

A REVIEW

*Technology for Educational
Achievement in Wisconsin
(TEACH) Board*

02-3

February 2002

2001-2002 Joint Legislative Audit Committee Members

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CONTENTS

Letter of Transmittal	1
Summary	3
Introduction	7
Expenditure Trends	13
Federal Funds for Educational Technology	15
Investment in Educational Technology and Infrastructure	17
Educational Technology Block Grants	17
Procurement Efforts	24
Infrastructure Financial Assistance	26
Resources to Improve Instruction	31
Educational Technology Training and Technical Assistance Grants	31
Initial Training Grants	31
Planning and Implementation Grants	35
Other Funding for Educational Technology Training	39
Educational Telecommunications Access	40
Video Links	43
Data Lines	47
Other TEACH Board Initiatives	48
Future Considerations	51
Appendix 1—FY 2000-01 Educational Technology Block Grants, by District	
Appendix 2—TEACH Training Grant Expenditures, by Consortia	
Appendix 3—FY 2000-01 Educational Technology Training and Technical Assistance Grants	
Appendix 4—Response from the Executive Director of the TEACH Board	



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February 21, 2002

Senator Gary R. George and
Representative Joseph K. Leibham, Co-chairpersons
Joint Legislative Audit Committee
State Capitol
Madison, Wisconsin 53702

Dear Senator George and Representative Leibham:

We have completed a review of the activities of the Technology for Educational Achievement in Wisconsin (TEACH) Board, as requested by the Joint Legislative Audit Committee. In fiscal year (FY) 2000-01, the TEACH Board spent \$61.3 million, including \$44.4 million in general purpose revenue, on programs to invest in educational technology equipment and to train teachers and others in the use of educational technology.

The TEACH Board is following its statutory mandate to support the development of educational technology in Wisconsin. TEACH Board programs are strongly supported by K-12 school districts and other educational agencies, and the TEACH Board has provided a significant amount of funding since its creation in the 1997-1999 biennial budget. Despite TEACH Board efforts to increase reporting, limited information is available on how funds have been used and on program effectiveness. We have included a number of questions the Legislature may wish to address as it considers reporting requirements for K-12 school districts, the effect of new technology on TEACH Board programs, and the level of support to be provided for the programs in the future.

We appreciate the cooperation and courtesy extended to us by TEACH Board management and staff. The response of the TEACH Board's Executive Director is Appendix 4.

Respectfully submitted,

A handwritten signature in cursive script that reads "Janice Mueller".

Janice Mueller
State Auditor

JM/KW/ss

The Technology for Educational Achievement in Wisconsin (TEACH) Board was created by 1997 Wisconsin Act 27 to assist public school districts, as well as other local and regional educational agencies, in expanding and upgrading the educational technology needed to take advantage of the Internet and to train teachers and others in the use of educational technology. The Board is administratively attached to the Department of Administration but is an independent agency whose Executive Director is appointed by the Governor. In fiscal year (FY) 2000-01, TEACH Board expenditures totaled \$61.3 million, including \$44.4 million in general purpose revenue (GPR), \$10.5 million in segregated revenue from the Universal Service Fund, \$4.5 million in program revenue from loan repayments by participating educational agencies, and \$1.9 million in federal revenue. Over the first four fiscal years of its existence, the TEACH Board's expenditures have totaled \$201.0 million. In FY 2000-01, the Board had position authority for 6.0 full-time equivalent (FTE) staff to carry out the TEACH Board's statutory duties.

Almost all of the Board's expenditures consist of four aid programs for local and regional educational agencies:

- the Educational Technology Block Grant program, which provides formula-based grants to school districts for any educational technology expenditure, except for school district employee salaries;
- the Educational Technology Infrastructure Financial Assistance program, which provides grants and loans to school districts and libraries to upgrade existing electrical wiring and to install computer network cables;
- the Educational Technology Training and Technical Assistance Grants program, which pays for technology-based professional development projects for school teachers and public librarians; and

- the Educational Telecommunications Access program, which provides high-speed Internet connections to school districts, libraries, technical colleges, private schools and colleges, and other educational agencies and pays for a statewide full-motion video network for use in distance education at participating schools, colleges, universities and Cooperative Educational Service Agencies (CESAs).

Most of the support provided to the state's K-12 school districts is included in the calculation of the State's two-thirds funding commitment for public school districts.

The largest single program administered by the Board is the \$35.0 million per fiscal year block grant program. The funds for this program are distributed according to a formula established in statutes. While the information available to measure the effect of these grants on school districts is limited because no reporting is required, the program is strongly supported by school district officials with whom we spoke. From its inception in FY 1997-98 through FY 2000-01, \$132.0 million has been distributed to school districts through the block grant program. Because the program's funding formula, like the formula used to determine school district equalization aid, is based on property values and student population, some school districts receive higher per student funding than others do. In FY 2000-01, per student funding levels ranged from a high of \$185.97 per student in the Norris School District to a low of \$11.16 in the Gibraltar School District. Milwaukee Public Schools received the largest amount: a grant of almost \$6.0 million in FY 2000-01. During site visits to 11 school districts, we gathered information on the use of block grant funds and found they were used for purposes including network hardware, computer workstations, and technology-related services, as allowed by statutes.

The Educational Technology Infrastructure Financial Assistance program provides funding for school districts and libraries to upgrade data and electrical wiring for high-speed data transmissions. The program is funded through state general obligation bonds. One-half of the debt service associated with these bonds is paid by the school district or library completing the upgrade; the TEACH Board pays debt service on the other half, which is counted towards the State's two-thirds funding commitment for public school districts. Through FY 2000-01, the TEACH Board had committed a total of \$53.8 million in infrastructure financial assistance: \$53.2 million to 129 school districts, and \$547,959 to 9 public libraries. In response to relatively low demand from libraries for this funding program, the Legislature, in 2001 Wisconsin Act 16, reduced the authorization level for libraries from \$10.0 million to \$3.0 million. By the end of FY 2000-01, the

Board had assisted in wiring 18,680, or an estimated one-third, of all K-12 classrooms in Wisconsin.

Two TEACH programs are designed to increase both opportunities for professional development and educational resources. The TEACH Board provides Educational Technology Training and Technical Assistance grants to fund professional development training projects for school district and public library staff. The Educational Telecommunications Access program provides subsidies for a full-motion video network that allows live video and sound transmissions by two or more parties and thereby enables students to enroll in classes that may not be available locally, and it allows districts and libraries high-speed Internet access.

Although statutes originally required the TEACH Board to award training grants annually on a competitive basis, the program has been modified through legislative action and the Board's administrative decisions. The number of teachers and library staff trained under the grants in FY 1998-99 is not known because available data on participation are not comprehensive and comparable; however, grant applications projected a total of 14,982 participants. FY 1998-99 expenditures totaled \$6.9 million, including \$2.9 million for consulting and other services and \$1.1 million for hardware.

Based on national studies, as well as information specific to Wisconsin teachers' reported skills and use of technology, the TEACH Board began in FY 1999-2000 to require grant applicants to include model demonstration sites, known as model classrooms, in their proposals. These classrooms are designed to allow experienced teachers to demonstrate their use of educational technology and curriculum integration methods and activities to other teachers. The grant recipients plan to serve 361 school districts and 309 public libraries.

Some school district and CESA staff we contacted disagreed with the TEACH Board's decision to require model classrooms as a feature of the Board's training grants, in part because the model classroom requires an investment in equipment and may be less relevant to the public libraries participating in the program. The TEACH Board expects to report on the percentage of Wisconsin teachers and library staff receiving training funded by the Board, as well as on teacher technology skills, by the end of 2002. The Board has also hired a consulting firm to assess the extent to which the training grant program has changed teaching methods. We include a recommendation for the Board to report to the Legislature no later than February 1, 2003, on the number of teachers and other staff trained and on ratings of their technology skill levels.

The Educational Telecommunications Access program provides funding for telecommunications services purchased from the State's voice, data, and video network known as BadgerNet. Funding is provided in the form of subsidized telecommunications services. The TEACH Board has spent a total of \$33.0 million, including \$31.5 million in segregated funds from the Universal Service Fund, for the program since FY 1998-99. These expenditures include grants to educational agencies that entered into contracts for telecommunications services before the creation of the TEACH Board. The State leases BadgerNet services from the Wisconsin BadgerNet Access Alliance (WBAA), a consortium of private telephone companies and other telecommunications firms, led by Ameritech, Inc. In 1998, the Department of Administration signed three contracts with WBAA, one each for video, data, and voice services, with the goal of obtaining a single rate for telecommunications services for the State and other participating Wisconsin agencies. The video link and data line portions of the BadgerNet contracts contain a minimum revenue guarantee for WBAA of \$59.4 million and will expire in December 2005.

Through FY 2000-01, the TEACH Board has installed 161 full-motion video links, which are typically used in distance education. While it is not possible to determine the number of students or courses that were paid for exclusively by TEACH Board funds, distance education video networks significantly funded by the TEACH Board are popular with teachers and administrators, in part because of the instructional opportunities they can provide.

As its five-year anniversary approaches, questions can be raised about the future of the Board and its programs, particularly as teacher and classroom experience with technology grows, the Legislature addresses a State budget shortfall, and some technologies that have been key in constructing the statewide network are no longer manufactured and will be supported until 2005. These questions include:

- 1) What reporting requirements should be imposed on program participants?
- 2) How should new technologies be assessed?
- 3) How should TEACH Board programs be funded and structured in the future?

We present a number of options for the Legislature to consider as it analyzes the future of the TEACH Board.

Introduction

The Technology for Educational Achievement in Wisconsin (TEACH) Board was created by 1997 Wisconsin Act 27 to assist K-12 school districts, as well as other educational agencies, in expanding and upgrading the technological infrastructure needed to make use of the Internet and distance education and to provide telecommunications access to a range of educational agencies. Statutes also require the Board to cooperate with the University of Wisconsin (UW) System, the Technical College System, and the Department of Public Instruction (DPI) to support technology-related professional development opportunities for public school teachers. Finally, statutes direct the Board to assist school districts and other educational agencies in cost-effective purchasing of educational technology.

TEACH Board expenditures totaled \$61.3 million in FY 2000-01, including \$44.4 million in GPR.

In fiscal year (FY) 2000-01, TEACH Board expenditures totaled \$61.3 million, including \$44.4 million in general purpose revenue (GPR), \$10.5 million in segregated revenue from the Universal Service Fund, \$4.5 million in program revenue from loan repayments by participating educational agencies, and \$1.9 million in federal revenue. Over the first four years of its existence, the TEACH Board's expenditures totaled \$201.0 million. In FY 2000-01, the Board had position authority for 6.0 full-time equivalent (FTE) staff to carry out the TEACH Board's statutory duties.

The TEACH Board is an independent agency attached to DOA for administrative purposes.

The TEACH Board is attached to the Department of Administration (DOA) under s. 15.03, Wis. Stats., but is an independent agency. The Board has nine members, including the Superintendent of Public Instruction or a designee; the Secretary of Administration or a designee; a member of the UW System Board of Regents, appointed by the president of the Board of Regents; a member of the Technical College System Board, appointed by the president of the Technical College System Board; a member of the Educational Communications Board, appointed by the Governor; and four at-large members appointed by the Governor. Except for the Superintendent of Public Instruction and the Secretary of Administration (or their designees), the board members serve four-year terms and require confirmation by the Senate. The Executive Director is appointed by the Governor.

Although the TEACH Board is independent from DOA, it is directed by statutes to work closely with DOA staff to carry out two of its programs. First, statutes require the Board to provide educational agencies with access to data lines and video links, which are provided to educational agencies from DOA's voice, data, and video network known as BadgerNet. Second, statutes require the Board to work with the Division of Information Technology Services, which was formerly part of DOA but is now attached to the newly created Department of Electronic Government, to coordinate and promote the efficient and cost-effective procurement and maintenance of technology by participating educational agencies.

The majority of the Board's expenditures consist of four aid programs for local school districts and regional educational agencies.

Almost all of the Board's expenditures consist of four aid programs for local school districts and regional educational agencies that are designed to invest in educational technology and to provide resources to improve instruction. The programs are:

- the Educational Technology Block Grant program, which provides formula-based grants to school districts for any educational technology expenditure, except for school district employee salaries;
- the Educational Technology Infrastructure Financial Assistance program, which provides grants and loans to school districts and libraries for upgrading existing electrical wiring and installing computer network cables, but not for wiring that is part of new school construction projects;
- the Educational Technology Training and Technical Assistance Grants program, which pays for technology-based professional development projects for school teachers and public librarians that are screened by TEACH Board staff using criteria established by the Board and awarded on a competitive basis, with consideration of geographic factors as required by statutes; and

- the Educational Telecommunications Access program, which both provides high-speed Internet connections to school districts, libraries, technical colleges, private schools and colleges, and other educational agencies and pays for the services of a statewide full-motion video network for use in distance education at participating school districts and other educational agencies. This program also provides grants to educational entities which, before the creation of the TEACH Board, contracted with telecommunications providers for video and data links.

As shown in Table 1, 72.4 percent of the Board's expenditures in FY 2000-01 were supported by GPR. The Universal Service Fund, which is supported by assessments on telecommunications providers, funded 17.1 percent of the Board's expenditures.

Most TEACH Board programs are considered part of the State's support for public schools and are included in calculations of its two-thirds funding commitment for public school districts. Specifically, the Educational Technology Block Grant program, the Educational Technology Training and Technical Assistance Grants program, the Educational Telecommunications Access program, and portions of the Educational Technology Infrastructure Financial Assistance program are considered school aids and are distributed as categorical aids to school districts. With the exception of the Educational Technology Infrastructure Financial Assistance program, TEACH Board funds distributed to school districts are outside the revenue caps.

The TEACH Board has also served as the administrative agency for grants awarded by the Educational Technology Board, which preceded the TEACH Board, and the Wisconsin Advanced Telecommunications Foundation (WATF), which funded advanced telecommunications projects and educated telecommunications users about advanced services before its dissolution in 2001.

Table 1

TEACH Board Expenditures by Source
FY 2000-01

<u>Funding Source</u>	<u>Expenditures</u>	<u>Percentage of Total</u>
General Purpose Revenue		
Educational Technology Block grants	\$35,000,000	57.1%
Training and Technical Assistance grants*	7,068,024	11.5
Infrastructure Financial Assistance program**	1,579,426	2.6
TEACH Board administrative costs	645,427	1.1
Educational Technology Board Pioneering Partners grants	<u>59,862</u>	<u>0.1</u>
Subtotal, GPR	\$44,352,739	72.4
Universal Service Fund		
Educational Telecommunications Access program	10,480,498	17.1
Program Revenue		
Infrastructure Financial Assistance program***	4,446,748	7.3
Wisconsin Advanced Telecommunications Foundation staffing	<u>86,687</u>	<u>0.1</u>
Subtotal, Program Revenue	4,533,435	7.4
Federal Revenue		
Educational Telecommunications Access program	1,503,000	2.4
IDEAS Portal	100,000	0.2
Infrastructure Financial Assistance Program**	165,721	0.3
Wisconsin Literacy Education and Reading Network Source	53,356	0.1
Foreign language grants	45,696	0.1
TEACH Board administrative costs	<u>33,000</u>	<u>0.0</u>
Subtotal, Federal Revenue	<u>1,900,773</u>	<u>3.1</u>
Total	\$61,267,445	100.0%

* Includes funding for foreign language grants.

** Reflects debt service for general obligation bonds issued for the Infrastructure Financial Assistance program.

*** Reflects loan repayments from school districts and public libraries.

Of the \$61.3 million in expenditures in FY 2000-01, approximately \$60.5 million, or 98.7 percent, was distributed to K-12 school districts. Cooperative Educational Service Agencies (CESAs), private schools and colleges, technical colleges, and libraries also received funding for technology or telecommunications access through TEACH Board programs. Table 2 shows TEACH Board expenditures. Administrative costs associated with operating the TEACH agency and Board totaled \$765,114, or approximately 1.2 percent of all expenditures.

The TEACH Board was originally presented to the Legislature as a five-year, \$500.0 million program, and it is currently in its fifth year of operation. Consequently, some believe it is important to determine whether the Board has met its statutory requirements and its own goals. Therefore, at the request of the Joint Legislative Audit Committee, we evaluated the Board's management of its several programs, reviewed the Board's internally established performance goals, and reviewed the extent to which purchasing efforts have been successful in promoting the cost-effective procurement of educational technology by the agencies participating in TEACH Board programs. We also reviewed expenditure and staffing information for the TEACH Board and interviewed members of the TEACH Board and TEACH staff, as well as staff in DPI and DOA. We interviewed staff from 11 school districts, 7 CESAs, 3 distance education networks, 4 library systems, 1 technical college district, and 1 private college. Finally, we gathered information about comparable educational technology funding programs from other midwestern states, to determine their strategies for funding programs for educational technology.

