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ABSTRACT

In an effort to address concerns in the educational community related to the use and costs of information and communications technology, the Technology for Educational Achievement in Wisconsin (TEACH) Board was created in 1997. The TEACH Board administers the distribution of grants under the technology block grant and technology training and technical assistance grant programs. The Board also coordinates with the Department of Administration (DOA) and the Public Service Commission to operate a telecommunications access program. In addition, the Board coordinates with DOA to provide infrastructure loans, technology purchasing services, technical assistance, and educational technology services, equipment, and training to eligible educational institutions. The TEACH Board was also responsible for closing out the pioneering partners education technology grant and loan program. Institutions served by Board programs include school districts, private schools, cooperative education service agencies, technical colleges, private colleges, the University of Wisconsin system, and public libraries. This paper discusses the responsibilities of the TEACH Board and the programs that it administers and coordinates. (AEF)

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Technology for Educational Achievement in Wisconsin Board

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Technology for Educational Achievement in Wisconsin Board

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Technology for Educational Achievement in Wisconsin Board

Introduction

Over the past decade, concerns relating to the use and costs of information and communications technology have emerged within the educational community. In an effort to address these types of concerns and accelerate the statewide investment in educational technology, the Technology for Educational Achievement in Wisconsin (TEACH) Board was created in 1997 Act 27. The TEACH Board administers educational technology grants programs and coordinates with the Department of Administration (DOA) and the Public Service Commission to operate a telecommunications access program. The Board also coordinates with DOA to provide infrastructure loans, technology purchasing services, technical assistance and educational technology services, equipment and training to eligible educational institutions. This paper discusses the responsibilities of the TEACH Board and the programs that it administers and coordinates.

TEACH Board

The TEACH Board is attached to DOA for limited purposes of budgeting, program coordination and related management functions. The Board consists nine members including: the State Superintendent of Public Instruction, the

Secretary of the Department of Administration; and seven members appointed for staggered four-year terms including a member of the Board of Regents of the University of Wisconsin (UW) System appointed by the president of the Board; a member of the Wisconsin Technical College System (WTCS) Board appointed by the president of the Board, a member of the Educational Communications Board, appointed by the Governor and four other members appointed by the Governor. The Governor appoints the Executive Director of the Board.

The Board has the following duties under Subchapter IV of Chapter 44 of the statutes:

- Promote the efficient, cost-effective procurement, installation and maintenance of educational technology by school districts, cooperative educational service agencies (CESAs), technical colleges and the UW System, in cooperation with these entities and DOA.
- Identify the best methods of providing preservice and in-service educational technology training for teachers.
- Enter into cooperative purchasing agreements, with the consent of DOA, under which participating school districts and CESAs can contract for educational technology training for their professional employees.
- Support the development of courses in the effective use of educational technology for the instruction of professional employees who are licensed by the Department of Public Instruction (DPI), in cooperation with the UW System, WTCS,

DPI and other entities.

- Provide telecommunications access to school districts, private schools, CESAs, technical college districts, private colleges and public library boards, in cooperation with DOA and the Public Service Commission under the educational telecommunications access program.
- Submit a biennial report concerning the Board's activities, no later than October 1 of each even-numbered year, to the Governor and the appropriate standing committees of the Legislature.
- Coordinate the purchasing of educational technology materials, supplies, equipment and contractual services for school districts, CESAs, WTCS districts and the UW System through the Division of Information Technology in DOA and establish standards and specifications, in cooperation with DOA, for educational technology hardware and software purchases by school districts, CESAs, WTCS districts and the UW System.
- Purchase educational technology equipment for use by school districts, CESAs and public educational institutions in this state and permit these entities to purchase or lease, with an option to purchase at a later date, the equipment from the Board. The law specifies that there is no requirement that any educational technology equipment be purchased or leased from the Board.

