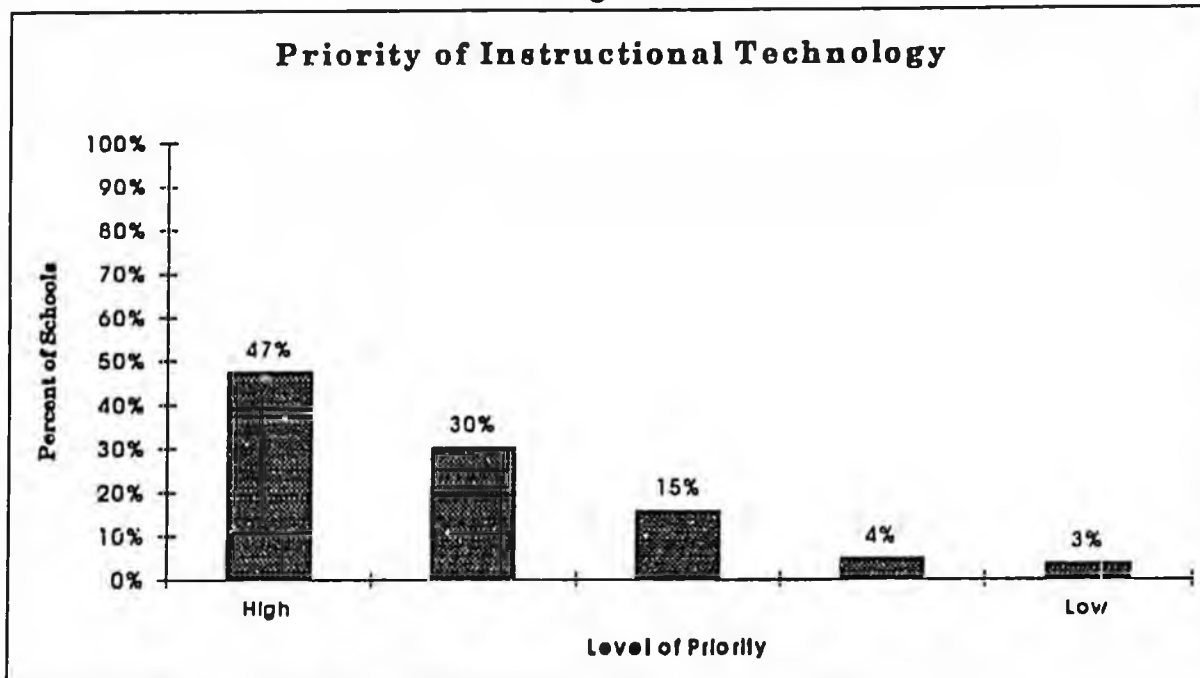
to the lack of availability of cable in some rural communities. Of the schools without cable connections, 44% report having satellite dishes which allow them to access video programming. Of all the schools with satellite dishes, 75% are participating in a satellite distance learning program.

Technology Priorities/Planning

"The staff is committed to upgrading our technology capabilities as a high priority."

Principals were asked how high a priority instructional technology is for their schools on a scale of 1 to 5 with 5 being a high priority. Figure 21 shows that nearly half the schools responding feel that instructional technology is a high priority. The percentage of school placing technology as a medium-high to high priority (77%) is lower than superintendents giving technology a medium high to high priority (94%).

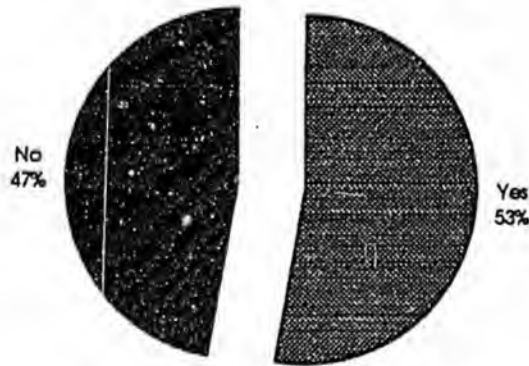
Figure 21



When asked whether the schools had a technology plan, 53% indicated they do have a plan as indicated in Figure 22