Table 2

TEACH Board Expenditures
FY 2000-01

	<u>Source</u>	<u>Expenditures</u>
Educational Technology Block grants	GPR	\$35,000,000
Educational Telecommunications Access	Universal Service Fund	10,480,498
	Federal revenue	<u>1,503,000</u>
Subtotal, Telecommunications Access		11,983,498
Educational Technology Training and Technical Assistance grants	GPR*	7,068,024
Infrastructure Financial Assistance**	Program revenue	4,446,748
	GPR	1,579,426
	Federal revenue	<u>165,721</u>
Subtotal, Infrastructure Financial Assistance		6,191,895
Administrative Costs		
TEACH Board administrative costs	GPR	645,427
	Federal revenue	33,000
WATF services	Program revenue	<u>86,687</u>
Subtotal, Administrative Costs		765,114
Other Initiatives		
IDEAS Portal	Federal revenue	100,000
Educational Technology Board Pioneering Partners grants	GPR	59,862
Wisconsin Literacy Education and Reading Network Source	Federal revenue	53,356
Foreign language grants	Federal revenue	<u>45,696</u>
Subtotal, Other Initiatives		<u>258,914</u>
Total		\$61,267,445

* Includes GPR funding for foreign language grants.

** Reflects debt service payments for general obligation bonds issued for the Infrastructure Financial Assistance program and loan repayments from school districts and public libraries.

Expenditure Trends

TEACH Board expenditures through FY 2000-01 have totaled \$201.0 million.

The TEACH Board was introduced in 1997 as a \$500.0 million, five-year initiative, but as shown in Table 3, expenditures in its first four years totaled \$201.0 million. If expenditures closely follow appropriated amounts included in the FY 2001-03 biennial budget, they will total an estimated \$332.3 million over a six-year period.

Table 3

TEACH Board Expenditures and Budget FY 1997-98 through FY 2002-03

<u>Fiscal Year</u>	<u>Expenditures</u>
1997-98	\$34,250,826
1998-99	55,214,370
1999-00	50,300,175
2000-01	<u>61,267,445</u>
Subtotal, Expenditures	201,032,816
2001-02*	65,159,900
2002-03*	<u>66,140,400</u>
Subtotal, Budget	<u>131,300,300</u>
Total	\$332,333,116

* As budgeted in 2001 Wisconsin Act 16.

Private schools are eligible for some TEACH programs.

Table 4 shows the range of educational agencies that are eligible to participate in TEACH programs. It should be noted that Milwaukee charter schools are eligible to receive aid under all four TEACH programs, but Milwaukee Parental Choice program schools are eligible only for the subsidies provided through the Educational Telecommunications Access program.

Table 4

**Educational Agency Eligibility for TEACH Programs
FY 2001-02**

<u>Educational Agency</u>	<u>Educational Technology Block Grants</u>	<u>Infrastructure Financial Assistance</u>	<u>Training and Technical Assistance Grants</u>	<u>Educational Telecommunications Access</u>
School districts	Yes	Yes	Yes	Yes
Public library systems	No	Yes	Yes	Yes
CESAs	No	No	Yes	Yes
Technical colleges	No	No	No	Yes
Private colleges	No	No	No	Yes
State residential schools	No	No	No	Yes
Private schools	No	No	No	Yes
Milwaukee charter schools*	Yes	Yes	Yes	Yes
Juvenile secured correctional facilities*	Yes	No	Yes	Yes

* 2001 Wisconsin Act 16 expanded eligibility by allowing Milwaukee charter schools and juvenile secured correctional facilities to participate in TEACH programs.

The TEACH Board has faced litigation involving its financial support of private sectarian schools. In November 1998, the Freedom From Religion Foundation filed suit, claiming that the Board's practice of subsidizing the costs of telecommunications services to private sectarian schools was unconstitutional. In April 2001, the United States Court of Appeals upheld the constitutionality of providing new telecommunications access grants to sectarian schools but declared unconstitutional service contracts for telecommunications access that were signed by sectarian schools before the creation of the TEACH Board in FY 1997-98, on the grounds the grants, which were to be used to pay for these contracts, were not sufficiently restricted and might be used for purposes relating to religion. The TEACH Board suspended the grants to sectarian schools after FY 1998-99, when payments to nine sectarian schools totaled \$41,459. 2001 Assembly Bill 492, which authorizes the TEACH Board to award Educational Telecommunications Access grants to private sectarian schools, was passed by the Assembly and is currently under consideration in the Senate.

Educational agencies may also receive federal funding for educational technology.

Federal Funds for Educational Technology

In addition to state funding for educational technology provided by the TEACH Board, many educational agencies also receive funding from federal sources. Public K-12 school districts and other agencies received an estimated \$24.8 million in FY 2000-01 in combined federal technology funding from three programs:

- \$17.5 million from the E-rate program, which provides federally funded discounted rates for telecommunications services, primarily to K-12 schools, libraries, and consortia of educational agencies;
- \$6.1 million from the federal Technology Literacy Challenge Fund, which is administered by DPI and pays for technology-related professional development opportunities for teachers and librarians; and
- \$1.2 million from the federal Library Services and Technology Act, which provides funding that is administered by DPI to purchase and maintain public libraries' hardware and software for shared automated systems to track materials in circulation.

Of the \$24.8 million in all federal educational technology funding received in FY 2000-01 by agencies participating in TEACH Board programs, a total of \$17.5 million, or 70.3 percent, consisted of E-rate discounts, which are applied to telecommunications services such as basic and long-distance telephone services, Internet access, and equipment to provide internal telecommunications connections. The TEACH Board applies for federal E-rate funds on behalf of school districts and libraries with TEACH-provided video links and data lines. School districts and libraries may also apply directly to the federal government for E-rate discounts on other educational technology supported by the TEACH Board, including infrastructure improvements, purchases made with block grant funds, and telecommunications contracts with providers other than the TEACH Board. Additionally, the Board currently requires participants in its Infrastructure Financial Assistance program to apply for E-rate discounts. Agencies eligible for the E-rate program include public schools; not-for-profit private schools with less than \$50.0 million in endowments; private sectarian schools; charter schools; public, private, and certain research libraries; and consortia of eligible schools and libraries.

In FY 2000-01, the TEACH Board spent \$1.5 million in federal E-rate funds for its Educational Telecommunications Access program. Federal E-rate funds also supported Educational Technology Infrastructure Financial Assistance program grants, the IDEAS Portal, the Wisconsin Literary Education and Reading Network Source, and foreign language grants. In January 2001, the TEACH Board and the Joint Committee on Finance reached an agreement regarding E-rate funding that requires the TEACH Board to submit its proposed E-rate expenditures to the Joint Committee on Finance under a passive review process.

Investment in Educational Technology and Infrastructure

The TEACH Board supports investments in educational technology and infrastructure through two aid programs and the promotion of cost-effective procurement. The TEACH Board distributes funds for its largest program—the Educational Technology Block Grant program—according to a formula established in statutes. While there is limited information available to measure the effect of these grants on school districts, the program is strongly supported by school district officials. On the other hand, there has been less demand than projected for the Infrastructure Financial Assistance program. The success of the TEACH Board’s efforts to assist educational agencies by promoting the cost-effective procurement of educational technology is unclear.

Educational Technology Block Grants

In FY 2000-01, the TEACH Board distributed \$35.0 million in GPR-funded block grants.

From the program’s inception in FY 1997-98 through FY 2000-01, the TEACH Board has distributed \$132.0 million to school districts through the Educational Technology Block Grant program. Appendix 1 shows the amounts received by each block grant recipient in FY 2000-01, when \$35.0 million was distributed.

Statutes detail how grants are to be distributed to each district. The formula is based on student membership and equalized value. Equalized value is the full value of the taxable property in the district for the previous year, excluding adjustments resulting from appeals. Membership is the sum of: (1) the average of the number of students enrolled on the third Friday in September and the second Friday in January of the previous school year; and (2) the number of full-time equivalent students enrolled in an approved summer school program during the summer before the counted year. The block grant formula establishes a base grant of \$5,000 that is guaranteed to all school districts, establishes a minimum equalized value per student, and includes an adjustment for K-8 only districts and union high school districts.

The block grants averaged \$40.13 per student in FY 2000-01.

As shown in Table 5, TEACH Board block grants averaged \$40.13 per student in FY 2000-01. Because the block grants appropriation has not increased since FY 1998-99, the amount of funding on a per student basis is expected to continue to decrease slightly over the next two fiscal years if enrollment continues to increase.

Table 5

Educational Technology Block Grants
FY 1997-98 through FY 2000-01

<u>Year</u>	<u>Total Funding</u>	<u>Number of Students</u>	<u>Statewide Funding per Student</u>
FY 1997-98	\$27,000,000	865,070	\$31.21
FY 1998-99	35,000,000	868,152	40.32
FY 1999-00	35,000,000	869,623	40.25
FY 2000-01	35,000,000	872,063	40.13

Districts with higher property values receive less funding per student than districts with lower property values do.

Because the block grant funding formula, like the formula used to determine equalization aid, is based on property values and student population, some school districts receive higher per student funding than others do. Districts with higher property values receive less funding per student than districts with lower property values. As shown in Table 6, the Norris School District, with 87 students enrolled in the 2000-01 school year, received the highest block grant funding per student in FY 2000-01, \$185.97. The Gibraltar School District, with 675 students, received the lowest block grant funding per student, \$11.16.

Table 6

**School Districts with Highest and Lowest Block Grants per Student
FY 2000-01**

<u>School Districts with Highest per Student Grant</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Block Grant per Student</u>
Norris	\$16,179	87	\$185.97
Royall	73,924	739	100.03
Dover #1	7,791	79	98.62
Wauzeka-Steuben	35,200	368	95.65
Norway J7	9,182	104	88.29
<u>School Districts with Lowest per Student Grant</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Block Grant per Student</u>
Mequon-Thiensville	\$63,502	3,950	\$16.08
Lakeland UHS	14,443	969	14.91
Elmbrook	100,449	6,840	14.69
Northland Pines	21,352	1,613	13.24
Gibraltar	7,533	675	11.16

The largest block grants for FY 2000-01 are shown in Table 7. Milwaukee Public Schools received the largest amount: a block grant of almost \$6.0 million.

Table 7

**15 Largest Educational Technology Block Grants for School Districts
FY 2000-01**

<u>School District</u>	<u>Block Grant</u>	<u>2000-01 Students</u>
Milwaukee	\$5,972,957	100,494
Racine	793,464	20,912
Kenosha	738,428	19,986
Green Bay Area	622,694	19,465
Madison Metropolitan	534,242	25,285
Appleton Area	476,683	14,719
Sheboygan Area	404,177	10,000
Janesville	390,683	10,867
Eau Claire Area	387,042	11,073
Oshkosh Area	359,514	10,430
Wausau	339,431	9,014
Stevens Point Area	303,322	8,011
Waukesha	299,107	12,575
Superior	274,245	5,231
La Crosse	255,072	7,711

Until 2001, school districts were the only eligible recipients of block grants. However, in FY 2000-01, the TEACH Board chose to provide block grants to Milwaukee charter schools not affiliated with Milwaukee Public Schools. Charter schools in other parts of the state are sponsored by school districts and, therefore, are eligible to receive a portion of their district's block grant.

**The Board awarded
\$115,275 to five
Milwaukee charter
schools in FY 2000-01.**

In response to a request from Milwaukee charter schools, and because statutes were not clear about the eligibility of charter schools sponsored by Milwaukee government agencies other than Milwaukee Public Schools, the Board sought and received a legal opinion from DOA's Office of Legal Counsel regarding their eligibility. The Board then calculated each charter school's block grant using the equalized value per member of Milwaukee Public Schools. The Board awarded a total of \$115,275 in educational technology block grants to five Milwaukee charter schools in FY 2000-01, as shown in Table 8. With the exception of the Milwaukee Academy of Science, which is sponsored by UW-Milwaukee, these charter schools are all sponsored by the City of Milwaukee.

Table 8

Milwaukee Charter School Block Grant Funding
FY 2000-01

<u>Charter School</u>	<u>Block Grant</u>	<u>Students</u>	<u>Grant per Student</u>
Central City Cyberschool	\$27,465	356	\$77.15
Downtown Montessori	6,778	32	211.81
Khamit Institute	10,216	88	116.09
Milwaukee Academy of Science	58,644	818	71.69
YWCA Global Career Academy	12,172	117	104.03

In 2001 Wisconsin Act 16, the Legislature resolved the issue by explicitly allowing Milwaukee charter schools to receive block grants and other TEACH funding, but with a different formula than the one the TEACH Board used to calculate block grant funding for FY 2000-01. The Legislature's action directed the TEACH Board, beginning in FY 2001-02, to calculate block grants for Milwaukee charter schools using the statewide average equalized value per member, rather than the equalized value per member in Milwaukee Public Schools. Had the TEACH Board used the statewide average equalized value in FY 2000-01, Milwaukee charter schools would have received only \$74,616, or 35.3 percent less than they received under the TEACH funding formula. Beginning in FY 2001-02, juvenile secured correctional facilities, such as the Lincoln Hills School, are also eligible to receive block grants. School districts and Milwaukee charter schools are eligible for block grants after the school board or, in the case of the juvenile correctional facilities, the Secretary of the Department of Corrections adopts a resolution or submits a written request for the grant.

School districts are not required to report to the State on their use of block grant funds.

Block grant funds can be used for any purpose related to educational technology, except to fund employee salaries and fringe benefits or to replace district funding for educational technology. Additionally, block grant funds must be held in a separate accounting fund and may not be used to replace funding available from other sources. Statutes do not, however, require any reporting, and the TEACH Board does not receive any reports on how school districts have used their block grants. It should be noted, however, that the TEACH Board has requested that districts be required to report block grant expenditures. The 1999-2001 request by the Board was not included in the Governor's budget proposal; the 2001-03 request was removed from the Governor's budget proposal as a policy item and has not been taken up by the Legislature.

Consequently, no statewide data are available on the use of block grant funds or the effect they have had on school districts.

However, in 2000, DPI and the TEACH Board surveyed all school districts on educational technology issues and received responses from 384 districts. As shown in Table 9, these school districts reported budgeting \$185.7 million for technology, including \$54.9 million, or 29.6 percent of technology expenditures, on network hardware. Computer workstations and peripherals accounted for \$50.8 million, or 27.4 percent of technology expenditures. Other significant expenditure categories include telecommunications and technical support.

Table 9

DPI Survey of School District Budgets for Educational Technology*
FY 1999-2000

<u>Category</u>	<u>Budget</u>	<u>Percentage of Total</u>
Network hardware	\$ 54,929,149	29.6%
Computer workstations and peripherals	50,846,303	27.4
Telecommunications services**	22,109,143	11.9
Technical support	19,340,698	10.4
Instructional software	12,274,757	6.6
Professional development	9,616,270	5.2
Administrative software	6,270,938	3.4
Other***	4,365,114	2.3
Distance learning	3,963,393	2.1
Internet service provider costs	<u>1,963,073</u>	<u>1.1</u>
Total	\$185,678,838	100.0%

* Includes 384 of 426 school districts.

** Includes telephone service, data lines, and video links.

*** Includes supplies.

During site visits to 11 school districts, we also gathered information on the use of block grant funds and found purchases generally consistent with those reported in the 2000 survey, including hardware, software, and network infrastructure. Examples of the types of expenditures made by school districts with FY 1999-2000 block grants include:

- \$2.2 million by Milwaukee Public Schools for contracted educational technology services, including line fees for a Wide Area Network, software license and maintenance fees, and computer consultants;
- \$250,010 by the Madison Metropolitan School District for personal computer hardware, such as personal computers, monitors, and computer speakers;
- \$50,200 by the Whitewater School District for equipment to increase network bandwidth within and between school buildings;
- \$18,000 by the School District of Beloit for instructional software;
- \$3,000 by the Altoona School District for a TEACH-subsidized video link; and
- \$1,400 by the Boulder Junction School District for external hard drives to use for video editing and graphic design.

School district officials expressed satisfaction with the block grants.

In our review of expenditures in 11 districts, we found no evidence that districts used block grant funds to pay for employee salaries or fringe benefits or for purposes other than educational technology. Further, school district officials we contacted expressed a high degree of satisfaction with the Educational Technology Block Grant program. District officials viewed the block grants as important supplements to district educational technology budgets and were pleased with the flexibility allowed in spending the funds.

Other midwestern states provide less block grant funding for educational technology.