TEACH Wisconsin Programs

The TEACH Board administers the distribution of grants under the technology block grant and technology training and technical assistance grant programs. The Board also coordinates with DOA and the Public Service Commission (PSC) to operate a telecommunications access program. In addition, the Board coordinates with DOA to

provide infrastructure loans, technology purchasing services, technical assistance and educational technology services, equipment and training to eligible educational institutions. The TEACH Board was also responsible for closing-out the pioneering partners educational technology grant and loan program. Each of these programs is described in further detail below.

Educational Technology Grant Programs

Technology Block Grants. This grant program provides funding to public school districts for any purpose related to educational technology. Educational technology is defined in the statutes as "technology used in the education or training of any person or in the administration of an elementary or secondary school and related telecommunications services." Examples of some uses of the grants include: network upgrades, wiring loan payments, computer lab improvements, purchase of hardware or software, consulting or planning services, professional development for district employees and telecommunications access assistance. Grants under this program may not be used to fund salaries or benefits of any school district employee or replace funding available from other sources.

Under 1997 Act 27, a total of \$27 million in 1997-98 and \$35 million in 1998-99 was budgeted for educational technology block grants from two funding sources: (a) the general fund; and (b) income from the common school fund.

General Fund Block Grants. General purpose revenue (GPR) funding for educational technology block grants to school districts is budgeted at \$10 million in 1997-98 and \$30 million in 1998-99. The GPR block grants are distributed based on a formula that uses equalized value per member, which is the full value of the taxable property in

the district as certified for the prior year, excluding value adjustments resulting from appeals. There is an adjustment for K-8 districts and union high school (UHS) districts. For UHS districts, equalized valuation is divided by three times membership. For K-8 districts, equalized valuation is divided by 1.5 times membership. Funding is distributed as follows:

a. \$5,000 is provided to each eligible school district. If all 426 school districts request the grant, a total of \$2,130,000 is distributed annually under this provision.

The balance of the funds (\$7,870,000 in 1997-98 and \$27,870,000 in 1998-99) is distributed to eligible school districts in proportion to the weighted membership of each school district. The weighting factor for members in each district is calculated by dividing the statewide average equalized value per member by the value per member in the district. For purposes of this calculation, if a district has an equalized value of less than \$75,000, it is treated as having a value per member of \$75,000, which applies only to the Norris School District.

Two examples of the calculation of this formula follow using the prior year factors that were used to calculate grant amounts for fiscal year 1998-99:

a. Statewide equalized valuation per member (1997-98) equals \$263,246;

b. District A's equalized valuation per member equals \$120,000 and the weighting factor for membership is $\$263,246 / \$120,000 = 2.193717$. Therefore each member is weighted as 2.193717. If District A had 1,000 members, its weighted membership would total 2,193.7.

c. District B's equalized valuation per member equals \$550,000 and the weighting factor for membership is $\$263,246 / \$550,000 = 0.478629$. Therefore each member is weighted as 0.478629. If District B had 1,000 members, its weighted membership would total 478.6.

d. For grant purposes in 1998-99, the statewide total weighted membership is 1,015,878, so that the grant amount per weighted member is \$27.35 ($\$27,780,000 \div 1,015,878 = \27.35). District A would receive \$64,998 in GPR block grants, which is calculated by taking its weighted membership times \$27.35 and adding \$5,000 to the total ($2,193.7 \times \$27.35 = \$59,998$; $\$59,998 + \$5,000 = \$64,998$). District B would receive \$18,090, which is calculated by taking its weighted membership times \$27.35 and adding \$5,000 to the total ($478.6 \times \$27.35 = \$13,090$; $\$13,090 + \$5,000 = \$18,090$).

One-time Supplemental Grants. In 1997-98, \$2,000,000 GPR was provided in a separate appropriation for a one-time supplemental block grant program. School districts with an equalized value per member below the prior year statewide average (\$247,530 in 1996-97) were eligible for this funding, using prior year values.