Figure 22

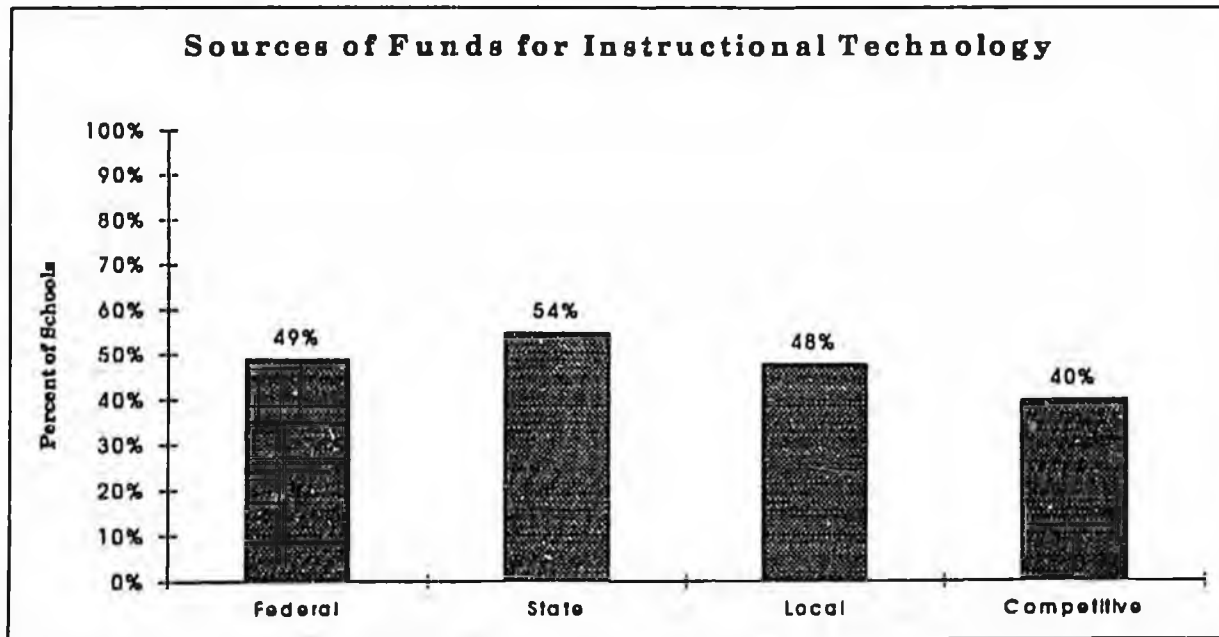
Percent of Schools with School-Based Technology Plans



"Because of the lack of a district technology plan and lack of funding (our) students are not getting the same level of technology education as other students in (the district). We desperately need to make this a state priority for ALL students in Alaska."

Principals were also asked to indicate the funding sources they use to pay for the technologies in their buildings. Figure 23 indicates that schools are using a wide variety of sources to fund educational technology. Additionally, 19% of the responding schools identified using other sources of funding for technology. The most often cited funding used in the "other" category was PTA funds followed by donations by businesses and individuals.