Other midwestern states offer ongoing educational technology block grants with similar goals but in programs smaller than Wisconsin's. For example, in FY 1999-2000, when the Educational Technology Block Grant program provided \$35.0 million, Ohio distributed \$20.6 million in grants to subsidize school district purchases of hardware, software, and telecommunications services, and Indiana used gaming and lottery revenues to distribute \$27.5 million in grants to school districts. Illinois distributed approximately \$25.0 million annually for four years. Michigan and Minnesota do not provide educational technology block grants to school districts.

Procurement Efforts

The success of the Board's procurement efforts is unclear.

Wisconsin statutes direct the TEACH Board to promote the cost-effective procurement of educational technology by establishing specifications and standards for purchase of hardware and software, entering into cooperative purchasing agreements for educational technology training, and purchasing educational technology equipment to lease or re-sell to schools and CESAs. CESAs provide a range of services to school districts by, for example, assisting them in meeting special education requirements, coordinating teacher training opportunities and related instructional services, and providing information to districts on how to purchase and manage instructional technology. The TEACH Board has worked with CESAs to promote the cost-effective procurement of educational technology by school districts and libraries, but the success of the Board's efforts is unclear.

In 1996, before the TEACH Board was established, DOA staff surveyed each CESA to determine how the proposed board could best promote cost-effective procurement practices. The CESAs indicated that the TEACH Board could assist local educational agencies by promoting simplified purchasing and competitive prices and by establishing no mandatory purchasing requirements.

DOA developed 55 educational technology procurement bulletins on behalf of the TEACH Board.

To address these local needs on behalf of the TEACH Board, DOA contracted with 424 vendors to provide goods and services related to educational technology available through procurement bulletins. The 55 current TEACH Board procurement bulletins are categorized in Table 10. School districts and CESAs are able to purchase educational technology through these bulletins, although they are not required to do so. With the assistance of DOA staff, the TEACH Board created a Web site in 1999 that districts and CESAs may use to obtain information regarding the bulletins. To date, the TEACH Board has attempted to encourage use of its procurement Web site by presenting information at educational conferences, meeting with school district and CESA staff, and making use of CESA e-mail lists.

Table 10

TEACH Procurement Bulletins
As of July 2001

<u>Category</u>	<u>Number of Bulletins</u>	<u>Number of Vendors</u>
Hardware	17	37
Network services	12	29
Consumables*	7	9
Software	6	7
Maintenance services	4	7
Training	3	54
Service**	3	278
Distance education	2	2
Financing	<u>1</u>	<u>1</u>
Total	55	424

* Includes items such as batteries, cables, paper, and toner cartridges.

** Includes data entry and information technology consulting.

Limited information is available regarding how frequently the bulletins are used and whether savings are being realized by school districts and CESAs. While the TEACH Board projects possible savings of 10 to 30 percent through the bulletins, these comparisons are made with retail prices not typically paid by educational institutions. However, it appears that the TEACH Board procurement Web site is being visited regularly. According to DOA staff, the Web site was visited 9,880 times between January and July 2001, which significantly exceeds the TEACH Board's goal of 1,537 visits for FY 2000-01. Some district staff indicated they use the bulletins as a guide to see what prices should be and then use that information to obtain better prices from their local suppliers.

A second statutory requirement to promote cost-effective purchasing directs the TEACH Board, with the consent of DOA, to enter into cooperative purchasing agreements with school districts or CESAs for district employees to receive educational technology training. TEACH Board staff indicated they have not entered into cooperative purchasing agreements as required because districts typically rely on their CESAs to coordinate training. Board staff also indicated their principal role in developing educational technology training is to subsidize training through the Educational Technology Training and Technical Assistance Grants program.

Infrastructure Financial Assistance

Participation in the Infrastructure Financial Assistance program has been lower than expected.

The Educational Technology Infrastructure Financial Assistance program provides funding for school districts and libraries to upgrade data and electrical wiring needed for high-speed data transmission. Funding for this program is provided to individual school districts and libraries in equal parts of grants and loans. While the program has not met the performance goals set by the TEACH Board, and participation has been lower than expected, school district officials we contacted whose districts sought funding under the program viewed the program as beneficial.

The Educational Technology Infrastructure Financial Assistance program is funded through general obligation bonds issued by the State. The TEACH Board uses the bond revenue to support school districts' and libraries' infrastructure projects; participating agencies are then responsible for repaying debt service on half the amount of infrastructure financial assistance received. The TEACH Board pays debt service on the other half, which is counted toward the State's two-thirds funding commitment for public school districts.

In 1997 Wisconsin Act 27, which created the TEACH Board, the Legislature authorized \$100.0 million in general obligation bonding authority for the Educational Technology Infrastructure Financial Assistance program's use in school buildings, and an additional \$10.0 million for library buildings. In response to relatively low demand from libraries for this funding program, the Legislature reduced the authorization level for libraries to \$3.0 million in 2001 Wisconsin Act 16.

Infrastructure financial assistance totaled \$53.8 million.

The TEACH Board had committed \$53.8 million in Educational Technology Infrastructure Financial Assistance program funding to 129 school districts and 9 public libraries through FY 2000-01, as shown in Table 11.

Table 11

Educational Technology Infrastructure Financial Assistance Program Funding
Through FY 2000-01

	<u>Funding*</u>	<u>Number</u>
School districts	\$53,209,859	129
Library systems	<u>547,959</u>	<u>9</u>
Total	\$53,757,818	138

* Program funding includes assistance the Board has already distributed, as well as funding the Board has reserved for school districts and libraries that have initiated but not yet finished their infrastructure improvements.

School districts and libraries may use the financial assistance for a variety of purposes related to infrastructure improvement, but statutes prohibit purchasing equipment such as computers or printers with program funds. Eligible expenses include:

- labor, construction, and equipment associated with data and electrical wire installation and upgrades;
- design and planning costs;
- up to \$4,500 per upgraded building for network hardware equipment such as servers;
- closing fees and other costs associated with the Infrastructure Financial Assistance program; and
- asbestos removal.

Since the program began, the Board has denied only four applications for assistance, for the following reasons:

- two applicants proposed projects involving new construction, which is statutorily excluded from eligibility;
- one applicant included a network design proposal that the Board considered to be ineligible for assistance; and
- one applicant sought reimbursement for expenditures that occurred before the beginning of the Educational Technology Infrastructure Financial Assistance program.

\$47.1 million has been designated for data and electrical wiring construction.

A significant majority of the funds committed by the TEACH Board for infrastructure improvement have been designated for data and electrical wiring construction, as shown in Table 12. Approximately \$47.1 million, or 87.5 percent of total committed funds, has been designated for data and electrical wiring construction. Design costs and network hardware each accounted for over 5.0 percent of the committed infrastructure funds.

Table 12

Infrastructure Financial Assistance Categories
Through FY 2000-01

<u>Expense</u>	<u>Committed</u>	<u>Percentage of Total</u>
Data and electrical wiring construction	\$47,058,599	87.5%
Design and planning costs	3,100,360	5.8
Network hardware	2,865,741	5.3
Closing fees and other costs	421,625	0.8
Asbestos removal	<u>311,493</u>	<u>0.6</u>
Total	\$53,757,818	100.0%

Non-statutory language included in 1997 Wisconsin Act 27 directed the TEACH Board to establish performance measures for all of its programs. The Board set goals for:

- the number of public K-12 classrooms wired with TEACH assistance;
- the number of students served by those classrooms; and
- the number of public library buildings wired with TEACH assistance.

The Board has helped fund the wiring of 18,680 K-12 classrooms.

By the end of FY 2000-01, the Board had assisted in wiring 18,680, or an estimated one-third, of K-12 classrooms. Classrooms wired with the Board's assistance served 41.0 percent of public K-12 students, although the Board's goal was to serve 75.0 percent of students by FY 2000-01. Likewise, the Board assisted in wiring 21 buildings belonging to 9 libraries by the end of FY 2000-01, falling short of the goal of assisting in wiring 32 buildings. Through FY 2000-01, 129 of 426 school districts participated in the program.

In September 2000, the TEACH Board surveyed technology coordinators at school districts that were not participating in the Educational Technology Infrastructure Financial Assistance program, in an effort to assess future demand. A total of 246 nonparticipating school districts responded, and 86.0 percent reported having a level of wiring that the TEACH Board considered sufficient for most purposes. Additionally, 51.0 percent of the responding districts indicated that their data wiring infrastructure would be adequate for their needs for the next ten years.

Only 9 of 382 libraries have requested infrastructure assistance funding.

As noted, of the 382 libraries statewide, only 9 have participated in the program, including 1 that had multiple buildings wired. In April 2001, the Board surveyed library technology consultants to identify barriers to participation in the Educational Technology Infrastructure Financial Assistance program. They found:

- shared automated systems, which library systems use to centrally manage catalog and circulation information, are a higher funding priority for libraries than data and electrical wiring improvements;
- unlike school districts, libraries do not receive block grants that can be used to repay the loans, and thus some reported insufficient funding for debt service payments; and
- libraries are often located in smaller buildings than schools, and library staff indicated only small amounts of assistance are needed.

Two attempts have been made to increase library participation in the program. Proposals were included in both 1999 Senate Bill 60 and the Governor's 2001-03 Executive Budget to allow libraries to use infrastructure assistance to purchase network hardware for their catalog and circulation information system needs. These proposals were not successful; the session ended before action was taken on 1999 Senate Bill 60, and the Governor's proposals were removed during legislative deliberation on the 2001-03 budget.

Illinois and Ohio have programs similar to the Educational Technology Infrastructure Financial Assistance program.

In addition to Wisconsin, two other states in the Midwest offer grant or loan programs to help educational agencies renovate or install infrastructure for telecommunications. In FY 1999-2000, Illinois made \$20.0 million available in loans to school districts for improvement of infrastructure and also offered grants for library infrastructure upgrades. In FY 1999-2000, Ohio distributed \$6.6 million in grants to school districts for the purposes of installing sufficient electrical wiring to safely operate educational technology. Minnesota and Iowa do not offer similar programs.

The TEACH Board's Educational Technology Training and Technical Assistance Grants program funds professional development training to improve the technological skills of K-12 teachers, school district staff, and library staff. The Board also subsidizes operation of full-motion video networks under its Educational Telecommunications Access program, which allows students to enroll in classes that may not be available locally and makes on-line educational resources available to school districts and public libraries through high-speed Internet access. The full-motion video network of linked video classrooms can transmit and receive live video images and sound. Both programs have been well-received, but little information is available on the effectiveness of the training grant program.

Educational Technology Training and Technical Assistance Grants

The TEACH Board has funded training grants in FY 1998-99, FY 1999-2000, and FY 2000-01.

The Educational Technology Training and Technical Assistance Grants program provides grants to improve the skills of school district teachers and staff and public librarians in the use of educational technology. Eligible training grant applicants include CESAs and consortia consisting of two or more school districts or CESAs, or one or more school districts or CESAs and one or more public library boards. The TEACH Board awards the grants annually. Training grants have been awarded during FY 1998-99, FY 1999-2000, and FY 2000-01.

Initial Training Grants

Statutes originally required the TEACH Board to award grants annually on a competitive basis, but the program has been modified through legislative action and the Board's administrative decisions. For the first grant award cycle of FY 1998-99, eligible projects included funds for training library or school staff in the use of computers, the Internet, and video distance learning; public library patrons in the use of computers; and school staff in the integration of educational technology in school curricula. The TEACH Board received 40 training grant applications and originally awarded a total of \$6.0 million to 23 applicants.

After the initial training awards were made in FY 1998-99, an unsuccessful applicant appealed the decision to the TEACH Board. While the TEACH Board denied the appeal, legislative interest in geographic equity in grant awards led to the Board's creation of a \$1.0 million rural technology training initiative during FY 1998-99. This initiative was funded by delaying final payment to the 23 initial projects. The rural training initiative funded four additional projects from the original training grant applications, including the project proposed by the applicant whose appeal was denied. As a result, 27 projects were funded during the initial training grant cycle. Table 13 shows the funding distribution for the FY 1998-99 grant cycle.

It should be noted that because the TEACH Board had fully allocated the \$6.0 million FY 1997-99 training grant appropriation to make partial payments on FY 1998-99 training grant awards, including the rural training initiative awards, the Legislature subsequently increased the appropriation for the training grant funds by \$1.0 million. The increase was intended to enable the TEACH Board to fully fund the amounts originally awarded to the initial grant recipients.

Reliable information is not available on the number of teachers and staff trained with TEACH funds.

Comprehensive and comparable information regarding how many teachers and library staff were actually trained with these initial grants is not available. Despite a requirement by the TEACH Board for end-of-project reports to include data on trainee participation, the reports we reviewed did not contain comparable information on the number of participants trained, both because of differences in how grantees counted participation and because several reports omitted the information. However, we note that an estimated 14,982 teachers and school and library staff were projected to receive training in the original grant applications.

Table 13

Educational Technology Training and Technical Assistance Grant Recipients
FY 1998-99

<u>Lead Agency</u>	<u>Number of School Districts</u>	<u>Number of Public Libraries</u>	<u>Grant Amount</u>
Initial Grants			
CESA 6	29	38	\$ 500,000
Pulaski Community School District	37	15	499,999
CESA 8	29	15	499,580
School District of La Crosse	26	31	477,675
Milwaukee Public Library	1	1	456,200
Adams-Friendship Area School District	32	21	452,442
East Troy Community Schools	2	2	449,297
Chippewa Falls Area United School District	29	43	408,585
Wausau School District	7	1	286,638
CESA 9	6	19	258,633
Waukesha School District	4	4	199,975
Hamilton School District	9	13	191,575
Sauk Prairie School District	1	2	172,101
Madison Metropolitan School District	1	1	165,350
West Bend Joint School District	2	2	142,920
School District of Greenfield	2	3	139,350
DeForest Public Library	1	1	125,688
Arrowhead Library System	1	5	121,207
Fox Point-Bayside School District	3	1	110,208
Waterford Graded School District	2	2	96,362
Hartland-Lakeside J3 School District	5	1	91,640
St. Francis School District	1	1	86,373
School District of Shorewood	<u>2</u>	<u>2</u>	<u>68,202</u>
Subtotal	232	224	6,000,000
Rural Training Initiative			
CESA 11	27	14	300,000
CESA 12	18	16	300,000
CESA 3	31	16	300,000
Lakeland Union High School	<u>7</u>	<u>5</u>	<u>100,000</u>
Subtotal	<u>83</u>	<u>51</u>	<u>1,000,000</u>
Total	315	275	\$7,000,000

We also reviewed expenditure information in the end-of-project reports. As shown in Table 14, projects reported \$6.9 million in expenditures in FY 1998-99, which is slightly below the amount awarded by the TEACH Board. Expenditures for consulting and other services, which could include trainers, were the most common and totaled \$2.9 million, or 41.5 percent of total reported expenditures. An additional \$1.0 million, or 14.7 percent of expenditures, supported tuition and registration. These expenditures, along with \$0.9 million for substitute teaching staff, could be reasonably expected as the leading expenditure categories for a training program.

Table 14

**Educational Technology Training and Technical Assistance Grant Expenditures, by Category
FY 1998-99**

<u>Expenditure Category</u>	<u>Amount</u>	<u>Percentage</u>
Consulting and other services	\$2,852,269	41.5%
Hardware	1,102,484	16.1
Tuition and registration	1,008,165	14.7
Payment of substitute staff	887,263	12.9
Not categorized*	365,558	5.3
Travel	162,023	2.4
Printing, supplies, and postage	136,110	2.0
Software	128,497	1.9
Other	91,874	1.3
Indirect costs and administration	89,903	1.3
Telephone and network usage	<u>38,197</u>	<u>0.6</u>
Total	\$6,862,343	100.0%

* Final expenditure reports were completed by two projects using non-standard categories and consequently their costs could not be categorized.

There is little consensus in the education community about the most effective method for technology training, and there was considerable variation in training projects funded by the TEACH Board during the program's first round. Detail on individual project expenditures is provided in Appendix 2.

The TEACH Board must consider geographic factors in awarding training grants.

In 1999, the Legislature amended s. 44.72(1), Wis. Stats., to:

- require the TEACH Board to ensure that at least one grant is awarded annually to an applicant located in the territory of each CESA;
- give preference in awarding grants to consortia that include one or more public library boards; and
- ensure that, to the extent possible, grants are equally distributed on a statewide basis.

Planning and Implementation Grants

In the 1999-2001 biennium, the Legislature appropriated \$9.0 million for the Educational Technology Training and Technical Assistance Grants program. However, because of concerns that the effectiveness of the professional development activities that had been funded was limited, the FY 1999-2000 planning grants and FY 2000-01 implementation grants required a specific set of eligible training methods. In 1999, the TEACH Board adopted these required methods in response to national studies, as well as information specific to Wisconsin teachers' reported skills and use of technology. Each of the 14 implementation grants for FY 2000-01 is described in Appendix 3.