Common School Fund Income Block Grants. The common school fund was established by the Wisconsin Constitution, which designates that income from that fund be distributed among common schools in proportion to the number of residents between the ages of four and 20 years old. Under the state Constitution, revenues from certain fines and forfeitures and sales of public lands are deposited in the common school fund. The income from the fund is primarily derived from interest payments on loans from the fund to municipalities and school districts by the Board of Commissioners of Public Lands. The Constitution stipulates that the income must be distributed for the support and maintenance of schools in the district and the purchase of suitable library materials.

Under 1997 Act 27, \$15 million in 1997-98 and \$5 million in 1998-99 is provided from income of the common school fund for educational technology block grants to school districts. However, the TEACH Board can distribute these funds only after \$14,300,000 of annual income from the fund is apportioned by DPI to school districts

for school libraries. If, after the library funds are distributed, the remaining income of the common school fund is less than the amount appropriated for these educational technology block grants, the TEACH Board will distribute the remaining income of the fund, rather than the amount appropriated.

In general, distribution of this segregated (SEG) funding to each eligible school district is in proportion to the number of persons between the ages of four and 20 who reside in each district. In order to determine this number, the statutes require that each school district certify, to DPI, the number of residents in the district between those ages, by October 15 of each year. Because K-8 and UHS districts overlap, K-8 districts will receive aid from the common school fund based on the number of four to 13 year-old residents in the school district and UHS districts will receive aid from the common school fund based on the number of 14 to 20 year-olds in the school district.

Additional Funding Factors. For each of these types of block grants, generally, school districts must adopt a resolution requesting the grant through an annual meeting for common school districts, or a school board action for unified school districts or the Milwaukee Public Schools. In 1997-98, all 426 school districts submitted resolutions for 1997-98 block grants. New resolutions must be submitted for 1998-99 block grants. A school district that receives a block grant must deposit the monies in a separate fund. Grants may not be used to replace funding available from other sources.

The TEACH Board is required to distribute the general fund block grants and the one-time supplement grants to school districts on the first Monday in February. In 1998-99, half of the common school fund income block grants will be distributed by January 30 and the remaining amount will be distributed in June following a second payment to school districts for school library aids. Beginning in 1999-00, the grants funded by income from the common school fund

will be distributed in one payment on or before June 30. The grant program is a categorical aid, such as aid for handicapped education and pupil transportation. As such, block grants are not subject to school district revenue limits.

In 1997-98, the Board distributed \$12 million GPR and \$15 million SEG for educational block grants. The Board anticipates distributing \$30 million GPR and \$5 million SEG for grants in 1998-99. Under the provisions of 1997 Act 27, the TEACH Board was required to submit its agency budget request with base funding shown as \$35 million for the GPR block grants, rather than the \$30 million that was actually provided in 1998-99.

Training and Technical Assistance Grants. Under this program, the Board can award up to \$6 million GPR in grants during the 1997-99 biennium to CESAs and to consortia of two or more school districts or CESAs or one or more school districts or CESAs with one or more public library boards for training and technical assistance in the use of educational technology. Grants are awarded through one funding cycle annually on a competitive basis with preference statutorily required to be given to consortia that include one or more public library boards. The Board is required, to the extent possible, to ensure that grants are equally distributed on a statewide basis. In order to facilitate the statewide distribution of these grants, funding guidelines adopted by the Board for the program provide that a single CESA may request a maximum grant amount of \$200,000. Larger consortium are eligible for proportionately larger awards with a TEACH recommended maximum grant request of \$500,000. The minimum recommended funding request for a consortium is \$10,000. Under program guidelines, the Executive Director of the TEACH Board staff may negotiate the final grant amounts to ensure an equitable statewide distribution of these funds. The TEACH Board awarded \$6 million in educational technology training and technical assistance grants to 23 consortium in December of 1998. Because of concerns over the geographic

distribution of the grants, these awards are pending at the time of writing.