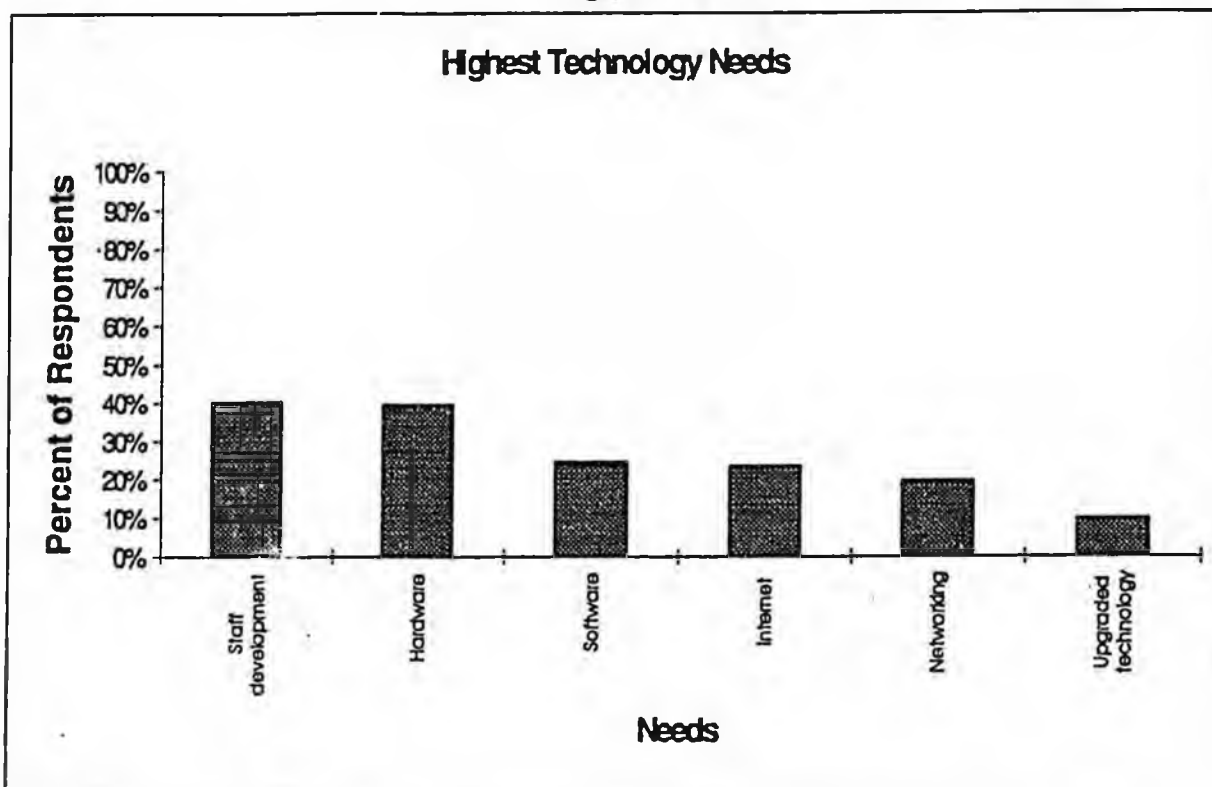
Figure 23



"Help! As you can see, our district and school is in the technological dark ages without the money to finance new equipment. We need to enter the 21st Century now. Please send money!"

Finally, principals were asked to indicate their three highest needs in the instructional technology. Summaries of the top needs indicate that teacher training/staff development continues to be the highest need for schools closely followed by additional hardware. Figure 24 shows the top areas of need as reported by the schools. While the top need of staff development was also the top need expressed in the 1993 survey, other needs rising to the top such as Internet access and networking are new and reflect changes in technology within the last two years.

Figure 24



"Students need to be exposed to more computers and technology at a younger age. The older students need more classes offered to make them more comfortable using modems, computers, on-line services and learning to use the technology in their daily lives. Staff needs training, both ongoing and intensive distance education to teach how to use equipment to maximize productivity."

Table 4 shows the categories of responses to this question, the number of times that response was mentioned and the percent of respondents mentioning each need.

**Table 4
Technology Needs**

Greatest Technology Need	Number of Responses	Percent of Respondent
Staff development	116	40%
Hardware	114	39%
Software	70	24%
Internet	67	23%
Networking	56	19%
Upgraded technology	28	10%
Funding	18	6%
Integration into curriculum/teaching strategies	18	6%
Equity--access to all teachers and learners	16	6%
Multi-media	16	6%
Computer labs	15	5%
Technical support personnel	15	5%
Phones and modems	12	4%
Basic computer knowledge/skills	10	3%
Phone lines capable of high speed data	10	3%
Technology plan/goals	10	3%
E-mail	7	2%
Star Schools/STEP Distance classes	7	2%
Telecommunications/communications	7	2%
Computer teacher	5	2%
Student support/training/skills	5	2%
Student and instructor use	4	1%
Buy-in and support	4	1%
Research/reference	4	1%
Technology curriculum/courses	4	1%
Vocational--CAD and Principles of Technology	4	1%
Word processing	4	1%
Library upgrades	3	1%
Time	3	1%
video training/production	3	1%
Cable/video connection to classrooms	3	1%
Record keeping	2	1%
Affordable communications	2	1%
Early childhood programs	2	1%
Interactive learning--compressed video	2	1%
Keyboarding	2	1%
Release time	2	1%
ILS	2	1%
CAI	2	1%

"We need quality training time for teachers!!! We have the technology but the elementary teachers need training."

Other needs that were mentioned by only one respondent included easy computer use, information retrieval, ITV information, keep pace with technology, lower pupil-teacher ratio, management of computer software, on-line knowledge, people to share information with, space, technology maintenance, technolust, network CD-ROM applications, information access skills, computer and economic education,

drill and practice, technology education lab equipment, increased capability, office technology, parent training, equipment repair, data processing, statewide goals.

