FCMAT

Siskiyou County Office of Education

Special Education Review

January 10, 2007

FISCAL CRISIS
& MANAGEMENT ASSISTANCE TEAM

Administrative Agent
Larry E. Reider
Kern County
Superintendent of Schools

Chief Executive Officer
Joel D. Montero

FCMAT

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January 10, 2007

Barbara Dillmann, Superintendent
Siskiyou County Office of Education
609 Gold Street
Yreka, CA 96097

Dear Superintendent Dillmann,

In September 2006, the Fiscal Crisis and Management Assistance Team (FCMAT) entered into an agreement with the Siskiyou County Office of Education for a study of its special education programs. Specifically, the agreement asked FCMAT to:

1) Review the staffing ratios and efficiency of the Siskiyou County Office Special Education Programs and provide recommendations for improvement, as necessary.
2) Review the identification processes for special education students, including the use of preventative measures for intervention by school districts within Siskiyou County and provide recommendations for improvements, as necessary.
3) Review the SELPA AB 602 funding formula and provide examples of alternative funding formulas that may be more cost effective.

The attached fiinal report contains the study team's findings and recommendations.

We appreciate the opportunity to serve you and we extend our thanks to all the staff of the Siskiyou County Office of Education.

Sincerely,

Joel D. Montero
Chief Executive Officer

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Foreword

FCMAT Background

The Fiscal Crisis and Management Assistance Team (FCMAT) was created by legislation in accordance with Assembly Bill 1200 in 1992 as a service to assist local educational agencies in complying with fiscal accountability standards.

AB 1200 was established from a need to ensure that local educational agencies throughout California were adequately prepared to meet and sustain their financial obligations. AB 1200 is also a statewide plan for county offices of education and school districts to work together on a local level to improve fiscal procedures and accountability standards. The legislation expanded the role of the county office in monitoring school districts under certain fiscal constraints to ensure these districts could meet their financial commitments on a multiyear basis. AB 2756 provides specific responsibilities to FCMAT with regard to districts that have received emergency state loans. These include comprehensive assessments in five major operational areas and periodic reports that identify the district's progress on the improvement plans

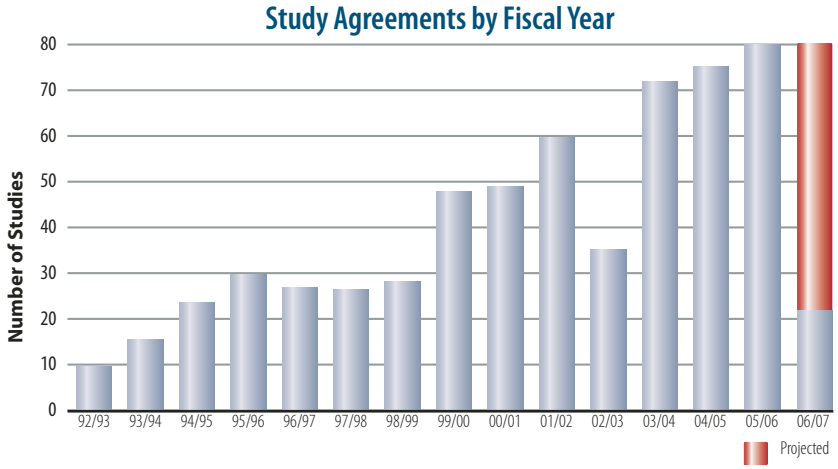
Since 1992, FCMAT has been engaged to perform more than 600 reviews for local educational agencies, including school districts, county offices of education, charter schools and community colleges. Services range from fiscal crisis intervention to management review and assistance. FCMAT also provides professional development training. The Kern County Superintendent of Schools is the administrative agent for FCMAT. The agency is guided under the leadership of Joel D. Montero, Chief Executive Officer, with funding derived through appropriations in the state budget and a modest fee schedule for charges to requesting agencies.

Total Number of Studies 604
Total Number of Districts in CA..... 982

Management Assistance	555	(91.89%)
Fiscal Crisis/Emergency	42	(6.95%)
Emergency Loan	7	(1.16%)

Note: Some districts had multiple studies

(Rev. 9/21/06)



Introduction

Background

The Siskiyou County Office of Education serves 28 school districts with a total of 6,480 students in grades K-12. The county covers an area of approximately 6,000 square miles and has a total population of approximately 45,000. The county as a whole has experienced slightly declining enrollment over the past five years.

In August 2006, FCMAT received a request from the district for management assistance services. The scope and objectives of the study agreement approved by the district in November 2006 are as follows:

1) Review the staffing ratios and efficiency of the Siskiyou County Office Special Education Programs and provide recommendations for improvement, as necessary.
2) Review the identification processes for special education students, including the use of preventative measures for intervention by school districts within Siskiyou County and provide recommendations for improvements, as necessary.
3) Review the SELPA AB 602 funding formula and provide examples of alternative funding formulas that may be more cost effective.

Study Team

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* As a member of this study team, this consultant was not representing his employer but was working solely as an independent contractor for FCMAT.

Study Guidelines

A FCMAT study team visited the county office on October 24-26, 2006 to conduct interviews, collect data and review documents. This report is a result of those activities and is divided into the following sections:

I. Executive Summary

II. Staffing

III. Student Identification

IV. Special Education Funding

Executive Summary

The Siskiyou County Office of Education serves 28 school districts spread throughout a county with an area of approximately 6,000 square miles. Ten of the 28 districts have an ADA of less than 100. Some special education staff drive 2 to 2 ½ hours to arrive at a rural school district and thus have limited time to provide direct services to the students. In addition to the sparse population and geographic challenges, some districts have declining enrollment, which will result in an increasing fiscal burden. This situation poses unique challenges to providing cost-effective special education services.

To streamline services and reduce costs, the county office acts as the SELPA administrative unit (AU); the SELPA administrator is also the administrator of the county office special education programs and services. The SELPA and the county office special education administrative services staff consists of an administrator, three program managers and an administrative assistant. This is a cost-effective arrangement; however, the county office should consider clearly defining and distinguishing the SELPA administrative roles and duties from those of county office program administration for each of these positions.

The SELPA executive committee members and SELPA steering committee members do not participate consistently in special education management and oversight. Because of the distances involved, it takes some district principals and superintendents a full day to travel to and from the county office of education for a two hour meeting. Participation may be improved through increased electronic communication such as Web sites, e-mail lists, telecommunication and Internet video conferencing.

Through partnerships with the districts, the county office provides effective support services, including school psychologists and school nurses. Forest reserve funds help the districts and the county office provide additional services that would otherwise not be available because of limited state and federal funding.

The additional instructional aide time in the itinerant resource specialist programs (RSPs) is an effective use of human and financial resources, allowing an aide to provide instruction at one site while the resource specialist teacher is at another site. The requirement that at least 80% of resource specialist teachers have an instructional aide is being met.

The number of emotionally disturbed pupils and the number of pupils with autism have increased countywide over the past two to three years. Statewide statistics show that these disability categories have the highest rate of population increase, so it is probable that the number of pupils with these disabilities will continue to grow in Siskiyou county. The SELPA should prepare for the fiscal and programmatic effects of this growing population.

Temporary Unit SELPA funds are provided to some districts by the SELPA Director outside the allocation formula. A SELPA-adopted procedure for documenting needs, developing specific goals and monitoring effectiveness needs to be reviewed.

Some of the districts in the county have declining enrollment and may require increased county office special education services. Districts with low enrollment (less than 100

ADA) can have difficulty meeting the needs of low performing students with nonsevere disabilities.

County office program managers are assigned program specialist duties based on their area of expertise and geographic location. As a result, the program managers travel through each others' geographic areas, duplicating travel time and reducing direct services to students. The county office should consider assignments based on geographic area to reduce travel time and improve efficiency of services.

FCMAT found that Siskiyou county has the lowest administrative staff-to-student ratio of 11 comparable counties surveyed. Most of Siskiyou county's special education programs and services appear to operate efficiently, with the exception of speech and occupational therapy caseloads. The county office should consider reviewing speech and language caseloads to ensure that they meet statutory requirements.

The SELPA's service delivery plan places responsibility for some regional programs and services with the county office. Because the funding model does not fully fund the county office for the cost of providing these program and services, the county office is required to charge the districts of residence or districts of attendance for the excess cost.

The chief concern of the county office and school districts is not with special education program delivery, but with the increasing costs of special education programs. During the 2006-07 school year, the total billback is projected to increase from $569,000 to more than $932,000. In addition, the SELPA is facing significant revenue issues including, but not limited to, the following: projected reduced funding as a result of the reduced cost of living adjustment for special education; a projected decrease or elimination of the forest reserve funding program; a potential loss of revenue from MAA billing; and continued declining enrollment countywide.

The SELPA has developed a systematic method of allocating special education resources to program and services providers throughout the county. However, it does not appear that the SELPA has given sufficient attention to a number of factors that might ensure a more equitable allocation.

It was reported that one or more school districts in the SELPA may be using little or none of their general fund to support special education programs, and that some districts are carrying over state funds from year to year. This could indicate that those districts are receiving an inequitable funding allocation. Thus the allocation model should be reviewed. No district should benefit from the funding allocation at the expense of other members.

The county office retains a percentage of the state allocation and uses it to provide regional and other programs. A lack of review and revision in this area can lead to an inequitable allocation to the county office, which will in turn affect the amount of billback to districts.

In an attempt to address the potential inequities of the present funding model, the SELPA applied an inflating factor of 10% for schools with an ADA greater that 100. However,

districts which operate their own programs make up less than 5% of the total countywide ADA. Setting an ADA level of 100 as the minimum standard for a district to provide its own RSP may not be cost effective. In the past, the RSP unit was based on a school with an ADA of 600. Increasing the efficiency of the RSP model could lower costs and decrease billbacks to districts. The SELPA should consider raising the minimum ADA level to approximately 600 to increase the cost effectiveness of the delivery system.

The use of state sparsity unit funding (Temporary Unit funding) has also increased the billback. The county has lost some of the value of the sparsity units because of declining enrollment. The SELPA should consider reviewing sparsity unit funding allocations and the extent to which funds could be more strategically allocated to support RSP services or to reduce billback amounts.

As it continues to provide services on behalf of the SELPA, the county office must make every effort to improve communication, transparency and trust. Continuing fiscal challenges make it essential that clear communication and understanding exist between the county office and the districts.

Rather than operating with a budget that is developed and implemented unilaterally by the county office or a district providing regional services, the budget development process should be multilateral, involving both the districts and the county office. The SELPA should form an operations oversight committee comprised of representatives of both program and business staff from the county office and the districts, including the county office's external business services director. The committee should meet regularly to jointly develop and/or review proposed special education fiscal and program issues. The oversight committee would develop final recommendations for consideration by the steering committee. Because it is in the best interest of all member agencies that no members accrue undue benefit at the expense of others, an oversight committee could also recommend the allocation of state and federal resources in a manner that is fair and equitable.

The county office billback to districts has increased from about 10% of the total spent on special education in 2004-05 to nearly 15% of the projected total for 2006-07. The statewide average is approximately 30%; therefore, the county office's billbacks are less than half of the statewide average percentage.

Findings and Recommendations

Staffing

Special Education Local Plan Area (SELPA)

The county office acts as the SELPA Administrative Unit (AU), and the SELPA administrator is also the administrator of the county office special education program services. There is not a distinction between SELPA services and county office services. SELPA and county office special education program funds are not separated so that an audit trail for each program can be established.

The SELPA is responsible for ensuring free and appropriate public education (FAPE) by means of equitable special education services for all students with identified disabilities. This includes direct special education instruction and related services such as occupational therapy and transportation.

The SELPA is responsible for providing regional services and program specialist activities denoted in California Education Code (E.C.) sections 56368 and 56836.23, to districts and the county office operating special education programs.

The SELPA and county office special education administrative services consist of an administrator, three program managers and an administrative assistant. SELPA support staff and county office special education program staff positions are not tracked or coded in the budget in a way that separates the SELPA costs and functions from those of the county office.

The functions of the SELPA program specialist (E.C. 56368) and the county office special education program managers have been combined into three program manager positions, which provide program support for all special education programs and services within the SELPA and supervise county office special education program personnel. Most SELPA districts are not aware of the staff's combined SELPA and county office responsibilities.

At FCMAT's request, the SELPA and county office administration were able to document full time equivalent (FTE) administrative staffing and, using records of travel and service, was able to separate SELPA and county office staffing FTEs as follows:

Table 1: SELPA Staffing

Certificated	FTE		Classified	FTE
Administrator	0.56		Executive Secretary	0.30
Program Manager	0.30		Total:	0.30
Program Manager	0.45			
Program Manager	0.20		**SELPA Administration**	**FTE**
Total:	1.51		Certificated	1.51
			Classified	0.30
			Total:	1.81

The SELPA qualifies for sparse SELPA funding, which provides a higher base funding level than funding based on average daily attendance (ADA). Two SELPA districts employ their own directors of special education: Siskiyou Union High School District and Yreka Union Elementary School District.

SELPA executive committee members and SELPA steering committee members do not participate consistently in special education management and oversight. Participation may be improved through increased communication via Web sites or e-mail lists; meeting dates and times that do not conflict with other administrative or business meetings; and including county business office staff on the committees.

Recommendations

The SELPA should:

1. Document the duties and responsibilities of the SELPA staff, distinguishing SELPA duties and responsibilities from those of the county office programs.
2. Communicate to all participating agencies the separation of SELPA and county office program duties and responsibilities.
3. Develop a SELPA funding, budget and expenditures process that is separate from that of the county office special education program.
4. Promote consistent participation in the SELPA executive committee and SELPA steering committee.

Staffing Ratios

County Office Special Education Administration

Table 2: County Office special education administrative staffing

Certificated	FTE		Classified	FTE
Administrator	0.31		Executive Secretary	0.54
Program Manager	0.20		**TOTAL:**	**0.54**
Program Manager	0.50			
Program Manager	0.45		**COE Program Administration**	FTE
Total	**1.46**		Certificated	1.46
			Classified	0.54
			Total	**2.00**

The SELPA and county office program personnel FTEs in Tables 1 and 2 may not equal 100% because these personnel are also assigned to other programs such as workability grants or transportation, which may have separate funding streams.

Administrative Staffing Comparisons

FCMAT compared the Siskiyou County Office of Education's special education program administrative staffing with that of 10 other California county offices of education.

Table 3: Comparison of County Office Special Education Administrative Staffing

County	Pupil Count*	Administrative Staffing Ratio
Mariposa	28	0.0714
San Luis Obispo	496	0.0306
Imperial	475	0.0275
Ventura	515	0.0244
San Joaquin	693	0.0226
Stanislaus	1,188	0.0160
Glenn	406	0.0158
Humboldt	357	0.0106
Napa	320	0.0087
El Dorado	1,069	0.0083
Siskiyou**	**293**	**0.0068**

* December 2005 Pupil Count. ** Siskiyou administrative data developed October 25, 2006.

Table 4 adjusts the pupil count of two comparison counties to match that of Siskiyou county, then applies the Siskiyou county administrative ratio to the two comparison counties. The result shows that Siskiyou has the lowest ratio of administrative personnel to pupils.

Table 4: Comparative Data

County Office	Pupil Count	Administrative Ratio	Adjustment to Siskiyou COE Count	Siskiyou COE Administrative Ratio Comparison
Humboldt	357	0.0106	1.2184	0.0083
Napa	320	0.0087	1.0922	0.0074
Siskiyou*	**293**	**0.0068**	**1.0000**	**0.0068**

Some instructional staff members coordinate programs and services, such as the infant program. Program managers and county office instructional staff indicated that there is minimal contact between managers and instructional staff. A review of program managers' duties may be appropriate to determine if staff are being evaluated as required, and to determine the frequency of site program visits, classroom observations and contact with instructional staff.

The county office does not currently maintain separate SELPA and county office special education program budgets. Separate budgets would allow the county office billback process to better identify excess costs related to the SELPA and county office programs. This would benefit the county office and the districts by giving school district superintendents a better understanding of the distinct funding provided by the SELPA and the county office, and allowing for better communication regarding the allocation of special education funds.

Recommendations

The county office should:

1. Clearly delineate the duties and responsibilities of the SELPA in accordance with E.C. sections 56368 and 56836.23.
2. Clearly define and distinguish SELPA and county office program administration, including associate superintendent and program manager positions and duties.
3. Develop and monitor separate SELPA and county office special education program budgets. Account for staff who serve both entities in each budget.
4. Review the program managers' duties and responsibilities to ensure that program monitoring and staff supervision is adequate.

Support Services

The county office employs the school psychologists and nurses who provide services to the districts. These services are funded through direct service funds, district contract services and special education funds.

Siskiyou County is considered a rural, sparse county; support service personnel are assigned to various sites in 28 school districts. The county's geography and sparse population increase support staff members' travel time and decrease the amount of time spent with students. The October 2005 CBEDS count indicates a countywide enrollment of 6,480 K-12 students.

School Psychologists

The school psychologists provide district and county office special education personnel with support services that include participating in student study teams (SSTs), assessing students, and developing behavior management plans.

Appendix I of the Siskiyou county SELPA document, titled *Fee-for-Service Formulas,* contains the following information regarding psychologists:

II. Fee-for-Services for Psychologist
   1. The County Office shall maintain 4.0 full time equivalent (FTE) psychologist positions.
      a. The county office shall fund 1.0 FTE from Special Education Support Funds.
      b. The County Office shall fund 1.0 FTE from District Services Funds.
      c. Districts shall fund 2.0 FTE, pro-rated based on ADA.

School Nurses

School nurses provide mandated and special education services, including taking developmental histories, monitoring medications, and developing, implementing and monitoring specialized physical health care procedures for students with severe medical impairments. School nurses also provide mandated regular education services, which are not evaluated in this report.

The health and student services division consists of 10 registered nurses and a health services director, who is also a registered nurse. Of these, a total of 1.20 FTE, or 217 days, are assigned to and funded by county office special education programs to provide mandated and specialized physical health care needs. The nursing program also trains and monitors 3.50 FTE classified personnel, who provide direct medical interventions to students.

FCMAT compared the county office's countywide support services with data in the AB 722 *Study of Pupil Personnel Ratios, Services, and Program* (California Department of Education, July 2003). This comparison is shown in Table 5.

Table 5: Comparison of Siskiyou countywide support services with data in AB 722 Study of Pupil Personnel Ratios, Services and Program.

Siskiyou County			
Pupil Support Services	**Support Personnel FTE**	**CBEDS**	**Staff-to-Pupil Ratio**
School Psychologists	4.00	6,480	1:1,620
School Nurses	10.00	6,480	1:648

AB 722 Study			
Pupil Support Services	**Support Personnel, Survey Ratio**	**Adequate Ratio**	**Siskiyou County Ratio**
School Counselors	1:877	1:515	NA
School Psychologists	1:1,588	1:1,273	1:1,620
School Social Workers	1:9,486	1:4,081	NA
School Nurses	1:1,893	1:1,255	1: 648

The AB 722 study defines *Survey* and *Adequate* as follows:

> **Survey** ratios were obtained by dividing the sum of each district's current enrollment by the number of FTEs currently employed as reported on district surveys.
>
> **Adequate** ratios were calculated by comparing current enrollment with the number of FTEs the school districts considered necessary to provide adequate pupil support services and programs.

The data in Table 5 indicate that the county office's ratio of pupils to school psychologists is 2.02% higher than the survey ratio and 27.26% higher than the adequate ratio; the county office's ratio of pupils to school nurses is 65.77% lower than the survey ratio and 48.37% lower than the adequate ratio. School nurse staffing for special education appears more than adequate.

Recommendations

The county office should:

1. Monitor and review psychologists' assignments to ensure an equitable distribution of travel time and maximum service to all districts and county office programs.
2. Continue to monitor and maintain appropriate specialized health care services to students with identified special education needs.

County Office Instructional Program Staffing Ratios

Non-Severe Programs and Services

Table 6: County Office Special Education Non-Severe Pupil Count History by Disability

Non-Severe Unduplicated Pupil Count	Disability			Total
Year	SLI	OHI	SLD	
2001-2002	184	8	62	254
2002-2003	145	8	34	187
2003-2004	135	7	29	171
2004-2005	131	12	22	165
2005-2006	144	8	31	183

SLI=speech/language impaired; OHI=other health impaired; SLD=specific learning disability.

Resource Specialist Program

This category of services is for students with mild to moderate disabilities and needs. Demand for county office services for severe learning disorders decreased steadily until the 2005-2006 school year. This may be because the county office assumes responsibility for programs and services for districts in which average daily attendance (ADA) drops below 100.

Table 7: County Office Resource Specialist Staffing and Caseload

Resource Specialist Program Staff	FTE	Pupil Count	Caseload
Certificated	3.10	83	27
Classified	3.00		
Totals:	6.10	83	13.61

*District data, November 3, 2006.

The county office resource specialist program caseload does not exceed 28 students, placing it in compliance with E.C. section 56362. The program provides itinerant services to one or more district school sites and to the court school, which also has a three-hour on-site instructional assistant.

The requirement that at least 80% of resource specialist teachers have an instructional aide is also being met. The additional instructional aide time may be needed because in an itinerant program such as this an aide may provide instruction at one site while the resource specialist teacher is at another site.

Designated Instructional Services

Speech and Language Impaired

The county office provides itinerant unduplicated special education speech and language services to students in county office and district special education programs.

Table 7: County Office Speech and Language Impaired program data

Level	Certificated FTE	Unduplicated and Duplicated Pupil Count*	Caseload	California Education Code Caseload	Under/ Exceeds
Preschool	1.09	63	58	40	43.94%
K-22 years	5.71	321	56	55	2.29%
Totals:	**6.80**	**384**	**56**		

*District data, November 3, 2006

An unduplicated count records pupils are not receiving other special education services. A duplicated count denotes students who are receiving other special education services.

The preschool caseload exceeds the average of 40 specified in E.C. section 56441.7. The K-22 year old caseload slightly exceeds the average of 55 specified in E.C. 56363.3.

California Education Code section 56363.3 allows for a higher caseload if the local plan specifies a higher caseload and provides reasons for it. The SELPA's current local plan does not specify a higher average caseload.

In the absence of education code regulations, the School Services of California (SSC) benchmarks in Table 8 can be used as a guideline for caseloads in the listed areas of service.

Table 8: School Services of California Designated Instructional Services Caseload Guidelines

Service	Pupils	Certificated or Licensed Staff
Adaptive PE	45-55	1
D & HOH Itinerant	20-30	1
Individual and Small Group Instruction	20-28	1
OT Assistant Services	20	1
Occupational Therapy	10-15	1
Physical Therapy	25-30	1
Social Worker	20-30	1
Speech & Language: Preschool	40 max	1
Speech & Language: K-12	55 avg	1
Visually Handicapped Itinerant	10-30	1
Vocational Education	40-75	1

Source: April 2005 Expenditures Workshop, School Services of California.

Occupational Therapy

The county office has two full time occupational therapists who provide itinerant occupational therapy services to 106 students, resulting in a caseload of 53 students per FTE, which is 353.33% higher than SSC guidelines.

Low-Incidence Disabilities

The low-incidence disabilities category includes students with sensory and specialized physical health care needs. These students require intensive services from highly qualified personnel with specialized training. The data indicate a steady increase in students and thus an increase in the need for these services and in costs, which will have significant fiscal effect on the SELPA.

Table 9: Low-Incidence Disabilities, Unduplicated Pupil Count

	Disability				
Year	**HH**	**Deaf**	**VI**	**OI**	**Total**
2001-2002	5	2	6	0	13
2002-2001	7	2	6	17	32
2003-2004	9	2	6	14	31
2004-2005	9	5	6	18	38
2005-2006	11	5	8	19	43

HH= hard of hearing; VI=visually impaired; OI=orthopedically impaired.

County office deaf and hard of hearing services are itinerant and have 1.0 FTE certificated staff and 0.67 FTE classified staff serving 21 pupils, placing the caseload within SSC guidelines.

County office programs and services for visually impaired pupils are itinerant, with 1.0 FTE certificated staff and 2.0 FTE classified staff serving five infants, two preschoolers and 13 pupils in kindergarten through 22 years of age, placing the caseload within SSC guidelines. The pupil count for these services represents duplicated and unduplicated pupil counts. There has been a significant increase in the number of infants served, which will affect the preschool and K-22 year old programs in the future. In addition, extensive Braille services will be needed to meet the needs of blind pupils.

Pupils with moderate to severe cognitive delays in combination with any other disability are served in county office severe special day classes.

Table 10: Severe Disabilities, Unduplicated Pupil Count, 2001-2006

Year	Disability						
	MR	ED	DB	MD	AUT	TBI	Total
2001-2002	55	9	1	2	8	2	77
2002-2003	59	9	1	1	6	3	79
2003-2004	60	17	1	0	5	2	85
2004-2005	54	19	1	0	5	1	80
2005-2006	39	16	0	1	10	1	67

MR=mentally retarded; ED=emotionally disturbed; DB=deaf-blind; MD=multiple disabilities; AUT=autism; TBI=traumatic brain injury.

The number of emotionally disturbed pupils and the number of pupils with autism have increased over the past two to three years. These figures include an increasing number of preschool students with autism, indicating a need to develop intensive services to serve these pupils in the future. These increased services will have a significant fiscal effect on the SELPA.

Table 11: School Services of California Severe Special Day Class Caseload Guidelines

	Typical Caseloads		
Disability	Pupils	Certificated	Classified
Autism	8	1	2
Hearing Impaired	8-10	1	2
Multi-Handicapped	8-10	1	2
Orthopedically Impaired	8	1	2-3
Emotionally Disturbed	8-10	1	2
Developmentally Delayed	10-12	1	2

Source: School Services of California Survey of Caseloads, Expenditures Workshop, April 2005.

County office infant/cochlear programs and services include 1.0 FTE certificated staff and 0.68 FTE classified staff serving nine infants, two preschoolers and two pupils in kindergarten through 22 years of age. Staff provide home-based services to nine infants and site-based services to four students with cochlear implants. Certificated staff members coordinate services for the infant program.

County office preschool programs and services include 2.0 FTE certificated staff and 3.96 FTE classified staff serving 32 pupils. The program serves pupils who are autistic (AUT), visually impaired (VI), orthopedically impaired (OI), speech/language impaired (SLI) and mentally retarded (MR). Caseloads exceed SSC guidelines for individual disability areas.

County office preschool/K-12 programs and services include 1.0 FTE certificated staff and 2.46 classified staff serving nine pupils with disabilities that include SLI, AUT and MR.

Caseloads are within SSC guidelines for students with multiple disabilities, although this class serves pupils with different disabilities rather than multiple disabilities.

County office special day classes include 10.0 FTE certificated staff and a total of 20.45 FTE classified staff serving 97 pupils. The classified staff FTEs include 14.75 FTE instructional aides, 3.33 FTE one-to-one assistants, and 2.40 FTE medical assistants. Special day classes serve students with emotional disturbances (ED), AUT, MR, OI, specific learning disabilities (SLD), SLI, hard of hearing (HH), VI and other health impairments (OHI). The SSC caseload guidelines cannot be used because the county office serves students based on functioning level rather than on specific disabilities; however, the county office average caseload of approximately 10 pupils per certificated FTE is within the normal range for special day classes. The large number of classified staff is an indicator of the severity of disabilities and the services required.

Services for ED students include 2.0 FTE certificated staff and 1.92 classified staff serving 12 pupils, resulting in a caseload which is lower than SSC guidelines. Some pupils identified as ED are served in other special day classes.

Overall, county office programs provide appropriate staffing ratios for special education students. Some staff members are assigned multiple duties to meet a wide variety of student needs, and some programs may be understaffed when geographic factors and the variety of disabilities and functioning levels are taken into account.

Recommendations

The county office should:

1. Continue to monitor special education programs and services to ensure appropriate services to students and compliance with education code requirements.
2. Continue to monitor special education staffing and service levels; reassign, increase or decrease staff as appropriate.

Efficiency of Programs and Services

SELPA Programs

Temporary Unit SELPA funds are provided to districts by the SELPA Director outside the allocation formula. A SELPA-adopted procedure for documenting needs, developing specific goals and monitoring the effectiveness of their service needs to be reviewed.

Declining enrollment in some districts requires increased county office special education services. These districts sometimes have difficulty meeting the needs of low performing students with non-severe disabilities. Possible solutions include a multiple-district special day class (SDC) program for students with mild to moderate disabilities, which encourages districts to combine their FTE allocations to provide local services; and an SDC program for students with mild to moderate disabilities, operated by a regional agency such as the county office or a larger district.

Some districts have allowed special education personnel to perform duties and responsibilities outside of special education. This use of resources reduces funding allocations for special education programs and services in other districts and may affect the maintenance of effort (MOE) calculations when the district attempts to modify services or combine services with another district.

Program managers are assigned program specialists' duties based on their area of expertise and geographic location. As a result, program managers travel through each other's geographic areas, duplicating travel time and reducing direct service to SELPA districts and county office staff. A survey of SELPA and county office instructional staff regarding the strengths and weaknesses of program managers in their role as program specialists could help identify needs. Consistent communication can also be helpful and should be encouraged. Assignments based on geographic area can reduce travel time and travel that overlaps other program managers' geographic areas.

County Office Instructional Programs and Services

The county office has the lowest administrative staff-to-student ratio of the 11 county offices surveyed by FCMAT (see Table 3). County office programs and services are arranged based on disability categories: mild, moderate/severe, and low-incidence. Students are placed based on functioning level and geographic location. This results in students with a variety of disabilities in the same setting, teachers with multiple credentials, and an increase in staffing to provide one-to-one assistance.

Past staff reductions have resulted in an increased caseload for special day classes and for programs served by itinerant staff.

The county office provides special education programs and services for students with non-severe, severe and low-incidence disabilities throughout the SELPA. County office programs include infant and preschool programs and services; itinerant resource specialist and itinerant speech and health services for pupils with non-severe disabilities and spe-

cific learning disabilities; special day classes for pupils with severe disabilities; and itinerant services for pupils with low-incidence disabilities, including deaf, hard of hearing, visual impairment and orthopedic impairment. Program managers monitor county office programs and services and evaluate staff. In addition, program managers are assigned program specialists' duties based on their area of expertise and geographic location. As a result, program managers travel through each other's geographic areas, duplicating travel time and reducing direct contact time with students.