Some activities and costs that could be eligible for funding under this program include: (a) staff training in the use of technology and the application of technology into the schools curriculum; (b) training public library patrons in the use of available educational technology; (c) costs of hiring substitute teachers or other temporary employees to replace staff who are attending training activities during working hours; and (d) costs of contracts, services, fees or other costs for providing educational technology training or technical assistance.

Pioneering Partners. Under 1997 Act 27, the Educational Technology Board (ETB) was eliminated. The ETB was responsible for the administration of the pioneering partners program, which provided competitive grants and loans to school districts and public libraries for the purposes of educational technology and distance education improvements including building infrastructure upgrades, staff and teacher professional development, telecommunications fee payments, curricular or administrative projects, and hardware and software purchases. Act 27, transferred the responsibility of closing out ETB-awarded pioneering partners grants to the TEACH Board. In addition, Act 27 authorized the TEACH Board to award \$5 million in final round grants, based on those applicants recommended by ETB in the February, 1997, funding cycle. The ETB awarded a total of \$14,980,000 in grants to 107 projects since June 1996. In 1997-98, the TEACH Board funded an additional 36 projects from the ETB recommendations for a total of \$4,990,000.

Telecommunications Access Program

This program provides eligible entities

subsidized access to new data lines and video links or grants for data lines and video links in existence prior to the enactment of the TEACH programs as part of 1997 Act 27. Under the statutes, the PSC, in consultation with DOA and the TEACH Board must promulgate rules establishing an educational telecommunications access program that provides eligible school districts, private schools, CESAs, technical college districts, private and tribal colleges and public library boards with access to data lines and video links. Data lines are defined as data circuits capable of providing direct access to the Internet. Video links are defined as two-way interactive video circuits.

In the 1997-99 biennium, a total of \$9,875,000 SEG is budgeted to provided access subsidies and grants to public school districts and technical college districts. A total of \$1,821,400 SEG is appropriated for providing access to new data lines and video links to private and tribal colleges and public library boards in those years. In addition, \$620,000 SEG is provided for private school subsidies and grants in the 1997-99 biennium.

Funding for this program is provided through the segregated universal services fund (USF), which receives its funding through assessments on annual gross operating revenues from intrastate telecommunications providers. The monthly assessment for TEACH, effective October 1, 1998, was set at 0.07798 percent of annual 1996 gross operating revenues from intrastate telecommunications. Assessments for this program will total \$12,316,400 in 1998-99.

Under 1997 Act 27, telecommunications providers are allowed to fully recover their share of assessment costs for USF expenditures related to the TEACH Board through a "pass-through" adjustment applied only to subscribers' local exchange service rates. Local exchange service is defined as basic local exchange service and business access line and usage service within a local calling area. The recovery of such costs may be effected by the telecommunications utility

notwithstanding any other rate adjustment provisions under Chapter 196 of the statutes affecting telecommunication utilities.

To be eligible for the telecommunication access program, the TEACH Board has adopted the policy that school and library applicants must participate in the federal E-rate program. This program provides schools and libraries with federally funded discounts on telecommunications services, Internet access and internal connections (computer wiring, hubs and routers). The TEACH staff may waive this requirement in situations where the E-rate process would prevent an institution from receiving a service in a timely fashion. Participants in this federal program are prohibited from receiving assistance from the USF for access to other education or library services similar to those provided under the federal program.

The two components of the access program, subsidized access to new data lines or a video link and grants for existing contracts, are described below.

New Data Line or Video Link. Under this component of the access program, a school district, private school, CESA, technical college district, private college or public library board may make a request to the TEACH Board for subsidized access to either one new data line or video link. Technical college districts could only participate in this component of the program after the TEACH Board determined that there was sufficient moneys for their participation. A school district with more than one high school may apply for access to both a data line and a video link or more than one data line and video link; however, by administrative rule, a school district may not request access to more data lines or video links than the number of high schools in the district.