Survey Conclusions/Recommendations:

Both the majority of superintendents and principals responding to the survey gave educational technology a high priority for their districts, but fewer indicated an articulated plan. Because research has shown that successful integration of technology depends on a careful plan, it is recommended that school districts place a priority on technology's role in the schools develop a plan for its acquisition and implementation. A well developed plan includes not only a strategy for acquisition of technology, but also strategies for integration into the curriculum, training of staff, technology upgrade and replacement plans, budgets, timelines, and staffing patterns necessary to support technology. Planning must account for the long-term process of adoption of new technologies before integration into schools is successful.

"Our Goals 2000 (plan) focuses on instructional technology and training teachers and students."

Training is an issue that stands out in the survey as the number one need. If teachers are to become effective in educating students for the lives they will lead, they must be confident and competent users of technology. In addition, teachers should be adept at using the various tools available to enable ALL students to meet high standards. Technology has a role in assisting teachers to reach students of various learning styles. Technology's power for teachers is enormous, but can only be realized if teachers have the skills to make the best uses of these powerful tools..

The survey also indicates that there continues to be wide disparities across the state and even within school districts in the numbers and kinds of technologies available for teacher and student use. Some schools have few technologies or predominantly older technologies for instructional use, while other schools have sophisticated labs, CD-ROM players, digitized cameras, telephones in every classroom or other technologies with which to work. As with the hardware, access to basic infrastructures that make educational resources available to teachers and students on demand is widely disparate. Telephone lines, cable television or satellite dishes, and building networking make accessing on-line data networks, video resources, distance education resources, and much more possible. Again an equity issue is raised when some students and teachers have access to such materials and others do not. Equal educational opportunities cannot be realized when some students are more prepared for life and work opportunities in the information age than others. The state should examine means by which all districts and schools will have access to the funding needed to the resources needed to effectively implement technology in the classroom.

"Basic Infrastructure (Is) needed In the state to provide universal access for schools, educators and students. State funding will be needed for technology support."

Schools and districts have become much more knowledgeable in the past two years regarding the potential uses of new technologies and information resources. Because of this knowledge, they show a high frustration level when access to these resources lags behind their needs. These frustrations were shown in the comments regarding funding sources and the desire to move forward more quickly than currently is happening.

"It would be nice to see all the school district funded for instruction and equipment rather than a hit and miss program."

The major barrier to implementing technology in schools continues to be funding for all schools to acquire hardware and software, train teachers and implement and use networks. Funding also limits the use of the Internet and other information services. The state should continue to examine its role in providing

funding sources or incentives for the implementation of technology for all students in the state regardless of location.

Connectivity is increasingly a need in Alaska schools; yet for many rural and remote sites the notion of connecting to the Internet at high speeds without incurring long distance costs is simply a dream. The telecommunications infrastructure in rural Alaska needs to be modernized, but the population base of the areas most in need seemingly do not warrant the investment by telecommunications providers. The state should examine its role in modernizing the telecommunications infrastructure needed across the state for schools to connect to the Information Highway. Awareness and interest in access to the Internet has created a gap between the desire of schools to connect and the available telecommunications infrastructure. The state should work on behalf of schools to work with regulatory agencies, telecommunications providers and others to ensure that schools have access to high speed, affordable telecommunications connectivity.



Lawrence A. Wiget, Ed.D.
 Director, Government Relations/Legislative Liaison
 Anchorage School District
 4600 Debarr Road
 Anchorage, Alaska 99519-6614
 (W) 907 269-2255 (FAX) 907 269-2107

ANCHORAGE SCHOOL DISTRICT POSITION STATEMENT

CS House Bill No. 216

"An Act establishing the Alaska education technology program."

The Anchorage School District supports the establishment of the Alaska education technology program and urges support of by the legislature of House Bill 216.

It has been a year to the day since I first addressed this committee in support of HB 216. Since that time, much has changed:

- Our ability to share information with each other around the State and around world has advanced through awareness and use of the Internet. The development of new software tools now makes accessing this information network by students and teachers more user friendly. The Department of Education, the Anchorage School District, The Municipality, the State Library and other organizations, individuals, and businesses from around the State have recognized the importance of this communication avenue and have all created access points to their organizations on the Internet.

This global information highway and the skills to communicate over it, as well as access to the rich store of information on it, must be made available to students. Unfortunately, what has not changed in the past year, is our ability as a District and as a State to provide equitable access to Information Highway for all students.

- Since I spoke to you last year too, the Anchorage School District has developed a comprehensive Instructional Technology Plan with the help of an Instructional Technology Committee consisting of over 40 community and school personal.