The county office staff, program manager and one district are attempting to develop internet audio and video communication to provide direct instruction from a remote location, with an instructional assistant at the student's school site.

Most county office special education programs and services appear to operate efficiently. With the exception of speech and occupational therapy, caseloads are within SSC guidelines and comply with the California Education Code. A number of qualified staff serve more than one disability category, making it possible to serve pupils with moderate to severe disabilities in one classroom rather than having separate classes for each disability category.

The SELPA and the county office have responded to changing and declining special education enrollment by combining special day classes for moderate to severe disabilities; closing some special day class programs and providing student services at a different campus; decreasing resource specialist teacher and aide FTEs to match reduced caseloads; and eliminating a full time California special education management information systems (CASEMIS) clerk position. In addition, the county office and SELPA have shifted funding for materials, protocols and conferences to Medi-Cal Administration Aid (MAA) and lottery funds, and implemented a secondary special day class for ED pupils. Staffing levels in several areas have been increased because of increased pupil counts. Areas of increase include visually impaired, hearing impaired, speech language and hearing, instructional assistants, transportation, specialized health care and one-to-one assistance.

Recommendations

The SELPA should:

1. Revise the SELPA funding allocation plan to ensure equitable funding.
2. Revise the FTE allocation plan and monitor allocations to ensure appropriate use of personnel.
3. Review and monitor program managers' ability to provide program specialist services to SELPA and county office instructional staff and students. A survey of instructional staff, development of consistent channels for communication and assignment based on geographic areas should be considered.

The county office should:

4. Consider reviewing and modifying program managers' supervisory responsibilities. This should include a survey of staff regarding supervision and contact needs, possible assignment based on geographic area to reduce travel time, and use of instructional staff to develop programs and services for specific areas in which they have expertise.
5. Decrease the speech and language caseload to meet statutory requirements.
6. Continue monitoring enrollment trends; implement changes to meet students' needs. This includes modifying staffing patterns based on enrollment trends and geographic needs.
7. Monitor and document reductions and increases in programs services in relation to non-severe, severe, and low incidence categories.
8. Monitor the progress of internet audio/video instructional communication and replicate it if it is successful.
9. Monitor the fiscal status of non-severe, severe, and low incidence services.
10. Monitor and track SELPA and county office programs and services.

Student Identification

FCMAT interviewed county office administrative, support, certificated and classified personnel, as well as district superintendents and site administrators.

School districts' regular education programs are responsible for alternative educational programs such as Title 1, tutoring, learning centers and after-school reading programs. District regular education programs are also responsible for 504 plan interventions, student study teams (SSTs) and response to intervention (RTI).

All districts have student study teams, but there is a lack of consistent alternative programs and intervention strategies prior to or as an alternative to referring students for special education assessment. Many districts have a variety of student assistance programs; some districts have none. Implementation of 504 plans is not consistent throughout the county's 28 school districts. Similarly, implementation of interventions is not consistent across all county districts.

FCMAT found that caseloads for occupational and speech therapy appear to be above the statewide average, which may indicate that over-identification is taking place.

A cooperative effort by the county office curriculum and instruction department and the county office special education program could help develop consistent intervention strategies and alternative services for students, thus reducing the number of students referred for special education assessment. The two departments could also help districts consistently develop, implement and monitor 504 plans and student study teams.

Identification and Assessment Support Personnel Duties

The county office supervises, coordinates and monitors all school psychologists, who provide regular education and special education services to all SELPA school districts. Duties include participation in SST meetings, providing behavior and environment strategies, and reviewing students' intervention documentation prior to referral for assessment.

School psychologists and other school personnel assess student eligibility for the severe and low-incidence disability categories. It appears that school psychologists are adhering to student eligibility criteria; the decline in the specific learning disability category pupil count may be evidence of this.

Nurses' duties include participating in the SST process when health issues are present, producing a developmental history during assessment referral, developing and training staff, and implementing and monitoring specialized physical health care procedures.

County office itinerant personnel provide direct special education instruction in smaller school districts. Services include RSP, speech services, and low-incidence services for deaf, hard of hearing, visually impaired, and orthopedically impaired students.

County office itinerant special education instructional personnel may participate in the SST process by providing intervention strategies and reviewing intervention documents prior to referral for assessment, but do not chair SST meetings.

The county office supervises, coordinates and monitors itinerant speech personnel, who provide services for pupils from birth through 22 years of age. It appears that speech personnel adhere to eligibility criteria, assessing the educational impact of a student's area of concern, and the effect on the student's educational progress.

County office occupational therapists were not available for FCMAT to interview because of scheduling conflicts. However, FCMAT reviewed documents and interviewed other staff and administrators. When enrollment data is compared with SSC guidelines, it indicates a high incidence of occupational therapy service for a small student population. Interviews with other personnel indicated that occupational therapy assessments may not be based on the student's area of concern or affect educational progress.

Recommendations

The county office should:

1. Review and monitor compliance with mandated special education timelines and assessments.
2. Implement a cooperative working arrangement between the county office curriculum and instruction department and the county office special education program to assist districts in developing consistent intervention strategies, alternative services, 504 plans and student study teams.
3. Continue to monitor assessment personnel to ensure that appropriate referral and assessment guidelines are followed, and that assessments adhere to eligibility criteria. When students do not qualify for special education services assessments, guidance should be provided for regular education personnel to help remediate areas of concern.
4. Ensure that assessment personnel are using speech and occupational therapists to provide classroom interventions that may reduce referrals for special education services.
5. Consider conducting an independent assessment to validate the disability when a high number of students are enrolled for a specific service.
6. Investigate a possible over-identification of students requiring occupational therapy services.

Special Education Funding

The primary factor contributing to the county office's request for this study is the rapidly increasing cost of the special education program since billbacks were initiated three years ago, and the increases in billbacks to districts. During the 2006-07 fiscal year, the total billback is projected to increase from $569,000 to more than $932,000.

The SELPA also faces significant revenue issues, including the following:

- Projected reduced funding as a result of the reduced cost of living adjustment (COLA) rate for special education under the current state funding formula.
- A projected decrease or elimination of the forest reserve revenues.
- Potential loss of revenue from MAA billing.
- Continued declining enrollment countywide.

Because there is a relationship between the resource allocation plan and the billback model, it is relevant for the SELPA to consider its current allocation model for federal and state special education funds, and identify alternatives that might be employed.

Special education programs and services have four sources of funding:

1. Local support from the general unrestricted funds of school districts.
2. Revenues from local property taxes.
3. State aid from Part 30 of the California Education Code, commencing at Section 56000.
4. Federal local assistance from the Individuals with Disabilities Education Act (IDEA), renamed the Individuals with Disabilities Education Improvement Act (IDEIA), last reauthorized as P.L. 108-446 in December of 2004.

Funding Allocation Models: Principles and Background

Under both state and federal law, the local school district has the primary responsibility to provide funding and services for students with disabilities. State and federal policymakers view the revenue limit apportionment generated by all students as the primary source for funding special education programs and services. The general unrestricted funds of local school districts and, in counties where they have been levied, local property tax revenues for special education, are the primary sources for carrying out this responsibility.

The purpose of property tax revenues is to fund special education programs and services provided by the county office. It could be said that these revenues are similar in purpose to the general unrestricted funds of local school districts. If tax revenues exceed the cost of special education programs and services, the county office is to distribute the excess revenues to the local school districts participating in the SELPA.

Part 30 of the California Education Code provides state aid, while IDEIA provides federal local assistance. These funding sources are intended to lessen the financial burden

on school districts. It should also be noted that there are two additional federal laws that impose these requirements on local school districts without providing any financial support: section 504 of the Rehabilitation Act of 1973 places these requirements on any agency receiving federal funds, and the Americans with Disabilities Act (ADA) requires public and private entities to make reasonable and necessary physical and service accommodations for persons with disabilities.

When defining a funding allocation model, a SELPA must keep in mind that it is allocating funds intended to lighten the financial burden on school districts, not to fully fund the excess costs of providing special education programs and services. The county office provides special education programs and services on behalf of school districts, but does not have a general fund. Therefore, the county office must bill the districts for costs in excess of the state and federal funds it receives.

This local support is often referred to as "encroachment," which is a misnomer because both the state and federal funding models are intended to supplement local support, not supplant it. The final report on the new funding model for special education from the state Legislative Analyst's Office, the Department of Education and the Department of Finance makes this clear:

> We found in our field visits that in many LEAs there is conflict between general and special education concerning the responsibility for providing services for pupils with disabilities. Some LEA administrators believe that students with disabilities are the sole responsibility of the state and federal governments and resent using any local revenue limit funding for special needs pupils. This viewpoint ignores the fact that the state provides a revenue limit for every pupil and works counter to providing a seamless educational system for all pupils.
>
> A principle of our proposal is that federal, state, and local education agencies will continue to share responsibility for funding special education. State and federal funding is intended to support a portion of LEA costs for providing special education for children with identified needs. There will continue to be a local funding share in providing education to these children. [Emphasis added]
>
> *New Funding Model for Special Education: Final Report*
> Legislative Analyst's Office, Department of Education, Department of Finance

The Code of Federal Regulations 34, Section 300.202, *Use of Amounts*, also specifies that funds are for excess costs:

> (a) *General.* Amounts provided to the LEA under Part B of the Act—
> (1) Must be expended in accordance with the applicable provisions of this part;
> (2) Must be used only to pay the excess costs of providing special education and related services to children with disabilities, consistent with paragraph (b) of this section; and
> (3) Must be used to supplement State, local, and other Federal funds and not to supplant those funds. [Emphasis added]

Like almost every district in California, the county office and the SELPA districts are spending more on special education than is received from state and local sources.

In January 1974, the California State Board of Education adopted the California Master Plan for Special Education. While much has changed over the last 32 years, the purposes of the fiscal model remain intact:

> The objectives essential to the construction of an equitable finance plan for special education are as follows:
>
> 1. Provide adequate resources to assure equality of educational opportunity for all individuals with exceptional needs.
> 2. Provide levels of support for special education programs which will promote programs and services of equal quality.
> 3. Provide encouragement for the development of comprehensive programs.
> 4. Promote both program and fiscal accountability.
> 5. Clarify fiscal relationships between state, county, and district.
> 6. Ensure equity in support levels among various program components.
> 7. Provide adjustments in support levels to reflect changing costs.
> 8. Provide support based on needs of pupils enrolled in special education-funding based on specified programs and services rather than on categorical disability groupings.
> 9. Ensure that reporting and auditing policies and procedures are meaningful for evaluation and program development.
> 10. Provide methods for monitoring and evaluating quality control in special education.
>
> California Master Plan for Special Education, California State Board of Education, Jan. 10, 1974, Pages 36-37. [Emphasis added.]

Thus the fiscal model is a plan used by the SELPA to distribute state aid and federal local assistance to its members in a manner that equitably relieves the fiscal burden each member has in providing a free appropriate public education (FAPE) to its students with disabilities, ensuring that each such student has equal access to the FAPE he or she requires.

The Siskiyou County SELPA's service delivery plan places responsibility for some regional programs and special education services with the county office. Because the funding model does not fully fund the county office for the cost of providing these programs and services, the county office is required to charge the districts of residence for the excess cost. This is a common practice throughout California, whether it is based on an off the top attempt to fund the county office or a fee-for-service structure.

There are only four ways to pay for programs and services provided by one agency in behalf of another:

1. Payment can be made up front on some agreed upon basis.

2. Payment can be made on an ongoing basis throughout the year.
3. Payment can be made upon the completion of the provision of services.
4. Payment can be made using any combination of the above methods.

An effective funding allocation/billback model will do the following:

- Foster trust among SELPA members.
- Provide for easy verification of cost data.
- Be transparent and understandable to all concerned.
- Balance the full continuum of services required by the target population with the impact on a single district of one or a small number of students with very expensive needs.
- Address the costs associated with varying disabilities in such a way that the financial burdens of high cost programs and services don't severely affect one or two entities, but are shared by all.
- Ensure reasonable predictability and stability from year to year.
- Promote a sense of shared responsibility for all students and a collaborative effort on the part of the individual members toward that end.
- Ensure that budgets for regional or SELPAwide services are developed collaboratively by the provider and the districts.

Siskiyou County SELPA Funding Allocation Model

The Siskiyou County SELPA has developed a systematic method of allocating special education resources to program and service providers throughout the county. However, it does not appear that the SELPA has given sufficient attention to a number of factors that might ensure a more equitable allocation.

When considering revisions to its fiscal model, a SELPA may wish to take into account factors that increase the costs of special education programs and services, so as to ensure a more equitable distribution of state and federal funds.

Some special education programs and services are more costly than others. For example, a student with autism, deafness or serious multiple disabilities will require more labor-intensive services, resulting in higher staffing ratios and higher costs than students with speech disorders, who often require less frequent and intense intervention and may be served in a small group setting. The excess costs will be greater in the first instance unless the funding model provides for the difference in operating costs.

Socio-economic factors and bilingual/bicultural factors may also play a role. While districts in communities with a lower socio-economic status may experience a greater incidence of students with disabilities, districts in communities with a high economic status may experience greater costs as a result of parental expectations and procedural activities.

Given the intent of state and federal policymakers, mitigation of the fiscal burden should be considered in terms of equity rather than equality, and might consider factors such as the following:

- Providing special education services in the least restrictive environment (LRE).
- Responsiveness to changing demographics and service needs.
- Determining who will have primary responsibility for providing programs and services, based on the disability and the intensity of services required.
- Establishing cost factors for various disabling conditions based on their service needs.
- Considering factors such as socio-economic and bilingual/bicultural populations that may contribute to higher special education costs.
- Comparing the cost effectiveness of alternative strategies.
- Providing ways to reduce the amount and cost of staff travel.

Vigilance in matters affecting equity will help align the fiscal model with the uses intended for state and federal funds; the focus will be on alleviating the impact of excess costs, based on factors that may drive up those costs.

It was reported that one or more school districts in the SELPA may be using little or none of their general fund to support special education programs, and that some districts are carrying over state funds from year to year. This may indicate that those districts are receiving an inequitable funding allocation. Therefore, the allocation model should be reviewed. No district should benefit from the funding allocation at the expense of other members.

Only two districts appear to be receiving allocations of federal funds.

It appears that the Siskiyou County SELPA's fiscal plan, like that of many other SELPAS, was produced by a relatively simple transition from a statewide unit-based funding system to the current system of statewide ADA-based funding.

The county office retains a percentage of the state allocation and uses it to provide regional and other programs. It is does not appear that this percentage has been reviewed and revised regularly over the past seven years. A lack of review and revision can lead to an inequitable allocation to the county office, which will affect the amount of billback to districts. For example, enrollment has been declining and the local plan specifies that the county office is responsible for providing resource specialist program (RSP) services for districts with an ADA of less than 100. However, when a district's ADA falls below 100 its prior funding allocation is reallocated to other districts rather than to county office programs and services. This increases the county office's responsibility without increasing its allocation amount or percentage, resulting in a less equitable funding model and increased billbacks to districts.

In an attempt to address the potential inequities of an ADA-only funding model, the SELPA applied an inflating factor of 10% to the ADA proration for schools with an ADA

greater than 100; however, districts that operate their own programs make up less than 5% of the total countywide ADA. Charts in Appendix C illustrate the funding allocation rates to the districts in 1998-99 and 2005-06.

Setting an ADA level of 100 as the minimum standard for a district to provide its own resource specialist program (RSP) may not be cost effective. Table 12 shows the Siskiyou SELPA's Local Plan standards for RSP staffing. For comparison, pre-AB 602 funding standards for RSP instructional personnel service units at the low and high points of each ADA range are also listed.

Table 12: Local Plan and pre-AB 602 standards for RSP staffing

Allocation of RSP based on ADA			
	Siskiyou SELPA	**Pre-AB602 Funding Ratios**	
ADA	**RSP**	**at Lowest**	**at Highest**
<75	.2		0.123
75-100	.4	0.125	0.167
101-200	.75	0.168	0.333
201-350	1.0	0.335	0.583
351-500	1.5	0.585	0.833
600		***1.000***	***1.000***
501-650	2.0	0.835	1.083
651-800	2.5	1.085	1.333
801-950	3.0	1.335	1.583
>950	3.5	1.585	

The RSP unit was based on a typical school with an ADA of 600. The funding permitted the units to serve up to 4% of the countywide ADA, based on a funding rate of one unit for every 24 ADA. That funding and staffing standard is displayed in the italicized row in Table 12. As the table shows, the standards employed by the Siskiyou County SELPA are more costly than the standards underpinning the current funding model.

Increasing the efficiency of the RSP model could lower costs and decrease billbacks to districts. The SELPA may wish to consider raising the minimum ADA level to approximately 600 to increase the cost effectiveness of the delivery system. The SELPA may also wish to consider restructuring how the RSP is used. Education Code section 56361 requires that a RSP be included in the continuum of placement options, but also provides for a combination of programs, locations and means of instruction.

While the tendency is to view the RSP as synonymous with the resource specialists, Education Code section 56362 defines the RSP as a program which must be under the supervision of the resource specialists. Consequently, at schools with less than 400 or 500 ADA, the SELPA might consider creating programs which emphasize collaborative planning by regular class teachers and resource specialists. The programs would be super-

vised by the resource specialist and might include less direct instruction by the resource specialist, more use of trained paraprofessionals, and some level of telecommunication or distance learning. This would increase the caseloads of resource specialists, increase the level and skills of paraprofessionals, increase general education staff involvement, and reduce travel time and costs. Appendix E includes information on distance learning strategies, which could be developed in cooperation with neighboring counties in California and Oregon.

The SELPA might also consider implementing regional collaboratives or consortia. For example, the SELPA could establish one consortium composed of Siskiyou Union, Etna and Dunsmuir High School districts and their feeder districts, and another composed of Yreka High School District, its feeder districts and Butte Valley Unified School District.

Recommendations

The SELPA should:

1. Review and revise its allocation policy to ensure a greater degree of equity, with the understanding that allocations are intended to mitigate excess costs, supplementing local funding rather than replacing it. In striving to achieve equity, the following factors should be taken into account:
    - Varying levels of cost associated with specific disabilities or services.
    - The effects of district size and the presence or absence of the population or resources needed to provide programs or service in a cost-efficient manner.
    - The effects of distance between a district and the location of programs and services in which its students may participate.
    - Socio-economic factors which may affect the incidence and cost of providing services.
    - Whether or not a district fully uses its allocation of state or federal funds or charges non-special education costs to a special education goal.
2. Ensure that budgets for SELPAwide programs and services provided by the county office are developed using a multilateral process that includes representatives from the affected districts.
3. Review, evaluate, and revise as necessary the provision of RSP services. The cost effectiveness of the current model and alternative models should be thoroughly explored.

Sparsity Units (Temporary Unit funding)

The use of state sparsity unit funding (Temporary Unit funding) has also increased the billback. As a necessary small SELPA, Siskiyou County was able to accrue units in excess of the funding standards to meet needs resulting from the rural, sparsely populated nature of the county. In 1998-99, the sparsity units totaled 15.28, or 24.15% of the units that Siskiyou operated that year. Most of the sparsity units and 7.43 of the units categorized for special classes were used as RSP units. By 2005-06, the sparsity units in the state funding stream had increased to 25.71, or 40.62% of the total. However, as the table in Appendix D notes, this is an illustrative comparison only. In effect, Siskiyou County has lost some of the value of the sparsity units because of declining enrollment.

Although these sparsity units were intended to enable the SELPA to ensure equal access for students living in rural, sparsely populated areas, in September 1999 the SELPA determined the following:

> …As per the recommendation of the SELPA Funding Committee and the adoption of the Steering Committee, these funds will be allocated in the following manner:
>
> 1. $ 9,014 For the provision of one .20 FTE Speech Therapist or Nurse
>
> 2. $17,000 For the inclusion of one SH child in district program operated by district staff where one-to-one support for the child is required for the entire school day
>
> 3. $10,000 For the inclusion of one SH child facilitated by County Office of Education staff or second and subsequent children on district sites requiring one-to-one support for the entire school day by district staff
>
> 4. $ 5,000 For the inclusion of one SH child who requires at least 180 minutes of 1 to 1 support in district operated programs.

In 1999-2000, $206,098 was allocated for the above specified assistance. Of this amount, $54,084 went to the largest district in the SELPA, Yreka Elementary, which has an ADA of 1,154. The allocation for 2006-07 totals $220,000, $160,622 of which has already been directly allocated to districts. With an allocation of $60,622, Yreka Elementary has again been allocated the most.

The SELPA may want to review sparsity unit funding allocations and the extent to which funds could be more strategically allocated to support RSP services or to reduce billbacks.

In addition, if the SELPA continues to provide funding for one-to-one support services, it should consider determining the reimbursements at the end of the year. Decisions regard-

ing need should not be predicated on available funding; they should be guided only by the needs of the student. Determining the total amount available for allocation for the year but not accepting requests for reimbursement until May would ensure this focus.

Reimbursement should be based on a predetermined formula, with districts receiving prorated amounts if requests exceed available funds. The SELPA Administrator should review the reimbursement requests and make recommendations to the steering committee, which should make the decisions regarding funding.

Recommendations

The SELPA should:

1. Review the allocation of sparsity unit funding (Temporary Unit funding).
2. Review funding whenever program responsibilities shift from a district to the county office. The goal should be for funding to follow student needs.

Dual Roles of the County Office

Many of the issues the Siskiyou County SELPA faces have more to do with fiscal relationships between the districts and the county office than with disagreements over practices and policies among the members. Even in cases when disagreements involve practice and policy, the issues raised appear related more to the impact of billbacks than to pedagogical or philosophical differences. Therefore, if the county office is to continue providing services on behalf of the SELPA, it must make every effort to improve communication, transparency and trust.

It appears that most stakeholders do not clearly understand the distinction that must be made between the county office's two roles. The county office acts as the administrative unit (AU) of the Siskiyou County SELPA, and has a separate and distinct role as the provider of special education programs and services on behalf of SELPA members.

The superintendents on the SELPA steering committee have selected the county office to serve as the AU for the Siskiyou County SELPA. As the AU, the county office is the entity that coordinates the SELPA and employs the SELPA staff, under the guidance and direction of the council of superintendents.

The SELPA has identified the county office as the SELPAwide provider of specific special education programs and services. This role and function of the county office is separate and distinct from its role as AU. The duties and responsibilities of the county office as a provider of regional special education programs are defined in Education Code Sections 56836.23, 56368, and 56836.25. The SELPA has not specified any school districts to provide regional programs and services.

The SELPA's local plan specifies that the SELPA administrator is responsible for providing special education programs and services with the assistance of the program managers. The SELPA receives specific funding to provide these services and E.C. Section 56836.25 restricts the use of these funds to the purposes specified.

Because it is a necessary small SELPA, Siskiyou County SELPA receives these funds based on an ADA of 15,000, which is more than double the actual county ADA of 6,072.64 reported in 2005-06. As a result, the SELPA received $207,270 last year to provide special education programs and services. Had funding been based on actual reported ADA, the SELPA would have received only $83,912. Thus the SELPA's status as a necessary small SELPA resulted in an additional $123,358.

While the county office makes appropriate use of the standardized account code structure (SACS) goal codes of 5050 for regional services and 5060 for program specialist services, it does not appear that the goal and function codes for the SELPA administrator's and program managers' salaries and benefits are appropriately divided between program responsibilities (goal code 5001, function 2100), regional services (goal code 5060, function 2200) and program specialist services (goal code 5060, function 2200). This should be reviewed and the salaries and benefits coded appropriately to ensure greater distinction between program activities and regional activities.

In its role as a regional provider, the county office provides programs and services which the SELPA has determined the county is better able to provide than individual school districts. Some have suggested that in this role the county office should be viewed as one would view a certified non-sectarian non-public school (NPS) or certified non-sectarian non-public agency (NPA), having a contractor-contractee or vendor-customer relationship with the SELPA. This is an instructive perspective that would also be true of any district designated as the provider of a regional program or service.

Budget Development and Operational Oversight

It appears that budgets for the SELPAwide special education programs and services provided by the county office are developed, revised, and monitored by county office staff with little or no involvement on the part of the affected school districts. The executive committee should take on this role.

Rather than operating with a budget that is developed and implemented unilaterally by the county office or the district providing the regional service, the budget development process should be multilateral, involving both the districts and the county office. Agreement should be reached regarding creditable revenues, creditable expenditures, staffing standards, compensation standards, other direct support costs, and indirect support costs.

County office proposals for new or expanded county office programs may be reviewed by the executive committee, but it appears that they are not also reviewed by the districts' chief business officials (CBOs). As a result, the process of changing SELPAwide programs does not involve both business staff and program administrators. Thus, financial discussions may not have adequate programmatic and legal context.

Actions by the SELPA steering committee, composed of the district and county superintendents, should be based on well researched staff recommendations developed in a predictable and inclusive manner. A consistent and predictable process should be used to address initiatives. The SELPA should form an operations oversight committee comprised of representatives of both program and business staff from the county office and the districts, including the county office's external business services director. The committee should meet regularly to jointly develop and/or review proposed special education fiscal and program issues. The oversight committee would develop final recommendations for consideration by the steering committee.

This committee structure would help develop consensus support for initiatives and provide a forum for communicating special education policy and financial information to achieve mutual understanding of the issues. It would also provide an appropriate program and legal context for fiscal discussions.

An operations oversight committee could also jointly develop, monitor, review and revise budgets for regional and/or SELPAwide programs and services provided by the county office. By reviewing the budget throughout the year and revising it as needed, the committee could ensure greater fiscal stability and predictability from year to year.

Because it is in the best interest of all member agencies that no members accrue undue benefit at the expense of others, an oversight committee could also recommend the allocation of state and federal resources in a manner that is fair and equitable. To accomplish this, the committee could use personnel data and other relevant information from each district to develop creditable revenues, creditable expenditures, staffing standards, other direct support costs, and indirect support costs for each member district. It could also take into consideration unique factors such as socio-economic and bilingual/bicultural populations, the presence or absence of private schools, the geographic and demographic nature of the county, and the unique characteristics of the disabled student populations.

An operations oversight committee could develop recommendations for the distribution of special grants and allocations provided to the SELPA, including the following:

- Out-of-home per-bed funding for students residing in licensed children's institutions and foster family homes.
- Funding for activities prior to referring a student for mental health services.
- One-time augmentations to the base funding entitlement.
- Funds to provide materials, equipment and services to students with low-incidence disabilities.

The oversight committee could also develop a means of paying for the high cost of intensive services or NPS/NPA services without causing undue burden to the district of residence. Many SELPAs establish NPS/NPA risk pools to mitigate the cost to any single district. Similarly, many SELPAs establish extraordinary cost pools from which assistance is provided to the district with a student who requires costly levels of service. While the Siskiyou County SELPA does have a mechanism for assisting with the cost of NPS/NPA services, it should be reviewed regularly with the goal of encouraging less costly public school services. In addition, the oversight committee could review the distribution of sparsity unit funding, including the support provided for extraordinary costs generated by specific students.

Because the size and geography of the county make it difficult and costly to meet in person, the SELPA should use telephone and electronic communication whenever practicable.

Recommendations:

The SELPA should:

1. Consider establishing a SELPA oversight committee composed of business and program administrators. The committee should have the following responsibilities:
    - Develop, monitor, review, and revise budgets for the operation of programs and services to be provided by the county office.
    - Review proposals for new programs and services or the expansion of existing programs and services in a fiscal, programmatic, and legal context; develop a rationale and recommendations for proposals to be sent to the steering committee for adoption.
    - Develop proposed standards for approved revenues, approved expenditures, compensation packages, administration and supervision levels, staffing patterns, and other factors that affect cost and will be considered acceptable for inclusion in the billback calculation.
    - Develop recommendations to ensure that the allocation model provides an equitable and fair distribution of state and federal resources to mitigate the burden of providing high cost programs and services.

The county office should:

2. Ensure that its budgets for the programs and services it provides are available to and understood by its line supervisors.

Billback Model

In 2004-05 , the county office's billback to districts totaled $584,710, which was 9.7% of the $6,027,897 total spent on special education that year. In 2005-06, the billback of $569,218 was 9.08% of the $6,270,858 spent on special education. For 2006-07, the billback is projected to be $932,634, or 14.33% of the total $6,506,447. While there is no standard figure for a desirable billback percentage, Paul Goldfinger of School Services of California has estimated the average local support cost at about 30%. The county office's billbacks represent less than half that percentage.

In addition, it does not appear that the districts have a good understanding of the county office billback process. This can lead to reduced levels of trust.

A wide variety of options are available to help ensure greater transparency, reliability and equity in the billback process.

The current mechanism for county office billbacks to districts for the excess costs of services appears to be based on enrollment or on the numbers of students that participate in special classes, RSP services, and/or designated instruction and services (DIS).

Although the current approach averages costs over a wide population, it may obscure the unusually high cost of serving some populations. The billback mechanism might be better calculated based on each sub-category of disability (autism, hearing impaired, emotionally disturbed and others), or on educational setting (SDC, RSP, DIS). While somewhat more complex, this would place more focus on the specific nature of the program or service, creating greater trust and making possible a better analysis of billbacks.

The nature of the program or service also merits consideration. Very small districts are fully dependent on county office or regional programs and services. Large districts may use county office or regional programs to serve a particular disability grouping, or to serve students with a level of need that is greater than what the district is able to serve.

For very small districts, county office or regional programs are often needed to ensure a free appropriate public education (FAPE) for all students. For larger districts, county office and regional programs and services may be needed, or they may provide a margin of safety, or a combination of the two. County office or regional programs and services that provide a margin of safety should be a consideration when developing an allocation/billback model. For example, billbacks may be based partially on total district ADA to ensure a margin of safety, and partially on enrollment or participation.