A 1999 survey found teachers either did not use technology or used it in limited ways.

State and national studies suggest teachers' skill levels and use of educational technology could be improved. A self-assessment of nearly 15,000 Wisconsin teachers in nearly 300 school districts in 1999, administered by DPI, found that 83 percent of teachers either did not use educational technology in their teaching or used it in limited ways: only 17 percent of teachers reported effectively integrating technology into their classroom practices. In a national study of the capacity to use educational technology, school principals or officials were asked to identify the percentage of their teachers in terms of four technology-use skill levels: beginner, intermediate, advanced, or innovator/instructor. In 23 percent of Wisconsin schools in FY 1999-2000, school principals or officials considered the majority of their teachers to be beginner users of technology, meaning that they were learning basic computer technology skills.

Grant applicants were required to use a model classroom training method.

Through the request for proposals for FY 1999-2000 planning grants, the TEACH Board required applicants to include:

- educational technology model demonstration sites, known as model classrooms;

- strategies to reinforce training concepts, such as peer-mentor relationships and on-line resources;
- technical support, defined as reliable technology infrastructure; and
- partnerships with other entities, such as public school districts, CESAs, public libraries, post-secondary institutions, and the business community.

Model classrooms allow experienced teachers to demonstrate educational technology and curriculum integration methods and activities to other teachers. The request for proposals called for applicants' discussion of model classrooms to emphasize the use of the distance education network, although other approaches, such as video-taping model classroom practices, were also permitted.

The planning grants were designed to create and support a planning committee and its activities, in advance of the implementation grants funded in FY 2000-01. These planning committees were established to complete needs assessments for teachers, identify model teachers and classrooms, schedule training activities, and identify best practices to be modeled in projects. As shown in Table 15, the TEACH Board received and funded 14 applications for planning grants at a level of \$598,000 in FY 1999-2000.

Although they were not guaranteed funding during the implementation phase, only FY 1999-2000 planning grant recipients were eligible to apply for FY 2000-01 implementation grants. The proposals for the implementation phase described various technological approaches to the model classroom. For example, proposals identified observation of the classroom teacher in real time over the distance education network, as well as unedited recordings of classroom activities and highly edited taped segments.

Table 15

Educational Technology Training and Technical Assistance Grant Recipients
 Planning Phase, FY 1999-2000

<u>Fiscal Agent for Consortia</u>	<u>Grant Amount</u>
Milwaukee Public Schools	\$48,793
CESA 1	48,396
CESA 5	47,000
CESA 11	47,000
CESA 4	47,000
CESA 9	47,000
CESA 6	47,000
CESA 8	45,200
CESA 7	44,650
CESA 3	43,033
CESA 2	41,112
CESA 12	40,200
CESA 10	30,030
School District of Beloit	<u>21,586</u>
Total	\$598,000

In FY 2000-01, the TEACH Board awarded nearly \$7.0 million in implementation grants.

All 14 of the planning grant recipients applied for and received implementation grants for FY 2000-01. These grant awards totaled nearly \$7.0 million. As shown in Table 16, grant awards for the FY 2000-01 implementation phase were received by consortia with a combined membership of 361 school districts and 309 public libraries.

Table 16

Educational Technology Training and Technical Assistance Grant Recipients
Implementation Phase, FY 2000-01

<u>Lead Agency</u>	<u>Number of School Districts</u>	<u>Number of Public Libraries</u>	<u>Grant Amount</u>
CESA 1	14	23	\$ 500,000
CESA 3	31	21	500,000
CESA 4	26	33	500,000
CESA 5	35	40	500,000
CESA 7	36	15	500,000
CESA 8	28	22	500,000
CESA 9	17	25	500,000
CESA 11	28	2	500,000
CESA 12	18	26	500,000
School District of Beloit	2	6	500,000
CESA 2	65	30	499,726
CESA 6	26	10	499,574
Milwaukee Public Schools	1	1	499,508
CESA 10	<u>34</u>	<u>55</u>	<u>498,406</u>
Total	361	309	\$6,997,214

Some school district and CESA staff we contacted disagreed with the TEACH Board's decision to require model classrooms as a feature in the planning and implementation grants, in part because of concerns that the model classroom requirement represented a significant change in how they pursued professional development for their teachers. In addition, model classrooms require an investment in equipment. Thirteen of the 14 implementation grant recipients purchased model classroom equipment: equipment costs ranged from \$78,285 to \$206,627 and represented between 15.7 and 41.4 percent of implementation grant awards. Some public library, school district, and CESA staff also noted that model classrooms were less relevant to the public library consortia members, although public libraries had separate budget lines in the training grants. On the other hand, others believed that professional collaboration among teachers is encouraged by the model classroom concept and is an important component of staff development.

The TEACH Board measures the effect of the training grant program in two ways: by establishing performance measures for the program and by requiring grant recipients to complete a final project report. The training grant program performance measures, required by the TEACH Board since the beginning of the training grant program, include:

- the number of school districts participating in the training grant program;
- the number of libraries participating in the training grant program;
- the percentage of Wisconsin teachers and staff receiving training and technical assistance through the training grant program; and
- the pre- and post-training skill level of teachers who receive training through the training grant program, regarding their ability to evaluate, select, and integrate educational technology into the curriculum.

Little is known about the success of the training grants in changing teaching methods.

Data are currently available for the first two performance measures only, and little is known about the success of the training grants in changing teaching methods. However, the TEACH Board expects to report on the percentage of Wisconsin teachers and library staff receiving training funded by the Board and on teacher technology skill levels by the end of 2002. The Board also hired a consulting firm in October 2001, at a cost of \$24,700, to assess the extent to which the training grant program has changed teaching methods.

Other Funding for Educational Technology Training

DPI awarded \$6.1 million in federal funds in FY 2000-01 for educational technology training.

In addition to funding provided by the TEACH Board, professional development funding for educational technology is available through DPI and the UW System. DPI administers a federally funded Technology Literacy Challenge Fund, for which the State received \$6.1 million in federal funds in FY 2000-01. DPI awarded 37 grants to K-12 school districts and the Wisconsin School for the Deaf, ranging from \$16,000 to \$800,000, to support educational technology training projects. Unlike TEACH-funded professional development projects, these projects are not required to use a specific training method, and businesses and other entities not eligible for TEACH Board programs may participate in the federal program.

The UW System has awarded \$3.4 million in GPR for educational technology training grants.

The UW System also funds educational technology training grants to school districts, CESAs, and several UW campuses. Between FY 1997-1998 and FY 2000-01, the UW System awarded a total of \$3.4 million in training grants to K-12 school districts and the Wisconsin School for the Deaf from its GPR appropriations. The focus of each project is to teach local educational staff how to integrate technology into the classroom by offering professional development opportunities for teachers. Although recipients of these grants are required to evaluate the effectiveness of the training they received under the grant, data are not available to demonstrate improvement in teachers' technology skills as a result of educational technology training.

Although approximately \$23.0 million has been appropriated for the TEACH Board's Educational Technology Training and Technical Assistance Grants program, and additional technology training grants have been awarded by DPI and the UW System, it remains unclear whether teacher technology skills or teacher use of technology have improved. Current reporting requirements developed by the TEACH Board will provide information on the number of teachers receiving training through this program and on teacher technology skill levels by the end of 2002. To enable the Legislature to consider the most current information in establishing appropriations for the 2003-05 biennium, we recommend the TEACH Board report to the Joint Legislative Audit Committee no later than February 1, 2003, on:

- the number of Wisconsin teachers and library staff who have received training funded by the Board; and
- ratings of teacher technology skill levels, as reported to the Board in final project reports for the implementation grants awarded in FY 2000-01.

Educational Telecommunications Access

The TEACH Board subsidizes full-motion video links and high-speed data lines for educational agencies.

In addition to funding training opportunities, the TEACH Board provides funding through the Educational Telecommunications Access program for full-motion video links that allow the transmission of live video and audio information over the State's BadgerNet network and data transmission lines. Funding is provided in the form of subsidized telecommunications services provided directly to educational agencies. Schools, colleges, and universities use video links to engage in distance education, with telecommunications connections allowing teachers and students in different locations to interact, or for teacher and staff training. Educational agencies, especially libraries, typically use data lines to allow high-speed Internet connections.

The TEACH Board also provides funding in the form of grants to educational agencies that signed telecommunications service contracts before the creation of the Board. These agencies were members of regional distance education networks that were developed to meet regional educational needs in a cost-effective manner. In FY 2000-01, these grants, known as existing contract grants, subsidized 115 video links and 3 data lines.

In FY 2000-01, spending for the Educational Telecommunications Access program totaled \$12.0 million.

The TEACH Board has spent a total of \$33.0 million for the Educational Telecommunications Access program since FY 1998-99, as shown in Table 17. Of that amount, \$21.1 million, or 64.1 percent, supported telecommunications access services to school districts and CESAs, and \$4.3 million, or 13.0 percent, supported telecommunications access services to libraries. The remaining \$7.5 million, or 22.9 percent of total expenditures, supported telecommunications access services to other educational entities. FY 2000-01 spending totaled \$12.0 million, and the program was funded by the Universal Service Fund (\$10.5 million) and federal E-rate funds (\$1.5 million).

Table 17

**Educational Telecommunications Access Program Expenditures,
by Educational Agency
FY 1998-99 through FY 2000-01**

<u>Educational Agency</u>	<u>FY 1998-99</u>	<u>FY 1999-2000</u>	<u>FY 2000-01</u>	<u>Total</u>	<u>Percentage of Total</u>
Schools districts and CESAs	\$ 8,036,249	\$6,183,148	\$ 6,924,068	\$21,143,465	64.1%
Libraries	849,237	1,384,191	2,036,379	4,269,807	13.0
Multiple agencies*	0	0	1,503,000	1,503,000	4.6
Technical colleges	1,769,415	414,725	538,750	2,722,890	8.3
Private colleges	972,159	407,768	478,092	1,858,019	5.6
Private schools	605,084	321,414	436,519	1,363,017	4.1
State schools	<u>0</u>	<u>38,939</u>	<u>66,689</u>	<u>105,628</u>	<u>0.3</u>
Total	\$12,232,144	\$8,750,185	\$11,983,497	\$32,965,826	100.0%

* Federal E-rate funds were used by the TEACH Board in FY 2000-01 to reduce debt balances in DOA's Master Lease program, which was used to provide video link access to a number of educational agencies.

Subsidized telecommunications services are part of the State's BadgerNet network.

The telecommunications services are part of the State's voice, data, and video network known as BadgerNet. The State leases the network from the Wisconsin BadgerNet Access Alliance (WBAA), which is a consortium of private telephone companies and other telecommunications firms led by Ameritech, Inc. In 1998, DOA signed three contracts with WBAA, one each for voice, data, and video services, with the goal of obtaining a single rate for telecommunications services for the State and other participating Wisconsin agencies. By contract, the consortium was guaranteed a minimum of \$59.4 million over the life of the video contracts. The contracts for video links and data lines will expire in December 2005.

Beginning in FY 2001-02, the newly created Department of Electronic Government has assumed statutory responsibilities regarding information technology and telecommunications, including being responsible for the planning and development of information technology and telecommunications in the executive branch of government. The TEACH Collaboration Committee, which includes leadership of Wisconsin's PK-16 education systems, is actively involved in the assessment of how technology is used to meet educational needs. Services the TEACH Board formerly received from DOA are now provided by the Department of Electronic Government, including management of the BadgerNet contract for video and data lines and approval of standards and specifications of technology purchases.

Other midwestern states provide significant support for educational telecommunications services.

Other midwestern states have also provided a significant amount of funding to support educational telecommunications access. For example, Illinois provided \$24.0 million in FY 2000-01 for the Illinois Century Network and other telecommunications initiatives that provide access to all government, public, and private education institutions, including K-12 systems, public libraries, and museums. Indiana provided an estimated \$3.3 million in FY 2000-01 to provide Internet connection grants to school districts. Iowa operates the Iowa Communications Network, a state-owned fiber optic network through which K-12 schools and higher education institutions gain access to full-motion video distance education. Since the network's creation in 1980, Iowa has spent approximately \$350.0 million on it; current funding is approximately \$18.0 million per year. Minnesota operates a program that funds telecommunications access to public school districts, non-public schools, and charter schools. Minnesota spent approximately \$18.0 million on its telecommunications access program in FY 2000-01.

Video Links

In FY 2000-01, approximately \$3.2 million was spent for operation of 161 full-motion video links.

Full-motion video links allow two or more parties to send or receive live video and sound transmissions. Typically used to engage in distance education, a video link allows participants at one or more classrooms equipped with special cameras, microphones, and monitors to interact with participants at another similarly equipped site. In FY 2000-01, the TEACH Board spent an estimated \$3.2 million in service fees for 161 video links. While it is not possible to determine the number of students or courses for which video network access was supported exclusively with TEACH Board funds, survey data from the Wisconsin Association of Distance Education Networks (WADEN), which is the association of regional network directors and staff, indicate that for the 2000-01 school year, an estimated 13,019 students, or 1.3 percent of the 1,023,900 students in public and private schools, were enrolled in at least one course offered via a video link. This estimate should be viewed with caution because not all districts responded to the WADEN survey. It should also be noted that some of Wisconsin's largest school districts, including Milwaukee Public Schools and the Madison Metropolitan School District, currently choose not to make use of video network course offerings from other districts to meet their students' needs.

Despite the relatively low number of students who participate, distance education video networks are popular with teachers and administrators, in part because of the instructional opportunities they can provide. For example, officials indicated that foreign language courses are often shared via a video link, particularly in small districts that are unable to support a comprehensive foreign language program on their own. As shown in Table 18, 156 language courses were offered to K-12 students throughout the state during the 2000-01 school year. These course offerings represented various levels of instruction for a semester.

Table 18

Language Courses Carried by Full-Motion Video Networks
2000-01 School Year

	<u>Fall 2000</u>	<u>Spring 2001</u>	<u>Total</u>
French	32	27	59
German	19	14	33
Spanish	19	14	33
Japanese	10	9	19
Sign Language/Deaf Communication	2	6	8
Russian	2	1	3
Latin	<u>1</u>	<u>0</u>	<u>1</u>
Total	85	71	156

Source: Wisconsin Association of Distance Education Networks

75.2 percent of the subsidized full-motion video links are located in public schools.

As shown in Table 19, 75.2 percent of all full-motion video links installed by the TEACH Board from FY 1998-99 through FY 2000-01 are in public schools. According to TEACH Board staff, video link installation slowed in FY 1999-00 and FY 2000-01 because initial demand for video classrooms had largely been met. All educational agencies that receive video link funding from the TEACH Board also receive Internet access through a high-speed data line.

Table 19

Installation of Full-Motion Video Links
FY1998-99 through FY 2000-01

<u>Educational Agency</u>	<u>1998-99</u>	<u>1999-00</u>	<u>2000-01</u>	<u>Total</u>	<u>Percentage of Total</u>
Public school districts	69	38	14	121	75.2%
Technical colleges	16	0	0	16	9.9
Private colleges	7	1	0	8	5.0
Private K-12 schools	5	0	2	7	4.4
CESAs	2	4	0	6	3.7
State residential schools	1	1	0	2	1.2
Tribal colleges	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0.6</u>
Total	101	44	16	161	100.0%

Educational agencies pay \$250 per month to DOA for a full-motion video link.

Because the TEACH Board subsidizes the cost of full-motion video links, local agencies bear only limited costs. A participating educational agency must, as required by statute, pay DOA \$250 per month for video link service. This amount has not changed since FY 1998-99. On the other hand, the district, school, or college is responsible for purchasing specialized equipment for the video classroom, for which the average cost is estimated at \$37,000. It should be noted that both the monthly video link charge and the video classroom expenditures are allowable expenditures under the Educational Technology Block Grant program, so it is possible for some agencies to pay all participation costs using only funds provided by TEACH programs.

The cost of full-motion video links ranges from \$489 to \$5,312 per month.

The Board's actual cost of providing full-motion video links varies significantly, depending on factors such as an educational agency's rural or urban location, distance to telecommunications providers, and date of installation. For example, the median average monthly cost to the TEACH Board for a video link in FY 2000-01 was \$1,371, but it ranged from a high of \$5,312 in the North Crawford School District in Crawford County to a low of \$489 at CESA 12 in Ashland. There are 15 video links for which the monthly service cost paid by the Board is more than \$3,000, as shown in Table 20.

Table 20

Monthly Cost of TEACH Video Links
For Video Links Installed between December 1998 and June 2001

<u>Monthly Service Cost</u>	<u>Links Installed</u>	<u>Percentage of Total</u>
\$ 489-1,000	67	41.6%
1,001-1,500	21	13.1
1,501-2,000	29	18.0
2,001-2,500	19	11.8
2,501-3,000	10	6.2
3,001-3,500	9	5.6
3,501-4,000	5	3.1
\$ 5,312	<u>1</u>	<u>0.6</u>
Total	161	100.0%

The median monthly cost for full-motion video links is lower through BadgerNet.