Post-It™ brand fax transmittal memo 7671		# of pages ▶	2
To	Rep Toohay +	From	Anch L10
Co.	Rep Randy	Co.	
Dept.	Co-Chair - HESS	Phone #	252-4114
Fax #	465-2137	Fax #	

Our vision begins with a student in the classroom, a student who is more eager to learn because of the instructional technology tools he or she is using. This student is connected to the District network which is connected to the global information highway. Computers are used to access information, solve-problems and develop ready-to-work skill, and in seeking local support for instructional technology.

However, the technology available to our students in the Anchorage School District to fulfill this vision is inadequate and outdated. The majority of our students are not being trained and do not have access to the technology they will encounter when they enter the world of work or higher education. The District budget, cannot provide adequate funds to meet existing or future District instructional technology needs, or eliminate the present inequity among our schools in providing access to technology, information resources, and communication. To this end, we are putting forth to the voters of Anchorage this Spring a \$35,420,000 Instructional Technology Bond. The outcome of our efforts in this arena will not be known until after the April 16th election..

The proposed legislation will establish a technology fund. It will lay the foundation for future monies to be set aside for technology needs statewide. It recognizes the importance of technology to the future of Alaska, ~~and it recognizes the need for local commitment to technology by providing a matching grant.~~

It is a starting point in meeting the instructional and communication technology needs of Alaskans. We urge you to support House Bill 216.

Thank you!

Alaska State Legislature House of Representatives

COMMITTEE ASSIGNMENTS:

LABOR & COMMERCE, CHAIRMAN
MILITARY & VETERANS AFFAIRS, CHAIRMAN
COMMUNITY & REGIONAL AFFAIRS
RESOURCES
INTERNATIONAL TRADE / TOURISM
LEGISLATIVE COUNCIL



INTERIM:
10928 EAGLE RIVER ROAD, SUITE 141
EAGLE RIVER, AK 99577
PHONE (907) 694-8944
FAX 694-8949

SESSION:
STATE CAPITOL
JUNEAU, AK 99801-1182
PHONE (907) 465-3777
FAX (907) 465-2819

SPONSOR STATEMENT

HB 216

Establishing the Alaska Education Technology Program

Alaskans must be competitive in the market place. Technology is advancing at an incredible rate. This legislation provides a vehicle for Alaskans to learn and stay abreast of technological changes.

House Bill 216 establishes the Alaska Education Technology Program. Through this program, schools and public libraries can apply for matching grants to purchase computer equipment and similar advanced technology. It also makes matching grant funding available for advanced technology training for educators and librarians so that they can train Alaskans on the technology.

This legislation allows the legislature and the private sector to work together in establishing an endowment fund from which the annual earnings of the fund may be appropriated by the legislature for the program.

Your support for this legislation is encouraged. It will help Alaskans stay competitive.



Representative Pete Kott



SPONSOR STATEMENT

Alaska State Legislature House of Representatives

COMMITTEE ASSIGNMENTS:

LABOR & COMMERCE, CHAIRMAN
MILITARY & VETERANS AFFAIRS, CHAIRMAN
COMMUNITY & REGIONAL AFFAIRS
RESOURCES
INTERNATIONAL TRADE / TOURISM
LEGISLATIVE COUNCIL



INTERIM:
10928 EAGLE RIVER ROAD, SUITE 141
EAGLE RIVER, AK 99577
PHONE (907) 694-8944
FAX 694-8949

SESSION:
STATE CAPITOL
JUNEAU, AK 99801-1182
PHONE (907) 465-3777
FAX (907) 465-2819

SECTIONAL ANALYSIS HB 216 - 9-LS0765\F

Sec. 1 - Findings and purpose of the legislation.

Sec. 2 - Adds a requirement of including a report on education technology and program evaluation in the annual "School District Report Card to the Public".

Sec. 3 - Establishes the Alaska Education Technology Fund and defines its uses. It also defines grant application requirements for both schools and libraries. This section also provides the definition of required participation in grant program. It also lays out the powers and duties of the Commissioner of Revenue as treasurer of the fund.

Sec. 4 - July 1, 1995 effective date.



Representative Pete Kott



To: Members of the HESS Committee
From: John A. Rusyniak, Professional Educator
Re: HB 216
Date: 21 March, 1995

I urge you to support the HB 216 regarding technology in education.

For the last 19 years I've been teaching students. It's amazing to see the impact technology has had on this process. It wasn't long ago that we were teaching high school students how to keyboard, now we are doing it at the primary grades.