RSP costs could be isolated using appropriate SACS codes, and the excess cost apportioned to RSP could be based on the staffing FTE rather than on the number of students served by each district. This method would ensure that funding for excess costs goes to those who use this service.

FCMAT found that separate goal sub-codes are used for each special class or program. Although this method identifies the cost of each program or service, it also uses up most of the available code numbers, preventing the use of goal sub-codes for programs serving

autistic or emotionally disturbed pupils. Using school or site codes would provide greater flexibility and make more goal codes available.

Recommendations:

The SELPA should:

1. Consider reviewing and revising billback policies, taking into account the following:
    - Varying levels of cost associated with specific disabilities or services as discrete billback calculations.
    - The effects of district size, the nature and use of various programs and services, and whether or not enrollment or participation should be the only basis for calculating billback.
    - A review of approved revenues, approved expenditures, compensation packages, administration and supervision levels, staffing patterns and other factors that affect costs to determine standards for what will be included in the billback calculation.

    The SELPA should clearly delineate between class size or caseload funding standards and acceptable class size or caseload maximums for the various programs and services provided within the SELPA.

The county office should:

2. In the absence of acceptable standards for inclusion in the billback model, consult with and otherwise involve affected school districts in decisions that affect program costs, including the costs of administration and supervision, COLAs and benefits.
3. Consider using school or site codes in SACS to make more codes available for costs associated with specific disabling conditions.

Appendices

Appendix A: Education Code Sections 56368, 56836.23 and 56836.25

Appendix B: Siskiyou County SELPA, Special Education Pupil Count Data by District

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Appendix E: Distance Learning Resources

1) Policy Brief: "The Promise and the Power of on Distance Learning in Rural Education," The Rural School and Community Trust

2) Article: Speech Telepractice Program Expands Options for Rural Oklahoma Schools.

Appendix F: Policy Brief: "Best Fiscal Management Practices for Rural Schools," The Rural School and Community Trust

Appendix G: Study Agreement

Appendix A:

Education Code Sections 56368, 56836.23 and 56836.25

56368. (a) A program specialist is a specialist who holds a valid special education credential, clinical services credential, health services credential, or a school psychologist authorization and has advanced training and related experience in the education of individuals with exceptional needs and a specialized in-depth knowledge in preschool disabilities, career vocational develop-ment, or one or more areas of major disabling conditions.

(b) A program specialist may do all the following:

(1) Observe, consult with, and assist resource specialists. designated instruction and services in-structors, and special class teachers

(2) Plan programs, coordinate curricular resources, and evaluate effectiveness of programs for individuals with exceptional needs.

(3) Participate in each school's staff development, program development, and innovation of spe-cial methods and approaches.

(4) Provide coordination, consultation and program development primarily in one specialized area or areas of his or her expertise.

(5) Be responsible for assuring that pupils have full educational opportunity regardless of the dis-trict of residence.

(c) For purposes of Section 41403, a program specialist shall he considered a pupil services em-ployee, as defined in subdivision (c) of Section 41401.

56836.23. Funds for regionalized operations and services and the direct instructional support of program specialists shall be apportioned to the special education local plan areas. As a condition to receiving those funds, the special education local plan area shall ensure that all functions listed below are performed in accordance with the description set forth in its local plan adopted pursu-ant to Section 56205:

(a) Coordination of the special education local plan area and the implementation of the local plan.

(h) Coordinated system of identification and assessment.

(c) Coordinated system of procedural safeguards.

(d) Coordinated system of staff development and parent and guardian education.

(e) Coordinated system of curriculum development and alignment with the core curriculum.

(f) Coordinated system of internal program review, evaluation of the effectiveness of the local plan, and implementation of a local plan accountability mechanism.

(g) Coordinated system of data collection and management.

(h) Coordination of interagency agreements.

(i) Coordination of services to medical facilities.

(j) Coordination of services to licensed children's institutions and foster family homes.

(k) Preparation and transmission of required special education local plan area reports.

(l) Fiscal and logistical support of the community advisory committee.

(m) Coordination of transportation services for individuals with exceptional needs.

(n) Coordination of career and vocational education and transition services.

(o) Assurance of full educational opportunity.

(p) Fiscal administration and the allocation of state and federal funds pursuant to Section 56836.01

(q) Direct instructional program support that may be provided by program specialists in accor-dance with Section 56368.

56836.25. Funds received pursuant to this article shall be expended for the purposes specified in Section 56836.23.

Appendix B:

Siskiyou County SELPA, Special Education Pupil Count Data by District

Special Education Unduplicated Pupil Count

BIG SPRINGS UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**21**	**20**	**15**	**12**	**17**	**-19.05%**
Dist Service	**11**	**12**	**9**	**8**	**7**	**-36.36%**
Serve by Outside Agency	**10**	**8**	**6**	**4**	**10**	**0.00%**

BOGUS ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**1**	**1**	**0**	**0**	**0**	**-100.00%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**1**	**1**	**0**	**0**	**0**	**-100.00%**

BUTTE VALLEY UNIFIED	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**46**	**45**	**46**	**34**	**48**	**4.35%**
Dist Service	**30**	**29**	**28**	**25**	**28**	**-6.67%**
Served by Outside Agency	**16**	**16**	**18**	**9**	**20**	**25.00%**

BUTTEVILLE UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**10**	**14**	**4**	**7**	**13**	**30.00%**
Dist Service	**0**	**14**	**9**	**10**	**14**	**-100.00%**
Serve by Outside Agency	**10**	**0**	**-5**	**-3**	**-1**	**-110.00%**

DELPHIC ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**3**	**0**	**1**	**2**	**0**	**-100.00%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**3**	**0**	**1**	**2**	**0**	**-100.00%**

DUNSMUIR ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**30**	**31**	**27**	**33**	**32**	**6.67%**
Dist Service	**20**	**21**	**18**	**25**	**22**	**10.00%**
Serve by Outside Agency	**10**	**10**	**9**	**8**	**10**	**0.00%**

DUNSMUIR JOINT UNION HIGH	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**21**	**12**	**12**	**15**	**13**	**-38.10%**
Dist Service	**20**	**12**	**10**	**10**	**9**	**-55.00%**
Serve by Outside Agency	**1**	**0**	**2**	**5**	**4**	**300.00%**

ETNA UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**29**	**35**	**40**	**31**	**37**	**27.59%**
Dist Service	**25**	**23**	**26**	**27**	**19**	**-24.00%**
Serve by Outside Agency	**4**	**12**	**14**	**4**	**18**	**350.00%**

ETNA UNION HIGH	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**65**	**59**	**51**	**48**	**44**	**-32.31%**
Dist Service	**53**	**46**	**42**	**42**	**40**	**-24.53%**
Serve by Outside Agency	**12**	**13**	**9**	**6**	**4**	**-66.67%**

FORKS OF SALMON ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**3**	**3**	**2**	**3**	**2**	**-33.33%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**3**	**3**	**2**	**3**	**2**	**-33.33%**

FORT JONES UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**20**	**23**	**21**	**17**	**19**	**-5.00%**
Dist Service	**11**	**13**	**11**	**13**	**17**	**54.55%**
Serve by Outside Agency	**9**	**10**	**10**	**4**	**2**	**-77.78%**

GAZELLE UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**6**	**6**	**9**	**10**	**9**	**50.00%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**6**	**6**	**9**	**10**	**9**	**50.00%**

GRENADA ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**13**	**13**	**15**	**8**	**13**	**0.00%**
Dist Service	**10**	**11**	**10**	**6**	**6**	**-40.00%**
Serve by Outside Agency	**3**	**2**	**5**	**2**	**7**	**133.33%**

HAPPY CAMP UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**42**	**31**	**31**	**26**	**24**	**-42.86%**
Dist Service	**20**	**0**	**23**	**19**	**15**	**-25.00%**
Serve by Outside Agency	**22**	**31**	**8**	**7**	**9**	**-59.09%**

HORNBROOK ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**13**	**10**	**6**	**12**	**12**	**-7.69%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**13**	**10**	**6**	**12**	**12**	**-7.69%**

KLAMATH RIVER UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**9**	**10**	**5**	**5**	**5**	**-44.44%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**9**	**10**	**5**	**5**	**5**	**-44.44%**

LITTLE SHASTA ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**1**	**0**	**1**	**3**	**3**	**200.00%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**1**	**0**	**1**	**3**	**3**	**200.00%**

MCCLOUD UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**19**	**19**	**14**	**11**	**8**	**-57.89%**
Dist Service	**10**	**12**	**7**	**9**	**0**	**-100.00%**
Serve by Outside Agency	**9**	**7**	**7**	**2**	**8**	**-11.11%**

MONTAGUE ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	44	35	26	21	32	-27.27%
Dist Service	19	15	7	11	14	-26.32%
Serve by Outside Agency	25	20	19	10	18	-28.00%

MT. SHASTA UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**66**	**61**	**52**	**60**	**58**	**-12.12%**
Dist Service	**39**	**40**	**42**	**40**	**35**	**-10.26%**
Serve by Outside Agency	**27**	**21**	**10**	**20**	**23**	**-14.81%**

QUARTZ VALLEY ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**2**	**5**	**8**	**6**	**5**	**150.00%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**2**	**5**	**8**	**6**	**5**	**150.00%**

SEIAD ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**9**	**12**	**10**	**9**	**8**	**-11.11%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**9**	**12**	**10**	**9**	**8**	**-11.11%**

SISKIYOU COE	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**0**	**0**	**0**	**70**	**0**	**0.00%**
Dist Service	**332**	**298**	**287**	**283**	**293**	**-11.75%**
Serve by Outside Agency	**0**	**0**	**0**	**0**	**0**	**#DIV/0!**

SISKIYOU UNION HIGH	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**106**	**97**	**105**	**90**	**86**	**-18.87%**
Dist Service	**91**	**81**	**83**	**79**	**71**	**-21.98%**
Serve by Outside Agency	**15**	**16**	**22**	**11**	**15**	**0.00%**

WEED UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**49**	**44**	**64**	**40**	**40**	**-18.37%**
Dist Service	**17**	**21**	**28**	**22**	**22**	**29.41%**
Serve by Outside Agency	**32**	**23**	**36**	**18**	**18**	**-43.75%**

WILLOW CREEK ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**8**	**10**	**7**	**4**	**4**	**-50.00%**
Dist Service	**0**	**0**	**0**	**0**	**0**	**0.00%**
Serve by Outside Agency	**8**	**10**	**7**	**4**	**4**	**-50.00%**

YREKA UNION ELEMENTARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**151**	**152**	**134**	**102**	**115**	**-23.84%**
Dist Service	**114**	**108**	**95**	**76**	**80**	**-29.82%**
Serve by Outside Agency	**37**	**44**	**39**	**26**	**35**	**-5.41%**

YREKA UNION HIGH	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
Dist Residence	**95**	**84**	**96**	**87**	**81**	**-14.74%**
Dist Service	**65**	**67**	**75**	**68**	**58**	**-10.77%**
Serve by Outside Agency	**30**	**17**	**21**	**19**	**23**	**-23.33%**

PUPIL COUNT SUMMARY	2001-02	2002-03	2003-04	2004-05	2005-06	5 YEAR
DISTRICT OF SERVICE	**608**	**586**	**583**	**556**	**504**	**-17.11%**
DISTRICT OF RESIDENCE	**957**	**909**	**875**	**846**	**797**	**-16.72%**
SISKIYOU COE	**332**	**298**	**287**	**283**	**293**	**-11.75%**
SERVICE BY OUT SIDE AGENCY	**17.00**	**25.00**	**5.00**	**7.00**	**0.00**	**-100.00%**

Appendix C:

Funding Allocation Rates to Districts, 1998-99 and 2005-06

1998-99 Calculation for Distributing Funds to Districts

District	ADA	Percent	Adjusted ADA	Adjusted Percent
Big Springs	212	3.11%	233	3.42%
Bogus	<100			
Butteville	<100			
Delphic	<100			
Dunsmuir Elem	272	3.99%	299	4.39%
Etna Elem	273	4.00%	300	4.40%
Forks of Salmon	<100			
Fort Jones	153	2.24%	168	2.46%
Gazelle	<100			
Grenada	111	1.63%	122	1.79%
Happy Camp	187	2.74%	206	3.01%
Hornbook	<100			
Junction	<100			
Klamath River	<100			
Little Shasta	<100			
McCloud	160	2.35%	176	2.59%
Montague	235	3.44%	259	3.78%
Mt. Shasta	800	11.73%	800	11.73%
Quartz Valley	<100			
Sawyers Bar	<100			
Seiad	<100			
Weed Elem	438	6.42%	438	6.42%
Willow Creek	<100			
Yreka Elem	1,154	16.91%	1,154	16.91%
Dunsmuir High	155	2.27%	171	2.50%
Etna High	481	7.05%	481	7.05%
Siskiyou Union High	892	13.07%	892	13.07%
Yreka High	921	13.50%	921	13.50%
Butte Valley Unif	379	5.55%	417	6.11%
Totals	**6,823**	**100.00%**	**7,037**	**103.13%**

Note; <100 districts are served by SCOE

2005-06 Calculation for Distributing Funds to Districts

District	ADA	Percent	Adjusted ADA	Adjusted Percent
Big Springs	120	2.08%	132	2.29%
Bogus	<100			
Butteville	125	2.16%	138	2.38%
Delphic	<100			
Dunsmuir Elem	185	3.20%	204	3.52%
Etna Elem	232	4.01%	255	4.41%
Forks of Salmon	<100			
Fort Jones	113	1.95%	124	2.15%
Gazelle	<100			
Grenada	131	2.27%	144	2.50%
Happy Camp	132	2.29%	145	2.52%
Hornbook	<100			
Junction	<100			
Klamath River	<100			
Little Shasta	<100			
McCloud	<100			
Montague	175	3.02%	193	3.32%
Mt. Shasta	805	13.91%	805	13.91%
Quartz Valley	<100			
Sawyers Bar	<100			
Seiad	<100			
Weed Elem	374	6.42%	411	7.06%
Willow Creek	<100			
Yreka Elem	956	16.53%	956	16.53%
Dunsmuir High	104	1.80%	114	1.98%
Etna High	321	5.56%	353	6.12%
Siskiyou Union High	915	15.82%	915	15.82%
Yreka High	808	13.97%	808	13.97%
Butte Valley Unif	290	5.02%	319	5.52%
Totals	**5,786**	**100.01%**	**6,016**	**103.99%**

Note; <100 districts are served by SCOE

Appendix D:
Sparsity Unit Data, 1997-98 and 2005-06

Sparsity Units Accrued By Siskiyou County

Unit Types	Ratio of case load to CBEDS	97-98 CBEDS 8,277	Divisor to Determine the Units	Units Based on CBEDS Limits	Actual Operated Units	Difference (Sparsely)
SDC	0.028	231.756	10	23.18	15.75	(7.43)
RSP	0.040	331.080	24	13.80	35.19	21.40
DIS	0.032	264.864	24	11.04	12.35	1.31
Total	**0.100**			**48.01**	**63.29**	**15.28**
	Percent of Actual Units that were sparsity units				**24.15%**	

Unit Types	Ratio of case load to CBEDS	05-06 CBEDS 6,480	Divisor to Determine the Units	Units Based on CBEDS Limits	Actual Operated Units	Difference (Sparsely)
SDC	0.028	181.440	10	18.14	15.75	(2.39)
RSP	0.040	259.200	24	10.80	35.19	24.39
DIS	0.032	207.360	24	8.64	12.35	3.71
Total	**0.100**			**37.58**	**63.29**	**25.71**
	Percent of Actual Units that were sparsity units				**40.62%**	

Note:
This comparison is only an illustration to facilitate understanding. In fact, Siskiyou County SELPA has experienced declining enrollment and, as a result, suffered a decrease in funding. Consequently, this comparison does not accurately reflect the "value" of sparsely units in the current funding stream.

Appendix E:

Distance Learning Resources

1) *Policy Brief: "The Promise and the Power of on Distance Learning in Rural Education"*

   The Rural School and Community Trust

2) *Article: Speech Telepractice Program Expands Options for Rural Oklahoma Schools.*

POLICY BRIEF

The Promise and the Power
of Distance Learning in Rural Education

By Vicki Hobbs

August 2004

Rural Trust Policy Brief Series on Rural Education

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The Rural School and Community Trust (Rural Trust) is the premier national nonprofit organization addressing the crucial relationship between good schools and thriving rural communities. Working in some of the poorest, most challenging rural places, the Rural Trust involves young people in learning linked to their communities, improves the quality of teaching and school leadership, advocates for appropriate state educational policies, and addresses the critical issue of funding for rural schools.

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PART I: INTRODUCTION

Revolutionizing the Concept of 'Schooling'

For most people the word 'school' still conjures up a mental image of metal desks, a fondly remembered teacher standing in front of a chalky blackboard, a basketball or football rivalry, cramming for tests, and the senior prom. In the age of new technologies and advanced telecommunications, is the concept of 'schooling' likely to change? Will it mean, as some have said, the eventual elimination of schools as we know them or will technology-enabled education and distance learning expand educational opportunity both within and outside the traditional classroom? The vast majority of rural elementary and secondary students still ride school busses and attend schools that have changed very little, at least in organization and structure, from the schools of a hundred years ago.

However, a rapidly growing number of rural students are increasingly involved in some form of distance learning for all or part of the school day (or night). The precise long-term impact of distance learning technologies on schooling will not be known for several years. But this paper embraces the likelihood that distance learning will revolutionize the concept of 'schooling'—not by abandoning schools and individualizing and isolating students in the process, but rather by enhancing individual and class educational opportunities most often in the context of a school. The concept of schooling will surely be altered in the process, but the school as a social and educational institution will undoubtedly remain.

The Context: Rural Schools and Rural Communities

One-third of America's schoolchildren attend schools in places of fewer than 25,000 people. One in five are in places with fewer than 2,500 people. Nearly one-third (31.3%) of public schools are in these very rural places. In 12 states—Alaska, Arkansas, Iowa, Kentucky, Maine, Nebraska, New Hampshire, North Carolina, South Dakota, Vermont, West Virginia, and Wyoming—rural and small town children are a majority in the public elementary and secondary schools.[1]

The schools that educate one-third of our children living in rural places are unique and diverse. One common characteristic shared by most rural schools is their size—they are generally small in comparison to most urban and suburban schools. Nearly 54 percent of rural and small town secondary schools (grades 9-12) have enrollments of 400 or fewer students.[2]

Extensive research findings[3] show that small schools and districts graduate a higher percentage of students and drop-out rates are lower in small schools. In small schools and districts, there is less violence, less vandalism, a heightened sense of belonging, better attendance, and members of the community, including parents, are more involved.

The importance of rural schools to their communities is significant and the educational value of retaining small, community-based schools is undeniable. But rural schools also face unique challenges:

- *Providing a Comprehensive Curriculum-* Size and/or remote geographic location may prevent small schools from offering a comprehensive curriculum.

All schools are held to state performance standards, but by also setting input or resource standards, such as a high minimum number of credits offered, an additional burden is selectively placed on small schools. Compounding the problem, national teacher shortages in subjects such as math, science, and foreign languages make it harder for small, rural schools to maintain advanced high school course offerings.

- *Recruiting, Retaining and Adequately Paying Teachers* - On average, rural teachers in the U.S. make only 88 percent of the salary of their non-rural peers.[4] With growing teacher shortages and a growing "teacher pay gap"[5] across districts, many small and rural schools may simply not be able to retain or hire new teachers. A 2003 report shows the range in average rural teacher salaries across the U.S. from a low of $24,234 in South Dakota to a high of $49,872 in New Jersey, with a U.S. average of $32,694.[6] While salary is not the only factor involved in attracting or retaining teachers, low teacher salaries weigh heavily against rural schools in the competition for teachers.

- *Meeting the Requirements of No Child Left Behind* - Rural schools have unique problems meeting the No Child Left Behind Act's "highly qualified" teacher requirements, as they struggle to find and hire certified teachers in every subject area. Educational requirements for paraprofessionals, providing supplemental services for students in schools identified as "in need of improvement," and providing for student transfer and options for school choice are all more burdensome to small and rural schools.

- *Funding Shortages and Threats of Consolidation* - State cuts in education funding particularly impact rural schools, which frequently have a low tax base, limited economic development, an aging population, and declining student enrollments. Coupled with the growing number of lawsuits arguing that state governments have a constitutional duty to provide schools with equitable and adequate educational funding,[7] many legislatures often blindly (and with no evidence to support them) turn to school consolidation as a way out of fiscal distress and a way to improve student educational opportunities.[8] It is almost always true that lowering costs through consolidation will be more than offset by higher costs in other areas.[9]

Distance learning is a fitting response to these pressing needs confronted by America's rural schools. Research shows that it can be as effective as classroom learning in terms of student performance.[10] It offers the opportunity for enhanced curriculum and advanced classes, as well as for students to participate in low-enrollment, high-cost classes such as physics, anatomy, chemistry, music theory, or calculus. Along with the academic advantages come economic ones: school size no longer determines the scope or breadth of curriculum offered. Schools of any size can offer a virtually unlimited curriculum without incurring the costs of hiring additional teachers. Savings increase even more if schools participate in distance learning consortiums to share master teachers, personnel and technology costs.

Most importantly, distance learning can enable small schools to remain open and small—thereby embracing more than a half century of educational research showing that smaller schools offer a multitude of educational advantages for students over larger schools.[11]

Purpose of the Paper

Distance learning is here to stay. Its future appears to be unsure only in its direction or extent of growth. This paper focuses on the applicability and potential of two-way interactive television for small and rural K-12 schools as a primary asset in improving educational access and equity and calls for the adoption of enlightened distance learning policies and guidelines at the state and local levels. Appendices include: (1) Characteristics of Major Distance Learning Technologies; (2) Types of Distance Learning Technologies; and (3) a Categorization of State Videoconferencing Policies. The Appendices are followed by a glossary of technical terms (that are also bolded within the text), and list of references.

Distance learning can enable small schools to remain open and small—thereby embracing more than a half century of educational research showing that smaller schools offer a multitude of educational advantages for students over larger schools.

PART II: THE PROMISE OF DISTANCE LEARNING

Distance Learning Defined

Simply stated, distance learning is any instructional setting in which teacher and learner are separated by space and/or time. From early correspondence courses that involved remote students completing lessons and mailing them to an instructor for grading, distance learning today has made possible a multitude of newer methods where teacher and learner may be physically separated, but instruction and learning can still occur. In essence, distance learning in its many forms is defined in terms of four main characteristics: learners, time, instruction, and degree of interactivity.

- *Learners -* Distance learning can occur with students learning individually or within a group. On an individual basis, although two students are enrolled in the same distance learning course, one may be at home at the kitchen table, while another is in a school media center. In a class or group setting, a group of students enrolled in a distance learning course might be located in a high school classroom (with no teacher present), while other groups of students may also be participating from an alternative school, charter school, or military computer lab.

- *Time -* Distance learning can occur in **real time**, delayed time, or both. In **real time** or "**synchronous** communication," teacher and students simultaneously interact. In delayed time or "**asynchronous** communication," students can respond to previously developed instruction at their convenience—any time, any place. Increasingly, the line between **synchronous** and **asynchronous** communications is blurred by the blending of technologies.

- *Instruction -* Distance learning instruction can be provided by multiple methods. Students may learn from a teacher, much like in a traditional classroom, or from a set of prepared lessons, usually in the form of computer text and/or graphics. In text/graphics-based instruction, the student may never have contact with a human instructor. Newer forms of distance learning technologies may use a range of instructional or communication formats.

- *Degree of Interactivity -* Distance learning is often divided into "one-way" or "two-way" technologies. In one-way technologies, the learner typically can see and hear the instructor, but the teacher and student cannot spontaneously interact. In two-way distance learning technologies, the student(s) and instructor can see, hear, and interact with each other spontaneously.

Appendix I includes a chart showing the relationship between these four characteristics for each major distance learning technology.

> All distance learning technologies offer the opportunity for curriculum enhancement, advanced classes, and the opportunity for students to participate in classes that do not have a locally available certified teacher.

Advantages of Distance Learning for Small and Rural Schools

- *Academic advantages.* All distance learning technologies offer the opportunity for curriculum enhancement, advanced classes, and the opportunity for students to participate in classes that do not have a locally available certified teacher. Hard-to-staff classes or course scheduling problems caused by the departure of multi-certified teachers are barriers that small schools can easily overcome through distance learning. The opportunity for students to enroll in any number of Advanced Placement or dual-credit courses can offer college-bound students a significant academic advantage, and being able through distance learning to offer courses on an every year basis (as opposed to an alternate year basis) significantly improves students' academic and scheduling options.

- *Economic advantages.* Schools are accustomed to calculating the cost of instruction per student in order to economically justify offering a class. But in doing so, small school administrators—in the name of economic efficiency—are routinely forced to ignore the needs of a handful of students interested in advanced courses such as Anatomy/Physiology or Calculus. They instead favor assigning teachers to classes that can generate larger, more cost-efficient enrollments. Through distance learning, small schools can easily justify expanded curriculums that vary from year to year depending on individual student needs, without the requirement to alter local teacher hiring patterns.

With some forms of distance learning there are no incremental costs. The cost of offering a course for one student can be the same as for a class of twenty; the cost of offering a distance learning course every hour of the day can be the same as for offering one class a day. There are also economic advantages to students having graduated from high school with the equivalent of one semester of college courses already completed through dual-credit programs.

In addition to the primary academic and economic advantages of distance learning are the ancillary benefits that some distance learning technologies can provide, including:

- *Professional development and continuing education opportunities for teachers from across the state or the nation.* Rural teachers can gain additional certification or maintain certification using distance learning technologies without the accompanying costs of time and travel. Professionals with degrees in needed subject areas can complete requirements for alternative certification without leaving their communities.

- *Pre-service teacher education opportunities.* Distance learning technologies can facilitate extended clinical experiences for pre-service teachers and cross-district mentoring relationships between new and experienced teachers, as well as help provide ongoing contact between new teachers and college education faculty.

- *Virtual field trips.* Two-way I-TV technologies can enable students in remote locations to visit any site with similar technology in their state, the country, or the world. Opportunities like talking with NASA astronauts, viewing demonstrations at any number of I-TV-equipped science centers around the country, and visiting numerous art galleries, museums, or exhibits are only the beginning of the world of possibilities open to students at all grade levels, regardless of remoteness or geographic isolation.

- *Collaborative learning.* Distance is no barrier for students and teachers who wish to collaborate on joint research or authentic learning projects when they are equipped with appropriate distance learning technologies. Students in countries around the world can share their views and their experiences with U.S. students. Place-based education takes on whole new parameters when students can share their "place" with others while expanding their own concept of place.

Through distance learning, small schools can easily justify expanded curriculums that vary from year to year depending on individual student needs, without the requirement to alter local teacher hiring patterns

- *Specialized/ancillary student services.* Speech therapy, psychological testing, counseling, individualized assessments, and gifted education are but a few of the additional services students can access through two-way I-TV technologies.

The Impediments to Distance Learning in Rural Education

Even with significant advantages, considerable barriers exist when rural schools and communities begin their quest to implement distance learning technologies.

1.The "Digital Divide" [12] was the term coined in the 1990's to signify the gap between those areas of the country where access to telecommunications technology—especially Internet access—was readily available and those where it was not. Despite significant progress, much of rural America still looms behind its urban and suburban counterparts across the digital divide. The gap is now defined in terms of access to **broadband** telecommunications technology (high speed lines)[13] and the permeation of telecommunications technology in the workplace.

Prior to implementation of the **E-Rate** program—a telecommunications, Internet access and internal connections discount program—by the Federal Communications Commission in 1997, only 27% of U.S. public school classrooms were connected to the Internet.[14] By 2002, that number was reported to have grown to 99%, while 94% of public schools connected to the Internet reported that they had a **broadband** connection. For rural schools the picture was not quite as rosy. Two percent of rural schools and 7% of rural classrooms still had no Internet access. Ninety-one percent of rural schools had access to wired **broadband** Internet connections and 76% to **wireless broadband**, compared to 97% and 100% in urban schools.[15]

The availability of newer telecommunication technologies in rural areas, while not static, still lags behind that of urban and suburban areas. The E-Rate Program has indeed reduced but not eliminated this disparity. Broadband access costs, required for videoconferencing

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technologies, are typically much more expensive in rural, sparsely populated areas.

2. Rural educators often have limited training, information, and knowledge about the technologies available and how to use them effectively.

3. Technology selection is too often made on the basis of the "least cost," dooming the distance learning program and student success when the technology chosen fails to meet either the needs or expectations of students, parents, or teachers.

4. School district budgets rarely include money for distance learning technology implementation or maintenance and upgrades, forcing schools to rely on the whims of grant availability in order to implement or upgrade their program.

5. The combined lack of available funding and technical assistance places districts at a disadvantage when planning for distance learning technology implementation. The Telemedicine and Distance Learning Program as reauthorized through the USDA in the 2002 Farm Bill continues to be the only significant federal funding source for distance learning networks. Most state funds for distance learning have been curtailed in this era of education budget shortfalls.

6. Small schools lack the resources to attract skilled technology coordinators, making the technical upkeep of distance learning equipment problematic.

7. State education agencies (SEAs) often do not consider it within the scope of their services to provide assistance in selecting distance learning technology or course providers. Left on their own, schools can become unwary targets of unscrupulous vendors.

8. An evaluation component is often not incorporated into the distance learning technology planning and implementation process, leaving schools with no clear understanding of whether—or why—a particular direction succeeded or failed.

Distance Learning—Effective for Student Academic Achievement

At the forefront of many discussions about distance learning is the issue of how well students learn and how satisfied they are compared to traditional classroom learning. But research suggests that students in a distance learning environment learn just as well as traditionally taught students.[16]

Across hundreds of studies conducted in largely non-K-12 environments, "no significant difference" accurately describes the comparison between the achievements of distance learning vs. traditional students. While there is much more research to be done, we do know at this point that distance learning technologies can be just as effective in terms of student performance as traditional classroom instruction and student (and instructor) satisfaction can be very high.