Some with whom we spoke expressed concern about the monthly service cost of video links, particularly given that the TEACH Board is required by statutes to purchase these services from the BadgerNet contract, which has a minimum revenue guarantee. However, there is a lack of comparable networks, including in the private sector, to compare monthly costs for these services. We note that the median monthly cost of video links in contracts negotiated and signed by school districts before the creation of BadgerNet is \$1,959, which is higher than the median monthly cost of video links installed under the BadgerNet contracts. These self-negotiated district contracts, as noted, were developed to meet local and regional educational needs in the absence of a statewide network and funding initiative.

Hardware concerns now require the State to consider alternate technology to ensure statewide interconnectivity.

There are concerns about the future of the video portion of BadgerNet and the statewide reach the network provides. A piece of proprietary hardware, manufactured by a single company and critical to the operation of the full-motion video network, is no longer being manufactured and will not be supported by the vendor once the current video network contract ends in December 2005. DOA purchased an additional 30 of these items, known as J-Series CoDecs, before manufacturing ceased and installed 17 of the 30 during August 2001. While DOA might be criticized for initially choosing critical network hardware that was manufactured by a single company, most pre-existing full-motion networks were using this proprietary hardware, and DOA chose the J-Series CoDec to ensure compatibility with these existing

systems. Nevertheless, when the State purchases proprietary technology, it is dependent upon a single supplier. A more secure approach considers technologies that are based on an industry standard design and are manufactured by more than one company.

Data Lines

In FY 2000-01, \$3.6 million was spent on high-speed data lines for 486 local educational agencies.

In addition to providing video links to educational agencies, the TEACH Board also provides data lines that allow high-speed connection to the Internet. Like video links, these data lines operate on the BadgerNet network. In FY 2000-01, the TEACH Board spent \$3.6 million to provide data line installation and services to 486 school districts and libraries.

Through FY 2000-01, 276 of the 486 data lines, or 56.8 percent, were provided to public libraries, as shown in Table 21. Educational agencies receiving TEACH-provided data lines are required to pay \$100 per month of service. The fee has not changed since FY 1998-99. The Board subsidizes this payment for participating agencies. Its monthly cost for all but nine of the data lines is \$704 per line.

Table 21

Data Lines by Institution
FY 1998-99 through FY 2000-01

<u>Educational Agency</u>	<u>Data Lines Provided</u>	<u>Percentage of Total</u>
Public libraries	276	56.8%
Public school districts	161	33.1
Private K-12 schools	35	7.2
Private colleges	<u>14</u>	<u>2.9</u>
Total	486	100.0

Subsidized high-speed data lines are a significant benefit to public libraries.

Library officials indicated that data lines provided by the TEACH Board are important in several areas of library operation, and the program is strongly supported by the public library staff we contacted. Libraries use the data lines to provide high-speed access to the Internet, as well as to provide access to on-line library resources and to share information with other libraries.

Other TEACH Board Initiatives

The TEACH Board has funded several other educational initiatives.

In addition to the four principal TEACH Board programs—the Educational Technology Block Grant program, the Educational Technology Training and Technical Assistance Grants programs, the Educational Technology Infrastructure Financial Assistance program, and the Educational Telecommunications Access program—the TEACH Board also funded several smaller initiatives in FY 2000-01 that were related to or designed to take advantage of educational technology. These initiatives included:

- \$59,862 in GPR for Pioneering Partners grants for the purchase of instructional technology and training, which were awarded by the Educational Technology Board. This board was dissolved by 1997 Wisconsin Act 27, which created the TEACH Board. TEACH Board expenditures for these grants involved final payments to grant recipients.
- \$86,687 in program revenue for administrative support of the Wisconsin Advanced Telecommunications Foundation, which was dissolved by 2001 Wisconsin Act 16. As noted, WATF funded advanced telecommunications projects and educated telecommunications users about advanced services. It was created by 1993 Wisconsin Act 496, and financial support for its projects was provided by the telecommunications industry. Eligibility for WATF grants was broad, including public institutions and private businesses. With the dissolution of WATF, \$499,100 to cover outstanding grants and \$68,100 for 1.0 FTE administrative positions were transferred to the TEACH Board.
- \$100,000 in federal E-rate funds for the IDEAS Portal, a Web site that provides teachers with classroom-tested materials that integrate technology with curriculum. The materials are organized by subject area, grade level, and model academic standards. The Web site was developed and is managed by UW-Extension, using federal funding provided through the TEACH Board.

- \$53,356 in federal E-rate funds for the Wisconsin Excellence in Reading Initiative, which the Governor proposed in the 2000 State of the State address. As part of this literacy initiative, the TEACH Board began development of an interactive Web site, the Wisconsin Literacy Education and Reading Network Source, that will include resources on reading instruction and literacy for teachers, parents, child care providers, and tutors.
- \$213,092 in GPR and \$45,696 in federal E-rate funds for technology-supported foreign language instruction at the K-6 level. Veto language in the 1999-2001 Biennial Budget Bill directed the TEACH Board to incorporate innovative foreign language instruction criteria into the competitive grant process for the Educational Technology Training and Technical Assistance Grants program.

With passage of 2001 Wisconsin Act 16, the Legislature provided funding for two additional TEACH Board initiatives. The REACH grant program allocates \$500,000 from a settlement agreement with Ameritech, Inc., for public libraries that do not have high-speed Internet access. One-time grants of up to \$6,000 will be available to libraries interested in acquiring a data line through the TEACH Board's Educational Telecommunications Access program. In addition, \$52,700 in program revenue was appropriated annually to fund 1.0 FTE position to coordinate the annual Governor's Wisconsin Educational Technology Conference, first held in 1993. This conference is cosponsored by DPI, the Educational Communications Board, the UW System, the Wisconsin Technical College System, private colleges, and the TEACH Board.

Since its establishment in 1997, the TEACH Board has distributed over \$201.0 million to K-12 school districts and other educational institutions throughout Wisconsin and supported the creation of a statewide video network. Funds distributed to K-12 schools have been included in calculations of the State's two-thirds funding commitment for public school districts, and programs supported with TEACH Board funds have been generally well-received by educators and administrators. However, as TEACH reaches its five-year anniversary, questions can be raised about the future of the Board and its programs, particularly as teacher and classroom experience with technology grows, the Legislature addresses a budget shortfall, and technologies that have been key in constructing the statewide video network are no longer manufactured and supported.

What reporting requirements should be imposed on program participants?

Because there are few reporting requirements, the Legislature's ability to assess the effectiveness of the Board's use of funds is limited. Among the GPR-funded programs, only the Educational Technology Training and Technical Assistance Grants program provides for both a plan for the allocation of the funds and an end-of-project report. The Board and the Legislature have almost no information on how block grant funds, totaling \$132.0 million to date, have been used.

Because block grant funds are statutorily required to be held in a separate account, districts could be required to report on their use. The TEACH Board has twice sought reporting authority for block grants; as noted, in one instance the request was not included in the Governor's budget proposal, and in the other the Legislature did not grant it. On the other hand, because school districts have great flexibility in choosing which technology-related costs to charge to TEACH and which to fund in other ways, any reports would need to be interpreted with caution. Critics of additional reporting may also argue that it would impose additional costs on the districts. The TEACH Board could also incur additional administrative costs for developing reporting categories and analyzing information reported by the districts.

If additional reporting of block grant expenditures were required, a modest effort might entail requiring grant recipients to report expenditures according to broad categories like those specified in Educational Technology Training and Technical Assistance grants. For

example, categories could include computer hardware and software, training and professional development services, other professional services, repayment of loans made by the TEACH Board for educational technology infrastructure, and monthly payments for data lines and video links. This information could be shared in the TEACH Board's biennial report to the Legislature. Alternatively, the Legislature could direct the TEACH Board to gather data from a representative sampling of districts. Either option would require fewer staffing resources in the school districts and at the TEACH Board than a more comprehensive reporting requirement might require.

How should new technologies be assessed?

The future of the Educational Telecommunications Access program depends, in part, on the technology chosen for the full-motion video network that is currently operated under the BadgerNet contract. As previously noted, the video contract is due to expire in December 2005, and the current technology used to operate the video links will be supported by the vendor until 2005. The distance learning technology best suited to succeed the current BadgerNet contract will need to be determined, but no evaluation of the available replacement technologies has been completed to date. However, as we completed our review, staff of the TEACH Board shared information about the needs assessment efforts of the Board and school districts, DPI, the Wisconsin Technical College System, and the UW System, which are being coordinated by the Board.

In order to develop a reasonable assessment of the demand for and cost of maintaining the statewide network, the TEACH Board and the other agencies involved will, at a minimum, need to consider:

- an assessment of the educational agencies that use the network, in order to determine what level of services they will need in the future; and
- the expected cost of alternative replacement technologies.

Results of this assessment could be used by the Legislature to determine the types of technology it may wish to support. Other issues facing the Legislature include:

- the effect wireless technology and other technology alternatives may have on the State's investment to date; and

- the role of the new Department of Electronic Government in conducting technology needs assessments.

While the TEACH Board and the Department of Electronic Government may be well-situated to provide a state-level analysis of educational needs and alternative technologies, the analysis of educational needs could be enhanced by information from local school districts. For example, for those 13,109 students whose enrollment in network courses was reported in the 2000-01 school year, the Legislature may ask the TEACH Board to report:

- how many were enrolled in courses beyond those required for high school graduation; and
- how many were disadvantaged or at-risk students.

How should TEACH Board programs be funded and structured in the future?

In 2001 Wisconsin Act 16, the Legislature identified three alternative sources of funding for the Educational Technology Block Grant program for FY 2001-02: funds from a legal settlement with Ameritech; funds from WATF, which was dissolved in 2001; and federal E-rate revenues. However, only the federal E-rate is expected to provide funding in FY 2002-03, because the Ameritech settlement and the WATF funds are expected to be fully exhausted when the FY 2001-02 block grant awards are distributed. Therefore, GPR will be the primary funding source if the block grant program continues beyond FY 2002-03.

As categorical aids, some of the TEACH Board programs funded with GPR—the block grants, the training and technical assistance grants, and part of the debt service on bonds issued for the infrastructure program—are included in calculations of the State’s two-thirds funding commitment for public school districts. Because the block grants are considered categorical aids, the State could maintain a level amount of support by providing \$1 in general equalized aid for every \$3 of TEACH Board GPR funding eliminated. For example, if budget constraints require consideration of changes to the level of block grant funding, complete elimination of the \$35.0 million block grant program would require only an \$11.7 million increase in general aid to maintain the State’s two-thirds funding commitment. Districts receiving these increased general aids would be able to use them for educational

technology purposes, including telecommunications access payments or debt service payments for infrastructure. Implementation of this option, however, would likely be strongly resisted by K-12 school districts, which would receive less total funding from the State.

There are other issues that may be addressed as the Legislature responds to the State's current budget shortfall. When the Governor introduced TEACH in his 1997-99 Executive Budget, he proposed an acceleration in the development of educational technology infrastructure statewide. The TEACH Board and its programs have been frequently described, although not addressed in statutes, as a five-year, \$500.0 million investment in educational technology and telecommunications. Because expenditures have been made from TEACH Board appropriations since FY 1997-98, some have suggested the TEACH Board has completed its mission. The Legislature may therefore be asked to decide whether the TEACH Board and all or some of its programs should be changed or eliminated; whether program participants would be required to increase their share of program costs; and how best to ensure adequate coordination among the various entities responsible for educational technology, teacher training, and distance education.

Appendix 1

FY 2000-01 Educational Technology Block Grants, by District

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Abbotsford	\$47,074	659	\$71.43
Adams-Friendship Area	71,604	2,107	33.98
Albany	23,016	457	50.36
Algoma	31,061	731	42.49
Alma	24,454	397	61.60
Alma Center	45,293	591	76.64
Almond-Bancroft	28,759	532	54.06
Altoona	69,419	1,407	49.34
Amery	86,953	1,935	44.94
Antigo	145,445	3,029	48.02
Appleton Area	476,683	14,719	32.39
Arcadia	41,104	890	46.18
Argyle	20,194	375	53.85
Arrowhead UHS	49,223	1,976	24.91
Ashland	153,560	2,293	66.97
Ashwaubenon	89,284	3,231	27.63
Athens	36,191	554	65.33
Auburndale	57,030	910	62.67
Augusta	43,611	689	63.30
Baldwin-Woodville Area	64,888	1,348	48.14
Bangor	39,283	707	55.56
Baraboo	110,992	2,982	37.22
Barneveld	22,684	431	52.63
Barron Area	98,664	1,583	62.33
Bayfield	17,671	559	31.61
Beaver Dam	135,533	3,427	39.55
Beecher-Dunbar-Pembine	14,203	332	42.78
Belleville	39,921	895	44.60
Belmont Community	21,359	392	54.49
Beloit	413,605	6,751	61.27
Beloit Turner	44,463	1,046	42.51
Benton	24,853	298	83.40
Berlin Area	80,288	1,764	45.49
Big Foot UHS	10,707	497	21.54
Birchwood	10,316	327	31.55

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Black Hawk	37,359	609	61.34
Black River Falls	89,189	1,933	46.14
Blair-Taylor	43,522	741	58.73
Bloomer	57,328	1,151	49.81
Bonduel	37,545	937	40.07
Boscobel Area	73,144	1,008	72.56
Boulder Junction J1	5,969	239	24.97
Bowler	49,702	583	85.25
Boyceville Community	65,974	939	70.26
Brighton #1	9,239	160	57.74
Brillion	41,092	883	46.54
Bristol #1	17,927	529	33.89
Brodhead	62,805	1,238	50.73
Brown Deer	33,032	1,516	21.79
Bruce	37,626	661	56.92
Burlington Area	103,696	3,516	29.49
Butternut	16,113	224	71.93
Cadott Community	71,206	947	75.19
Cambria-Friesland	24,203	465	52.05
Cambridge	38,586	1,021	37.79
Cameron	58,066	845	68.72
Campbellsport	50,512	1,511	33.43
Cashton	34,008	576	59.04
Cassville	21,052	360	58.48
Cedar Grove-Belgium Area	33,364	960	34.75
Cedarburg	67,612	2,820	23.98
Central City Cyberschool	27,465	356	77.15
Central/Westosha UHS	34,171	1,094	31.23
Chetek	43,420	1,119	38.80
Chilton	63,229	1,348	46.91
Chippewa Falls Area	164,300	4,496	36.54
Clayton	32,578	383	85.06
Clear Lake	53,803	721	74.62
Clinton Community	49,078	1,181	41.56
Clintonville	85,103	1,672	50.90

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Cochrane-Fountain City	37,811	759	49.82
Colby	72,632	1,144	63.49
Coleman	29,220	782	37.37
Colfax	54,102	889	60.86
Columbus	43,288	1,247	34.71
Cornell	45,342	582	77.91
Crandon	34,547	1,095	31.55
Crivitz	25,430	878	28.96
Cuba City	39,543	769	51.42
Cudahy	113,813	2,781	40.93
Cumberland	52,221	1,268	41.18
D C Everest Area	213,315	5,101	41.82
Darlington Community	46,928	903	51.97
De Forest Area	102,283	2,992	34.19
De Pere	93,117	2,822	33.00
De Soto Area	29,171	620	47.05
Deerfield Community	38,021	789	48.19
Delavan-Darien	76,341	2,654	28.76
Denmark	75,882	1,615	46.99
Dodgeland	35,006	812	43.11
Dodgeville	41,946	1,256	33.40
Dover #1	7,791	79	98.62
Downtown Montessori	6,778	32	211.81
Drummond Area	12,192	577	21.13
Durand	65,088	1,250	52.07
East Troy Community	43,264	1,707	25.35
Eau Claire Area	387,042	11,073	34.95
Edgar	41,598	653	63.70
Edgerton	66,678	1,860	35.85
Elcho	10,077	436	23.11
Eleva-Strum	48,872	691	70.73
Elk Mound Area	52,355	808	64.80
Elkhart Lake-Glenbeulah	18,473	591	31.26
Elkhorn Area	67,794	2,566	26.42
Ellsworth Community	84,487	1,882	44.89