If an eligible institution meets certain eligibility requirements, established under state law and administrative rule, and the Board determines that there is sufficient funding, DOA may provide the

school district a subsidized data line or video link. The actual access to a data line or a video link is provided by telecommunications providers under contract with DOA.

An approved applicant is required to pay DOA not more than \$100 per month for each data line or video link that relies on a transport medium that operates at a speed of 1.544 megabits per second and not more than \$250 per month for each data line or video link that operates at a different speed. The remaining cost of the data line or video link is paid by the TEACH Board, which receives its funding for this program from the USF.

The actual amount of the subsidy that the TEACH Board provides under this component of the program varies due to a number of factors including: the type of data line or video link installed, the location of the institution and the contract amounts that DOA negotiates. Based on the state contract amounts for telecommunications access, the total cost of a data line provided by DOA operating at a speed of 1.544 megabits per second is currently \$640 a month; therefore, under an annual contract term a school district would pay \$1,200 per year for the data line and the TEACH Board would pay the remaining \$6,480 per year.

The current contract amounts for the three data lines operating at a speed other than 1.544 megabits per second vary with an average cost of approximately \$2,600. Using this average cost, the school district would pay \$3,000 per year and the TEACH Board \$28,200 per year. There is also a one-time installation charge for every data line of \$350, which TEACH pays.

Video link prices are site-specific for each of the approved sites. The average video link cost in 1998 is \$2,600 per month. Using the 1998 average video link cost, under an annual contract, an applicant would have a yearly cost of \$1,200 for a link operating at a speed of 1.544 megabits per second and a yearly cost of \$3,000 for a link operating at another speed. The TEACH Board would be

Table 1
Telecommunications Access Program: Number of Services Provided by Institution Type -- As of January 1, 1999

	New Video Link	New Data Line	Existing Video	Existing Data	Total
Public School Districts	70	164	113	11	358
CESAs	2	2	NA	NA	4
Technical Colleges	16	0	NA	NA	16
Public Libraries	0	162	NA	NA	162
Private Colleges	7	8	NA	NA	15
Private K-12 Schools	4	24	2	8	38
Tribal School	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>
Total	100	360	115	19	594

responsible for \$30,000 a year for a link operating at a speed of 1.544 megabits per second and \$28,200 annually for a link operating at another speed.

As of January 1, 1999, 460 applications were approved to support 100 new video links and 360 new data lines. The monthly costs of the new data lines for the approved institutions is approximately \$223,400 of which \$187,300 would be funded with the TEACH monies and \$36,100 funded by the applicants. The monthly cost for the approved video links totals approximately \$256,400, of which TEACH will fund \$231,400 and the applicants \$25,000.

Grants for Existing Contracts. Under this component of the access program, the TEACH Board may award an annual grant to a school district or private school that had in effect on October 14, 1997, (the effective date of the 1997-99 state budget), a contract for access to a data line or video link, as documented by the PSC. Technical colleges, CESAs, public libraries and private colleges are not eligible for these grants. The Board is required to set the amount of the grant to be equal to the amount of the subsidy received by an institution under the new data line or video link access program, but the grant may not be greater than the contract cost in effect on October 14, 1997. Districts and private schools that receive funding

for existing contracts are not guaranteed the maximum monthly price of \$100 or \$250 as for a new data line or video link. In addition, an institution may not receive support for existing contracts and new lines or links under the access program. The existing contracts grant component of the access program will sunset on June 30, 2002.

As of January 1, 1999, 134 applications were approved to support 115 existing video link sites and 19 existing data lines. Of these grants, ten were awarded to private K-12 schools for a total of \$67,200 and 124 were awarded to public school districts for a total of \$1,906,200.

Table 1 provides information regarding the number of data lines and video links that have been approved for each type of institution as of January 1, 1999, under both components of the access program.