Ensuring Student Success

There are three critical factors that significantly impact the achievement and satisfaction level of distance learning students:

1. *Degree of instructional effectiveness* - Just as in a traditional classroom, this measure is of paramount importance to student achievement. Distance learning advocates often say that distance learning technologies will not improve a *bad* teacher, but they can enhance the capabilities of a *good* teacher. Ultimately, what is most important is the instructor's knowledge and ability to convey information, encourage participatory learning, coach students through the learning process, and ensure that students can apply what is learned. The technology can facilitate, ignore, or disrupt the learning process, but without a high degree of instructional effectiveness any course—distance learning or traditional—will fail to achieve its goal.

2. *Extent of instructor training and comfort with the technology* - Regardless of the technology used, the instructor must be adequately trained, not just in the technical operation of the equipment, software, or hardware, but more importantly in the ways the technology and instructional techniques will interface. A teacher who believes that he can simply transfer course

notes from a traditional course to a web-based environment is just as ill-prepared to teach a distance learning course as an I-TV teacher who believes that all she has to do is to lecture for fifty minutes. The outcome in both instances will be negative.

3. *Level of student support provided* - Distance learning should not be an isolated process. A support structure for students involved in it is critical for student success. Depending on the distance learning technology, the support structure can include, among many other examples:
    - A school-based facilitator who handles all electronic, faxed, and mailed communication between the remote instructor and local students in an I-TV class.
    - The opportunity for frequent, direct, one-on-one contact between a web-based instructor and distance learning students.
    - A troubleshooter to turn to when technical problems occur.

Distance Learning Technologies—Not All Created Equal

The earliest form of distance learning was the correspondence course—students completed lessons and mailed them to a distant instructor for grading, unassisted by technology beyond the postal system. While traditional correspondence courses still exist, today's distance learning is most often aided by technology, and takes on a multitude of faces, including one-way formats where students receive information only (e.g., audiotapes, CD-ROM, and pre-recorded video) and two-way formats where interaction is at least intermittently possible (e.g., online learning, instruction by satellite, and desktop videoconferencing). For a full list and explanation of today's numerous forms of distance learning technologies, see Appendix II (page 28).

With so many available formats, it's important to know that all distance learning technologies are not created equal—each has a role to play in education, but each cannot equally ensure a positive learning outcome or be appropriate to all learners or in all learning environments. There is a danger in thinking that all distance learning technologies are equivalent in terms of quality of instruction or potential for learning, levels of satisfaction, and student outcomes. Distance learning technologies must not be chosen solely on the basis of lowest cost or ease of implementation. This will likely result in a frustrating experience for students, parents, teachers and administrators. Care must be taken to choose the technology most appropriate to local student needs and to fully implement the technology chosen.

The chart in Appendix I shows how each of the major distance learning technologies can be assessed for its potential for the best student learning outcomes.

Except in specific situations where student needs may dictate otherwise, the best distance learning technologies incorporate the following characteristics:

a) Instructor-led classes are preferable to text or graphics-based instruction.
b) Class-based instruction is preferable to individual instruction.
c) Full-time, two-way audio and video allows for a higher degree of interactivity than does one-way audio (or one-way audio/video).
d) **Synchronous** (**real-time**) instruction and communication is preferable to **asynchronous** (delayed) instruction/communication.

With so many available formats, it's important to know that all distance learning technologies are not created equal—each has a role to play in education, but each cannot equally ensure a positive learning outcome or be appropriate to all learners or in all learning environments.

Part III - The Power of Distance Learning in Rural Education

Choosing the Right Distance Learning Technology: I-TV

The goal of any distance learning course should be to maximize *both* student achievement and student satisfaction. While there are certainly scenarios under which virtually all distance learning technologies may be appropriate, two-way interactive television (I-TV) provides the best technology foundation for small and rural K-12 schools to meet their needs to enhance curriculum offerings, stem the effect of teacher shortages, provide for ongoing teacher professional development, and meet the requirements of *No Child Left Behind*.[17] In a technologically advancing world, schools with a foundation in two-way I-TV can easily and effectively bridge into the many and varied 'blended technology' options increasingly available, as the need and technical capabilities arise. Through I-TV, small rural districts can achieve a high level of empowerment and equity in course offerings while not being restricted by their size.

> Two-way interactive television (I-TV) provides the best technology foundation for small and rural K-12 schools to...enhance curriculum offerings, stem the effect of teacher shortages, provide for ongoing teacher professional development, and meet the requirements of *No Child Left Behind.*

Two-way interactive TV, as typically implemented, is the distance learning technology that most closely mimics a traditional classroom. It is taught by a live, human, real-time instructor to a class of students who are present at the same time (although located at different sites); it allows for students and instructor to simultaneously see, hear, and communicate with each other throughout the class. It is therefore the technology which is *most likely* to enable higher student achievement and a greater level of student, teacher, and parent satisfaction.

Two-Way I-TV—A Strategy for Saving Rural Schools

The cost of two-way I-TV technology has dramatically decreased in the last decade, making it both a wise educational and economic investment for small schools or districts. With the range of potential uses of two-way I-TV, the cost of the equipment and ongoing transmission lines is certainly justifiable. When comparing the costs of consolidation—including new facilities, increased transportation costs, increased administrative costs, higher dropout rates, etc.—and the costs of implementing two-way I-TV capabilities across small districts, the better option is clear.

Implementing I-TV allows small schools to retain all of the assets of small size, while overcoming curricular limitations. Through I-TV, small districts can share their teaching assets across all districts in their consortium or beyond. Hiring patterns can reflect the needs of the consortium, rather than the needs of individual districts. For instance, if one school hires a Spanish teacher and another hires a French teacher, all schools in the consortium can then offer students both Spanish and French as foreign language options. Physics can cease to be an every other year offering, as sufficient enrollment numbers accumulate across districts each year. Chemistry can be offered by a dedicated and qualified teacher to students across all consortium schools via I-TV with a centralized lab set up on alternating Saturdays.

Students can graduate from small high schools with the equivalent of a semester or more of dual or AP credit, given their access to a wide range of advanced classes. Through I-TV, the possibilities are endless. One or two students in each of several small schools in a consortium can access limited demand classes, without the prohibitive cost-per-pupil associated with traditional hiring of on-site teachers, even if they could be found. And, the potential for providing ancillary services via I-TV has only begun to be realized, including speech therapy provided by a regionally hired speech therapist; psychometric testing provided through a partnering higher education institution or college of education; diagnostic health services or nutrition workshops provided through a regional health clinic; state or regional child and family support services offered through a local school nurse; vocational rehabilitation services offered in conjunction with a regional practitioner; diagnostic testing for special needs students; and more.

The Rural Trust has amassed an impressive set of research studies and policy papers that speak to the academic and social advantages of small schools.[18] Adding two-way I-TV technology to the capabilities of small and rural schools only enhances their value to the students and communities they serve. No longer should consolidation be seen as the only or best alternative for increasing the quality or quantity of curricular offerings—the costs, in all forms, are simply too great, and I-TV is too viable as an alternative.

A Road Map to K-12 I-TV Implementation[19]

I-TV Adopters' Checklist[20]

If districts that implement distance learning follow the following step-by-step checklist as first promoted in *Virtual Classrooms: Educational Opportunity Through Two-Way Interactive Television* (Hobbs and Christianson, 1997) and reprised in *Recommended Standards, Guidelines, and Resources for K-12 Two-Way Interactive Television Network* (2002), the successful implementation of the technology will be greatly enhanced. Hobbs and Christianson (1997) provide a detailed description of the implementation steps included below.

- **Step 1: Assess Your Need for I-TV**
  Decide what you want to accomplish: expanded high school course offerings, dual-credit courses, virtual/electronic field trips, teacher professional development, continuing education, community/adult education, and/or community/economic development.

- **Step 2: Build Support for I-TV Within the Local School and Community**
  Involve teachers, administrators, counselors, and technical and other school staff in the investigation process. Incorporate the Board of Education and work with the community in planning for I-TV.

- **Step 3: Research the Technology Options—Doing the Homework**
  Determine what technologies are available to you and the advantages and disadvantages of each. See the technologies in operation—visit classrooms where distance learning classes are in progress. Involve a cohort of teachers, administrators, and board members in site visits. Determine your need for expert help. Above all, match local needs with the technologies available.

- **Step 4: Form an I-TV Consortium or Partnership**
  Identify school districts who are interested in a distance learning consortium partnership. Determine likely community and higher education partners. Secure a commitment from school district partners to adopt a collaborative calendar and common bell schedule. Identify a consortium director.

- **Step 5: Determine Your Transmission Options**
  Identify what your options are for transporting audio/video signals. Work with telecommunications providers, SEAs, state networks or vendors in selecting the optimum transmission mode to meet your educational requirements. Identify providers and understand and compare costs.

- **Step 6: Identify Sources for I-TV Classroom Equipment**
  Locate multiple equipment vendors who can bid on I-TV classroom equipment that meets *your* educational requirements.

- **Step 7: Understand Classroom Equipment, Facility, and Training Requirements**
  Work with vendors or consultants to choose an optimum I-TV classroom, and together manage lighting and sound control issues. Determine the appropriate furniture requirements. Understand recommended equipment standards and requirements for I-TV teacher training.

- **Step 8: Develop a Plan of Operation**
  Develop consortium bylaws and network policies and identify a fiscal agent for the consortium. Determine the basis for achieving equity among sending and receiving districts. Develop a collaborative calendar, common bell schedule, develop a consortium budget, and an I-TV course schedule. Establish enrollment policies and procedures. Secure commitment from I-TV teachers and arrange for their training. Prepare the I-TV classroom and install equipment. Write operational guidelines for I-TV classrooms. Develop a plan for community use.

- **Step 9: Maximize I-TV Usage**
  Explore all options for use of the I-TV classroom by students across all grade levels, teachers, administrators, staff, ancillary personnel, local government, community organizations, and citizens.

- **Step 10: Evaluate the Program After Implementation**
  Weigh the benefits against the costs. Maintain an ongoing evaluation process which includes both student achievement and satisfaction components. Systematically identify problems or frustrations as they arise and work toward their elimination.

Using an I-TV Consortium to Deliver Distance Learning

Schools frequently band together when cooperative efforts make common and economic sense and have done so throughout history. Special education cooperatives, vocational-technical consortiums, educational service cooperatives, and insurance collectives all are mainstays in school district operations that allow individual school districts to collaboratively meet needs not feasible if they were to operate on their own. But most educational technologies do not depend on cooperative or collaborative efforts across school districts. Therefore the idea of a distance learning consortium may not be readily apparent to many school administrators. I-TV differs from other educational technologies because its optimum use depends heavily on a cooperative organizational arrangement among schools or across school districts.

An I-TV consortium typically consists of a number of small schools or districts, all of which have a defined need for additional classes. Similarly sized schools or districts are optimum consortium partners. The consortium model also works best when *all* consortium members both send and receive classes. This places all member districts on equal footing and best contributes to the long-term viability of the consortium.

The Advantages of I-TV Consortium Development

The advantages of a consortium arrangement in the implementation and operation of I-TV programs stems from the ability of multiple schools to share resources—financial and instructional.

Advantages of a consortium arrangement include:

- Sharing teachers – Schools unable to hire teachers in a particular curriculum area can mix and match their needs with other consortium members.
- Overcoming local teacher shortages, especially in critical needs areas.
- Maximizing usage of the I-TV network investment by using a collaborative calendar and common bell schedule.
- Sharing cost of operations, such as those associated with the consortium director's salary, technical support, maintenance agreements, staff development, and/or transmission costs.
- Combining classes with low student enrollments across multiple schools
- Accessibility of a professional peer group for I-TV teachers, counselors, and administrators within an I-TV consortium.
- Using I-TV technology to achieve multiple ancillary purposes across athletic conference members, administrator groups, school health personnel, special education staffs, etc.
- Equal empowerment of all school districts regardless of size.

The Process of Consortium Development

In order to be effective, cooperative arrangements among schools or districts can maximize their chances of success by following a few common-sense suggestions:

a. Determine cluster size.

The optimum size is usually 5-8 districts. This number allows a critical mass of class availability and teachers and remains a workable size organizationally.

b. Identify member districts of an I-TV consortium.

Look at natural affinity groups—geographic proximity, pre-existing relationships (athletic conferences, special education groups, vocational-technical consortiums, etc.), complementary need groups, and similarly sized districts.[21]

c. Identify higher education partners.

Key to the broad utilization of the technology is the early involvement of selected higher education partners. Higher education partners can help to provide access to dual credit courses, professional development training, Advanced Placement opportunities, and other resources. Such a partnership can result in many advantages on both sides. The added resources made available to local schools is as important as well as the broadened access to students on the part of the higher education institution.

d. Identify community partners.

Look for the opportunity to partner with local government offices, health and human service agencies, hospitals, outreach and extension offices, telecommunity centers, or other agencies and organizations that may have a need for I-TV capabilities and see the value of participating in a joint network with area schools. Among the advantages of such a broad I-TV partnership from the schools' point of view is remote access to health consulta-

The advantages of a consortium arrangement in the implementation and operation of I-TV programs stems from the ability of multiple schools to share resources—financial and instructional.

Higher education partners can help to provide access to dual credit courses, professional development training, Advanced Placement opportunities, and other resources.

tions for school nurses, diagnostic services, mental health services, counseling, speech or other therapy, using area professionals as part-time teaching faculty, etc.

e. Secure commitments to adopt a collaborative calendar and common bell schedule among school district partners.

Without a collaborative school calendar and common bell schedule agreed to by all consortium districts I-TV use is negatively impacted. Classes that begin on different days, at different times, with holiday breaks not in common, and lack coordinated staff development days and mandatory state testing dates, effectively reduce the amount of instructional time involved in I-TV classes operating across multiple districts. What may seem like an occasional variance in schedules in one school is magnified greatly when the entire consortium is considered.

f. Agree on Cross-District Fees

While receiving schools in some I-TV consortiums pay sending schools a fixed rate per enrolled student, a far preferable way of handling cross-district costs is to require that all consortium member schools offer a minimum of one course per year without charging a per pupil fee. In this way, over time, all districts both send and receive courses on par with other consortium member districts and the disincentive to enroll students—charging a per student tuition cost—becomes unnecessary.

g. Identify a consortium director.

A consortium director is typically responsible for a multitude of duties involving I-TV coordination: administration; promotion; training; course development; teacher recruitment; scheduling; calendar and bell schedule development; liaison with school administrators and counselors; budgeting; financial oversight; contract negotiation and oversight; problem resolution; policy development; etc. A consortium director can transcend the hierarchy of a traditional school. He/she can simultaneously relate to the superintendent, principals, board of education, faculty, students, and community outside the traditional role structure associated with these positions. In the absence of a hired consortium director the job usually falls to an existing school administrator already suffering from over commitment, time constraints, and competing priorities.

The Accommodations to Distance

It is important to understand how I-TV works best for teachers and students before it is fully implemented it in a district or school.

1. *Planning Ahead for Tests and Classroom Materials*

I-TV instructors must think ahead! Operationally, I-TV classes work best when: (1) tests are sent to off-site facilitators well in advance of test day, along with instructions for dissemination, test monitoring, etc.; (2) class materials are distributed to students in advance of the date needed; and (3) protocols for sending and receiving information between students and instructor are understood by all.

2. *Handling distance learning paperwork with remote I-TV sites*

In early I-TV networks, course handouts, tests, homework assignments, and other paperwork was routinely mailed, delivered by courier, or faxed. Today most I-TV paperwork can be easily handled through e-mail attachments or web-based course management software.

3. *Identifying a class facilitator*

Even when the teacher can see all sites at all times, it is useful to designate someone—possibly a school secretary or teachers' aide—to handle the day-to-day class facilitation issues such as receipt and transmission of all e-mail, regular mail, faxes, test distribution/ collection, etc. Providing an inbox and outbox for each I-TV class can ensure that materials are handled efficiently and sent to a remote teacher or received by local students in a timely manner. Regular delivery and pickup times, to and from the classroom, e.g., before and after school, will guarantee that materials are handled most expediently.

4. *Maintaining discipline in an I-TV classroom*

While an in-classroom facilitator is typically not required in an I-TV classroom, other techniques prove useful in maintaining discipline. A "student enrollment contract," signed by the student, his/her parent or guardian, and the high school principal can effectively predetermine the consequences of any disciplinary infraction. Typically, the first strike invokes a call to the student's parent and a second strike results in dismissal from the course.

A classroom management plan created by the instructor will help eliminate any confusion as to what is expected behavior, and will clarify all grading scales, late homework policies, and more. Many schools opt to include a small monitor/VCR in the high school principal's office.

Faced with the possibility of the principal tuning in at any point to the students in the local I-TV classroom, disciplinary problems are rare. Simply reminding students that the monitor is on effectively precludes any inclination to share answers during tests. It can also provide ample evidence to a questioning parent. Finally, the existence of a fax/phone with speed dial in each I-TV classroom allows the instructor to immediately reach a remote principal's office in the event of any problem. Such preventive measures are usually sufficient to deter disciplinary problems from occurring at all.

The Costs of Two-Way I-TV

1. *I-TV is a cost-effective strategy for distance learning.* In fact, for less than the cost of a beginning teachers' salary, a district can pay off the up-front equipment costs on a yearly basis, pay annual transmission costs, cover the joint organizational and technical director personnel costs for a consortium, and contribute to an annual maintenance/upgrade fund.

2. *Comparing the Costs of Two-Way I-TV with a Traditional Classroom.* Imagine hiring one teacher who—for less than a beginning teachers' salary—could teach any subject matter, seven periods per day; had no need for a planning hour; could provide unlimited after-hours' professional development training, and could teach community or adult education courses evenings and weekends. This is one way to explain the benefits two-way I-TV technology can bring to a school. As IP-based technologies continue to evolve and improve, the ongoing costs of I-TV will decline even further.

Two-way I-TV allows several small schools cooperating through an I-TV consortium to overcome the limitations of a restricted curriculum or the inability to find or hire teachers in advanced, high-demand curriculum areas. However, it is not a way to eliminate teachers or reduce instructional staff.

Table I. Total Estimated I-TV Costs

Capital and Operating Costs	Base Cost	With Federal E-Rate Discounts	
	With No Discounts	Value of Discount @ 50-74% F/R Lunch Rate (80% Discount)	Net Cost After Discount
A. One-Time Capital Cost Per Classroom			
1. Classroom Equipment (based on 65% equipment eligibility)	$28,000	$14,560	$13,440
Total Capital Cost:	**$28,000**	**$14,560**	**$13,440**
B. Estimated Annual Operating Cost			
1. T-1 line @ average of $500/month	$6,000	$4,800	$1,200
2. I-TV Teacher Training—two teachers trained per district per year @ $300/teacher	$600	--	$600
3. Organizational and technical support for school network consortia—1/10 of $50,000 I-TV network director/technical coordinator budget	$5,000	--	$5,000
4. contribution to equipment repair, replacement, and upgrade fund @ $2,000 per school per year	$2,000	--	$2,000
Total Operating Cost	**$13,600**	**$4,800**	**$8,800**

For less than the cost of a beginning teachers' salary, a district can pay off the up-front equipment costs on a yearly basis, pay annual transmission costs, cover the joint organizational and technical director personnel costs for a consortium, and contribute to an annual maintenance/upgrade fund.

Types of Costs

There are three types of costs to consider when implementing I-TV. The classroom equipment costs represent a one-time, up-front cost. Transmission costs are ongoing and are usually paid on a monthly basis. Finally, support costs are often overlooked as a necessary ingredient for successful implementation of distance learning technologies. Table 1 shows the estimated total costs for implementing I-TV.

1. *One-Time Classroom Equipment Costs*

   Classroom equipment costs are a one-time investment which currently ranges from $7,000 to $28,000 or more, depending on the capabilities desired in each classroom. Typically, for well under $30,000 (including installation and technical training), an I-TV classroom can include a **codec** with multi-point control unit capabilities; instructor, student, and document cameras; three monitors with carts (for students, instructor, and graphics); an instructor console (as the teaching station); a VCR; and a fax machine. Working with an equipment integrator, rather than multiple equipment vendors, will help to ensure a seamless, well-designed system, based on defined school needs rather than pre-packaged equipment "solutions." After applying eligible **E-Rate** discounts[22] a district with a 50-74% free and reduced-price lunch rate would receive an 80% discount on all **E-Rate** eligible costs. **Total Estimated Classroom Equipment Costs After E-Rate Discount: $13,440.**

2. *Ongoing Transmission Line Costs*

   Ongoing transmission costs will typically range from no cost to $3,600 per year, depending on the pre-existence of a statewide **broadband** network through which video transmissions are allowed. If a dedicated **T-1** line is desired or required, the typical (but highly variable) cost is $500 per month. But, all telecommunications costs are eligible for **E-rate** discounts, which will provide 20-90% discounts to the school based on free and reduced-price lunch eligibility. For instance, a school in which 50-74% of students are free or reduced-price lunch-eligible would receive an 80% discount on all telecommunications costs, from basic local service to long distance to distance learning transmission costs.[23]) After **E-rate** discounts, a school paying $6,000/year for a **T-1** line for distance learning would effectively pay only $1,200 per year.

3. *Instructor Training, Network Director/Technical Coordinator, and Maintenance Costs*

   The cost of training an average of two teachers per year in I-TV instruction is estimated to be $300 per teacher or $600 per year. Salary, benefits, and budget for a combined network consortium director and technical coordinator position are estimated at $50,000 a year. With an average of 10 schools in an I-TV consortium, the per school cost would be $5,000 a year. An annual contribution to an equipment maintenance and upgrade fund would add another $2,000 each year to the cost. **Estimated Cost: $7,600**

A Cost Model for Statewide Adoption of Two-Way I-TV

School finance lawsuits have been filed in 46 of the 50 states.[24] In November 2002, for instance, the Arkansas Supreme Court declared the state's system of public education to be unconstitutional because "it is both inequitable and inadequate."[25] The court directed lawmakers to develop a remedy that would make the system constitutional. As the debate about how to best reform Arkansas' education system unfolded, distance learning emerged as a cost-effective and educationally viable strategy to offer students high quality educational opportunities.

In late 2003, the Rural Trust released a cost analysis outlining various scenarios to implement effective distance learning programs for Arkansas' 234 school districts with enrollments of fewer than 1,500 students that were at that time threatened with consolidation. A given in each scenario was organizing small consortia of districts, each of which would develop and operate a two-way I-TV network. Each scenario considered the cost of equipment, services, and infrastructure, and included capital investment and annual operating costs, such as personnel training, ongoing technical support, and the program coordination necessary to assure that the technology is used effectively.

The report showed that the initial capital investment involved in providing two-way I-TV capabilities to the

state's smallest 234 school districts (under 1,500 enrollment) would cost as little as $3.98 million after applicable E-rate discounts. Annual operating costs, again taking advantage of available E-rate discounts, would likely be $2.7 million per year.

	Base Cost	Cost After E-Rate Discounts
Total Capital Cost	$6,772.963	$3,982,163 - $4,960,135*
Total Annual Operating Cost	$4,579,440	$2,726,160

* Depending on whether E-Rate applications are made as a Priority I or Priority II service

Table 2. Estimated Cost of Implementing I-TV in Arkansas' Smallest 234 School Districts

In other words, for far less than the cost of one teacher per school ($19,570 without E-Rate discounts; $11,650 with E-Rate discounts), small Arkansas schools can "share master teachers and students can participate in advanced high school classes in a technically seamless and instructionally sound environment. They can converse with their teacher or with other students just as if they were in the same classroom. Students requiring dual-credit or Advanced Placement classes can access those classes, taught by college faculty, adjunct faculty, or AP-certified instructors, from their own I-TV classroom. Remote students can participate in any virtual field trip from NASA to the Baseball Hall of Fame, from the Bronx Zoo to the California Science Center, from the Field Museum to an elephant sanctuary, and beyond. District faculty can participate in professional development opportunities without the typical time and travel costs involved."[26]

The Arkansas cost analysis clearly shows the economic feasibility of implementing I-TV in small districts on a statewide basis.

Part IV - THE IMPORTANCE AND IMPACT OF STATE AND LOCAL DISTANCE LEARNING POLICIES

What States Are and Should Be Doing: A Summary of State-Level Distance Learning Policy Study Findings, Implications and Recommendations

As distance learning grows in its use, local and state policies that guide schools and districts are increasingly needed. In an effort to help set the stage in the policy arena regarding distance learning, the Regional Technology in Education Consortia (R*TEC) attempted to categorize existing state policies and rules, as they apply specifically to **videoconferencing.** The paper provided both samples (suggested policies) and examples (actual policies with references), which both SEAs and local practitioners might use in creating distance learning policies.[27]

The "actor" or entity responsible for policy development, however, may shift from local school to district to regional agencies to the SEA to state legislative authority depending on the state. In an attempt to explicitly focus on the role of SEAs in the creation of distance learning policies, rules and regulations, the Rural Trust surveyed members of the State Educational Technology Directors Association (SETDA) in April-June 2003 to conduct a study of distance learning policies in existence across the United States. SEA technology directors in 34 states responded to the extensive, 10-page e-mail survey. An analysis of the study is available on the Rural Trust website [**http://www.ruraledu.org**]. Several important study findings are summarized below. Policy implications and recommendations are included as part of this paper, but are not part of the original study and should therefore not be attributed to SETDA. It should also be noted that the burden of implementation cannot fall to state technology directors alone. Likewise, SEAs cannot act in isolation. They are often under legislative or other constraints which impede or restrict their actions. Therefore, in order to fully implement the following recommendations, collaborative action will likely be required by all state-level policy makers.

Extent of Distance Learning Across States and the Potential for Widespread Adoption

Study Findings: Sixty percent of responding states indicate that more than 60% of their districts currently use some form of distance learning technology. These data point to the widespread adoption of distance learning across the U.S., in its many forms. Of equal importance, the potential for the broader adoption of distance learning technologies remains high. Over half of responding state technology directors (55%) said that more than three-fourths of the districts (who had not already done so) are interested in exploring distance learning, but 58% believed that, while the opportunity for schools to implement distance learning technologies is high, high costs and limited access to technology support are major impediments to adoption.

Implications: Distance learning is here to stay. Its widespread adoption, across multiple technologies is likely to continue for the foreseeable future, although the speed of adoption from state to state may vary along with impeding or facilitating factors.

Recommendation:

- *Embrace and facilitate the adoption of appropriate distance learning technologies.*
  Distance learning is not a fad whose time will pass. It will not likely foreshadow an end to schooling as we know it, but the adoption of distance learning technologies will increasingly expand how we look at schools, how schools view themselves, and how SEA policies must evolve along with them. SEAs have been and will continue to be faced with distance learning issues, including how they carry out their role as program monitor, state regulator, and/or assistance provider. Those states with SEAs that embrace and facilitate the adoption of appropriate distance learning technologies enable local schools to use the technology which best meets their needs.

Which Distance Learning Technologies are Most Widespread?

Study Findings: Web-based distance learning technologies and two-way I-TV are the predominant forms of distance learning reported by the states, but all forms of distance learning are used to some extent.

Implications: Current practices indicate the need for multiple distance learning technologies across schools. Limiting a school's choice of technology may not be in the best

As distance learning grows in its use, local and state policies that guide schools and districts are increasingly needed.

interests of students and could delay improvements in technology brought about by experimentation and widespread use.

Recommendations:

- *Allow for the existence of multiple distance learning technologies within states.*
  SEA adherence, promotion, or restriction to a single distance learning technology is probably not in the best interest of small schools—or schools of any size—given the hugely divergent needs and circumstances of students and schools. States should allow schools the option of selecting the distance learning technology that *best* meets their unique student needs.

- *Provide schools with ongoing access to technology selection assistance.*
  SEAs can be helpful to schools interested in distance learning by providing them access to valid, unbiased information about the various forms of distance learning technology available, best implementation practices, and advantages and disadvantages of each.

Impediments to Widespread Adoption of Distance Learning Technologies

Study Findings: The biggest impediment to broader distance learning adoption, as reported, is availability of funds (both local and state), followed by lack of in-district technology support, and affordability of **broadband** access. State regulation is not seen as an impediment to distance learning adoption, with almost 70% of the state technology directors responding to the survey indicating that their SEA was "supportive" or "very supportive" of the promotion of distance learning and the extent to which it enables adoption of distance learning technologies by schools. In only 57% of responding states, however, are state legislatures viewed as supportive of distance learning in schools.

Implications: Without access to a means of implementing distance learning courses, small schools will be placed at a disadvantage in meeting an increasing number of state-mandated course offerings and curbing renewed efforts to consolidate schools. Without state legislative support for distance learning, access will be even more difficult.

Recommendations:

- *Provide adequate state funding for initial I-TV equipment for small schools.*
  With a widespread reduction in funds available for education, nearly all states have seen technology funding reduced or eliminated. A priority should be placed on re-instating non-categorical state funds available for purchasing I-TV classroom equipment. Such funding would be most productive if targeted to small schools.

- *Prioritize funding access to districts based on demonstrated need.*
  Priority for funding should be given to districts that can demonstrate a need for I-TV technology. Technology entitlement funds to all districts or competitive grant funds available only to those who successfully apply will leave small districts incapable of implementing I-TV. Without personnel available with time to devote to grant writing, small schools are placed at a significant disadvantage in the competition for limited funding. The playing field is leveled when demonstrated need, not grant writing skills, is the basis for allocating grant funds.

Statewide Data Networks

Study Findings: Nearly two-thirds of the responding states (63%) currently have a state-subsidized, high-speed data network linking the state. In two states a statewide network is being established, but in 10 responding states schools must seek their own dial-up or **broadband** connections.

Those districts that most need distance learning technologies often have the least access to it—financially or infrastructurally. Schools in states that do not have a state-supported high speed data network are placed at both an economic and access disadvantage.

Implications: Those districts that most need distance learning technologies often have the least access to it—financially or infrastructurally. Schools in states that do not have a state-supported high speed data network are placed at both an economic and access disadvantage. Likewise, a disadvantage is placed on schools in states that limit the **bandwidth** available to schools for I-TV use or have insufficient **bandwidth** to support full-motion video.