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Elmbrook	100,449	6,840	14.69
Elmwood	25,046	428	58.52
Erin	12,955	334	38.79
Evansville Community	67,068	1,513	44.33
Fall Creek	59,305	871	68.09
Fall River	24,774	428	57.88
Fennimore Community	53,776	858	62.68
Flambeau	46,827	712	65.77
Florence	32,415	872	37.17
Fond du Lac	232,828	7,013	33.20
Fontana J8	6,880	267	25.77
Fort Atkinson	85,102	2,742	31.04
Fox Point J2	14,828	683	21.71
Franklin Public	100,158	3,537	28.32
Frederic	35,809	627	57.11
Freedom Area	62,578	1,456	42.98
Friess Lake	9,383	227	41.33
Galesville-Ettrick-Trempealeau	84,263	1,477	57.05
Geneva J4	5,700	110	51.82
Genoa City J2	27,543	569	48.41
Germantown	82,232	3,532	23.28
Gibraltar Area	7,533	675	11.16
Gillett	47,512	839	56.63
Gilman	37,473	564	66.44
Gilmanton	18,591	256	72.62
Glendale-River Hills	17,417	979	17.79
Glenwood City	68,267	889	76.79
Glidden	18,764	276	67.99
Goodman-Armstrong	14,079	236	59.66
Grafton	47,924	1,972	24.30
Granton Area	29,105	366	79.52
Grantsburg	58,937	994	59.29
Green Bay Area	622,694	19,465	31.99
Green Lake	8,298	380	21.84
Greendale	51,026	2,050	24.89

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Greenfield	73,645	3,043	24.20
Greenwood	32,935	585	56.30
Hamilton	90,485	3,764	24.04
Hartford J1	51,403	1,522	33.77
Hartford UHS	53,901	1,715	31.43
Hartland-Lakeside J3	41,154	1,342	30.67
Hayward Community	34,183	1,930	17.71
Herman #22	7,943	101	78.64
Highland	22,514	369	61.01
Hilbert	27,165	536	50.68
Hillsboro	38,571	630	61.22
Holmen	169,809	3,040	55.86
Horicon	52,927	1,127	46.96
Hortonville	86,968	2,585	33.64
Howard-Suamico	156,455	4,321	36.21
Howards Grove	46,475	981	47.38
Hudson	126,173	4,250	29.69
Hurley	36,687	757	48.46
Hustisford	16,467	437	37.68
Independence	21,742	349	62.30
Iola-Scandinavia	37,597	826	45.52
Iowa-Grant	66,400	999	66.47
Ithaca	21,622	361	59.89
Janesville	390,683	10,867	35.95
Jefferson	60,919	1,805	33.75
Johnson Creek	26,292	620	42.41
Juda	17,717	314	56.42
Kaukauna Area	147,619	3,643	40.52
Kenosha	738,428	19,986	36.95
Kettle Moraine	116,578	4,364	26.71
Kewaskum	61,537	1,954	31.49
Kewaunee	51,783	1,144	45.26
Khamit Institute	10,216	88	116.09
Kickapoo Area	32,990	469	70.34
Kiel Area	68,557	1,528	44.87

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Kimberly Area	101,481	2,965	34.23
Kohler	13,251	424	31.25
La Crosse	255,072	7,711	33.08
La Farge	24,246	321	75.53
Lac du Flambeau #1	13,219	511	25.87
Ladysmith-Hawkins	80,060	1,164	68.78
Lake Country	13,708	500	27.42
Lake Geneva J1	41,329	1,703	24.27
Lake Geneva-Genoa City UHS	23,270	1,062	21.91
Lake Holcombe	21,072	490	43.00
Lake Mills Area	41,911	1,346	31.14
Lakeland UHS	14,443	969	14.91
Lancaster Community	65,877	1,150	57.28
Laona	18,787	313	60.02
Lena	28,074	482	58.24
Linn J4	5,301	65	81.55
Linn J6	5,466	102	53.59
Little Chute Area	63,276	1,416	44.69
Lodi	51,773	1,593	32.50
Lomira	50,174	1,158	43.33
Loyal	48,689	690	70.56
Luck	38,076	665	57.26
Luxemburg-Casco	70,900	1,813	39.11
Madison Metropolitan	534,242	25,285	21.13
Manawa	51,957	962	54.01
Manitowoc	189,452	5,457	34.72
Maple	63,556	1,412	45.01
Maple Dale-Indian Hill	11,994	546	21.97
Marathon City	28,556	743	38.43
Marinette	131,607	2,567	51.27
Marion	33,146	647	51.23
Markesan	33,133	1,000	33.13
Marshall	65,913	1,211	54.43
Marshfield	167,953	4,118	40.79
Mauston	76,721	1,641	46.75

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Mayville	51,531	1,332	38.69
McFarland	76,154	1,991	38.25
Medford Area	126,755	2,415	52.49
Mellen	27,499	347	79.25
Melrose-Mindoro	46,493	755	61.58
Menasha	132,284	3,554	37.22
Menominee Indian	92,546	1,068	86.65
Menomonee Falls	74,860	3,915	19.12
Menomonie Area	145,632	3,476	41.90
Mequon-Thiensville	63,502	3,950	16.08
Mercer	8,158	220	37.08
Merrill Area	153,708	3,401	45.19
Merton Community	32,498	847	38.37
Middleton-Cross Plains	104,503	5,137	20.34
Milton	112,717	2,902	38.84
Milwaukee	5,972,957	100,494	59.44
Milwaukee Academy of Science	58,644	818	71.69
Mineral Point	38,160	854	44.68
Minocqua J1	11,363	651	17.45
Mishicot	53,121	1,145	46.39
Mondovi	70,326	1,161	60.57
Monona Grove	71,310	2,594	27.49
Monroe	115,575	2,814	41.07
Montello	26,810	849	31.58
Monticello	23,773	434	54.78
Mosinee	77,515	1,959	39.57
Mount Horeb Area	67,961	1,923	35.34
Mukwonago	152,974	4,924	31.07
Muskego-Norway	128,744	4,546	28.32
Necedah Area	33,648	768	43.81
Neenah	178,535	6,366	28.05
Neillsville	73,415	1,249	58.78
Nekoosa	49,349	1,528	32.30
Neosho J3	12,602	208	60.59
New Auburn	15,006	322	46.60

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
New Berlin	89,365	4,540	19.68
New Glarus	27,871	737	37.82
New Holstein	46,203	1,288	35.87
New Lisbon	37,060	728	50.91
New London	111,446	2,546	43.77
New Richmond	102,836	2,449	41.99
Niagara	39,353	571	68.92
Nicolet UHS	21,082	1,199	17.58
Norris	16,179	87	185.97
North Cape	8,961	195	45.95
North Crawford	46,906	638	73.52
North Fond du Lac	61,328	1,280	47.91
North Lake	14,474	402	36.00
Northern Ozaukee	29,366	907	32.38
Northland Pines	21,352	1,613	13.24
Northwood	10,311	406	25.40
Norwalk-Ontario-Wilton	26,276	661	39.75
Norway J7	9,182	104	88.29
Oak Creek-Franklin	124,603	4,782	26.06
Oakfield	35,682	662	53.90
Oconomowoc Area	87,110	4,254	20.48
Oconto	74,001	1,317	56.19
Oconto Falls	84,021	1,912	43.94
Omro	59,135	1,253	47.19
Onalaska	107,171	2,801	38.26
Oostburg	35,191	964	36.51
Oregon	125,810	3,482	36.13
Osceola	81,239	1,772	45.85
Oshkosh Area	359,514	10,430	34.47
Osseo-Fairchild	55,947	999	56.00
Owen-Withee	37,378	621	60.19
Palmyra-Eagle Area	43,504	1,212	35.89
Pardeeville Area	39,384	1,027	38.35
Paris J1	8,349	192	43.48
Park Falls	29,685	928	31.99

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Parkview	56,413	1,170	48.22
Pecatonica Area	27,541	520	52.96
Pepin Area	16,077	355	45.29
Peshtigo	62,349	1,102	56.58
Pewaukee	38,557	2,081	18.53
Phelps	6,735	179	37.63
Phillips	49,548	1,188	41.71
Pittsville	41,993	816	51.46
Platteville	70,996	1,644	43.18
Plum City	21,774	380	57.30
Plymouth	91,439	2,563	35.68
Port Edwards	24,857	536	46.38
Port Washington-Saukville	92,670	2,764	33.53
Portage Community	102,476	2,539	40.36
Potosi	35,226	451	78.11
Poynette	39,659	1,121	35.38
Prairie du Chien Area	58,723	1,238	47.43
Prairie Farm	31,522	365	86.36
Prentice	28,402	595	47.73
Prescott	46,922	1,211	38.75
Princeton	15,062	491	30.68
Pulaski Community	147,958	3,452	42.86
Racine	793,464	20,912	37.94
Randall J1	21,237	650	32.67
Randolph	19,361	460	42.09
Random Lake	42,130	1,074	39.23
Raymond #14	14,692	374	39.28
Reedsburg	85,060	2,428	35.03
Reedsville	32,828	741	44.30
Rhineland	99,726	3,396	29.37
Rib Lake	35,460	589	60.20
Rice Lake Area	114,461	2,729	41.94
Richfield J1	14,122	429	32.92
Richland	81,828	1,603	51.05
Richmond	17,641	365	48.33

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Rio Community	29,173	549	53.14
Ripon	62,626	1,638	38.23
River Falls	104,806	2,956	35.46
River Ridge	43,349	667	64.99
River Valley	55,600	1,615	34.43
Riverdale	55,806	913	61.12
Rosendale-Brandon	49,197	1,038	47.40
Rosholt	35,726	758	47.13
Royall	73,924	739	100.03
Rubicon J6	9,729	139	69.99
Saint Croix Central	54,465	1,003	54.30
Saint Croix Falls	43,939	1,137	38.64
Saint Francis	46,823	1,300	36.02
Salem J2	48,695	1,138	42.79
Sauk Prairie	82,337	2,683	30.69
Seneca	24,110	353	68.30
Sevastopol	11,867	664	17.87
Seymour Community	137,662	2,472	55.69
Sharon J11	23,451	303	77.40
Shawano-Gresham	105,851	2,922	36.23
Sheboygan Area	404,177	10,000	40.42
Sheboygan Falls	60,587	1,688	35.89
Shell Lake	23,568	558	42.24
Shiocton	46,239	827	55.91
Shorewood	48,671	1,877	25.93
Shullsburg	25,237	422	59.80
Silver Lake J1	30,156	590	51.11
Siren	19,700	518	38.03
Slinger	87,770	2,731	32.14
Solon Springs	19,425	384	50.59
Somerset	50,202	1,216	41.28
South Milwaukee	129,703	3,278	39.57
South Shore	12,924	260	49.71
Southern Door	34,028	1,296	26.26
Southwestern Wisconsin	34,906	622	56.12

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Sparta Area	180,306	2,800	64.40
Spencer	62,091	873	71.12
Spooner	48,521	1,722	28.18
Spring Valley	42,338	748	56.60
Stanley-Boyd Area	82,836	1,052	78.74
Stevens Point Area	303,322	8,011	37.86
Stockbridge	12,080	260	46.46
Stone Bank	10,280	318	32.33
Stoughton Area	116,797	3,678	31.76
Stratford	43,799	772	56.73
Sturgeon Bay	44,467	1,444	30.79
Sun Prairie Area	128,614	4,771	26.96
Superior	274,245	5,231	52.43
Suring	20,183	642	31.44
Swallow	9,205	293	31.42
Thorp	37,563	636	59.06
Three Lakes	15,291	781	19.58
Tigerton	26,732	405	66.00
Tomah Area	141,072	3,030	46.56
Tomahawk	46,153	1,712	26.96
Tomorrow River	40,227	883	45.56
Trevor Grade	20,702	348	59.49
Tri-County Area	34,310	844	40.65
Turtle Lake	25,099	655	38.32
Twin Lakes #4	13,146	397	33.11
Two Rivers	112,357	2,203	51.00
Union Grove J1	31,366	610	51.42
Union Grove UHS	24,085	653	36.88
Unity	39,112	1,263	30.97
Valders Area	48,852	1,211	40.34
Verona Area	142,521	4,189	34.02
Viroqua Area	71,029	1,285	55.28
Wabeno Area	17,513	633	27.67
Walworth J1	21,822	494	44.17
Washburn	48,088	771	62.37

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Washington	5,784	121	47.80
Washington-Caldwell	10,698	211	50.70
Waterford Graded J1	46,841	1,392	33.65
Waterford UHS	33,971	991	34.28
Waterloo	38,547	966	39.90
Watertown	125,154	3,812	32.83
Waukesha	299,107	12,575	23.79
Waunakee Community	81,744	2,887	28.31
Waupaca	92,581	2,602	35.58
Waupun	100,899	2,511	40.18
Wausau	339,431	9,014	37.66
Wausaukee	24,561	745	32.97
Wautoma Area	53,722	1,639	32.78
Wauwatosa	122,037	6,174	19.77
Wauzeka-Steuben	35,200	368	95.65
Webster	15,085	731	20.64
West Allis	239,919	8,553	28.05
West Bend	172,148	6,626	25.98
West De Pere	47,630	1,831	26.01
West Salem	84,973	1,606	52.91
Westby Area	74,944	1,224	61.23
Westfield	42,668	1,437	29.69
Weston	22,972	401	57.29
Weyauwega-Fremont	40,906	1,108	36.92
Weyerhaeuser Area	11,499	251	45.81
Wheatland J1	23,724	508	46.70
White Lake	10,978	287	38.25
Whitefish Bay	60,966	2,440	24.99
Whitehall	50,774	777	65.35
Whitewater	63,510	2,098	30.27
Whitnall	57,236	2,324	24.63
Wild Rose	21,012	766	27.43
Williams Bay	10,616	522	20.34
Wilmot Grade	9,336	145	64.39
Wilmot UHS	33,162	1,089	30.45

<u>Grant Recipient</u>	<u>Block Grant</u>	<u>2000-01 Students</u>	<u>Grant per Student</u>
Winneconne Community	59,613	1,676	35.57
Winter	16,336	438	37.30
Wisconsin Dells	35,964	1,738	20.69
Wisconsin Heights	50,014	1,206	41.47
Wisconsin Rapids	254,523	6,048	42.08
Wittenberg-Birnamwood	79,216	1,420	55.79
Wonewoc-Union Center	23,839	466	51.16
Woodruff J1	17,781	568	31.30
Wrightstown Community	37,516	964	38.92
Yorkville J2	12,701	314	40.45
YWCA Global Career Academy	<u>12,172</u>	117	104.03
Total	\$35,000,000	872,063	\$40.13

Appendix 2

**TEACH Training Grant Expenditures, by Consortia
FY 1998-99**

<u>Agent for Consortia</u>	<u>Consulting and Other Services</u>	<u>Tuition and Registration</u>	<u>Hardware and Software</u>	<u>Substitute Staff</u>	<u>Travel</u>	<u>Other</u>	<u>Total</u>
CESA 6	\$266,895	\$109,828	\$90,647	\$7,842	\$14,787	\$10,000	\$499,999
Pulaski Community School District	130,048	171,728	99,159	80,267	0	18,798	500,000
CESA 8	206,194	36,453	123,000	82,011	24,787	26,837	499,282
School District of La Crosse	279,685	56,612	50,145	34,377	11,494	45,471	477,753
Milwaukee Public Library	154,294	15,547	78,015	191,302	0	16,373	455,530
Adams-Friendship Area School District	90,540	55,486	82,102	157,973	12,045	51,755	449,901
East Troy Community Schools	303,608	3,711	111,569	29,845	740	0	449,473
Chippewa Falls Area United School District	105,375	231,960	61,250	0	0	10,000	408,585
Wausau School District	88,785	51,978	27,335	53,480	65,918	6,594	294,090
CESA 9	104,641	52,412	50,022	5,404	4,863	24,863	242,205
Waukesha School District	166,627	0	355	0	0	8,421	175,403
Hamilton School District	84,421	48,387	40,763	1,148	1,646	15,211	191,576
Sauk Prairie School District	81,449	26,853	44,249	7,817	2,181	5,274	167,823
Madison Metropolitan School District	0	0	40,701	58,729	0	949	100,379
West Bend Joint School District	52,253	30,576	34,611	6,302	7,088	7,064	137,894
School District of Greenfield	96,029	4,127	0	38,458	0	53	138,667
DeForest Public Library	97,787	0	20,649	0	456	6,796	125,688
Arrowhead Library System	75,898	0	30,010	0	0	15,298	121,206
Fox Point-Bayside School District	0	28,834	23,986	50,234	0	4,138	107,192
Waterford Graded School District	70,124	0	21,462	0	0	4,776	96,362
Hartland-Lakeside J3 School District	53,797	0	12,575	4,626	228	5,051	76,277
St. Francis School District ¹	32,774	13,305	21,436	7,776	0	11,082	86,373
School District of Shorewood ²							65,558
CESA 11 ²							300,000
CESA 12	143,481	20,297	69,612	30,260	11,475	46,715	321,840
CESA 3	98,873	50,072	72,546	39,413	1,579	10,801	345,830
Lakeland Union High School	68,690	0	24,813	0	2,734	3,763	100,000

¹ Projected

² Did not provide breakdowns of expenditures

Appendix 3

FY 2000-01 Educational Technology Training and Technical Assistance Grants

The 1999-2001 training grants were awarded in two phases, as planning and implementation grants. The TEACH Board awarded \$598,000 for planning grants in FY 1999-2000, and \$6,997,214 in implementation grants in FY 2000-01. This appendix provides a summary description of each implementation grant. Twelve implementation grants were received by consortia led by CESAs, and two were received by consortia led by school districts (Milwaukee Public Schools and the School District of Beloit).