Technology hasn't always made things easier, but look at what we are now able to do. Kids accessing information on Internet, modems connecting people around the globe, multimedia presentations, and the list goes on and on.

Once again, I urge you to support the HB 216 !

To: Members of the HESS Committee
From: Bronk G. Jorgensen, Student
Re: HB 216
Date: 21 March, 1995

I urge you to support the HB 216 regarding technology in education.

For the last 6 years I've been using technology as a student at Tok School. It has helped me prepare school work in ways that others without a computer can not. For the last couple of years I have been helping teachers in the school on tech. Problems they have. There is a need for more technology in school for both students and teachers so we all can access information on Internet, use modems to connect to people around the globe, produce multimedia presentations, and the list goes on and on.

Thank you and once again, I urge you to support the HB 216!



Alaska State Legislature

House of Representatives
 COMMITTEE ON HEALTH, EDUCATION
 AND SOCIAL SERVICES

DATE: MARCH 21, 1995

PLACE: Capitol Room 106

SUBJECT OF MEETING:
*HB 216: Establishing Alaska
 Education Tech Programs*

NAME	REPRESENTING	BUSINESS/PERSONAL MAILING ADDRESS	ZIP	(H) PHONE	(W) PHONE	DO YOU WANT TO TESTIFY?	WHAT SUBJECT/ WHICH BILL?
Karen Jordan	ASTE	11575 Mendonhall/Lip Rd	99801	789-1803	463-1167	(Y) N	216
Karen Chane	State Library/DOE	P.O. Box 110571	99811		465-2910	(Y) N	216
ROD MOURANT	RapKott				2811	(Y) N	216
						Y N	
						Y N	
						Y N	
						Y N	
						Y N	
						Y N	
						Y N	

03/27/95 LEGISLATIVE TELECONFERENCE NETWORK LTN1405'
07:53:20 N CONFERENCE DISPLAY PAGE 05 - PARTICIPANTS BY SITE L362
TCN 50439 T/C DATE: 03/21/95 TIME: 14:00 to 15:30 STATUS: 6 ADJOURNED
SITE: LIO ANC VTS ANCHORAGE

1	LARRY	WIGET	ANCH SCHOOL DIST	T 02 HB 216
	4600 DEBARR RD	ANCHORAGE	AK 99519	(907)269-2255
2	KATHI	GILLESPIE	ANCH SCHOOL BRD	T 02 HB 216
	2741 SEAFARER LOOP	ANCHORAGE	AK 99516	(907)345-5335
3	PATRICK	REINHART		O 01 HB 65
				(907)000-0000

MSG: 1410 NO FURTHER INFORMATION
ENTER Pg# 09 PF2 NextC# ynnnn PF3 Exit PF5 Update PF7 Bwd PF8 Fwd PF12 Quit

03/27/95 LEGISLATIVE TELECONFERENCE NETWORK LTN1405
07:54:26 N CONFERENCE DISPLAY PAGE 05 - PARTICIPANTS BY SITE L362
TCN 50439 T/C DATE: 03/21/95 TIME: 14:00 to 15:30 STATUS: 6 ADJOURNED
SITE: LIO FBX VTS FAIRBANKS

1	MR. SKIP	VIA	FNSB SD	T 02 HB 216
	PO BOX 25128	ESTER	AK 99725	(907)479-4934
2	MS. SUE	HULL	AK PTA	T 02 HB 216
	1630 WASHINGTON DRIVE	FAIRBANKS	AK 99709	(907)479-5729
3	MS. CAROL	MEARES		T 02 HB 216
	PO BOX 9	ESTERQ	AK 99725	(907)479-3247

MSG: 1410 NO FURTHER INFORMATION
ENTER Pg# 09 PF2 NextC# ynnnn PF3 Exit PF5 Update PF7 Bwd PF8 Fwd PF12 Quit

03/27/95 LEGISLATIVE TELECONFERENCE NETWORK LTN1405
07:54:47 N CONFERENCE DISPLAY PAGE 05 - PARTICIPANTS BY SITE L362
TCN 50439 T/C DATE: 03/21/95 TIME: 14:00 to 15:30 STATUS: 6 ADJOURNED
SITE: LIO SIT VTS CRA CRAIG

1	MS. VICKIE	KELLY	CRAIG SCHOOL	T 02 HB 216
	PO BOX 800	CRAIG	AK 99921	(907)826-3274