Recommendations:

- *Develop and support a statewide, video-capable, high speed data backbone.*

  In states where the legislature has financially supported or authorized the creation of a "video backbone" or data transmission network for school interconnection, school districts can participate in an I-TV network at a fraction of the cost they would otherwise have to pay, even if **broadband** access is otherwise available. A state-supported "video backbone" can go a long way in helping small and rural schools affordably use I-TV technology. There are two requirements, however—the "backbone" must be robust enough to accommodate two-way full-motion audio/video and, unless data and video transmissions are routed over separate networks, the state network should provide schools with the routers and software required for maintaining QoS (quality of service). QoS ensures that audio-video transmissions have priority over data transmissions.

The Current Role of SEAs in Distance Learning Regulation

Study Findings: Local control remains an overriding consideration in issues of distance learning in approximately half of all respondent states, but almost three-fourths of the state technology directors indicate they have at least some authority to set state distance learning policies and establish implementation guidelines. Those guidelines, however, differ widely both with respect to the distance learning technologies encouraged and in the methods recommended. Seventeen percent of responding states indicate that the state places restrictions on the type of distance learning technologies school districts can implement, while two-thirds "encourage" the implementation of specific technologies. More than 80% of respondent states said they encourage the formation of distance learning consortia, while two-thirds of states also promote individual school or district adoption of distance learning technologies.

Implications: The issue of local vs. state control need not be a dichotomy. There is ample room for maintaining a high degree of local control while enabling, facilitating, and recommending distance learning implementation standards and guidelines. The SEA's role can go beyond regulatory and be one of assistance as well. Adopted state policies need not be a top-down mandate, but can result from the collaborative input of distance learning practitioners at the school level, developed with and for the benefit of schools involved in distance learning.

In I-TV, no classroom is an island. The interoperability and compatibility of I-TV classrooms is necessary at both a technical and operational level. I-TV classrooms within a consortium should have identical equipment in order to minimize troubleshooting and maintenance efforts. But it is also important for I-TV classrooms to operate using accepted audio and video equipment standards, so that interoperability problems across districts, consortiums, and states can be minimized. Where state networks exist it is infinitely easier to require standards of interoperability than in those states where each school is left to provide for its own means of transmission.

Recommendations:

- *Provide recommended I-TV implementation standards and guidelines.*

  There is a clear need for state implementation standards and guidelines for I-TV. I-TV adopter schools do not have to work through the large number of implementation decisions alone. By taking advantage of more than a decade's worth of experience in I-TV implementation around the country, SEAs can collect, adopt/adapt/develop, and disseminate recommended standards and guidelines for I-TV adopter schools.

- *Encourage standards of technical interoperability.*

  Until such time that states do implement comprehensive policies, recommended standards, and implementation guidelines to assist districts adopting I-TV technologies, the responsibility for maintaining interoperability and compatibility standards will fall solely at the district or school level.

- *Regulate I-TV courses in the same manner as traditional courses*

  As long as instruction remains **synchronous** (**real-time**), **full-presence** capabilities are maintained (the teacher sees all sites at all times), and I-TV instructors participate in a quality professional

The issue of local vs. state control need not be a dichotomy. There is ample room for maintaining a high degree of local control while enabling, facilitating, and recommending distance learning implementation standards and guidelines.

development training program, there should be no difference in the state regulation of I-TV courses and traditional courses.

- *Sponsor statewide contracts for course management software.*
  Such contracts enable I-TV adopter districts, if they choose, to use a common web-based format for handling all materials distribution and accessing instructional resources. Course management software vendors do not price their product to be accessible (or affordable) to individual small school districts. Having a statewide contract for management software allows each I-TV school or consortium equal access to the software at an affordable price.

- *Support statewide purchasing contracts for selected I-TV equipment.*
  It would be extremely helpful for each SEA to work with chief state information officers or other state-level policymakers to negotiate state contracts with multiple I-TV equipment vendors so that individual districts that choose to take advantage of the state contract can be assured of high quality equipment, fully integrated operation, and maintenance contracts as required, at the lowest possible price.

Distance Learning and School Accreditation

Study Findings: In 60% of responding states, schools are accredited based on the ability of the school to provide a minimum number and type of course offerings. In 13% of responding states, however, high school students are limited in the number of distance learning courses they can take for graduation credit.

Implications: Distance learning is likely to play an increasing role in the efforts of small schools to meet growing state demands for number and type of curricular offerings. Generically limiting the number of distance learning courses that can count toward graduation ignores a much more important measure of distance learning classes: quality vs. quantity.

Recommendations:

- *Eliminate restrictions on student credit earned through I-TV classes.*
  Currently, it is most often the *quantity* of distance learning courses that is regulated when it should be the *quality* of courses being offered. There should be no need for the state to limit the number of quality I-TV courses that can be accepted for graduation credit. That should remain a local option. SEAs must find ways in which distance learning courses—like traditional courses—can be monitored and regulated in terms of course content and instructional quality. Student outcomes, rather than "Carnegie Units" or seat time, should ultimately determine course value.

Accreditation of Distance Learning Course Providers

Study Findings: Only a minority of SEAs evaluate or accredit in-state (15%) and out-of-state (16%) distance learning course providers.

Implications: With few states operating state-supported distance learning programs and with few research findings in place, the sole responsibility for judging the integrity or educational value of commercial distance learning course vendors falls to local districts. This also places the burden on local schools or districts to evaluate whether distance learning course providers have linked their course objectives to state standards.

Recommendations:

- *Regulate commercial I-TV (and other distance learning technology) course providers.*
  If courses are provided from a commercial vendor via two-way **videoconferencing** or other distance learning technology, the state should implement course accreditation procedures, require the correlation of course objectives to state standards, and require state-approved instructor training. Ideally, states should also require vendors to apply for state approval. In-state I-TV consortiums that teach and receive courses from within their own consortium or across in-state school district consortiums should be subject to the same regulation as traditionally-taught courses in the state.

Distance Learning and No Child Left Behind

Study Findings: Only half of responding states (50%) indicate that they will take responsibility for soliciting or approving distance learning providers of supplemental

Distance learning is likely to play an increasing role in the efforts of small schools to meet growing state demands for number and type of curricular offerings.

education services in response to the *No Child Left Behind* (NCLB) legislation.

Implications: A small district failing to meet Adequate Yearly Progress (AYP) goals as mandated by NCLB and set by the state will be forced to try to improve student achievement by whatever means available. Although districts may have flexibility in choice, these districts may be left with little guidance in terms of quality of courseware. The involvement of the SEA may assist districts in making more effective decisions.

Recommendation:

- *Require registry and/or approval of providers of supplemental education courses.*
  At a minimum, SEAs should require the registration of providers of supplemental education courses by distance learning, which includes collecting sufficient verified information for school districts to judge the competency of the provider and the quality of the product or service. States should have suggested standards and procedures to help districts make informed choices.

State Requirements for Distance Learning Instructors and Course Content

Study Findings: Less than half of the responding states (48%) require distance learning courses to be taught by state certified teachers and in more than two-thirds of the states (68%) the SEA assumes no control over distance learning course content. In only slightly more than half of the states (58%), is alignment of in-state distance learning course objectives to state standards mandated; only 52% of the states make a similar requirement for distance learning courses originating out-of-state.

Implications: As online course vendors increasingly flood the distance learning market and little control is exerted over in-state providers, there is a disconnect between the push for increased accountability for traditionally taught students and the lack of instructional accountability on the part of distance learning course providers. This will be of increasing importance as schools struggle to meet state and federal (NCLB) requirements.

Recommendation:

- *Focus regulatory attention on issues of instructional content and quality.*
  Many SEAs require that school course curricula include state content objectives. Distance learning courses should not be exempt from this requirement. Ensuring the instructional content and quality of distance learning courses is appropriate, if done so irrespective of technology.

- *Carry out cross-technology evaluation studies.*
  SEAs should work with adopting schools to carry out cross-technology evaluation studies that measure both student achievement and student (and teacher) satisfaction. There is indeed a role for a nationally developed set of evaluation criteria and methodologies that states can use in carrying out such studies. Cumulative findings over time will then yield what no limited research study has yet been able to definitively do: determine how or whether student achievement and satisfaction differ across different distance learning technologies and define the circumstances under which specific distance learning technologies are most appropriate.

Preparation of Distance Learning Instructors

Study Findings: In one-fourth of the responding states (25%), first year, beginning teachers were judged to be "somewhat competent to teach in a distance learning classroom." In 75% of the states, however, beginning teachers were judged to be "somewhat unprepared" or "very unprepared" to teach in a distance learning classroom. Nearly two-thirds (63%) agreed or strongly agreed that the extent to which pre-service teachers were adequately prepared to teach in a distance learning classroom varied greatly by teacher education institution. While 74% of responding states report that they "encourage" professional development training for in-state distance learning instructors, only 68% "require" such training.

Implications: Pre-service teachers are not being prepared to use I-TV and other distance learning technologies. Distance learning technologies are rarely addressed in standard teacher preparation programs. I-TV is not a plug-and-play technology. While a computer can be taken out of the box, plugged in, and used, successful implementation of I-TV requires more than just the equipment involved. It requires that the instructor understand not only how to properly operate the equipment, but more importantly, how to maximize the use of the technology in the learning process. This only enforces the need for in-service professional development requirements and training opportunities for distance learning instructors.

Recommendations:

- *Ensure initial and ongoing I-TV instructor training for adopting districts*
  While it is not necessary to implement a separate teaching credential for I-TV teachers, it is important that I-TV teachers have access to both initial and ongoing, high quality pre-service and professional development training that focuses not only on technical equipment operation, but more importantly, on the effective use of technology teaching tools in the I-TV classroom. SEAs should work with teacher education programs and local professional development providers in developing/adopting/adapting quality programs that asssist teachers in learning how to teach effective distance learning courses.

Recommended Local School District Policies and Practices

Apart from carefully following the 10-step I-TV Checklist (page 11) when implementing two-way interactive television, there are several things adopting districts can and should do at the local level to ensure the implementation of an excellent distance learning program:

- The chosen distance learning technology should meet the needs of the local students. Be aware that distance learning technologies that "look" most like the traditional classroom are also the most likely to ensure student and teacher satisfaction as well as achievement across a broad range of students.
- Local school counselors must fully understand the distance learning courses being offered and the academic prerequisites for each, so they can advise students accordingly.
- Distance learning instructors should have appropriate training and be devoted to continuing their learning, regardless of whether they are located within or outside the district.
- Distance learning students must have as much interaction with their distance learning instructor as possible, with preference given to all forms of real-time, spontaneous audio-visual interaction.
- Each school should have a distance learning facilitator who can help distance learning students manage paperwork, troubleshoot problems, and assist students when immediate questions or problems arise.
- Technical assistance should be readily available at all times, whether provided for in-house, by jointly hired consortium personnel, or purchased externally.
- The curriculum of the distance learning course must meet the district's criteria for course rigor and alignment to local (and state) standards. This responsibility should remain with the local school in conjunction with the SEA. Beware of relegating this responsibility to any commercial vendor!
- Local school administrators should stay involved in distance learning courses, and should never turn over the education of local students to an unseen, unknown course provider. They should maintain continuous awareness of and involvement with remote distance learning providers, keeping local students' needs in the forefront of decision-making.
- Schools should work with the SEA to provide ways for schools with experience and expertise in implementing distance learning technologies to share that knowledge with other schools that may be in the early stages of distance learning implementation.
- There should be no difference between distance learning and traditional courses in terms of limits on credit earned, graduation requirements, etc. If distance learning courses, just like traditional courses, are continually meeting all local educational expectations, there should be no need to differentiate between them.

PART V: CONCLUSION

Distance learning can help small and rural schools capitalize on their primary asset—small size—while also providing equity in educational opportunity. No longer need small schools limit the scope of their curriculum simply because it is not economically justifiable (or possible) to hire local teachers in every advanced subject area. With distance learning technology—especially through I-TV—small schools can have access to low-demand, high-cost courses by sharing teachers across district and consortium boundaries. Through the localized and/or regional development of I-TV consortiums, groups of small school districts can band together to provide locally controlled, locally hired, but regionally shared teachers to provide high-quality, "high-touch" instruction across distance learning networks.

Unlike other distance learning technologies, I-TV has the capability to maintain both a "high tech" and a "high touch" instructional environment, where instructors know and interact with every student, where a facilitator solves any problems that may arise, and where the only significant difference between traditional and I-TV instruction lies in the remote physical location of the instructor.

No distance learning technology offers the quality, the immediacy, the potential for interactivity, the synchronicity, the level of student and teacher satisfaction, or the promise of I-TV. I-TV is a far more educationally viable, economically rational, and socially preferable alternative to school or district consolidation.

Distance learning is here to stay.

Clearly, distance learning is not a passing educational fad. Its roots are too deeply embedded and the needs it addresses are too great. This paper has laid the groundwork for making I-TV the accepted standard for distance learning technology. It remains to be seen whether newer technologies can approach the advantages of I-TV for schools that must rely on distance learning for curriculum enhancement or whether combining other technologies with I-TV will help to promote its advantages.

Distance learning technologies will not replace schools as we know them.

As Phil Westfall, President of the U.S. Distance Learning Association indicates, it is not likely that schools as we know them will gradually disappear. Their purposes—especially those of small schools—extend beyond the simple academic preparation of youth to include the very fabric of socialization of each succeeding generation. Such fear, however, should not cloud our visions of the future or cause us to discard forms of distance learning which force us to embrace new educational paradigms. For now—and likely for the indefinite future—schools are here to stay. We must learn to deal with the "messiness" of other learning environments and incorporate them into the future of education. Until that process is substantially improved, I-TV holds the highest promise for small and rural schools and the formation of future citizens.

SEAs and LEAs must work together in establishing policies.

Regardless of the distance learning technology chosen, it is important that SEAs and LEAs work together to develop recommended implementation guidelines, technical standards for interoperability, and operational policies which both protect the integrity of academic instruction and respond to student needs for flexible, non-traditional courses.

I-TV is the best application of technology in rural schools.

All distance learning technologies are not created equal. There is a substantial risk in premature, over-reliance on forms of distance learning that fail to provide quality learning opportunities and are thrust upon students of all learning styles as the instructional equivalent of traditional courses. Until safeguards are fully in place, and until an appropriate regulatory environment and support structure exists, I-TV is the optimum alternative, requiring little in the way of a demonstrably different regulatory structure or student safeguards.

No distance learning technology offers the quality, the immediacy, the potential for interactivity, the synchronicity, the level of student and teacher satisfaction, or the promise of I-TV.

I-TV is cost-effective for rural schools.

I-TV is an absolutely cost-effective form of distance learning in rural schools. For a modest capital investment and an annual operating cost less than the salary of one full-time teacher, small schools can offer students access to any advanced high school, dual credit, or Advanced Placement class, while providing a host of ancillary services to students, faculty, staff, and the community.

I-TV can help meet the demands placed on small and rural schools.

With the continued drain of young people from many parts of rural America and the decline of rural schools in many regions of the country, a significant resource is being lost. New, misguided waves of consolidation will only further damage the ability of small and rural schools to continue to produce tomorrow's educated citizenry. Distance learning opportunities—and most importantly, I-TV—can enable small schools to meet the curricular needs of its students while maintaining all of the advantages of small schools.

I-TV is a sound educational investment in rural youth.

In this era of decreasing dollars for education, increased cries for economic efficiency through consolidation, and increased academic standards to which *all* students are held accountable, distance learning—especially I-TV—offers a measure of considerable hope for small, rural schools. Adopting distance learning via I-TV can mean the difference between closing the small, community-based schools on which much of rural America was built and bussing students miles away to generic, reorganized districts having little or no connection to any community. It can mean the difference between students anchored to a community that they care for deeply and students who grow up without any sense of community identity. It can mean the difference between a viable future for rural America or its continued demise. The promise and the power of distance learning is its role in re-establishing the prominence of rural schools in the 21st century as academically excellent and economically viable sites of student learning.

Appendix I
Characteristics of Major Distance Learning Technologies

By comparing the attributes of each distance learning technology it is possible to determine—before implementation—the potential for optimum student learning. In Part II, distance learning technologies were discussed in terms of four characteristics: learners, time, instruction, and degree of interactivity. The following chart elaborates on those four dimensions, depicting each as a vertical continuum. The higher on the continuum the technology lies, the greater the *potential* for optimum student learning.

Explanation of Each Continuum on the Chart

- **Instruction Mode** ranges from instructor-led classes on the high end of the continuum to text/graphics-based instruction on the low-end of the continuum, with the possibility of mixed instructional modes occurring across the continuum. For the majority of learners, instructor-led classes are preferable to pre-produced text- or graphics-based instruction.

- **Learner Types** may include a group of learners, i.e., a class, or an individual, with the possibility of mixing individual students and classes with some technologies. For the majority of students, class-based learning is preferable to individual learning.

- **Degree of Interactivity** ranges from full-time, two-way audio/video to part-time or switched two-way audio/video to one-way video to one-way audio. For the majority of learners, full-time, two-way audio-video technologies are preferable to other modes.

- **Spontaneity of Two-Way Communication** exists as a dimension of **time** with **synchronous** (**real-time**) communication occurring at the high end of the continuum and **asynchronous** (delayed) communications occurring at the low end of the continuum. For the majority of learners, **synchronous** (**real-time**) communication is preferable to **asynchronous** (delayed) communication.

The major distance learning technologies listed in Appendix I are plotted on the chart as they typically fall with respect to each characteristic. Where each technology falls on the continuum, however, depends on both the technical limitations of the technology as well as implementation options (Appendix II list and defines types of distance learning technologies).

Understanding The Chart

Example:

Two-way I-TV, as typically implemented, appears at the top of each continuum. This means that it is an instructor-led technology—it is taught by a live teacher; the students involved in the technology are typically aggregated as a class, albeit at different locations, rather than as individuals; it is a full-time, two-way audio-video technology, meaning that the teacher and students can see, hear and interact with each other at all times; and it is a **synchronous** (**real-time**) technology—verbal student-to-teacher, teacher-to-student, and student-to-student communication occurs spontaneously. This technology, therefore, ranks highest in terms of *potential* for optimum student learning.

Example:

A typical online course involves text and graphics-based instruction, prepared, but not taught by, a live instructor; the student is typically an individual; it involves one-way audio and video, with the student able to see (and often hear) the pre-produced lessons, but unable to respond or ask questions except in written electronic form through the computer or using peripheral technologies; and communication occurs **asynchronous**ly—the student is not able to communicate with a remote instructor directly or spontaneously.

This chart is a valuable tool for rural school administrators or other distance learning technology adopters to weigh the advantages and disadvantages of each technology as it would be implemented, that is, the extent to which each characteristic "enables" or "disables" learning with respect to proven instructional strategies and communication theory. Equally important, however, is the use of the chart as a framework to evaluate any implementation strategy of any distance learning technology. It should empower administrators to choose (or insist on) implementation strategies which are more

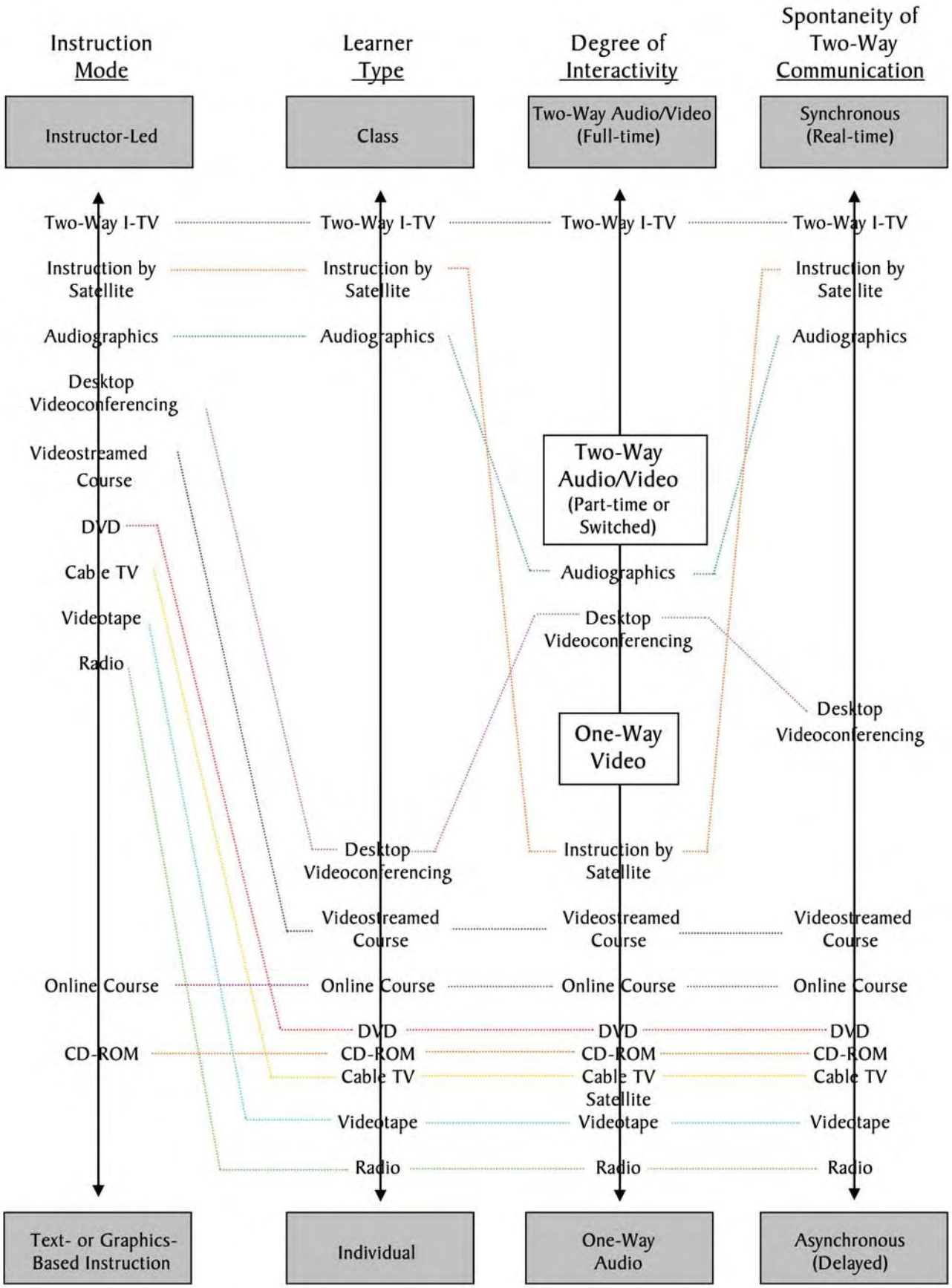
likely to enhance student achievement and satisfaction. The following chart should help an adopting school district understand three major points with respect to technology choice:

a) I-TV is the technology which is most likely to enable higher student achievement and a greater student, teacher, and parent satisfaction level.

b) Other technologies also have a role to play in distance learning. The degree to which they can ensure a positive learning outcome can be greatly enhanced by choosing implementation strategies that better facilitate or enable learning, for instance, by adding an in-room teacher aide to a class receiving instruction by DVD, or by blending **synchronous** communication components into an **asynchronous** online class.

c) Individual student needs may require that one technology be chosen over all others, without regard to maximizing the potential for student achievement or satisfaction. Most notable is the availability of online courses that can easily meet the "anytime, anywhere" requirements of some students. A home-bound student, a stay-at-home mom, a soldier stationed overseas, or a college student simply wanting to add another class on his/her own terms may each be pulled to a particular distance learning technology either out of necessity or convenience. What may be less than an ideal learning mode for one student, may be tolerable—or indeed, be no problem at all—for another student. A highly motivated, assertive, goal-oriented student is likely to succeed in virtually any distance learning medium. However, assuming that all students can or will succeed regardless of the distance learning technology implemented will usually result in student frustration, parent or administrator dissatisfaction, limited use, or abandonment of the technology investment.

Characteristics of Major Distance Learning Technologies



Appendix II: Types of Distance Learning Technologies

a. One-Way Live or Pre-Recorded Audio – Perhaps best known is Australia's School of the Air in which students received one-way audio instruction through their radio. Pre-recorded audio-taped lessons also fall within this category.

b. Two-Way Audio – **Teleconferences** in which students can hear an instructor and can respond and/or ask questions is an alternative for audio-based distance learning, but its use has languished in the educational arena with the advent of video-capable technologies.

c. CD-ROM Courses – Favored in alternative schools, special education classes, and other individualized, remediated instructional environments, CD-ROM courses take the individual student through a pre-programmed set of largely text- and graphics-based lessons. A teacher or facilitator is usually present in the classroom to assist students, but the CD-ROM course modules are the primary means for conveying instruction.

d. One-Way Live or Pre-Recorded Video –

- *Videotaped Instruction* – Students view previously recorded lectures or lessons via mailed videotapes or cable TV.
- *Instructional Television* – Once popular televised courses brought together a geographically dispersed 'class' of students who watched and listened to a pre-recorded lecture or in some instances, a live class that was being recorded. This was the first distance learning medium that offered each learner the versatility of recording a broadcast for future viewing. Its use continues to be widespread, especially for non-traditional learners.
- *DVD Instruction* – Complete video courses can also be available to students in a recorded format through DVDs.

e. One-Way Video with Two-Way Audio –

- *Audiographic Instruction* – Prominent in the previous two decades, this pre-Internet, computer and telephone-based technology allowed the instructor to link to students through a dynamically controlled computer screen. The students did not see the instructor, but could see any text or graphics generated or input by the remote instructor. A telephone link allowed for real-time, two-way audio communication. For instance, if the instructor typed in a math problem, students could see the problem on their computer screen, work on it, and then send it back to the teacher for review.
- *Instruction by Satellite* – A precursor of later technologies, instruction by satellite typically involves an instructor who broadcasts a live class to hundreds of students across the country who receive the class through a satellite downlink receiver in their schools. In an attempt to make this instruction two-way, students could often enhance participation by calling in questions to the teacher or by using a provided "call pad" to answer closed-ended questions. The expense associated with two-way instruction via satellite has precluded its far-reaching use.
- *IP Multicasting* – **IP** (Internet Protocol) multicasting over satellite is a new technology that allows quality transmissions at a low **bandwidth** while allowing streaming to the desktop. Rather than unicasting (sending the programming or data update to one recipient) or broadcasting (sending to all members of the network), multicasting allows for the targeted, simultaneous transmission of information to any number of selected recipients among a larger subset of members.

f. Two-Way Video – This form of distance learning is commonly known as two-way interactive television (I-TV) or **videoconferencing**. I-TV is live, interactive audio and video instruction; the teacher and remote students see and hear each other at all times just as if they were in a traditional classroom together. Similar to **videoconferencing**, I-TV differs slightly in its ability to achieve **continuous presence** (all sites see all sites at all times) and its ability to allow immediate interaction (with "always on" microphones).

g. Internet or Online Courses – Online or web-based instruction is a relatively new form of distance learning in which the student uses a computer and the Internet to interact in some form with a remote instructor or with a text/graphics-based course. In this highly accessible form of distance learning, a typical student needs only an Internet-accessible computer, a dial-up modem (or better connection), and an Internet Service Provider (ISP) to connect to local, regional, state-sponsored or commercial course providers.

h. 'Blended' Distance Learning Technologies – Given the divergent methods for implementing distance learning technologies, it is probable that the distance learning technologies adopted in the future will be a combination of technologies in a 'blended' environment. Imagine a basic two-way interactive I-TV classroom where remote students are involved in a course of study with a live instructor, and students and instructor are fully engaged in dialogue. The teacher incorporates short videotapes on specific instructional content, connects remote I-TV classrooms with an international guest lecturer by audio conference, routinely provides students the opportunity to send and receive homework via e-mail, encourages I-TV students to interact outside of class time through a class discussion list, provides remote students with access to class materials and tests through an online course management interface, and facilitates the continued real-time involvement of a home-bound (or home-schooled) student in the class through a desktop **videoconferencing**-capable computer in his/her home. This scenario, existing even more broadly and encompassing more instructional technology options than included above, is possible, and indeed, is being done today. Blending technologies is clearly the direction in which distance learning is moving.

• ***Virtual Schools***—In a generic sense, a virtual school is any public or private entity providing courses, where the student interacts with the courseware in a computer-mediated environment, rather than with a face-to-face teacher. It has come to mean a provider of a complete or restricted range of high school or K-12 online courses.

• ***Cyber Charter Schools***—Merging the concept of a charter school—a four-walls, bricks and mortar institution with a district or statewide charter—with that of a virtual school, the cyber charter becomes unbound by space or time limitations (within the limits of its charter) and can enroll any combination of public, private, home-bound, or home-schooled students. In those school choice states, such as Ohio and Pennsylvania, which have seen a rapid insurgence of cyber charters, the rules of engagement are only beginning to be worked out. Significant issues of teacher certification, Carnegie units, grading, diploma granting, state reimbursement, loss of revenue to public schools, etc. are just beginning to be addressed.

• ***Online Curriculum Providers or Virtual Support Companies***—This category of commercial vendors provides online distance learning resources, that can be purchased by other distance learning course providers (like schools), including: tutorials, curriculum, lesson plans, Web resources, e-learning applications, course management software, assistance with virtual school administration, training for online educators, enrollment management services, student evaluation and grade reporting tools, software platforms on which virtual schools can build their own programs, student information and data systems, and professional development.

Appendix III
Categorization of State Videoconferencing Policies

The following list, developed by the Regional Technology in Education Consortia (R*TEC)* categorizes state policies and rules, as they apply to **videoconferencing**, into categories and provides both samples (suggested policies) and examples (actual policies with references), which both SEAs and local practitioners might use in creating distance learning policies.