Applicants for 1999-2001 training grants were required to apply for projects incorporating a specific training philosophy, known as a model classroom. The TEACH Board's requirement reflected a concern that the previous approach to funding staff development was not working and that teachers were not integrating educational technology into the curriculum. In fall 1999, TEACH Board staff researched the use of modeling for staff development purposes before deciding to focus the training grants program on modeling and reinforcement strategies.

CESA 1

Grant Summary

Planning Grant	\$ 48,396
Implementation Grant	\$500,000
Number of Institutions	
School Districts	14
Libraries	23
Estimated Number of Staff Trained	
Teachers	200
Library staff	185
Model Demonstration Site Type	Mobile Internet protocol video unit records teaching methods used by six model teachers.

Consortium Membership

School Districts

Arrowhead UHS
Central City Cyberschool of Milwaukee
Greenfield
Mequon-Thiensville
Merton Community
New Berlin
Nicolet UHS
Oconomowoc
Port Washington-Saukville
Racine
Waukesha
Wauwatosa
West Allis-West Milwaukee
Whitnall

Public Libraries

Brown Deer
Franklin
Greenfield
North Shore
Racine
Wauwatosa
West Allis
Alice Baker
Barbara Sanborn
Brookfield
Big Bend
Butler
Delafield
Elm Grove

Public Libraries

Hartland
Menomonee Falls
Mukwonago
Muskego
New Berlin
Oconomowoc
Pauline Haas
Town of Merton
Waukesha

CESA 2

Grant Summary

Planning Grant	\$ 41,112
Implementation Grant	\$499,726
Number of Institutions	
School Districts	65
Libraries	30
Estimated Number of Staff Trained	
Teachers	1,650
Library staff	100
Model Demonstration Site Type	Mobile Internet protocol video units record teaching methods used by model teachers.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>	<u>Public Libraries</u>
Belleville	Kenosha	Stoughton Area	Aram	Monona
Big Foot UHS	Lake Geneva J1	Sun Prairie Area	Barrett Memorial	Oregon
Brighton #1	Lake Mills Area	Trevor Grade	Brigham Memorial	Powers Memorial
Bristol #1	Linn J4	Twin Lakes #4	Burlington	Rochester
Burlington Area	Linn J6	Union Grove J1	Cambridge	Sun Prairie
Cambridge	Marshall	Verona Area	Dane County	Waterford
Central/Westosha UHS	McFarland	Walworth J1	Dwight Foster	Watertown
Deerfield Community	Middleton-Cross Plains	Washington-Caldwell	Eager Free	Waunakee
De Forest Area	Milton	Waterford Graded J1	East Troy Lions	
Delavan-Darien	Monona Grove	Waterford UHS	Fontana	
Dover #1	Monticello	Waterloo	Genoa	
East Troy Community	Mount Horeb	Watertown	Graham – Union Grove	
Elkhorn Area	New Glarus	Waunakee Community	Irvin L. Young	
Evansville Community	North Cape	Wheatland J1	Jefferson	
Fontana J8	Norway-Raymond J7	Whitewater	Johnson Creek	
Fort Atkinson	Oregon	Williams Bay	Karl Junginger	
Genoa City J2	Palmyra-Eagle Area	Wilmot Grade	Kenosha	
Geneva J4	Paris J1	Wilmot UHS	L.D. Fargo	
Jefferson	Parkview	Wisconsin Heights	Madison	
Johnson Creek	Raymond #14	Wisconsin School	Matheson Memorial	
Yorkville J2	Silver Lake J1	Union Grove UHS	Middleton	

CESA 3

Grant Summary

Planning Grant	\$ 43,033
Implementation Grant	\$500,000
Number of Institutions	
School Districts	31
Libraries	21
Estimated Number of Staff Trained	
Teachers	450
Library staff	70
Model Demonstration Site Type	Mobile Internet protocol video unit records teaching methods used at Platteville Middle School and other qualified sites.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>	<u>Public Libraries</u>
Argyle	Mineral Point	Barneveld	Prairie du Chien
Barneveld	North Crawford	Blanchardville	Richland Center
Belmont Community	Pecatonica Area	Bloomington	Shullsburg
Benton	Platteville	Boscobel	Soldiers Grove
Black Hawk	Potosi	Eckstein Memorial	Viola
Boscobel Area	Prairie du Chien Area	Cuba City	
Cassville	River Ridge	Darlington Johnson	
Cuba City	Richland	Dodgeville	
Darlington Community	River Valley	Dwight T. Parker	
Dodgeville	Riverdale	Gays Mills	
Fennimore Community	Seneca	Schreiner Memorial	
Highland	Shullsburg	Allen-Dietzman	
Iowa-Grant	Southwestern Wisconsin	Lone Rock	
Ithaca	Wauzeka-Steuben	Mineral Point	
Kickapoo Area	Weston	Muscoda	
Lancaster Community		Platteville	

CESA 4

Grant Summary

Planning Grant	\$ 47,000
Implementation Grant	\$500,000
Number of Institutions	
School Districts	26
Libraries	33
Estimated Number of Staff Trained	
Teachers	750
Library staff	75
Model Demonstration Site Type	Mobile Internet protocol video unit records teaching methods used by four model teachers from participating school districts.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>	<u>Public Libraries</u>
Alma	Norwalk-Ontario	Alma	Mauston
Alma Center	Onalaska	Arcadia	McIntosh
Arcadia	Sparta Area	Bekkum Memorial	Mondovi
Bangor	Tomah Area	Black River Falls	Necedah
Black River Falls	Viroqua Area	Blair-Preston	New Lisbon
Blair-Taylor	West Salem	De Soto	Norwalk
Cashton	Westby Area	Elroy	Ontario
Cochrane-Fountain City	Whitehall	Ettrick	Readstown
De Soto Area	Wonewoc-Union Center	Galesville	Sparta
Elroy-Kendall-Wilton		Hauge Memorial	Strum
Galesville-Ettrick-Trempealeau		Hettie Pierce	Taylor
Hillsboro		Hillsboro	Tomah
Holmen		Independence	Torkelson Memorial
Independence		Kendall	Whitehall
La Crosse		La Crosse County	Wilton
La Farge		La Crosse	Wonewoc
Melrose-Mindoro		Lawton Memorial	

CESA 5

Grant Summary

Planning Grant	\$ 47,000
Implementation Grant	\$500,000
Number of Institutions	
School Districts	35
Libraries	40
Estimated Number of Staff Trained	
Teachers	1,300
Library staff	210
Model Demonstration Site Type	Fixed Internet protocol video classroom located at New Lisbon used as a central training site.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>	<u>Public Libraries</u>	<u>Public Libraries</u>
Adams-Friendship Area	Portage Community	Adams County	Mazomanie Free	Spring Green
Almond-Bancroft	Poynette	Albany	McMillan Memorial	Stoughton
Auburndale	Princeton	Angie W. Cox	Monroe	Verona
Baraboo	Randolph	Arpin	Monticello	Vesper
Cambria-Friesland	Reedsburg	Baraboo	Mount Horeb	
Columbus	Rio Community	Belleville	New Glarus	
Fall River	Rosholt	Black Earth	North Freedom	
Iola-Scandinavia	Sauk Prairie	Brodhead Memorial	Pittsville	
Lodi	Stevens Point Area	Charles & JoAnn Lester	Plain	
Marshfield	Tomorrow	Columbus	Portage County	
Mauston	Tri-County Area	Deerfield	Portage	
Montello	Waupaca	Jane Morgan Memorial	Poynette	
Necedah Area	Wautoma Area	Kilbourn	Prairie du Sac	
Nekoosa	Westfield	LaValle	Reedsburg	
New Lisbon	Wild Rose	Lettie W. Jensen	Rio	
Pardeeville	Wisconsin Dells	Lodi Woman's Club	Rock Springs	
Pittsville	Wisconsin Rapids	Marshall Community	Rosemary Garfoot	
Port Edwards		Marshfield	Sauk City	

CESA 6

Grant Summary

Planning Grant	\$ 47,000
Implementation Grant	\$499,574
Number of Institutions	
School Districts	26
Libraries	10
Estimated Number of Staff Trained	
Teachers	4,800
Library staff	26
Model Demonstration Site Type	Two mobile Internet protocol video units record model teaching methods.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>
Appleton Area	Menasha	Beaver Dam
Beaver Dam	Mayville	Brandon
Berlin Area	Neenah	Fond du Lac
Campbellsport	New London	Fox Lake
Dodgeland	North Fond du Lac	Horicon
Fond du Lac	Oakfield	Juneau
Freedom Area	Omro	Lomira
Horicon	Oshkosh Area	Theresa
Hortonville	Ripon	Waupun
Hustisford	Rosendale-Brandon	Fond du Lac
Kaukauna Area	Shiocton	
Lomira	Waupun	
Manawa	Winneconne Community	

CESA 7

Grant Summary

Planning Grant	\$ 44,650
Implementation Grant	\$500,000
Number of Institutions	
School Districts	36
Libraries	15
Estimated Number of Staff Trained	
Teachers	1,000
Library staff	30
Model Demonstration Site Type	Mobile VHS units record model teaching methods to be used with Web-based discussions.

Consortium Membership

School Districts

Algoma
Ashwaubenon
Brillion
Cedar Grove-Belgium Area
Chilton
Denmark
De Pere
Elkhart Lake
Gibraltar Area
Green Bay Area
Howard-Suamico
Kewaunee
Kiel Area
Kohler
Luxemburg-Casco
Manitowoc
Mishicot
New Holstein

School Districts

Oostburg
Plymouth
Pulaski Community
Random Lake
Reedsville
Sevastopol
Seymour Community
Sheboygan Area
Sheboygan Falls
Southern Door
Stockbridge
Sturgeon Bay
Two Rivers
Valders Area
Washington
West De Pere
Wrightstown Community
Howards Grove

Public Libraries

Algoma
Brillion
Brown County
Cedar Grove
Chilton
Door County
Elkhart Lake
Kewaunee
Lester
Manitowoc
Muehl
New Holstein/Kiel
Oostburg
Mead
Sheboygan Falls Memorial

CESA 8

Grant Summary

Planning Grant	\$ 45,200
Implementation Grant	\$500,000
Number of Institutions	
School Districts	28
Libraries	22
Estimated Number of Staff Trained	
Teachers	800
Library staff	60
Model Demonstration Site Type	Mobile Internet protocol video unit records model teaching methods, used together with sessions carried on full-motion video networks.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>	<u>Public Libraries</u>
Beecher-Dunbar-Pembine	Oconto	Birnamwood	Tigerton Branch
Bonduel	Peshtigo	Bonduel Branch	Wausaukee Branch
Bowler	Phelps	Coleman-Pound Branch	Wittenberg
Clintonville	Shawano-Gresham	Crivitz Area	Clintonville
Coleman	Suring	Farnsworth	
Crandon	Tigerton	Florence County	
Crivitz	Wabeno Area	Goodman-Dunbar	
Elcho	Wausaukee	Gillett	
Florence	White Lake	Lakes Country	
Gillett	Wittenberg-Birnamwood	Lena	
Goodman-Armstrong		Marinette Co. Consolidated	
Laona		Mattoon-Hutchins Community	
Lena		Menominee County/Tribal	
Marinette		Niagara	
Marion		Oconto Falls Community	
Menominee Indian		Peshtigo	
Niagara		Shawano County	
Oconto Falls		Suring	

CESA 9

Grant Summary

Planning Grant	\$ 47,000
Implementation Grant	\$500,000
Number of Institutions	
School Districts	17
Libraries	25
Estimated Number of Staff Trained	
Teachers	127
Library staff	123
Model Demonstration Site Type	Mobile Internet protocol video unit records model teaching methods with a focus on mathematics instruction.

Consortium Membership

<u>School Districts</u>	<u>Public Libraries</u>	<u>Public Libraries</u>
Athens	Abbotsford	Jean M. Thomsen
Antigo	Antigo	Thorp
D C Everest	Colby	Edward U. Demmer
Edgar	Dorchester	Tomahawk
Elcho	Western Taylor County	Wabeno
Marathon City	Samson Memorial	Westboro
Merrill Area	Greenwood	Withee
Mosinee	Edith Evans Community	Crandon
Northland Pines	Loyal	
Prentice	Medford	
Rhineland	Marathon	
Rib Lake	T.B. Scott	
Stratford	Minocqua	
Three Lakes	Neillsville	
Tomahawk	Owen	
Wausau	Rhineland	
Arbor Vitae Woodruff	Rib Lake	

CESA 10

Grant Summary

Planning Grant	\$ 30,030
Implementation Grant	\$498,406
Number of Institutions	
School Districts	34
Libraries	55
Estimated Number of Staff Trained	
Teachers	160
Library staff	125
Model Demonstration Site Type	Fixed full-motion video classroom located at Altoona Middle School transmits model teaching methods to eight linked full-motion video classrooms.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>	<u>Public Libraries</u>	<u>Public Libraries</u>
Abbotsford	Ladysmith-Hawkins	Altoona	Dresser	Pepin
Altoona	Lake Holcombe	Amery	Durand	Phillips
Augusta	Loyal	Augusta Memorial	L.E. Phillips Memorial	Pierce County
Birchwood	Medford Area	Baldwin	Ellsworth	Plum City
Bloomer	Mondovi	Balsam Lake	Elmwood	Polk County
Bruce	Neillsville	Barron County	Fairchild	Prescott
Cadott Community	New Auburn	Barron	Fall Creek	Rice Lake
Chippewa Falls Area	Osseo-Fairchild	Bloomer	Frederic	River Falls
Colby	Owen-Withee	Boyceville	Glenwood	Hazel Mackin
Cornell	Spencer	Bruce	Hawkins	Somerset
Durand	Stanley-Boyd Area	Cadott	Hammon	St. Croix
Eau Claire Area	Thorp	Cameron	Hudson	C.H. Johnson
Elk Mound Area	Weyerhaeuser Area	Centuria	Ladysmith	Spring Valley
Eleva-Strum	Gilmanton	Calhoun Memorial	Luck	D.R. Moon
Fall Creek		Chippewa Falls	Menomonie	Turtle Lake
Flambeau		Clear Lake	Milltown	
Gilman		Colfax	New Richmond	
Granton Area		Cornell	Ogema	
Greenwood		Cumberland	Osceola	
Independence		Deer Park	Park Falls	

CESA 11

Grant Summary

Planning Grant	\$ 47,000
Implementation Grant	\$500,000
Number of Institutions	
School Districts	28
Libraries	2
Estimated Number of Staff Trained	
Teachers	575
Library staff	6
Model Demonstration Site Type	Fixed full-motion video classroom located at Cumberland School District transmits model teaching methods to eight linked full-motion video classrooms.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>
Baldwin-Woodville Area	Elmwood	Saint Croix Central	Shell Lake
Barron Area	Frederic	Saint Croix Falls	Woodville Community
Boyceville Community	Grantsburg	Siren	
Cameron	Luck	Somerset	
Chetek	Menomonie Area	Spooner	
Clayton	Pepin Area	Spring Valley	
Clear Lake	Plum City	Turtle Lake	
Colfax	Prairie Farm	Unity	
Cumberland	Rice Lake Area	Webster	
Ellsworth Community			

CESA 12

Grant Summary

Planning Grant	\$ 40,200
Implementation Grant	\$500,000
Number of Institutions	
School Districts	18
Libraries	26
Estimated Number of Staff Trained	
Teachers	200
Library staff	30
Model Demonstration Site Type	Mobile Internet protocol video unit records teaching methods used by a core group of 25 teachers.