Infrastructure Loans

Under the TEACH infrastructure loan program, school districts and public libraries may apply for loans to fund the upgrading of electrical wiring in buildings in existence on October 14, 1997, and installation and upgrading of computer network wiring. Schools and libraries are required to pay one-half of the debt service on the loans and the state pays the other half. The state funding provided for debt service costs incurred in financing subsidized infrastructure loans to public libraries is not included in the state's funding of two-thirds of partial school revenues.

The Board establishes the application procedure for, and the terms and conditions of, the subsidized

loans, which may include the provision of professional building construction services from DOA. The Board also determines the interest rates on the loans, which have to be as low as possible but sufficient to fully pay all interest expenses incurred by the state and to provide reserves that would ensure against losses from payment delinquency or default. For loans approved in 1998-99, school districts and libraries can choose a loan term of two to ten years and are charged a five percent interest rate and closing costs for their portion of the loan.

Loan proceeds are generated through state general obligation bonds and offered to schools and libraries either under a lease purchase or general obligation bonding agreement. The bonding is issued by the Building Commission, at the request of the TEACH Board and with the approval of the Governor. The term of the loans made under the program cannot exceed ten years.

Under 1997 Act 27, \$100 million of general obligation bonding is authorized for school districts and \$10 million for libraries for infrastructure loans.

The Board has set up two application processes for these loans. School and libraries that began wiring projects, completed construction designs, accepted bids and signed contracts for services could apply under the fast start process, which closed on August 10, 1998. The TEACH Board allocated \$25 million of the \$100 million available for school districts for these one-time fast start loans. TEACH received 102 applications from school districts for just over \$25 million under the fast start process. As of January 1, 1999, the TEACH Board approved 90 fast start loans for a total of \$22.6 million in 1998-99.

Under the second process, school districts and libraries that just started wiring projects may apply for a loan under the standard start process. Applications under this process are accepted on a continuing basis and are reviewed each month.

TEACH staff intends to fund all eligible expenses for applicants whose buildings are less than 70% wired, based on the following analysis: (a) the number of classrooms in the school district that have been previously wired, divided by the total number of buildings in the district; (b) the number of classrooms wired for data access in the school district, divided by the total number of classrooms in the school district; (c) the average number of data jacks per wired classroom, divided by the number of students per classroom; and (d) the number of buildings in the loan request for new wiring, divided by the number of buildings not wired. These factors are averaged for each applicant to produce a composite percentage of wiring need. Twelve school districts have applied for loans under the standard start process as of January 1, 1999.

Three public libraries have applied for wiring loans under the fast start program, for a total of approximately \$420,000 of the \$10 million available for public libraries. As of January 1, 1999, no libraries have applied for a loan under the standard start process.

Other Educational Technology Related Activities

The TEACH Board is also working on a number of other educational technology activities in addition to administering access, loan and grant programs. The Board, in cooperation with the Division of Information Technology Services (Info-Tech), provides assistance to eligible educational institutions in procuring educational technology service and equipment, if requested. In addition, in an effort to improve statewide school district compatibility and efficient exchange of information, Info-Tech and TEACH are working on the development of guidelines for desktop hardware and software used by school districts and other

eligible educational institutions. These guidelines will not be mandatory and will not require school districts to purchase any one type of software package. Staff from both agencies are in the process of developing a clearinghouse of state and University bulletins and Info-Tech procurement information which will be available on the TEACH Board website. The website also contains information and application materials for each of the TEACH programs, Board meeting agenda and minutes and links to educational technology related information.

In cooperation with DPI, TEACH and Info-Tech are working on the development of guidelines for

administrative software used by school districts to report to DPI and TEACH, as well as other administrative software packages utilized by school districts including financial, library cataloging, attendance and grading packages. In addition, Info-Tech and TEACH will work with the relevant CESA staff to assist school districts with technical training, software and hardware procurement, guideline development and technical assistance.



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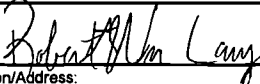
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