1. **Technical Considerations**
   a. Infrastructure
   b. Protocol
   c. Line dedication
   d. Hardware and software
   e. Tech support
   f. Quality of Service (QoS)

2. **Facilities and Budgetary Considerations**
   a. Room dedication
   b. Use protocol
   c. Local use fees
   d. Scheduling and schedule hosting
   e. Financial support

3. **Learner/Student Considerations**
   a. Technical support
   b. Qualifications for enrollment
   c. Supervision and remote site support
   d. Enrolling agency responsibility
   e. Academic support
   f. Completion expectations
   g. Individual attention

4. **Teacher/Curriculum Developer Considerations**
   a. Technical support
   b. Contract support (salary, benefits, preparation time)
   c. Content development support (purchased content, home-grown content development, ongoing professional development, content copyright requirements)
   d. Teacher and other staff training, professional development, and support
   e. Pedagogy, delivery, and curricular alignment
   f. Personnel qualifications

5. **Assessment and Evaluation Considerations**
   a. Federal and state assessment requirements
   b. Class, course, and school requirements for grading and credit
   c. Curriculum standards requirements
   d. Program evaluation needs
   e. Accreditation requirements
   f. Course and school "credibility" needs (standards of rigor and/or breadth)

6. **Management and Administration Considerations**
   a. Vision, goals, and objective needs
   b. School improvement plan needs
   c. Americans with Disabilities requirements
   d. Contract and union requirements
   e. Parent/Community involvement requirements
   f. Student and staff privacy needs
   g. CIPA (Children's Internet Protection Act) requirements

7. **Marketing and Public Relations Considerations**
   a. Class and program offering clearinghouse needs
   b. Local school contact plans (counselors, etc.)
   c. Ongoing program involvement and development plans
   d. Outreach plans

*From "R*TEC K-12 Interactive Videoconferencing: Policy Issues Review" by K. deFord and V. Dimock. June 2002. Available at http://neirtec.terc.edu/k12vc/resources/research.cfm

Glossary

Included in this glossary are words that you will find bolded in the body of the document or that you may confront as you delve more deeply into distance learning.

Asynchronous (Not Synchronous)

With reference to video and data signals and devices, asynchronous transmissions are those in which local and remote communication is not precisely in step, not of the same frequency, or does not happen together in time.

ATM – Asynchronous Transfer Mode

An international high-speed, high-volume, packet-switching transmission protocol standard. ATM uses short, uniform, 53-byte cells to divide data into efficient, manageable packets for ultrafast switching through a high-performance communications network. ATM is the first packet-switched technology designed from the ground up to support integrated voice, video, and data communication applications. High costs often make this transmission mode impractical for K-12 I-TV networks.

Bandwidth

The capacity to transfer data over telecommunications lines, usually measured in bits per second. The necessary bandwidth is the amount of spectrum required to transmit the signal without distortion or loss of information.

Broadband

A high capacity communications network that can enable the simultaneous transmission of voice, data, and video. Broadband networks are usually defined as operating at greater than T-1 speeds (1.544Mbps).

Codec

COder – DECoder. A digital device for the coding and decoding of video and/or audio signals usually to permit them to be transmitted in compressed and/or encrypted form.

Continuous Presence

A video processing, transmission, and display technique that electronically combines parts of two (or more) separate video images for transmission in a single data stream. At the receive location, two or more images may be viewed in quadrants on a single monitor or separated for viewing on side-by-side monitors.

DS-3

A telecommunications line (or digital transmission system) operating at 45 Mbps. A DS-3 line is approximately 30 times the bandwidth of a T-1 line.

DSL – Digital Subscriber Line

A generic term including a family of moderate speed access technologies that use sophisticated modulation schemes to pack data onto copper wires. They are sometimes referred to as last-mile technologies because they are used only for connections from a telephone switching station to a home or office, not between switching stations.

E-Rate

A telecommunications discount program for schools and libraries begun as part of the Telecommunications Act of 1996. Telecommunications services, Internet access, and internal connections are eligible for 20-90% discounts based on the free and reduced-price lunch rate of students within a school—or schools within a library district.

Fractional T-1

One or more channels of a T-1 service. A full T-1 carrier contains 24 channels; each provides 64 Kbps. Most phone companies, however, also sell fractional T-1 lines, that provide less bandwidth but are also less expensive. Typically, fractional T-1 lines are sold in increments of 56 Kbps (the extra 8 Kbps per channel is used for data management).

Fractional T-3 or DS3

A telecommunications service that uses a portion of a 672-channel T-3 circuit for any mix of voice, data, or broadcast-quality video.

IP – Internet Protocol

The set of rules that allow the transmission of data among all computers. IP specifies the format of packets and the addressing scheme. Most networks combine IP with a higher-level protocol called Transmission Control Protocol (TCP), which establishes a virtual connection between a destination and a source. IP by itself is like the postal system. It allows you to address a package and drop it in the mail, but there's no direct link between you and the recipient. TCP/IP, on the other hand, establishes a connection between two hosts so that they can send messages back and forth.

IP Address

An IP number is a numerical address consisting of several numbers separated by periods. Each IP address uniquely identifies a certain computer on the Internet.

ISDN – Integrated Services Digital Network

An international communications standard for sending voice, video, and data over digital telephone lines or normal telephone wires. ISDN supports data channel transfer rates of 64 Kbps (64,000 bits per second), but multiple channels can be purchased to increase bandwidth. There are two types of ISDN lines: Basic Rate Interface (BRI) and Primary Rate Interface (PRI). ISDN charges are typically incurred for each call or connection made. Costs increase as the number of channels used increases.

I-TV – Two-Way Interactive Television

An audio and video link between two or more remote locations with live, moving image transmission and display. Two-way interactive television allows all locations to see and hear the people and presentation materials at other locations. I-TV is the term usually used to signify videoconferencing in an educational setting. It should not be confused with Instructional Television (ITV), which is the one-way transmission of educational programming by television.

Kbps – Kilobits per second

Refers to the data speed of a telecommunications line. Data is transmitted in bits per second. A bit is the smallest unit of information on a computer network, a binary digit (0 or 1). A kilobit is 1000 bits.

Mbps – Megabits per second

Refers to the data speed of a telecommunications line. Data is transmitted in bits per second. A bit is the smallest unit of information on a computer network, a binary digit (0 or 1). A megabit is one million bits.

Point-to-Multipoint

A circuit that connects a single node to a switch. In continuous presence I-TV, it is a single site connecting to up to three additional sites, such that all sites can see all other sites at all times. In a switched I-TV network, it is a single site connecting to any number of additional sites. In a switched mode, each I-TV site will routinely see only the presenter or the site having last spoken.

Point-To-Point

A non-switched, dedicated communication circuit. In I-TV, a single site connecting to only one other site.

Real Time

Rapid transmission and processing of event-oriented data and transactions as they occur, in contrast to being stored and retransmitted or processed in batches. I-TV is a "real time" technology because it is broadcast live, as it occurs.

Synchronous

With reference to video and data signals and devices, synchronous means being precisely in step, or happening together at the same time. I-TV involves synchronous communication because the teacher and student interact at the same point in time through the same medium.

T-I/DSI

A telecommunications line (or digital transmission system) operating at a speed of 1.544 million bits (megabits) per second (1.5Mbps). A T-1 line consists of 24 individual channels, each of which supports 64Kbits per second. A T-1 line is a preferred means of transmitting I-TV, taking both cost and quality into account. T-1 lines, though transmitting lower quality, compressed video signals than DS-3 lines, for instance, are much less expensive and more widely available.

Tariff

A public document filed with a state public utility commission that outlines services and rates of telecommunications carriers. Usually, all customers are offered the same rate for a specific service, based on published constraints. In some states telecommunications carriers have filed special distance learning tariffs available to K-12 schools.

Teleconference

Live, two-way audio transmission between two or more locations. Usually includes speaker phones and microphone amplification systems.

Universal Service

The public policy that helps compensate telephone companies or other communications carriers for providing access to telecommunications services at reasonable and affordable rates throughout the country, including rural, insular, and high cost areas. Companies, not consumers, are required by law to contribute to the Universal Service Fund. The law allows companies to pass this charge on to customers. The E-Rate program is a separate part of the Universal Service Program.

Video Conference

An audio and video link between two or more remote locations with live, moving image transmission and display. Two-way video conferencing allows both locations to see and hear the people and presentation materials at other locations, although not necessarily in a continuous presence mode. I-TV is the term usually used to signify videoconferencing in an educational setting. Videoconferencing most often refers to the business

application of the technology, e.g., video meetings. Increasingly, the terms are used interchangeably.

Wireless

Radio waves, cellular, satellite, microwave, etc. are alternative modes of telecommunications transmission to land lines. I-TV via wireless transmission is possible, but is in its infancy.

Sources From Which Glossary Definitions Were Adapted:

1. The Glossary of Telecommunications Terms. Prepared by the US General Services Administration, Information Technology Service, Technology and Standards Division. August 1996. Available at http://www.its.bldrdoc.gov/fs-1037/
2. HEI Telecommunications Technology Consultants. Glossary of Telecommunications Terms. Available at http://www.hei.ca/glossary1.html
3. National Public Safety Telecommunications Council. Glossary of Telecommunications Terms. Available at http://www.npste.du.edu/documents/glossary.html
4. Webopedia. Online dictionary for computer and Internet technology definitions. Available at http://www.webopedia.com/

References

[1] Beeson, E. & Strange, M. (February 2003). *Why rural matters: The continuing need for every state to take action on rural education*. Washington, DC: Rural School and Community Trust. Available at http://www.ruraledu.org/newsroom/wrm_new.htm

[2] U.S. Department of Education, National Center for Education Statistics. (2002) *Common core of data agency survey, 2001-2002*. Washington, DC: Government Printing Office.

[3] Rural School and Community Trust. (March 2003). *School size: Research-based conclusions*. Washington, DC: Author. Available at http://www.ruraledu.org/docs/arkansas/schoolsize.doc.

[4] Jimerson, L. (March 2003). *The competitive disadvantage: Teacher compensation in rural America.* Washington, DC: Rural School and Community Trust. Available at http://www.ruraledu.org/docs/Teacher_Pay.pdf.

[5]

National Average Salaries*		
Salaries	Non-rural Districts	Rural Districts
Beginning	$26,895	$24,170
Average	$33,838	$29,828
Highest	$46,271	$39,687

* Based on FY2000 data. Average beginning salary is based on attainment of a BA + 0 years experience; highest salary is based on attainment of MA + 20 years experience.

[6] Selected state salaries for comparison purposes: From: *Why rural matters: The continuing need for every state to take action on rural education*.

Selected State Average Rural Teacher Salaries and Ranks			
Nebraska (49th)	$24,318	Illinois (27th)	$33,378
North Dakota (48th)	$24,395	Florida (26th)	$33,757
Montana (47th)	$26,458	Texas (23rd)	$35,979
Iowa (46th)	$27,052	Georgia (15th)	$37,867
Arkansas (45th)	$28,563	California (10th)	$40,383
Missouri (44th)	$28,584	Pennsylvania (7th)	$41,182
Mississippi (38th)	$30,284	New York (5th)	$42,659
West Virginia (29th)	$32,916	Alaska (3rd)	$44,658

[7] Lawsuits are currently pending in Arkansas, Kansas, Missouri, and Nebraska, among many others.

[8] In West Virginia, for example, 325 schools were closed over a 10-year period in an effort to make schools more efficient by reducing the number of administrators. It has since been shown that the number of central office administrators substantially increased even though the number of students being served by the system declined by 41,000 over the same time period. Meanwhile, per pupil transportation costs more than doubled. What appeared as sound logic, didn't hold up in reality. It is almost always true that lowering costs through consolidation will be more than offset by higher costs in other areas.

See Eyre, E., & Finn, S. (2002). Closing costs: School consolidation in West Virginia. *Charleston Gazette* series on the costs of school consolidation: August 25 and 30, September 8,12,24, and 29, and October 3 and 6, 2002. Available at http://wvgazette.com/section/Series/Closing+Costs.

[9] Rural School and Community Trust. (June 2003). *The fiscal impacts of school consolidation: Research-based conclusions.* Washington, DC: Author. Available at http://www.ruraledu.org/docs/arkansas/fisc_soc.doc.

[10] Russell, T. (1999). *The No Significant Difference Phenomenon*. Montgomery, AL: International Distance Education Certification Center. Retrieved August 17, 2004 from http://www.nosignificantdifference.org/nosignificantdifference/.

Cavanaugh, C. S. (1999) *The effectiveness of interactive distance learning technologies on k-12 academic achievement*. Available from ERIC Clearinghouse, Document No. ED428752.

[11] Cotton, K. (1996) School size, school climate, and student performance. *School Improvement Research Series*. Portland, OR: Northwest Regional Laboratory. Retrieved August 17, 2004 from http://www.nwrel.org/scpd/sirs/10/c020.html.

Cotton, K. (December 1996). *Affective and social benefits of small-scale schooling*. ERIC Clearninghouse on Rural Education and Small Schools. EDO-RC-96-5.

Funk, P. E. & Bailey, J. (1999). *Small schools, big results: Nebraska high school completion and postsecondary enrollment rates by size of school district*. Lincoln, NE: Nebraska Alliance for Rural Education. Retrieved August 17, 2004 from http://www.ruraledu.org/docs/ne_small.pdf.

Lindsay, P. (1982). The effect of high school size on student participation, satisfaction, and attendance. *Educational Evaluation and Policy Analysis* 4(1), 57-65.

[12] In 1995 when the National Telecommunications and Information Administration (NTIA) published the first in its Falling Through the Net research series (*Falling Through The Net: A Survey of the "Have Nots" in Rural and Urban America*), the rural poor were lowest of all groups in terms of household computer penetration at 4.5% and in modem penetration at 23.6% (as a percent of all computer owners).

In 1997 when NTIA published its second report, *Falling Through the Net II*, rural households earning between $5,000-$10,000 still had the lowest PC-ownership rates (7.9%) and on-line access rates (2.3%), followed by urban areas (10.5%, 4.4%) and central cities (11%, 4.6%). As in 1995 among all ethnic groups, Blacks had the lowest PC-ownership rates in rural areas (14.9%), followed by Blacks and Hispanics in central cities (17.1% and 16.2%, respectively). On-line access was also the lowest for Black households in rural areas (5.5%) and central cities (5.8%), followed by Hispanic households in central cities (7.0%) and rural areas (7.3%).

In its 1999 report, *Falling Through the Net: Defining the Digital Divide*, NTIA reported that urban households with incomes of $75,000 and higher were more than *twenty times* more likely to have access to the Internet than rural households at the lowest income levels, and more than *nine times* as likely to have a computer at home. Regardless of income level, Americans living in rural areas in 1999 were still lagging behind in Internet access. At the lowest income levels, those in urban areas were more than twice as likely to have Internet access than those earning the same income in rural areas.

By its fourth report in 2000, *Falling Through the Net: Toward Digital Inclusion, the NTIA found that* groups that had traditionally been digital "have nots" were making dramatic gains. The gap between households in rural areas and households nationwide that accessed the Internet had narrowed from 4.0% in 1998 to 2.6% in 2000. Rural households were much closer to the nationwide Internet penetration rate of 41.5%. In 2000, 38.9% of the households in rural areas had Internet access, a 75% increase from 22.2% in December 1998. However, while gains were made, it could not be denied that in rural households with less $25,000, the computer penetration rate and Internet access still lagged significantly behind those is urban areas and central cities. The divide still existed between those with different levels of income and education, different racial and ethnic groups, old and young, single and dual-parent families, and those with and without disabilities. With **broadband** services, a relatively new technology in 2000 and used by only 10.7% of online households, there were also disparities. Rural areas lagged behind central cities and urban areas in **broadband** penetration at 7.3%, compared to 12.2% and 11.8%, respectively

[13] A high-speed line as defined by the Federal Communications Commission is a connection that is faster than 200 **kbps** in at least one direction. Broadband connections are most often defined as operating at T-1 speeds or greater (1.54 mbps)

[14] National Center for Educational Statistics. (November 2003). *Recommendations of the task force on the prevention of waste, fraud and abuse*. Convened by the Schools and Libraries Division, Universal Service Administrative Company. September 2, 2003. Retrieved August 17, 2004 from http://www.sl.universalservice.org/taskforce/default.asp

[15] Federal Communications Commission. (December 2003). *High-speed services for internet access: Status as of June 30, 2003*. Washington, DC: Industry Analysis and Technology Division, Wireline Competition Bureau. Retrieved August 17, 2004 from http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd1203.pdf.

NCES (November 2002)

National Center for Education Statistics. (October 2003). I*nternet access in U.S. public schools and classrooms: 1994-2002*. Washington, DC: Author. Retrieved August 17, 2004 from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2004011

[16] While the vast majority of research has occurred with post-secondary students, a few studies have been done in a K-12 environment and have shown similar results. A recent literature review of interactive **videoconferencing**, conducted as a precursor to the October 2002 National Symposium on Interactive Videoconferencing in Dallas, Texas, summarizes the current state of the distance learning literature at the elementary-secondary level:

a. Only a limited number of studies could be found at the K-12 level, with the majority of those including both university (or professional) and some high school students

b. In a Colorado study (1991) exploring the feasibility of using video technology to provide Chapter I (Title 1) remedial courses to eligible elementary children, it was found that I-TV classes were "at least as effective as traditional instructional delivery systems in producing student achievement" and was successful in "actively engaging the students for the entire program".

[17] Philip Westfall, President of the United States Distance learning Association, summarized much of the existing research and experience on two-way I-TV in a January 2003 interview:

> Interactive television (I-TV) emulates the classroom at a distance; it is the transition to distance learning that requires the least amount of effort. Instructors can achieve the same levels of learning they had with their resident[ial] courses. If the infrastructure is in place, development costs for I-TV may be next to nothing, and time to convert to I-TV can be done in a matter of weeks with a modest amount of training for the instructor…As far as general effectiveness as a medium, it is consistently reported by users of I-TV that student performance is at least equal to resident[ial] classes…dropout rates are very low.

The Enliten Management Group. (January 2003). An interview with Phillip Westfall, president of U.S. Distance Learning Association. *Page of Enlitenment.* Retrieved August 17, 2004 from http://enliten.net/useus/Enlitenment/Web_Westfall_Interview.pdf

[18] See: Small Schools webpage of the Rural School and Community Trust at http://www.ruraledu.org/issues/small.htm

[19] A Note On Infrastructure Requirements—Just as there are many distance learning technologies, so too are there several two-way I-TV technologies, each using a different transmission mode. Four basic options exist in order of audio and video quality: (1) Analog, **DS-3** (45 **mbps**) or **ATM** which provides the audio and video quality similar to the nightly news; (2) dedicated **T-1** (1.54 **mbps**) lines within a consortium; (3) **ISDN** lines for which there is a per minute charge: and (4) **IP** (Internet Protocol) over **fractional** to full **T-1** lines, e.g., 384 **kbps** to 1.45 **mbps**. There are certainly infrastructural limitations, regardless of whether the option chosen is a dedicated **broadband** network (**DS-3** or **T-1**), an **ISDN** line, or an **IP** connection. Most rural areas will potentially have access to at least a **fractional T-1** line, but all telecommunications companies (especially larger companies) are not always willing to provide them or make them available at a reasonable **tariff**ed rate. Districts will need either state-provided or other consulting assistance in researching the infrastructural options and in deciding on the best, most feasible transmission means available.

[20] *Recommended Standards, Guidelines, and Resources for K-12 Two-Way Interactive Television Networks*. A White Paper published by GreaterNET and the Missouri Distance Learning Association. Available at *www.ruraledu.org*.

[21] I-TV consortiums consisting of a single large school district and several much smaller districts sets the expectation that the larger school becomes the provider and the smaller districts assume a "receive-only" role. This is not a healthy relationship. In the short-run, it may appear to work; in the long run the advantages of a consortium arrangement will be eroded.

[22] Note that a portion of the **codec**, installation, and maintenance are eligible as a Priority I Telecommunications Service if included as part of a distance learning service provided to the school by an eligible telecommunications provider. Priority I services receive highest priority for discounts and are virtually assured. If purchased directly by the school, this equipment would be eligible as a Priority II Internal Connection and would therefore be limited by the total amount of **E-Rate** funds available; that is, not all schools requesting Priority II services will receive discounts—those at the highest free/reduced lunch rates receive first priority.

[23] For a complete description of **E-rate** discounts for schools and libraries, see http://www.sl.universalservice.org/

[24] Among the currently most active states in terms of school finance litigation are New York, North Carolina, South Carolina, New Jersey, New Hampshire, Kentucky, Tennessee, Arkansas, Iowa, Nebraska, Kansas, Missouri, Wyoming, Texas, New Mexico, California, Montana, and West Virginia.

[25] Rural School and Community Trust. (April 2003). *Distance learning Technologies: Giving Small Schools Big Capabilities.* Washington, DC: Author. Retrieved August 17, 2004 at http://www.ruraledu.org/docs/arkansas/distlearn.doc.

[26] Hobbs, V. (August 2003). *Two-way interactive TV: An educationally sound and cost-effective approach to distance learning in Arkansas' small schools.* Washington, DC: Rural School and Community Trust. Retrieved August 17, 2004 at http://www.ruraledu.org/docs/arkansas/arkdl.pdf.

[27] Heath, M. & Holznagel, D. (October 2002). *K-12 interactive videoconferencing policy issues review*. Dallas, TX: Regional Technology in Education Consortia (R*TEC). Retrieved August 17, 2004 from http://neirtec.terc.edu/k12vc/resources/litpolicy.pdf.

First in an occasional series of articles highlighting telepractice programs or services provided by speech-language pathologists.

TRENDS IN TELEPRACTICE

Speech Telepractice Program Expands Options for Rural Oklahoma Schools

by Pamela G. Ponducey

"Do not go where the path may lead, go instead where there is no path and leave a trail."

–Ralph Waldo Emerson

Ralph Waldo Emerson's quote epitomizes the journey of our school-based Speech TeleTherapy program since April 1999. The Individuals with Disabilities Education Act (IDEA) guarantees all children with disabilities a free, appropriate public education, emphasizing special education and related services designed to meet their unique needs.

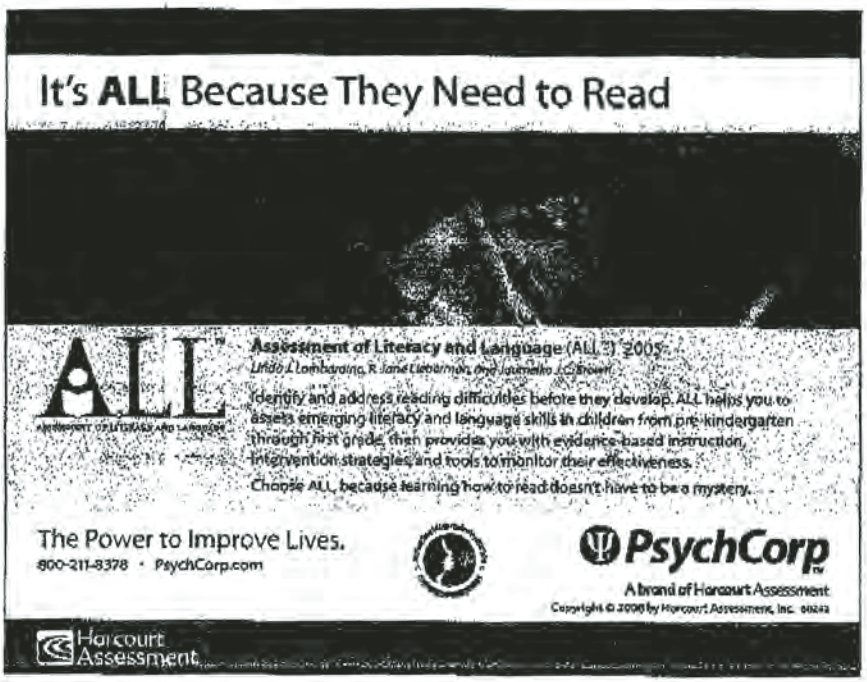
Although IDEA is a federal mandate and states like Oklahoma receive funds for special education, what happens if a rural school district is unable to recruit or retain a speech-language pathologist? One innovative and cost-effective solution to the challenge of health care provider shortage in rural America is telepractice.

Simply defined, our school-based Speech TeleTherapy program utilizes real-time, two-way interactive teleconferencing—point-to-point Internet Protocol (IP) videoconferencing endpoints with T1 or greater connections to the state technology network infrastructure (OneNet) to deliver speech treatment to students throughout the state of Oklahoma. We also use a document camera—"Elmo"—for viewing lessons and playing language-oriented board games to facilitate learning. Our services are recognized by the Oklahoma Department of Education as an alternative to on-site speech services for public schools in remote/rural areas of the state and promote compliance with state and federal regulations for public-school speech therapy services.

> Success of our program over the years has been partially attributable to the recruitment and retention of skilled SLPs who are willing to integrate telepractice competencies into their skill sets.

Costs for technology set-up varies depending on type of equipment, distance of rural schools, and sophistication of network infrastructure, both the "hub site" (clinic where the SLP telepractices) and "spoke site" (rural school setting). For our program, setting up a telemedicine suite costs approximately $7,800, which includes installation fee, telemedicine equipment, document camera, and wiring expenses. If dedicated T1 lines are used between clinic and school sites, there is a monthly line lease, which averages $800 per month for our program.

Success of our program over the years has been partially attributable to the recruitment and retention of skilled SLPs who are willing to integrate telepractice competencies into their skill sets. An experienced speech teletherapist orients and mentors our new SLPs on telepractice protocols and equipment utilization. Once this initial training and shadowing occur, SLPs in our program have expressed confidence in using the equipment. Access to our technology/network specialists during their sessions also increases SLPs' self-assurance in troubleshooting technological glitches.



Currently, we have five part-time SLPs providing contractual services to 99 students at seven school districts across the state, from the panhandle to far southeast Oklahoma. We invoice the school each month for hours of direct clinical service, case documentation, and lesson preparation. The contractual fee covers our personnel and operational expenses with a "break-even" business model. We certainly are not in this business to make a large profit, but to cover our expenses and provide a much-needed clinical service to students who otherwise would have minimal or no access to speech services.

Speech TeleTherapy program services include the following: speech and language screenings; group and individual speech therapy; standardized testing to document qualification for speech treatment; Individualized Education Plan (IEP) documentation; and participation in IEP and parent/teacher meetings via teleconferencing. It is paramount that the SLPs provide initial on-site evaluations and visits with students, teachers, and parents at the beginning of each academic year prior to telepractice implementation. This face-to-face contact helps the SLP establish a rapport, which is crucial for the success of our telepractice program. In addition, two to three on-site visits are provided during the school year as recommended by either the SLP, teacher, parent, or special education director.

Since the inception of our program, we have conducted nearly 11,000 Speech TeleTherapy sessions. SLP Beki Houston, a veteran with our program, says, "Most of my students are seen one to two times weekly from 20 to 30 minutes, depending on the severity of their speech-language delay or impairment," adding that she most often sees children with articulation/phonological disorders and children with language impairment.

"Some of these children exhibit both speech and language problems. In addition, I have one student with autism, one with a fluency disorder, and two with a hearing loss," she said.

She noted that orienting the paraprofessionals to use of the equipment is important. If the equipment or lines are not working properly, paraprofessionals are the staff members trouble-shooting those problems with the network architect.

Brenda Davis, another SLP involved with the telepractice program, praised it as "a great way to provide SLP services to rural communities. It is important to provide parent, teacher, and staff education about this mode of treatment."

"A consistent paraprofessional working with the students on-site is very important," she said. "The paraprofessional offers assistance with the scheduling of therapy, organization of materials, and task clarification as needed. I have noticed increased treatment time per session as the paraprofessional has the students ready for each session on time."

Davis noted that her students are very receptive to instruction presented through teleconferencing and are actively participating and accomplishing their speech and language goals.

At the end of each school year, our business analyst assigned to the program, Mickie Post, calls the schools to complete satisfaction surveys and collect constructive qualitative feedback for further development of the program.

Stringtown Public Schools Superintendent Richard Quaid stated, "There have been several students in the lower age group who have graduated from this program. We did not have that many graduates before because of inconsistent services. The longest we could keep an SLP down here was six months.

"This program has been a great success for us and is the best we have ever had," he said. "We don't know what we would do without it."

Pamela G. Forducey is the director of telehealth at INTEGRIS Health in Oklahoma City. Contact her at Pam.Forducey@integris-health.com.

Appendix F:

Policy Brief: "Best Fiscal Management Practices for Rural Schools"

The Rural School and Community Trust

POLICY BRIEF

Best Fiscal Management Practices for Rural Schools

By Jerry Johnson and Greg Malhoit

November 2004

Rural Trust Policy Brief Series on Rural Education

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Editor: Alison Yaunches

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The Rural School and Community Trust (Rural Trust) is the premier national nonprofit organization addressing the crucial relationship between good schools and thriving rural communities. Working in some of the poorest, most challenging rural places, the Rural Trust involves young people in learning linked to their communities, improves the quality of teaching and school leadership, advocates for appropriate state educational policies, and addresses the critical issue of funding for rural schools.

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I: INTRODUCTION

The operation of public schools and efforts to improve them often revolve around three central questions about funding. First, do schools and districts have sufficient or "adequate" funding to offer all children a quality education? Second, are state and local financial resources distributed fairly or "equitably" among school districts and schools? And, finally, are funds for education effectively and efficiently managed?

At the core of these three questions are two generally agreed upon principles: 1) a high quality education is vital to every child and to the well-being of American society as a whole, and 2) financial and material resources are crucial to providing that high-quality education. This paper recognizes the existence of inadequacy and inequity in school funding, particularly for rural schools and districts. While supporting and encouraging efforts to reverse this trend and provide adequate and equitable funding for schools, we also recognize the practical realities of operating within the contexts of today's schools. It is with that in mind that we offer suggestions here for maximizing the effectiveness and efficiency of existing resource levels.