Consortium Membership

<u>School Districts</u>	<u>School Districts</u>	<u>Public Libraries</u>	<u>Public Libraries</u>
Ashland	Solon Springs	Vaughn	Koller
Bayfield	South Shore	Bayfield Carnegie	Legion Memorial
Butternut	Superior	Boulder Junction	Mercer
Drummond Area	Washburn	Forest Lodge	Bad River Tribal
Glidden	Winter	Drummond	Eleanor Ellis
Hayward Community		Olson Memorial	Plum Lake
Hurley		Grantsburg	Shell Lake
Maple		Hayward Carnegie	Spooner
Mellen		Hurley	Superior
Mercer		Lac Courte Oreilles	Washburn
Northwood		Lac du Flambeau	Burnett
Park Falls		Land O'Lakes	Winchester
Phillips		Madeline Island	Tice

School District of Beloit Implementation Grant

Grant Summary

Planning Grant	\$ 21,586
Implementation Grant	\$500,000
Number of Institutions	
School Districts	2
Libraries	6
Estimated Number of Staff Trained	
Teachers	125
Library staff	117
Model Demonstration Site Type	Mobile Internet protocol video unit records model teaching methods with a focus on mathematics instruction at the Middle School level.

Consortium Membership

School Districts

Beloit
Janesville

Public Libraries

Edgerton
Hedburg
Milton
Beloit
Clinton
Orfordville

Milwaukee Public Schools Implementation Grant

Grant Summary

Planning Grant	\$ 48,793
Implementation Grant	\$499,508
Number of Institutions	
School Districts	1
Libraries	1
Estimated Number of Staff Trained	
Teachers	600
Library staff	125
Model Demonstration Site Type	District-owned VHS mobile units record best practices in staff development efforts.

Consortium Membership

School Districts

Milwaukee

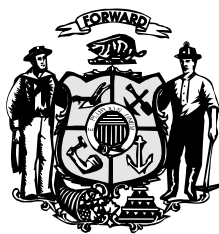
Public Libraries

Milwaukee Public Libraries

STATE OF WISCONSIN
TEACH Wisconsin
101 East Wilson Street, Madison, Wisconsin

SCOTT McCALLUM
GOVERNOR

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February 13, 2002

Ms. Janice Mueller
State Auditor
Legislative Audit Bureau
22 East Mifflin Suite 500
Madison, WI 53703

Dear Ms. Mueller:

TEACH Wisconsin has been working with the Legislative Audit Bureau since August 2000 to prepare this report. During this period I have been pleased with the professionalism of the auditors and their willingness to devote time to us throughout this audit.

The TEACH Board takes this opportunity to make several comments to help clarify and provide more information about the agency and its programs.

History

Technology for Educational Achievement (TEACH) Wisconsin was created by the State Legislature and Governor in the 1997-1999 State Budget, and came into existence in March 1998. TEACH was created to provide affordable telecommunications access to foster education at the state's educational institutions and library systems, to assist instruction for technology integration of the state's teachers, provide subsidized wiring loans for technological infrastructure at schools and libraries, assist in cost-saving procurement contracts, and to provide block grants for technological education-related budgets at K-12 schools.

Few programs in the State of Wisconsin have had a more far-reaching impact, whether urban or rural, rich or poor, socially or culturally diversified, than the TEACH program. In the few short years since its inception, TEACH has worked well to meet all of its statutory requirements, and has been pro-active in ensuring that past and current investments will continue to provide a solid base for future efforts.

No other state has a program organized like TEACH, and it is just beginning in its program impacts. There is dedicated annual funding to schools that depend upon the funding to purchase and maintain technology, professional development programs for both schools and libraries, state contracts to provide products and services, and perhaps most important, a collaborative PK -16 planning process. These efforts provide a foundation for future action, and a process whereby past and current investments are fully utilized. The true effectiveness of educational technology can only be felt over the long term, however, and this requires continued support by the Legislature, to build upon the continued success of TEACH programs.

Summary Comments

Block Grants

- By the end of fiscal year 2001-2002, TEACH will have distributed \$167 million in educational block grants. These funds are distributed to all 426 public school districts in the state, with the amounts formulated on the basis of property values and student population. Changes in the statutes in fiscal year 2000-2001 allowed eligibility for the 7 Milwaukee Charter schools, while Act 16 in 2001 provided eligibility to 4 state secured juvenile correctional facilities.
- The block grants are used for the purposes listed under statute [Ch 44.72 (2)(d)], for any purpose related to educational technology, except salary and benefits of school district employees.
- Block grant funds constitute the entire information technology (IT) budgets for many school districts. These grants are especially critical in rural or poor areas that would not otherwise have access to such resources. This focus on ensuring equity in the program is demonstrated by the equalization formula used to compute block grant amounts. As these funds fall outside of revenue caps for local school districts (yet are part of the two-thirds funding commitment by the state), these funds do provide a source of income that would otherwise be unavailable.
- Block grant funds have helped Wisconsin schools to buy 281,000 computers by 2001 (as reported by a joint DPI/TEACH 2001 survey). The ratio of students per Internet-connected computer in the state has dropped significantly since the inception of the TEACH programs, from 12.4 students per computer in 1999 to 4.7 in 2001. The ratio of students per multi-media computer has likewise dropped from 8.3 in 1999 to 3.7 in 2001. Students in Wisconsin now enjoy an overall ratio of students per instructional computer of only 3.1.
- Changes in the 2001-2003 budget have supplanted a large portion of the GPR block grant funding for fiscal year 2001-2002. Of the \$35 million in GPR funds originally allocated for block grants, \$4.04 million is taken from federal E-rate funds, \$1.5 million from the Ameritech settlement fund, and \$21.67 million from the WATF dissolution for supplanting purposes. This has left only \$7.78 million in GPR for block grant funding for 2001-2002.
- The TEACH Board has no authority to require reporting of any block grant recipient. The TEACH Board has felt this to be an important accountability measure for both the agency and the recipients, and requested such authority under the 1999-2001 and 2001-2003 budgets. The first request was not passed along to the Legislature from DOA, while the second request did not make it to a legislative vote. The ability to assess the direct impact of TEACH block grants upon state education is of vital importance to the agency's statutory performance-based budgeting efforts.

Performance-Based Budgeting

- TEACH is one of only two state agencies (along with the Department of Transportation) to be required to use performance-based budgeting (PBB) as part of its program assessment and operating strategy.
- The use of PBB provides for greater accountability of TEACH's programs, showing how certain programs impact Wisconsin students in particular ways. TEACH is currently compiling information relating to outputs, meaning the baseline data for student and teacher performance and related measures (such as student to computer ratios).
- The next stage for TEACH is to tie together program actions with teacher and student performance outcomes. This is another way of saying that TEACH will be able to demonstrate that spending X dollars on a particular program area has resulted in Y results, rather than simply hoping that any given policy will have the desired outcome.

However, this next stage in budgeting efforts by TEACH is not possible without greater reporting on school district block grant reporting.

- TEACH now needs the ability to measure specific program expenditures. This should not in any way affect recipients' flexibility in spending the funds, and as grants funds must be kept in separate financial accounts, basic reporting (for example, of general categorical expenses) should not prove an undue burden on the recipients. On the contrary, such reporting would assist TEACH (in cooperation with other agencies) in coordinating needs assessments for local districts, and would help to direct the future efforts of TEACH's other programs.

Telecommunications Access

- TEACH has one of the most highly professional and developed data and video network for PK-16 education and libraries in the US, with over 800 connections to public and private educational institutions, schools, libraries and higher educational institutions. Prior to TEACH, many institutions did not have any Internet or video access, or could only afford rudimentary dial-up access.
- Segregated funding for this program comes from the state Universal Service Fund assessment on telecommunications providers, with part of the cost being defrayed by minimum monthly charges paid by the access programs recipients. These monthly charges are set by statute [Ch 44.73 (2)(d)].
- TEACH provides subsidized access for data lines and video links, and provides SEG funds under its Existing Contract Grant program to those institutions that had already installed such services prior to October 1997. Due to these efforts, Wisconsin libraries and schools now enjoy access to global video and data networks, with the ability to conduct classes, conferences and research over the state and globe.
- The Telecommunications Access program is experiencing continued demand for both data and video access. New services under this program (the REACH grants and eligibility for branch libraries) are helping to expand the ability of libraries to participate in the Telecommunications Access program. Libraries are the largest users of new datalines under the TEACH programs, currently numbering some 300 high-speed access links, and TEACH plans to assist at least 70 more in this fiscal year alone.
- The current WBAA video contract for the state will expire in December 2005. Although Ameritech suppliers ceased development of the technology platform in February 2001, this was partly the result of a high-quality product that needed only minor maintenance and did not require upgrading. The manufacturing company had to abandon the current product because newer technology could not be sold to the current national customer base. WBAA is required to continue servicing existing equipment until December 2005, and TEACH is still receiving requests for installations.
- It is crucial that the pervasive shadow cast by the video network contract expiration does not obscure the value and worth of the millions of dollars spent for computers, academic and administrative software, wireless technology, LANs, WANs, telecommunication systems, infrastructure, professional development and other needs. The current video equipment is by no means obsolete. It is current, state-of-the-art equipment that will continue to serve the needs of schools and be compatible with emerging telecommunication standards-based platforms of tomorrow.

Infrastructure Financial Assistance (Wiring Loans)

- TEACH has wired nearly 20,000 of the state's K-12 classrooms since loans were first provided in Fiscal Year 1998-1999, ensuring that over 90% of state classrooms are wired for Internet or video link service.
- The wiring that has taken place has a long-term future, as classrooms have been wired to support many versions of new technology yet to be developed. Current wiring

schemes can support even the most futuristic bandwidth requirements, including providing a base for new wireless technologies.

Collaboration Committee

- As required by state statutes [Ch 44.71 (2)], for the past two years TEACH has been leading a collaborative effort with DOA, the UW system, Technical College system, private colleges and universities, ECB and DPI to enhance collaboration of PK-16 educational technology. TEACH staff has been piloting new educational technologies, leading educational technology standards committees and looking toward understanding the needs of the future. For example under the current Training and Technical Assistance Grant program TEACH installed over 50 Internet Protocol (IP) Video Servers connected to the Internet to support professional development. This is a significant investment in educational technology and will support staff development for many years to come.
- Were it not for TEACH Wisconsin, there would be no Executive Collaboration Committee or the Wisconsin Education Network Collaboration Committee (WENCC). The UW system president stated, during a September 2001 Executive Committee meeting, her praise for the cooperative planning approach being implemented through TEACH and the Department of Electronic Government (DEG) teams.
- The mission of WENCC is to ensure the highest levels of instructional interoperability among Wisconsin K-16 educational entities by creating an open forum for discussion and research. This includes the development of strategic recommendations to implement a statewide infrastructure that accommodates emerging distance learning technologies for all Wisconsin students. All participating parties stated that in the past there were planning initiatives conducted where the UW system's needs were not fully considered, but now with the TEACH Board-driven collaborative process this apparently will not happen again.
- Wisconsin has not previously experienced a process like WENCC, where all PK-16 educational sectors have come together to conduct an educational (classroom educator) needs planning initiative. WENCC will first identify the educator's needs, the educational institution's needs, employ local focus groups, and then will look for a state-wide technological solution to support those needs. The goal is a seamless PK-16 communication environment capable of supporting multiple educational application environments. This goal will be a common solution that will allow any institution to communicate not only with every school, university, tech college campus, or library in Wisconsin but anywhere in the world, at any time, and from any classroom.
- This collaboration process would not be happening without the foresight of the Legislature, which placed the statutory charge with TEACH to facilitate a collaborative process to identify educational technology standards. TEACH's role is to facilitate the development of educational technology standards associated with moving educational content (information) over information delivery systems, connecting teachers, instructors, professors and students to the world and each other. The Department of Electronic Government will manage the procurement process.

Training and Technical Assistance Grants

- TEACH provides competitive-based grants for professional development of K-12 teachers, administrators and library staff, as provided under Ch 44.72 (1). By statute, these grants are distributed equitably throughout the state to Cooperative Educational Service Agencies or school district consortia, provided that public library boards are included in project plans.
- Two training cycles have been authorized, one in the 1997-1999 budget, the other in 1999-2001. It may be a common misperception that three cycles had occurred, but the 1998-1999 year covered the first training grant phase, with the 1999-2001 phase

separated into planning and implementation grants. A third phase has been authorized in the 2001-2003 budget.

- The move in the current phase of training grants (2000-2002) to the specified model classroom plans was in recognition by TEACH that previous training grant models were not achieving the aim of increasing teachers' abilities to integrate technology into curricula. The TEACH Board felt that proactive policies should be taken by TEACH to align training standards to methods prescribed by the Metiri Group and other researchers. The model classroom was felt to address the needs of Wisconsin educators, and by providing "model" teachers from a local area, to fit professional development efforts into region-specific needs, concerns and reinforcement considerations.
- Although the report notes that equipment costs were incurred as part of the grant, TEACH allowed great flexibility in the makeup and extent of technology used in the model classroom or library components of the projects. This flexibility accounts for the wide range in equipment expenditures between different projects, and does not reflect a pattern imposed upon the grant recipients.

E-rate Consortium

- In 1999 TEACH was the first state to employ the idea of a statewide E-rate consortium for submitting federal E-rate applications on behalf of all eligible institutions. Providing this consortium reduces the workload of individual schools and libraries. This consortium effort by TEACH prompted similar action by other states and a reconfiguration of E-rate application processes at the national level.
- The amount of E-rate funding for fiscal year 2002-2003 will be approximately \$5 million. Fiscal year 2001-2002 E-rate funds total approximately \$4.9 million. The value of E-rate is that it allows TEACH to recover nearly 51% of the money spent on the data lines, video links, and Sonet backbone, in order to ensure that Wisconsin public schools, public libraries, and private schools will continue to receive TEACH telecommunications services at a greatly reduced rate. There is considerable amount of work involved in receiving E-rate funds. Currently, any E-rate money received by TEACH is given to the state to replace GPR dollars.

Procurement

- Under statutes [Ch 44.71 (2)(a) & (c)] TEACH cooperates with the Department of Administration in devising cooperative purchasing agreements for school districts and CESAs. It should be noted that all contracts must be negotiated and signed by DOA, not TEACH, and for this reason TEACH does not play a direct supervisory role in procurement efforts.
- Procurement cost savings for school districts, libraries and CESAs have been very conservatively estimated at \$1.35 million. This figure climbs significantly (upwards of \$8 million), depending upon where and how cost savings are calculated, and TEACH and DOA have provided excellent assistance and guidance for educational institutions that wish to find cost savings on hardware and software expenditures.

Efforts by Other States

- The audit presents examples of funding for educational technology in other states, citing, for example, that surrounding states offer less in block grants than Wisconsin, and that Ohio and Illinois made available loans for infrastructure assistance in 1999-2000. It would be useful, however, had these comparisons been made with greater detail. No information is presented in terms of funding per student as compared with Wisconsin, or how the infrastructure loans were funded or allocated (for example, was fifty percent of the principle subsidized, as in Wisconsin, or were these loans merely interest-free?). Other information that would be useful includes numbers/percentages

of schools and libraries that have data and video access, the extent of network coverage and collaboration within the states, and their success in technology migration planning.

- Without more information on the specifics of programs in other states, it is very difficult to draw any comparisons or conclusions from the presentation of such data.

The Future of TEACH

The audit raises a number of questions related to the future of TEACH and its program funding structure. Specifically, the report often refers to TEACH as a “five-year, \$500 million program,” a characterization that was never official policy and which I feel does not accurately reflect the place of TEACH in providing educational technology. As stated before, TEACH has initiated a number of projects and programs that require constant effort and collaboration among a number of state agencies, a role that TEACH has assumed and remains central to. These efforts are of vital importance in preparing Wisconsin’s future workforce, ensuring that the necessary resources and technologies continue to be made available to all students. This availability should be continued regardless of geography, rural or urban, rich or poor, districts and libraries.


The specific technologies and means of integrating them into curricula will continue to change, and as the audit notes, it is important to consider how new technologies are being assessed. Yet this has been a central task of TEACH in its work with the Collaboration Committee over the past few years, and its work has not been relegated to certain technologies (such as “wireless”), instead considering a wide variety of possibilities that would build upon and expand existing network capabilities.

As the role of technology becomes increasingly important in schools and libraries, it is vital to continue dedicated support for programs that make technology and distance learning access available to all students. If the TEACH Board, as the audit questions, has “completed its mission,” then it has done so ahead of schedule and under-budget. Yet this should not imply curtailment of the agency or its programs, which require (like all education-related activities) constant support and the realization that new students and new teachers continually enter the system.

TEACH Wisconsin continues to have an important role to play in Wisconsin education, providing essential educational technology to K-12 students and libraries in all areas of the state. As the audit report recognizes, TEACH has met its statutory requirements, all with a 1.2% administrative budget to handle TEACH’s program operations. School districts across Wisconsin have been highly satisfied with TEACH programs, while future efforts among various agencies are being planned under the leadership of TEACH.

Again, thank you for the opportunity to comment on this audit. We appreciated your independent review to assist in furthering the work, goals, and mission of TEACH Wisconsin.

Sincerely,



Doris J. Hanson
Executive Director