A high quality public education system is vital to children, and to the well-being of the nation's citizens and society as a whole. Research[1] has consistently demonstrated the benefits of education as measured by traditional social outcomes like increased personal income levels, decreased likelihood of criminal activity, and decreased reliance on public assistance. Moreover, schools play a critical role in the ongoing work of democracy by preparing students to participate fully in the civic life of their community, state, and nation. In short, schools can—and are expected to—prepare children to participate in a competitive and ever-changing economy, and to assume the responsibilities of citizenship in a democratic society.

Substantial resources are required for providing the kind of high quality education that can meet these expectations. At present, about $480 billion per year in public funds is expended for education. Local communities, state governments and the public at large have a responsibility to make available the financial and material resources required to provide all children with access to a quality education. In return, educators and citizens have an equally important responsibility for using all of those resources efficiently and effectively.

But, providing adequate resources for education can be a challenge, particularly for communities with low property and/or income wealth. The level of resources available to these low wealth schools is often a problem, and inequities among schools competing for high quality teachers and other personnel often aggravate the situation. Moreover, ineffective or inefficient fiscal management can

sometimes mean that even adequate and equitable funding fails to provide students with the education they require and deserve. Rural schools, in particular, need to make the most of every dollar available to teach their children. Anything less than the most efficient and effective use of resources is a disservice to children that adds to educational achievement barriers they may already face.

In rural areas, fiscal management is often provided at very small units of administration, because both schools and districts are small. Fiscal personnel in such districts are rarely specialized and frequently have inadequate training for the work. But today's environment of budgetary constraints and an increasing focus on high stakes test results, means that state and local policymakers are demanding greater financial and educational accountability on the part of all school leaders, including those from rural schools. Evolving from this accountability movement, parents and community members now have expanded opportunities to participate in schooling and to hold school leaders accountable. Sound fiscal management of limited education resources is therefore essential to building and maintaining confidence in the public school system among those whose children are its intended beneficiaries.

Along with concerns from policymakers and community members, courts are increasingly raising questions about fiscal management practices in school finance litigation. For example, in the pending school finance case in North Carolina (the *Leandro* case), the trial court held that state and local schools are responsible for implementing demonstrably sound fiscal management systems and practices.[2] In school finance cases across the nation, the defense almost always contends that there is enough funding available, but the schools and districts just use it inefficiently. In light of this trend, overcoming the barriers to effective and efficient fiscal management and developing policy environments that can ensure the sustained use of best practices is important for rural schools if they are to prevail in the courts and state legislatures.

Some rural districts have voluntarily addressed fiscal management issues through such innovative strategies as combining school superintendents or jointly hiring finance administrators to be shared by multiple districts. Under these administrative arrangements, questions arise about when it is cost effective to offer specialized budgetary and financial management services, what are the standards for budget services, and what kinds of skills and training should be required for serving in a fiscal management position. Allowing school districts to voluntarily engage in combining services and resources (in addition to other approaches and strategies) is not the only option available to states. Indeed, states have a menu of options available to increase collaborative efforts, ranging from creating incentives for districts to combine services to mandating shared administrative functions through *educational cooperatives* or *supervisory unions* comprised of multiple districts.

This policy brief is intended to highlight some of the leading policy issues faced by states, local school districts, policymakers, education leaders, and concerned citizens. State and local policies vary appreciably, and we acknowledge that a definitive statement on how school finances can and should be managed in every setting is beyond the scope of this paper. Rather, the goal is to present general recommendations about best fiscal practices that can be tailored to meet the needs and circumstances of individual states and school districts.

Sound fiscal management of limited education resources is therefore essential to building and maintaining confidence in the public school system among those whose children are its intended beneficiaries.

The document is organized into five sections. Following a list of "guiding principles of sound fiscal management systems," Section II outlines responsibilities and roles in the fiscal management

process. This section is organized according to the five major steps in the budgeting process, and emphasizes opportunities for engagement by various constituencies at each step in the process. An integral part of both responsive schooling practices and a sound fiscal management system is active participation by teachers, parents, students, and community members. The roles of school officials, elected or appointed governance bodies, and state departments of education are crucial as well: school officials can and should encourage that active participation and be responsive to it; governance bodies can and should actively seek the insights and concerns of their constituencies; and state departments of education can and should create policy contexts that facilitate this kind of participatory process.

With that in mind, we consider the roles and responsibilities for each of these groups:

- Teachers/parents/students/community members,
- School officials,
- Elected/appointed governance bodies, and
- State departments of education.

The involvement of these multiple groups in the process of fiscal management broadens the perspectives and knowledge base that go into setting priorities and making decisions. It also provides for a system of checks and balances that can ensure that public funds are managed effectively, efficiently, and in accord with priorities developed by the school and community.

Section III considers rural-specific concerns and strategies, and Section IV examines the options available to state policymakers in ensuring sound fiscal management practices at the school and district level. Following the fifth and final section, the conclusion, are appendices offering specific information on budgeting models, a glossary of school finance terms, and resources for obtaining additional information.

Guiding Principles of Sound Fiscal Management Systems

School districts spend and account for millions of dollars (about $480 billion per year nationally) in public funds for education. As such, their practices should be guided by principles ensuring that systems, policies, and processes are designed, coordinated, and directed toward student learning and the wise investment of public dollars for education. Sound fiscal management practices are characterized by the following eight guiding principles.

1. **Integrity.** Fiscal management practices must be implemented in ways that promote and sustain the integrity of the school district and the community: school institutions earn the trust of citizens, and citizens practice civic responsibility. Avoiding conflicts of interest, or even the appearance of such conflicts is vital.

2. **Efficiency.** A school district's fiscal management system must use available resources in ways that most directly and effectively meet the educational needs of students. Resource allocations and expenditures should be justifiable in terms of their expected impact on teaching and learning.

3. **Educational Excellence for All Children.** Fiscal management practices must support the provision of high quality learning environments, opportunities, and experiences that recognize the needs of individual students, and work toward the attainment of high levels of achievement for all students.

4. **Funding Adequacy and Equity.** Fiscal management practices must ensure that all schools and programs are provided with sufficient resources to provide a quality education to all students. Policies and practices must also ensure the fair distribution of resources to students, taking into account their individual needs and the diverse and unique circumstances of schools and school districts. Significantly, funding equity is both an inter-district and intra-district concern—i.e., the distribution of state funds to districts should reflect fairness in meeting the needs of individual districts; likewise, the distribution of those funds by the district should reflect fairness in meeting the needs of individual schools.

5. **Public Involvement.** Parents and community members have a major stake in how schools and districts use public resources to educate their children and support their communities. Accordingly, fiscal management systems must offer and encourage opportunities for significant and broad public involvement in the process of creating, implementing, and monitoring budgets.

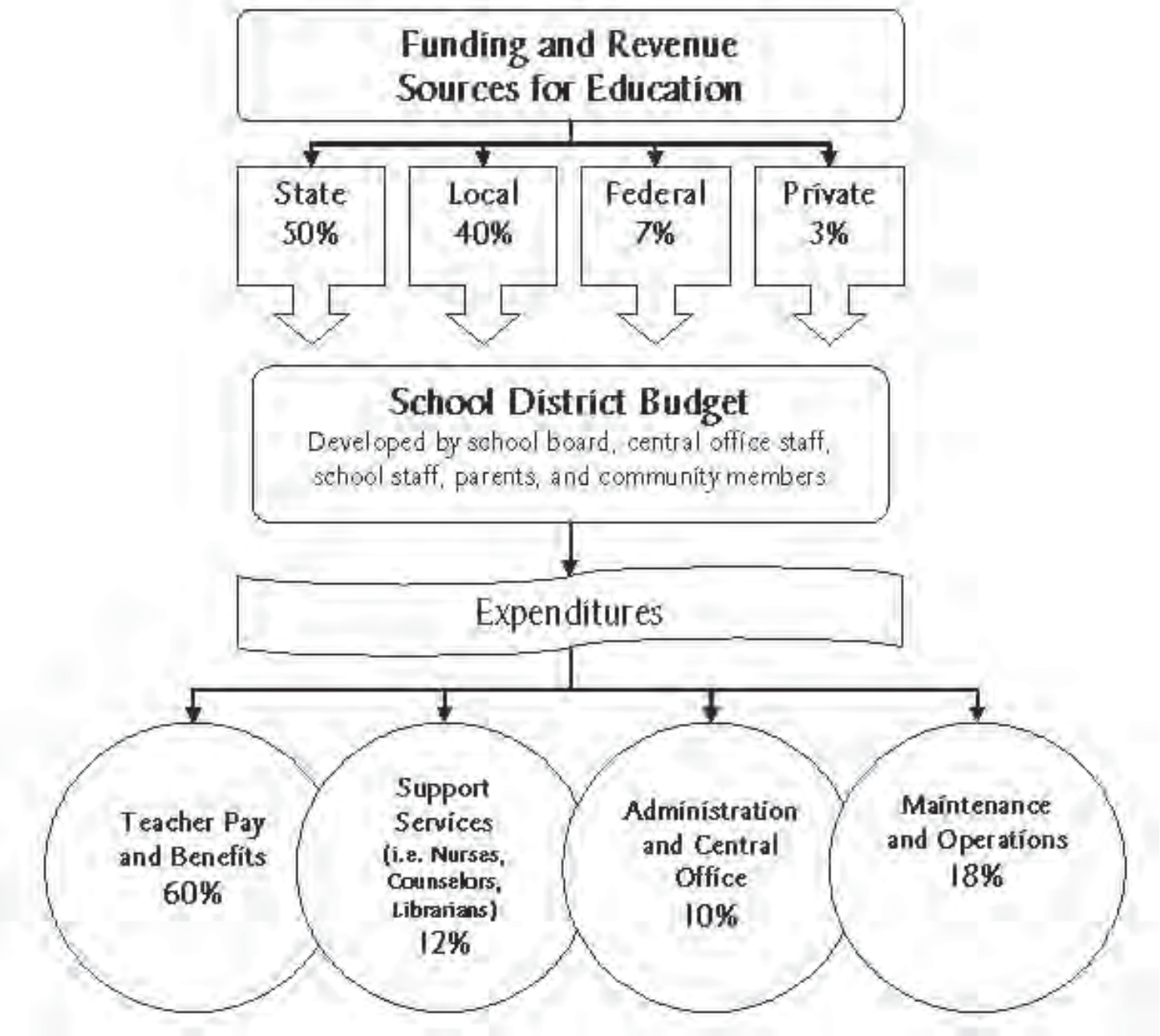
6. **Transparency.** Transparency in this context refers to the need for openness by school officials to share information about school finance matters with everyone. Schools and districts must develop and implement a fiscal management system that provides parents and community members with clear and easy-to-understand financial and accountability system information.

7. **Accountability.** Fiscal management systems must guarantee that the processes involved in the administration of public funds are conducted openly, and that those involved are held accountable to the highest standards of professional ethics and competence. External and unbiased professional audits should be an integral part of any fiscal accountability system.

8. **Competence/Professionalism.** The individuals who are responsible for handling and spending public dollars for education must demonstrate a professional level of competence in fiscal management. Local and/or state organizations should require and provide training that will enable individuals to reach a high professional level of competence.

The School District Budget Process

This diagram tracks primary sources of funding and major categories of expenditures. The school district budget, in the center, is the link between financial resources that flow into the district from various sources and the expenditures that support teaching and learning. The school budget, then, reflects the outcome of the active and thoughtful consideration of: (1) what kinds of resources—instructional staff, instructional materials, technology, transportation, etc.—are needed to provide all students with high quality learning opportunities, and (2) what sources and levels of available funds can be most effectively used to provide those needed resources.❖



❖ All figures are based on national averages. Actual distributions vary considerably among states and school districts.

II. BEST FISCAL PRACTICES: RESPONSIBILITIES AND ROLES

A school district budget is, first and foremost, an instrument of *educational planning*—it is the primary means by which school leaders and communities express their beliefs about the educational needs, goals, and plans for their children. While a school budget is largely composed of figures (anticipated revenues, proposed expenditures, etc.), those numbers can and should represent the culmination of considerable and thoughtful deliberation and planning by a diverse group of people: parents, students, the community, board of education, administrators, and staff. That deliberation should be centered on how to effectively and efficiently provide all students with a high quality education.

A budget should answer these questions:

- What needs to be done to educate students?
- How should it be done?
- Who will do it?
- How much will it cost?
- Where will the funds come from to support the budget?

The budget can serve as an instrument of both fiscal guidance and control. Implemented effectively, the budget can serve as a guide for school budget leaders to determine whether proposed expenditures are aligned with the overall vision or mission of the school or district. In this role, the budget can also be used to hold education leaders accountable for spending public dollars according to a school district's priorities and plans.

The ultimate goal in planning the budget is to align available funding and resources with the needs of students and schools.

Primary participants in the kind of effective fiscal management system we are advocating include:

- **Parents, Teachers, Students, and Community Members.** Their involvement brings diverse and objective voices not directly represented by school officials and governance bodies to the decision-making process, and their positions as non-school employees/non-elected officials provide a useful set of checks and balances.

- **School Officials.** They bring knowledge and skills in aligning both educational needs with programs and practices and also those programs and practices with available resources. They can translate the needs, goals, and approaches derived from broad-based decision-making into concrete educational and financial terms.

- **School Governing Bodies.** They play an important role by holding school officials accountable for responding to the expressed needs of the community. Acting on behalf of their constituents, they approve and monitor fiscal plans and their implementation. They serve (and should represent) the interests of not just their constituency, but the entire community, and they can provide a useful and important communications channel between the school and the community.

- **State Departments of Education.** They can hold both school officials and governing bodies accountable for effective, efficient, and responsive leadership. They have the joint responsibility of ensuring that schools and districts use resources wisely to meet the needs of their students and also of providing the training and resources that will enable them to do so.

Following is a brief review of fiscal management practices along with recommendations for the participation of the four above groups in five major areas: (1) planning, (2) review and approval, (3) implementation, (4) monitoring and evaluation, and (5) communication.

A. Planning the Budget

The ultimate goal in planning the budget is to align available funding and resources with the needs of students and schools. Many school districts start the process by estimating the funding they expect to receive, then allocating those limited resources to meet student needs. Ideally, however, the process should actually work in reverse. The budget planning process should begin by determining student and school needs, and then exploring ideas, concepts, and strategies to plan the most practical and most appropriate ways to meet those needs. Only after these processes, then, should the budgeting process turn to financial resources and attempt to match funding and resources with identified programs, projects, and services.

The following example illustrates how the process might work in the case of a new program to help struggling students. If a school district wants to start an after-school program, it will identify that program as a budget priority. After reviewing possibilities to determine the most appropriate after-school program for use with their students and in their community, the district determines the cost of developing and implementing the program. The next step then involves considering possible sources of funding from anticipated revenues—local, state, federal, other.

When sufficient funding is not available for providing pre-identified needed programs and services, schools and communities must commit themselves to pursuing additional and alternative revenue sources: increasing local revenues (in states where boards have taxing authority), lobbying municipal, county, and/or state government for additional funds, or grant writing. Based upon resource levels available, the after-school program is made a part of the working budget, or may be scaled back or eliminated if sufficient resources do not exist after higher priority items are funded.

That example also underlines the often overlooked aspect of contingency planning for the budget. Ensuring that funds are available for unforeseen emergencies is important during budget planning. Otherwise, the district may have to cut essential services in order to address emergencies and unanticipated needs.

When sufficient funding is not available for providing pre-identified needed programs and services, schools and communities must commit themselves to pursuing additional and alternative revenue sources.

The planning stage of the budgeting process is the most open, allowing for the greatest public input. At this stage, the budget will normally reflect the organizational structure of the school district by breaking down the elements of the district's operations into individual pieces or categories and considering how those pieces can be coordinated to create and maintain quality learning opportunities for all students. Most districts will break the budget down by categories: teacher and staff pay; teacher and staff fringe benefits; transportation, building maintenance; and instructional supplies. Many districts will also break down parts of the budget that are not centralized functions (e.g., instructional supplies) by individual schools, showing a total budget for each school in the district.

No two school district budgets are alike. In most budgets the largest category of expenses is teacher pay and fringe benefits, often representing nearly 80% of a school district's expenses. The school budget is a complex document, made up of various elements that involve a variety of schools, programs, departments, and categories—some that directly support education (e.g., teachers) and some that provide support (e.g., transportation). Balancing these various elements and categories to fit into the overall budget is crucial.

A number of theoretical approaches (see Appendix A for some representative models, pg. 27) to budgeting have been developed in response to calls for greater educational efficiency, cost effectiveness,

and involvement by principals and teachers. While these approaches can offer creative and viable models for structuring the mechanical processes of budgeting, approaches and models are of secondary importance to the fundamental issues of understanding the budget and of its role in charting the direction of the school district.

Budget Planning Roles and Responsibilities:

Parent/Teacher/Student/Community Member:

- Know your local school board representatives and school officials and how to contact them to ask for information or share concerns/ideas;
- Know and understand what opportunities for public involvement exist (e.g., many states require that final budget approval take place in a public meeting). If public input is allowed, speak out about questions, concerns or proposals;
- Contact the school district office or your school board representative to find out what opportunities for budget input exist and take advantage of them;
- Obtain copies of all budget documents and request an appointment with school officials to have the documents explained in non-technical language if needed;
- Identify the level of the budget. Is the budget for the district as a whole? Are there building level (i.e. by individual school) budgets? Do building-based budgets only cover teaching supplies or do they also include maintenance, teacher salaries, benefits and the like? Do local school citizen counsels or administrators have authority to make a budget? What is the nature of that authority?
- Find out what revenue or funds the school district expects to receive;
- Attend board meetings: ask questions and learn as much as possible about both the budget and the process followed by the school district for creating that budget;
- Make specific suggestions about programs or things you would like to see the school district do next year;
- Offer comments on or propose changes to the budget;
- If the school district is not cooperative or open during the budget planning process, bring your story to people who can help get the message out, such as state education leaders, lawyers, and the media.

School Officials (Superintendent, Principal, Finance Administrator, etc.):

- Develop and share with community members and the public a budget planning process and timeline that allows for public sharing and input;
- Make certain that all communications regarding the budget are prepared in an easy-to-understand format, using non-technical language as much as possible;
- Ensure that members of governing bodies (school councils, school boards, committees) have sufficient training to be able to understand the budget and contribute to its development.

Governing Bodies (Board of Education, Site-Based Decision-Making Council):

- Understand the mission of the school district, and use it as a guide in setting priorities
- Most school districts have a long-range, multi-year plan for improving the school system going by various names such as "strategic plans," "action plans," etc. The "priorities" of the strategic plan should be the first options considered after essential services are funded;
- Take steps to obtain additional or alternative funds when needed, including generating additional local funds through the (1) exercise of local taxing authority where it exists or (2) lobbying state and local government for additional financial support. Each district should have at least one person responsible for maximizing grants, since federal and other grants often have some flexibility to be used to target district goals;

- Participate in any available training or workshops offered by groups such as the state school boards association or school business managers organization that will increase knowledge of budget planning and/or school finance in general;
- Ask school district staff to explain budget documents in understandable terms and ask tough questions of those who produce the budget;
- In all deliberations and decision-making about the budget, think *holistically*—consider the "big picture" and remember that the budget reflects in numbers what the school district as a whole values and wants to accomplish;
- Insure that the public and all stakeholders are invited to fully participate in the budget planning process.

While the approved budget is not carved in stone, and amendments can be made in the implementation phase, a significant amount of time and energy must be devoted to reviewing the budget for completeness and for accuracy before it is submitted for approval.

State Department of Education:

- Mandate and sponsor training for school finance administrators, school board members, and site-based decision-making councils where they exist—the emphasis for these training workshops should be on developing budgeting and school finance knowledge and skills, and establishing a common terminology.
- Set guidelines for district budget planning processes that both encourage the setting of school and district goals through community and public involvement, and allow for flexibility in how those goals are to be achieved.

B. Formal Review and Approval of the Budget

Reviewing and approving the budget—the document that will become the educational blueprint for the coming school year—represents the transition from the general and open-ended planning processes to a more formal and internal implementation processes.

This stage of the process is more mechanical and internal than the first—district finance staff and officials work to create a formal financial document that reflects the priorities identified in the planning process. This formal budget also must comply with state and federal laws and state department of education regulations. While the approved budget is not carved in stone, and amendments can be made in the implementation phase, a significant amount of time and energy must be devoted to reviewing the budget for completeness and for accuracy before it is submitted for approval. Again, maintaining a contingency fund is crucial.

Requirements for approving district budgets are normally spelled out in state law, and vary from state to state. In all cases, however, local school board approval of the budget is the first step. Whether the board has final authority varies by state. Sometimes boards can approve a budget up to a certain capped percentage increase or tax limit. Boards can go to a public vote to override the cap in some states. Others require a public vote on the budget each year. Still others grant boards the authority to develop a budget which they then present to municipal authorities (councils, commissioners, etc.). The National Center for Education Statistics provides descriptions of individual state's school finance systems, including some information on statutory requirements for budget review and approval, at *http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2001309*.

Budget Review and Approval Roles and Responsibilities

Parent/Teacher/Student/Community Member:

- Carefully review draft budget documents made available to the public;

- Look for evidence that priorities set out in planning stages have remained;
- Meet with, call, or e-mail school officials to get answers to questions or explanations of confusing parts of the budget.

School Officials (Superintendent, Principal, Finance Administrator, etc.):

- Revisit the mission/beliefs of the district and the priorities identified in the strategic plan and use them as the lens for examining and proposing/considering changes to draft budgets—use the language of the district mission/belief statements to discuss budget items;
- Know and adhere to all state requirements with regard to budgetary review and approval;
- Create additional opportunities for all citizens and constituencies (e.g., advisory boards, budget committees, etc.) to be involved in reviewing draft budgets;
- Provide public (readable, non-technical) budget documents; in the case of approval processes that include a public meeting, make the proposed budget available to interested parties early enough to allow for review, questions, and clarifications prior to the meeting;
- Develop and broadly distribute to the community a simple document that explains the budget in layperson language.

Governing Bodies (Board of Education, Site-Based Decision-Making Council):

- Revisit the mission/beliefs of the district and the priorities identified in planning stages, and continually return to them as draft budgets are reviewed and changes are proposed—use the language of the district mission/belief statements to discuss budget items;
- Participate fully in the review approval process by reading and understanding the entire budget document, asking questions as necessary, and participating in discussions about proposed changes;
- Be prepared to answer the question "how does this expenditure promote student learning?" for each budget item;
- Ensure broad citizen involvement;
- Make sure the budget is written and presented in an easy-to-understand format.

State Department of Education:

- Mandate, at the very minimum, that review and final approval of the district budget take place in an open meeting, and that the proposed budget be made available to the public in advance of the meeting;
- Set guidelines for district budget review and approval that emphasize community and public involvement.

C. Implementing the Budget

Planning, reviewing, and approving a budget are essential parts of sound fiscal management practices. But, even a well-constructed budget can only be effective when it is actually followed and used as the primary guide for expenditures. Implemented in this way, the budget serves as an ongoing roadmap for school district leaders to ensure a school environment that both reflects the needs of children and respects the ideas and suggestions of school and community members. If the budget is not used in this way, there is an increased possibility that children's educational needs may not be met effectively, the distribution of resources may not be aligned with identified and approved priorities, and the funding process moves away from democratic practices and toward autocratic decision-making.

The budget serves as an ongoing roadmap for school district leaders to ensure a school environment that both reflects the needs of children and respects the ideas and suggestions of school and community members.

Implementing the budget, then, is about first managing and expending education dollars according to that plan, and then taking the priorities articulated and approved by the district and community and putting them into action. Once staff and vendor contracts are signed, there is not much flexibility to change the budget. The day-to-day work is done internally by school and district employees, using the budget as a plan and guide for ensuring that expenditures serve the needs of children in the most efficient and effective ways possible. Officials can maintain transparency in this stage by reporting expenditures and allowing and encouraging parents, students, and community members to follow the implementation of the budget and to ask clarifying questions about expenditures.

Budget Implementation Roles and Responsibilities

Parent/Teacher/Student/Community Member:

- Attend school board and other public meetings where the budget or school finances are likely to be discussed, review available documents, and ask questions to make sure the budget is understood;
- Meet with school officials and/or contact board members to get an explanation of budget items that are hard to understand, and to discuss questions, raise concerns, and make suggestions.

School Officials (Superintendent, Principal, Finance Administrator, etc.):

- Use a uniform chart of accounts (i.e., a standardized list of accounts with a specific title and number assigned to each account);
- Prepare and make available to the public monthly budget updates by general categories (e.g., transportation, technology, professional development. Updates should be no longer than one page, front and back);
- Proactively explain perceived oddities in the budget (e.g., a large jump related to beginning year salary encumbrance) in a straightforward, educational manner;
- Be prepared to answer the question "how does this expenditure relate to the mission/beliefs and/or promote student learning?" for any out-of-budget expenditures;
- Make certain that board members understand budget documents and expenditure reports.

Governing Bodies (Board of Education, Site-Based Decision-Making Council):

- Participate in any available training or workshops that will increase personal knowledge of budget implementation and/or school finance in general;
- Carefully review all financial statements, reports, and documents provided, looking carefully to see if budget expenditures are consistent with priorities and the approved budget;
- Ask questions of the superintendent and/or finance administrator as necessary;
- When reviewing budget expenditures, be able to answer the questions: How does a particular expenditure relate to the mission/beliefs of the school district? How does it promote student learning? Is it targeted toward the needs of students who may need extra help?

State Department of Education:

- Mandate and provide professional development/training for school finance administrators and school board members;
- Set reasonable guidelines for methods of accounting (e.g., accrual accounting) and using a standardized chart of accounts.

D. Monitoring and Evaluating the Expenditure of Funds

The school district budget, like any other planning and leadership document, should be assessed for its effectiveness in meeting the primary goals

for which it was developed. For a school budget, the primary goal is providing funding so all children can receive an education that enables them to reach their fullest potential. Assessment should be ongoing—monitoring expenditures, comparing current expenditures with planned expenditures, investigating instances of over- or under-spending, and making adjustments as necessary. Assessment should also be evaluative, with an annual outside professional audit to determine whether funds were expended in accordance with applicable policies, regulations, and statutes. In the case of both ongoing and evaluative assessments, open communication with parents and community members is crucial—and should include distributing a management letter reporting on the audit's important findings.

For a school budget, the primary goal is providing funding so all children can receive an education that enables them to reach their fullest potential. The evaluation of how funds are spent should reflect this goal.

Both internal and external participants monitor the expenditure of funds. Internally, school officials—and, in some cases, board members—will review individual expenditures with an eye toward the working budget. Externally, parents, community members, and others in the public will review monthly budget updates (shorter documents that highlight spending by category) with an eye toward broad priorities.

Evaluating how funds are spent has both financial and educational implications. Annual audits evaluate whether district funds have been handled competently and ethically. Program evaluations help to determine the effectiveness of specific programs, shedding light on returns—or lack thereof—from specific investments in teaching and learning. Both forms of evaluation provide useful information for planning the next year's budget.

Budget Monitoring and Evaluation Roles and Responsibilities

Teacher/Parent/Student/Community Member:

- Attend the board meeting that reports on the annual audit results, and review available materials and ask questions as necessary;
- Participate—and encourage others to participate—in any school surveys that are intended to assess program effectiveness, etc.;
- Meet with school officials to ask questions or share concerns;
- Use monthly budget performance summaries as an evaluative tool.

School Officials (Superintendent, Principal, Finance Administrator, etc.):

- Develop and implement a process for *ongoing* monitoring and evaluation of funds expenditures on at least a monthly basis;
- Have standing orders that staff are to immediately report any perceived irregularities in the budget;
- Ensure that documents providing public information on evaluations (e.g., CPA audit) contain an easy-to-understand executive summary/management letter;
- Use the mission statement/district beliefs as a guide for monitoring and evaluating the effectiveness and efficiency of expenditures;
- Include program evaluations as a key way to assess overall expenditures
- Use the audit as a management tool—e.g., as a significant piece of evidence in the evaluation of programs, services and personnel.

Governing Bodies (Board of Education, Site-Based Decision-Making Council):

- Include "fiscal management practices" as an important criterion in superintendent performance evaluations (and for the district's chief financial officer, if applicable);
- Know the purposes of evaluation/auditing, and use their results as a learning

tool for enhancing future program and finance decisions. The annual audit provides a check and balance for boards to know if there is either incompetence, fraud or mishandling of funds, or just plain bookkeeping mistakes;
- Participate in any avail1shops that will increase knowledge of financial evaluation and/or school finance in general;
- When reviewing the results of a financial audit or program evaluations, continually revisit the mission/beliefs of the district and consider findings in light of priorities and student needs;
- Require and review brief expenditure summary reports on a monthly basis;
- Review and approve the annual audit/ management letter in an open meeting.

State Department of Education:

- Set guidelines regarding processes for annual evaluation of fund expenditures that emphasize transparency and accountability, but that also allow some flexibility in how goals are to be achieved (e.g., alternatives to CPA audits);

E. Communicating How Funds are Used

Continuous communication with the public is an integral part of fiscal management. It is not enough for schools and school districts to comply with open records laws only when pressed. Rather, schools and districts should: be proactive in involving the broader community in setting goals; keep them apprised of the ongoing work; and report to them annually or semi-annually on goal achievement and the effectiveness of different programs/expenditures. In all communications, the school or school district should strive to provide information that is accessible, meaningful, and understandable by all. This can mean preparing an executive summary of a lengthy report or preparing a narrative to accompany data representations or graphic depictions of data and/or narrative information. One useful strategy for monitoring the effectiveness of communications is by soliciting feedback from parents, using a survey, for instance. Another strategy would be to form a parent advisory council to provide the same kind of feedback through ongoing dialogue.

In all communications, the school or school district should strive to provide information that is accessible, meaningful, and understandable by all.

Teacher/Parent/Student/Community Member:

- Read and understand communications from the school or school district;
- Ask questions about issues/communications that are unclear;
- Request additional information as needed;
- Meet with school officials to present any questions and comments you might have;
- Attend school board meetings and ask active informed questions, but be sure to strike a balance between being too quiet and being a gadfly who is easily dismissed.

School Officials (Superintendent, Principal Finance Administrator, etc.):

- Actively seek opportunities to inform the public about schooling and school finance issues;
- Present information in a style and format that is accessible, meaningful, and understandable by all (included here is the issue of document length and the need to prepare summary/synthesis documents);
- Broadly distribute a year-end report that informs stakeholders about the source of funds, how funds were expended, what programs and services were supported by the budget, and how the budget impacted students and the district. Include clear statements about surpluses or deficits and why either occurred.

Governing Bodies (Board of Education, Site-Based Decision-Making Council):

- Actively solicit from parents and community members their insights, comments, and suggestions about what and how the district can best meet the needs of students, and encourage them to attend and participate in board meetings, committee work, etc.;
- Provide a check (e.g., via a parent advisory group that pre-screens communications) for determining the accessibility, meaningfulness, or understandability of documents prepared by the district office;
- Boards of education may choose to establish board finance committees that review all expenditures and have an ongoing dialogue with the district administration. These committees must meet in public.

State Department of Education:

- Develop and provide school leaders with sample models for communicating budgetary and other school information to parents;
- Provide support for the development of school and district websites and other resources for communicating with the public;
- Require and enforce uniform data reporting methods to ensure data integrity, state reporting, and comparisons within and across school districts.

III. RURAL-SPECIFIC CONCERNS AND STRATEGIES IN THE BUDGET PROCESS

Nationally, rural students represent about a quarter of all students attending public school, and nearly a third of all schools are located in rural places. These rural schools and students have a number of unique characteristics and needs. For instance, the smaller size of many rural schools and districts can sometimes lead to per pupil expenditures that are higher than those of larger urban and suburban schools. Higher costs—in some cases, merely the *perception* of higher costs—are also caused by distance or isolation, high rates of poverty, lack of a social service infrastructure, and higher utility costs. Complicating the issue, small rural school districts frequently have a low or declining tax base. As a result, they often must operate with limited amounts of local funding for education.

In a number of states, policymakers have used "economies of scale" principles to argue that small rural schools with higher per pupil costs should be consolidated into larger schools that can educate students at a lower cost. More detailed analyses[3] of educational costs (e.g., ones that take into account relevant influences such as the multiple roles played by administrators in smaller schools and districts, or the increased levels of donated time and materials in smaller schools and districts) have begun to call into question the logic of economies of scale. And policymakers and the public are finally beginning to understand that the costs of consolidating small rural schools and districts far outweigh any predicted financial savings. In fact, predicted financial savings are often offset by hidden financial costs (e.g., increased transportation costs), diminished academic performance by students, increased discipline problems, reduced parental involvement, and limited participation in school activities.[4]

A number of states have no provisions in their funding systems to account for increased per pupil costs in small rural schools. Even in those states that do, the provisions are often insufficient to completely level the playing field. This under-funding of rural schools has implications for teaching and learning in a number of areas. For instance, lower teacher salaries than those in urban and suburban areas leads to difficulties in recruiting and retaining teachers, and lack of technology funds, along with often limited technological or communications infrastructures, makes it more difficult for small rural schools to make use of innovative distance learning opportunities.

A number of states have no provisions in their funding systems to account for increased per pupil costs in small rural schools. The under-funding of rural schools has implications for teaching and learning in a number of areas.

School employees, parents, students, and community members can organize and work toward making changes in state school finance systems that will provide fair and adequate distribution of funds. At the same time, schools and districts who strive to maintain democratic school governance and provide high quality services and learning opportunities for all children must find ways of working within constraints they currently face, and be creative in maximizing the efficiency of available resources.

Grouped by category, the following recommendations offer strategies that rural school districts can use to meet the challenges posed by their small size and diminished fiscal capacity:

A. Shared administrative staffing patterns.

Economies of scale and the small size of rural school districts can mean that the costs of traditional administrative staffing practices (e.g., one principal per school) are impractical. In these instances, districts can assign one principal to provide administrative support for more than one school. In all instances, however, a designated instructional leader (e.g., a lead teacher) should be physically located at each school site.

B. Multi-grade instructional staffing patterns. Traditional approaches to instructional staffing (e.g., separate classrooms for each individual grade) may also be impractical in rural school districts. In such cases, split-level grades and multi-grade classrooms can be an effective approach to working with smaller enrollments. Significantly, this is a practice that has positive financial and pedagogical outcomes—i.e., multi-age grouping is acknowledged as an effective innovative instructional practice, without regard to financial concerns.

C. Shared fiscal functions/other specialized services and functions. As suggested throughout this document, best fiscal management practices require competency and professionalism on the part of district staff responsible for managing fiscal affairs. Geographic isolation and other factors can make it difficult for districts to recruit and retain qualified financial managers. Districts faced with this challenge can partner with other districts and share the services of one individual who provides specialized financial services. Likewise, districts can and should seek opportunities to "share" other specialized staff (e.g., school psychologists, speech therapists, teachers for the hearing impaired, etc.).

D. Sharing staff. The ability of schools and districts to offer a wide range of curricular programs can be made more difficult by their smaller enrollments and staff numbers. Programs like early childhood education can be offered effectively through inter-district partnership agreements. In a similar vein, districts can collaborate to provide co-curricular programs like vocal and instrumental music, by sharing staff and sharing or jointly purchasing materials (e.g., musical instruments, uniforms).

E. Distance learning. Distance learning technologies make specialized curricula, innovative programs, and cooperative/collaborative projects viable. They also offer enhanced learning opportunities for students and staff alike in instructional technology.

F. Capital projects. A declining local tax base and the diminished fiscal capacity of rural school districts means they have less money available for capital construction and school facility renovation projects. In addition, state policies that favor the construction of large schools in centralized locations serving large geographic areas—and discourage or even disallow investment of resources in improving smaller schools located in rural communities—are damaging to both rural schools and their communities. Research suggests that rural communities with local schools are more able to retain their population and tend to have much healthier local economies.[5]

Schools and communities should work together to be agents for change in state policy and advocates for equity and adequacy in school funding.

Other research suggests that smaller schools are more effective at producing higher achievement for all children, particularly children from low income families and children of color (thus closing "achievement gaps").[6] For these reasons, rural school districts must do everything within their power to preserve and maintain their existing physical school structures. This means that upkeep and maintenance expenditures must be emphasized and protected at all costs in the district budget. It also means that state governments must play a greater role in funding the repair and maintenance of existing school facilities—and must ensure policy contexts that are conducive to doing so (i.e., policies that do not mandate a minimum size for receiving state aid), especially for resource-starved rural schools.

Advocacy for Equity and Adequacy

Regardless of creative steps taken by local districts to economize and cut costs, many rural schools are significantly disadvantaged by state school funding systems. The severe and persistent under-funding of rural schools has led rural districts in a number of states to file lawsuits challenging the constitutionality of existing state education funding sys-

tems. To date, legal challenges have been filed in 46 states, many with a rural focus (e.g., Kentucky, Tennessee, Arkansas). In many of these cases, courts have found in favor of the school districts ordering state lawmakers to significantly increase funding for education. Moreover, in this era of higher standards and NCLB, most states are grappling with methods to improve student achievement.

Under these circumstances, schools and communities should work together to be agents for change in state policy and advocates for equity and adequacy in school funding. Avenues for participation in this kind of advocacy include being informed about state policy, legislative and legal contexts, joining existing coalitions (or where none exists, starting one), learning about funding opportunities and writing grant proposals for additional funds or funds for special programs to enhance the education program.

IV. STATE POLICY OPTIONS TO ENSURE SOUND FISCAL MANAGEMENT

Balancing local control with state responsibility can be a delicate proposition. However, since states are constitutionally responsible for education, and since more than 50% of all funding now comes from state sources, states have a compelling duty to assume an active role in educating children, including directing the management and use of resources.

State policy should mandate school finance training for school officials and governing bodies; support the provision of high quality training; and review and approve any alternate training offered by other groups.

Because school districts and schools vary so greatly in terms of both their strengths and their needs, approaches to maximizing the effectiveness and efficiency of available resources must vary as well. Flexibility is the crucial component in meeting district and school variations. That flexibility must, however, be balanced by a policy context that ensures that government funds are used appropriately and in the service of achieving the state's educational objectives.

Recommended policy options:

- **External professional audits.** All sound fiscal systems, from the largest to the smallest, need an effective system of checks and balances. This protects the public's interest and the integrity of the school board, while providing management tools for school administrators. States should require annual external audits of school district finances (including special fund and enterprise accounts), conducted by a qualified and state licensed professional. The standards outlined in GAAP (Generally Accepted Accounting Procedures), while not specified in law, represent the highest standards of accounting and should be employed by any external accountant.

- **School finance training for school officials and governing bodies.** To lead effectively and to fulfill their roles and responsibilities to their schools and communities, district personnel must possess knowledge and skills in the area of school finance. State policy should mandate school finance training for school officials and governing bodies; support the provision of high quality training; and review and approve any alternate training offered by other groups.

- **Effective budgeting processes.** Effective and efficient fiscal management practices require that budgeting is an ongoing process of assessing needs, monitoring the effectiveness of current resource expenditures, and seeking input from a variety of perspectives within the district and the community. State policy should set guidelines for budgeting processes that include a timeline for budget development and enforce compliance with open meetings laws.

- **Categorical programs accountability.** Categorical funds are resources targeted for specific student populations and/or specific programs for assisting students. Budgeting and implementation should ensure that these funds are used for their intended purposes. Expenditures should be monitored and reported in a format that allows governing bodies and the public to see how categorical funds are being expended, and to hold school officials accountable for using them in appropriate and effective ways.

- **Chart of accounts written in lay language.** All too often, financial bookkeeping and accounting uses specialized terms not readily understood by a layperson. In addition to using a standardized chart of accounts with common codes, district leadership should ensure "transparency" by using account titles that clearly indicate the nature of the expenditure item or category in non-technical terms.

- **Revenue sheets presented in non-technical language and format.** Revenue sheets, like charts of accounts, should follow a common format. Districts must assure that definitions and terms easily enable lay persons to understand how much money is received, from what sources, and for what purposes.

- **Enterprise or separate accounts for special purposes.** Funds for activities that fall outside the primary instructional, administrative, and support functions of schooling (e.g., funds for class reunions, teacher retirement gifts, athletic clubs, the transportation system, or construction, etc.) should be maintained in separate and clearly identified accounts. As the authorized agent for these funds could be an untrained lay person, these accounts sometimes become the subject of intense local controversy. Independent cost centers or separate accounts prevent the intentional or unintentional diversion of these resources and makes it easier for all involved to see and understand spending patterns. States should establish guidelines and procedures to account for enterprise funds and local districts should make sure such accounts are established and properly controlled.

- **GASB 34 and fixed assets.** Schools should comply fully with all federal requirements regarding GASB 34 (which requires school districts to document fixed assets), and should make use of the process at the local level as a tool for managing inventory and fixed assets, and determining replacement schedules for capital items such as computers, expensive lab and shop equipment, and school buses. States must provide guidance and models for these accounting procedures.

- **Monthly statements.** Monthly statements should be prepared and distributed in a fashion that allows for public involvement in monitoring the budget. This means communicating current expenditures and commitments (or encumbrances) by categories, providing the relevant budget figures that allow for comparisons with planned/expected expenditures, and offering information clarifying major over- or under-spending).

- **The role of board and board finance committees.** Separation must exist between those who place the purchase order, the person who approves the purchase, and the bookkeepers who keep records of the transactions. State policy should reflect this separation of roles. In rural districts with fewer people to review purchases, these roles are often in the hands of only one or two people. This is not acceptable practice. Consequently, local policy should mandate purchase authorization from the school board or a separate board finance committees. These finance committees (which may or may not include non-board members), should be held to the same open meeting regulations as regular board meetings, including notifying the public of meetings through local media.

- **School quality essentials.** As the right to an adequate educational program emerges in court case decisions and as

the primary way in which children are assured a true opportunity to learn, states are reviewing and establishing new ways of defining essential school quality components. Recent adequacy research in Kentucky and Arkansas shows, for example, that pre-school programs, full-day kindergarten, small class sizes, adequate instructional materials, curriculum development capacity, and the like are necessary if truly no child is to be left behind.

States must establish a definition of "school quality essentials" or review their current definition to determine whether they are adequate for education in today's world. Additionally, states must determine whether components are responsive to the needs of all schools and communities in rural areas as well as in urban and suburban areas. *Defining Adequacy in a Rural Context*[7] is a document that offers concrete recommendations for ensuring such responsiveness.

Likewise, school districts must establish policies, practices, and support funds to make sure these essential services are available. Parents and members of the public must review and advocate for these essential learning opportunities.

SECTION V: CONCLUSION

It is vital that schools and communities understand the leading issues of policy and practice in the area of school finance if they are to ensure the efficient and effective management of resources for teaching and learning. The emphasis throughout this process should be on collective decision-making processes and the development of policy contexts that set high standards while allowing flexibility in meeting the needs and circumstances of individual states and school districts.

The policies and practices of managing public resources that support teaching and learning are of vital importance to us all, because:

- **Education matters.** A high quality education is vitally important for productive citizenship, and it is a guaranteed right for all children in most state constitutions.
- **Money matters.** A high quality education requires an adequate level of resources—a level not present in many places, and particularly not in low property wealth areas.
- **Fiscal management matters.** Given limited levels of resources and the mission to provide all children with high quality learning opportunities, making effective and efficient use of resources is crucial to success.
- **The courts matter.** Courts are increasingly raising concerns about fiscal management practices in cases that challenge the levels of funding provided to school districts (e.g., North Carolina's *Leandro* case).

Sound fiscal management practices are not only important to us all, they also demand the focus and efforts of us all. This document offers recommendations for how individuals and organizations can contribute to the goal of providing high quality education for all children. We encourage you to accept the responsibility and participate.

REFERENCES

[1] see, e.g., Ashenfelter, O., & Rouse, C. (1999). Schooling, intelligence, and income in America: Cracks in the bell curve. National Bureau of Economic Research, Working Paper 6902, 3; Dryden Witte, A., & Tauchen, H. (1994). Work and crime: An exploration using panel data. National Bureau of Economic Research, Working Paper 4794; and Wolfe, B., and Zuvekas, S. (1995). Nonmarket outcomes of schooling. Institute for Research on Poverty, Discussion Paper 1065-95, 3.

[2] Hoke County v. North Carolina, Wake Co. Sup. Ct., Case No. 95 CVS 1158 (April 4, 2002), in accordance with Leandro v. North Carolina, 346 N.C. 336 (1997).

[3] See, e.g., Legislative Resolution 180 Staff. (2003). *School Distriction Organization Background Information*. Lincoln, NE: Author.

[4] See http://www.ruraledu.org/docs/consolidation/fiscal.pdf, http://www.ruraledu.org/docs/consolidation/schoolsize.pdf, and http://www.ruraledu.org/docs/consolidation/cotton.pdf for reviews of the literature.

[5] Lyson, T.A. (2002). What does a school mean to a community? Assessing the social and economic benefits of schools to rural villages in New York. *Journal of Research in Rural Education, 17*(3), 131-137.

Dreir, W.H. & Goudy, W. (1991). *Is there life in town after the death of the high school? High schools and the population of Midwest towns*, 1994. Paper presented at the Annual Rural and Small Schools Conference.

[6] See http://www.ruraledu.org/rpm/rpm604d.htm for a summary of several studies in this line of inquiry.

[7] Rural School and Community Trust (In Press). Defining adequacy in a rural context. To be available at: http://www.ruraledu.org/

APPENDIX A: BUDGETING MODELS*

The following are two of the more common budgeting models or theories of planning expenditures within an organization. These models can provide school and district leaders with a structured and systematic approach to technical aspects of the budgeting process.

No budgeting model or theory is a "magic bullet." Budgeting often means making hard decisions among competing priorities. The following procedures can be useful tools in making these decisions.

Planning, Programming, Budgeting, Evaluation System (PPBES):

The PPBES budgeting model involves multi-year analyses of data from five major categories: pupils, programs, personnel, facilities, and finance. Using these data, the PPBES model seeks to sharpen intuition, judgment, and the link between the most efficient way of achieving school goals within the budget on the part of educational leaders through adherence to a systematic approach to analysis.

The PPBES budgeting model is comprised of five primary components:

1. A systematic analysis of the organization's objectives and review of existing approaches to achieving those objectives;
2. A search for relevant alternatives—different ways of achieving the organization's objectives;
3. An estimation of the total cost for each alternative—including direct and indirect costs, initial costs, costs requiring future organizational commitment, and those costs that cannot be measured in terms of dollar amounts;
4. An estimate of the anticipated effectiveness of each alternative, i.e., an estimate of how close each comes to meeting the objective;
5. A comparison and analysis of the alternatives, seeking the combination of alternatives that promises the greatest effectiveness, with given resources, in achieving the objectives.

Zero-Based Budgeting (ZBB):

The use of a ZBB model requires a rigorous evaluation of all programs and services. This model asks each program area to annually justify why it is a continuing priority—which means it theoretically starts from zero each year. It is viewed as effective in both stemming the tide of rising budgets and increasing management and program effectiveness.

The ZBB process can be described in terms of four basic steps:

1. Define the organization's "decision units" (i.e., the lowest practical unit that is knowledgeable about the spending request and its impact);
2. Develop "decision packages" for all activities (a decision package defines a specific function or operation that can be evaluated and compared to other functions—e.g., goal/service, means of achieving goal/providing service, alternative means, cost/benefit of primary and alternative means, etc.);
3. Rank all decision packages in terms of priority with regard to fulfilling the mission of the organization;
4. Approve and fund each activity or decision package to the level of affordability.

*Adapted from Hack, Walter G., Candoli, I. Carl, and Ray, John R. *School Business Administration: A Planning Approach.* Boston: Allyn and Bacon, 1995. ISBN 0-205-16366-1

APPENDIX B: GLOSSARY[◆]

Account
A descriptive heading under which similar financial transactions are recorded.

Accrual Accounting
Basis of accounting in which revenues are recorded as soon as they are anticipated (e.g., when taxes are assessed), and expenditures are recorded as soon as they are encumbered (e.g., when a purchase request is approved). Thus, the money is considered spent when the order is placed.

Adequacy Base
Dollar figure that represents what the state believes it costs to adequately educate one child with no special needs for one year.

Assessed Value
The total dollar value assigned to all real property and personal property subject to taxation.

Audit
An examination of financial records and accounts for the purpose of determining: 1) whether all transactions are recorded properly; 2) whether all transactions are legal and legitimate; and 3) whether financial statements drawn from accounts reflect an accurate picture of financial operations and financial status.

Average Daily Attendance (ADA)
The average daily attendance of students in a school district. This figure is often used to determine state aid.

Average Daily Membership (ADM)
The number of resident students in the school district who are enrolled and attending school in the school district. This figure is also used by states to determine state aid allocations.

Bonded Indebtedness
Obligations of a school district to make payments on a loan, generally for capital construction projects. This is similar to the mortgage on your house and the money is guaranteed by a bonding agent.

Capital Outlay
An expenditure that results in the acquisition of fixed assets or additions to fixed assets that are presumed to have benefits for more than one year. It is generally an expenditure for land or buildings.

Capital Project Fund
A fund to account for all the resources used for the acquisition of capital facilities including real property. Usually, the building account is separate from the general or school operating fund.

Categorical Funds
State and federal funds that are designated for specific educational objectives or categories of children. Examples would be for special education, socially and economically deprived children, or bilingual children.

Compensatory Education
Educational services above and beyond what is normally due a student under a state's education law. Most frequently, these are state or federal Title I monies earmarked for social and economically deprived children.

Debt Service Fund
Used to budget and account for receipts and expenditures necessary to meet the annual debt obligations of the school district. You will most often find a budget line for this purpose. It is the equivalent of a home mortgage payment.

Fair Market Value (FMV)
The amount that a willing seller could reasonably expect to receive from a willing buyer in the sale of property, or what you can get for your house on today's market.

◆ Adapted from "Glossary of Budget and Finance Terms" *http://www.doe.state.in.us/finance/glossary.html.* See also *http://www.mvsd.k12.ca.us/images/finance%20glossary.pdf* and *http://home.wi.rr.com/jthanrahan/html/glossary.html.*

Foundation Program
A state aid program that provides a minimum level of funding per student (called a foundation amount) and requires a minimum basic property tax rate for schools. If the local tax base is not strong enough to generate the foundation amount for each student, then the state provides the rest. This is the most common type of state aid formula. The key is whether the state sets the number high or low.

Fund
A grouping of financial transactions, both receipts and expenditures, of money for a specific purpose.

Guaranteed Tax Yield/Guaranteed Tax Base
A state aid program that guarantees school districts an equal amount of tax base per pupil regardless of the wealth of the district. The higher (or lower) the district chooses to spend, the higher (or lower)the state aid. Used by a few states, the system is quite equitable but the state matching fund is prone to manipulation based on state revenues and political factors.

General Fund
Used to budget and account for all receipts and expenditures for the basic operation and the programs of the school district. Expenditures from this fund may be made for items associated with the daily operation of a school district. This includes expenses for salaries of teachers, administrators, support staff, fringe benefits, supplies, heat, lights, maintenance, and other day-to-day operation expenses.

Millage
Factor applied to the assessed valuation of real or personal tangible property to produce tax revenue. It is a tax rate. A mill is defined as one-tenth of a percent or one-tenth of a cent (0.1¢) on the taxed value of the property. Some states use a 1.0 cent value per $100 of property value to determine tax rates (see "property tax rate").

Non-Revenue Receipt
Money received that is balanced by increases in the debt of the school district (borrowing money) or by the loss of some other asset in the school district (selling of land or equipment).

Percentage Equalization
A state aid program where each district is assigned an index of district wealth (based on calculations of property wealth, income wealth, or a combination) which ranges from zero to one. Per pupil spending levels are then determined by the district, and the state's contribution to that amount is determined by the index. For example, a low wealth district may have an index of .8; in this case, the state provides 80% of the per pupil amount.

Property Tax Levy
The dollar figure produced by multiplying the tax rate and the assessed value.

Property Tax Rate
A statement in dollars and cents, expressed per each $100 of assessed value, which will yield a specific amount of money in property taxes. The yield is also referred to as the levy (see "millage").

Revenue Receipt
Money received that adds to the monetary assets of the school district without a corresponding addition to the debt of the school district or a decrease in another asset(s) of the school district. The two most common revenue receipts are property tax revenue and money from state support.

School Budget
A financial plan considering both revenue and expenditures necessary to meet the educational program of the school district.

Weighting (or Additional Pupil Count)
This is a method of providing additional state assistance on the basis of certain educational programs costing more than a regular program. For example, a compensatory education student may get an additional student count in the formula of 0.25 or an extra 25% in aid (see "categorical programs").

APPENDIX C: RESOURCES

1. Resources available from the National Center for Educational Statistics (NCES)

- Common Core of Data (CCD) – National school finance statistics in raw form. It is available for download and on CD-ROM. The Build-a-Table application (*http://nces.ed.gov/ccd/bat*) allows users to download state-, district- and school-specific data in Excel and other formats.
- Site map of NCES papers and reports by topic *http://nces.ed.gov/help/sitemap.asp*
- Finance-specific papers and reports *http://nces.ed.gov/edfin*
- Encyclopedia of Educational Statistics *http://nces.ed.gov/edstats/*
- Summary of Litigation involving state school finance systems *http://nces.ed.gov/edfin/Litigation/Contents.asp*
- Small and Rural School Districts Characteristics: NCES Statistical Analysis Report, May 1997 (NCES-97-529) *http://nces.ed.gov/pubs97/97529.html*
- State Statistical Profiles Provides state level summaries as well as access to district and school data (limited) and statistics. *http://nces.ed.gov/pubs2000/stateprofiles/*
- Public School Finance Programs of the United States and Canada Descriptions of state finance systems. *http://nces.ed.gov/edfin/state_finance/StateFinancing.asp*
- "Characteristics of Small and Rural Schools" Information on students, revenues, expenditures, class size, etc. *http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=97529*
- "Digest of Educational Statistics: 2001" The basic compendium of educational statistics across the nation. About 500 pages of statistical tables addressing a myriad number of issues. A core document with many comparisons across states. *http://nces.ed.gov/programs/digest/d01/*

2. Resources available from other sites

- State finance system descriptions and databases *http://www.wcer.wisc.edu/cpre/finance/state/*
- Summaries of newspaper articles from around the nation with hyperlinks *http://www.smartbrief.com/ascd*
- Education Week Weekly newspaper of education interests, with good searchable archives *http://www.edweek.org*
- National Center for Education Finance Newly established office by the National Conference of State Legislatures to track national school finance issues and trends. *www.ncsl.org/programs/edu.html*
- Center for Special Education Finance *http://csef.air.org*
- State Websites Find your state's government website by visiting *http://www.piperinfo.com/state/*

3. School Finance Textbooks

There are many standard textbook treatments of educational finance and fiscal management issues. The following texts may prove useful in developing a quick background on a particular issue. The listing does not imply a recommendation by the Rural School and Community Trust.

- King, Richard A., Austin D. Swanson, and Scott R. Sweetland. *School Finance: Achieving High Standards with Equity and Efficiency*, Third Edition. 2003. Allyn and Bacon. ISBN 0-205-35498-X.

- Odden, Allan R. and Lawrence O. Picus. *School Finance: A Policy Perspective, Second Edition*. New York: McGraw-Hill. 2000. ISBN 0-07-047486-9

Appendix G:
Study Agreement

FISCAL CRISIS AND MANAGEMENT ASSISTANCE TEAM
STUDY AGREEMENT
September 11, 2006

The FISCAL CRISIS AND MANAGEMENT ASSISTANCE TEAM (FCMAT), hereinafter referred to as the Team, and the Siskiyou County Office of Education, hereinafter referred to as the COE, mutually agree as follows:

1. BASIS OF AGREEMENT

The Team provides a variety of services to school districts and county offices of education upon request. The COE has requested that the Team provide for the assignment of professionals to study specific aspects of the Siskiyou County Office of Education operations. These professionals may include staff of the Team, County Offices of Education, the California State Department of Education, school districts, or private contractors. All work shall be performed in accordance with the terms and conditions of this Agreement.

2. SCOPE OF THE WORK

A. Scope and Objectives of the Study

The scope and objectives of this study are to:

1) Review the staffing ratios and efficiency of the Siskiyou County Office Special Education Programs and provide recommendations for improvement, as necessary.
2) Review the identification processes for special education students, including the use of preventative measures for intervention by school districts within Siskiyou County and provide recommendations for improvements, as necessary.
3) Review the SELPA AB 602 funding formula and provide examples of alternative funding formulas that may be more cost effective.

B. Services and Products to be Provided

1) Orientation Meeting - The Team will conduct an orientation session at the COE to brief COE management and supervisory personnel on the procedures of the Team and on the purpose and schedule of the study.

2) On-site Review - The Team will conduct an on-site review at the COE office and at school sites if necessary.

3) Progress Reports - The Team will hold an exit meeting at the conclusion of the on-site review to inform the COE of significant findings and recommendations to that point.

4) Exit Letter - The Team will issue an exit letter approximately 10 days after

the exit meeting detailing significant findings and recommendations to date and memorializing the topics discussed in the exit meeting.

5) Draft Reports - Sufficient copies of a preliminary draft report will be delivered to the COE administration for review and comment.

6) Final Report - Sufficient copies of the final study report will be delivered to the COE following completion of the review.

3. PROJECT PERSONNEL

The study team will be supervised by Anthony Bridges, Interim Deputy Executive Officer Fiscal Crisis and Management Assistance Team, Kern County Superintendent of Schools Office. The study team may also include:

A. Dr. William Gillaspie, FCMAT Management Analyst
B. Sarge Kennedy, FCMAT Special Education Consultant
C. Bill Puddy, FCMAT Special Education Consultant

Other equally qualified consultants will be substituted in the event one of the above noted individuals is unable to participate in the study.

4. PROJECT COSTS

The cost for studies requested pursuant to E.C. 42127.8(d)(1) shall be:

A. $500.00 per day for each Team Member while on site, conducting fieldwork at other locations, presenting reports, or participating in meetings.

B. All out-of-pocket expenses, including travel, meals, lodging, etc. Based on the scope of work identified in section 2 A, estimated total cost is $10,000. The COE will be billed based on actual cost. Any change to the scope will affect the estimate of total cost.

C. The COE will be invoiced at actual costs, with 50% due following the completion of the on-site review and the remaining 50% due upon acceptance of the final report by the District.

Payments for FCMAT services are payable to Kern County Superintendent of Schools-Administrative Agent.

5. RESPONSIBILITIES OF THE COE

A. The COE will provide office and conference room space while on-site reviews are in progress.
B. The COE will provide the following (if requested):

1) A map of the local area

2) Existing policies, regulations and prior reports addressing the study request
3) Current organizational charts
4) Current and four (4) prior year's audit reports
5) Any documents requested on a supplemental listing

C. The COE Administration will review a preliminary draft copy of the study. Any comments regarding the accuracy of the data presented in the report or the practicability of the recommendations will be reviewed with the Team prior to completion of the final report.

Pursuant to EC 45125.1(c), representatives of FCMAT will have limited contact with COE pupils. The COE shall take appropriate steps to comply with EC 45125.1(c).

6. PROJECT SCHEDULE

The following schedule outlines the planned completion dates for key study milestones:

Orientation:	October 24, 2006
Staff Interviews:	October 24-26, 2006
Exit Interviews:	October 26, 2006
Preliminary Report Submitted:	December 8, 2006
Final Report Submitted:	To be determined
Board Presentation:	To be determined

7. CONTACT PERSON

Please print name of contact person: Joseph Guerra, Associate Superintendent of Business

Telephone 530-842-8407 FAX 530-842-8436

Internet Address joeg@sisnet.ssku.k12.ca.us

Barbara Dillmann 9/19/06

Barbara Dillmann, Superintendent Date
Siskiyou County Office of Education

Barbara Dean 9-11-06

Barbara Dean, Deputy Administrative Officer Date
Fiscal Crisis and Management Assistance Team

Indicate number of copies of report needed_____