

Port Angeles School District
Community Technology Advisory Committee Report
March 27, 2006

BACKGROUND

Over the past few years technology has become increasingly important to Port Angeles School District students. During the past five years schools have been using a combination of district capital funds, grant funds, and gifts to support technology purchases, installation, and training. Among the largest single grants was the BILL & MELINDA GATES *foundation* Model Schools Grant for school reinvention, a portion of which was permitted to be spent on technology. District-wide infrastructure acquisition received significant support from the district's portion of the grant. The Microsoft Teacher Leader Project grants received by nearly three dozen district teachers represent another significant influence on district technology.

The district has for several years prepared a technology plan as required by the state. The school board has approved the plan, and been unable to provide resources to fund many of the components. The one-time funds devoted to instructional technology have, with minor exception, been spent. Computers and infrastructure requires significant investment to maintain and replace. Operating budget reductions undermine the district's ability to support classroom technology needs. The board received technology training from the Washington State School Directors Association, and asked community members to review the district's technology plan.

The board wished an examination of the plan's relevance to the community's needs, and to better understand the community's willingness to commit resources to achieve technology education goals. The Community Technology Advisory Committee (CTAC) was created in November 2004 and given the following charge:

1. What changes, if any, would improve the three year tech plan adopted by the Board?
2. From a technology perspective are there any components of the plan that ought to be adjusted?
3. What level of funding request to support the plan is reasonable?

The committee met twice in 2004 and made the following recommendations:

- The committee recommended to the board that a Technology Levy be presented to voters.
- Technology needs must be seen as a utility, just as important as electricity in schools.
- No matter what level is chosen for the tech levy, some portion must go for professional development, but this needs to be marketed as technology training.
- The levy should be presented to show improved access to technology for teachers, students and parents. Suggestion is to have school labs open at night possibly for adult education.
- The technology plan needs more emphasis on video conferencing and distance learning. The goal should be to have at least one video conferencing classroom in every building. The long-term goal should be to have this available in every classroom.

- Tie WASL 2014 graduation requirements to educational technology. Graduates must be prepared to use technology in business or college.

The Community Technology Advisory Committee recommendations were incorporated into the 2005 District Technology Plan.

In 2005, the Board authorized a Technology Levy to be run in conjunction with the Maintenance & Operations Levy in February 2005. The Tech Levy did achieve a 52% level of support, but both levies failed to achieve the needed super majority.

At their special meeting on December 7, 2005 the board tasked the Education Technology Committee to reexamine student access to district computers, and, to forward their recommendations to the Community Technology Advisory Committee. The Education Technology Committee recommendations were:

- **Professional Development for information technology must be given a high priority.**
Ongoing training of teachers and support staff is necessary to continue to prepare students for the world they will be living in after graduation, either work or higher education.
- **All district computers must meet or exceed the state hardware standard.**
The district needs to be able replace equipment that has become technologically obsolete or has failed. Without resources, failed equipment cannot be repaired or replaced. More than half of the district's computers do not meet the state standard, next year that will jump to 90%. Currently 10% of our student computers do not function. Many functioning computers will not run standard software. Some of our computers are ten years old. Very few student computers have been purchased over the past two years.
- **25% of the district's computer technology (hardware) must be replaced annually.¹**
Technology changes rapidly and new software does not run on older equipment. Timely replacement means that teachers are able to use new teaching tools when they become available.
- **The district-wide ratio of one computer per four students must be maintained.**
The ideal ratio is one to one, but the committee felt that the one to four ratio was adequate at this time. As unit costs decrease, the ratio can increase.
- **All classrooms must be equipped with document projection systems.**
Being able to project student work quickly to share with the whole class greatly enhances learning. The projectors are also capable of showing videos from a variety of sources, including streaming video. Streaming video allows teachers to use the newest currently relevant material in their classrooms.
- **Other technology should also be valued and funded, e.g. science labs, arts, fitness.**
Too often the focus is just on Information Technology. Other areas have technology needs that should be addressed with a technology levy. (Science labs, art, fitness, etc.)

The Committee Technology Advisory Committee endorsed the Educational Technology Committee's recommendations.

¹ Industry standards range from 100% to 33% annually, education standards typically are 33% to 25% annually

PROCESS

Chairman, Gary Smith called the committee together on March 17, 2006. He reviewed the extensive inventory that the district was trying to maintain with few capital resources. Currently when any of the district's computers fail they are often not being repaired due to lack of funds. No new student computers have been purchased for nearly two years due to budget constraints. He noted that less than 10% of the district's computers meet industry standards, 30% meet the district's minimum standards and only half meet the state's standards. Jim Jones, Executive Director of Business and Operations pointed out that with out capital resources, the district is not standing still but backing up. Computer technology rapidly becomes outdated. Old computers cannot run the newest software

The federal No Child Left Behind (NCLB) legislation has a strong emphasis on the use of technology to enhance and improve education. The NCLB focus is on teacher preparedness, but the law notes that there must be good support of the technology for teachers to trust and use the technology effectively. Unless we can show ongoing support for the technology, teachers will be reluctant to use it to deliver instruction. Having a reliable technology levy supported by the voters will be crucial.

In anticipation of NCLB standards, the state of Washington is developing state technology standards. These standards are likely to be in place by early 2007. While no specific ratio of computers to students will be identified, there will be a strong suggestion in the standards that the appropriate level of funding be \$250 to \$500 per student per year for technology. At the \$250 level, this equates to \$1 million dollars of funding for technology per year for the Port Angeles School District.

Mr. Jones reviewed timelines for possible future levies for the committee. He also provided some data on the number of other districts with tech levies.

The CTAC's primary discussions focused on how to communicate the importance of technology to the community. Many issues were discussed. Committee members felt that we need to show how the technology used in the classroom by well trained teachers translates into improved learning. Some committee members believe that the general public sees computers only as objects used by a few teachers for a few students, and not that important to general education. Len Beil felt it was important to get community members to the schools, especially elementary, to see how teachers use technology in the classroom.

Several committee members related stories of how important good technology skills are to their businesses. Ken Jacobs and Steve Snyder stressed the importance of good technical skills for students going on to college.

COMMITTEE RECOMMENDATIONS

The Community Technology Advisory Committee recommends that the Port Angeles School Board of Directors approve a technology levy at 42¢ per thousand for two years in September 2006².

The Community Technology Advisory Committee believes by running this levy in September 2006 there is an excellent chance of it passing. The levy could be run concurrently with the September primaries with little cost to the district. The Committee felt that running the levy in September would lend momentum and support of the Maintenance and Operations levy in February 2007. Further, we believe that the tech levy cannot be run concurrently with the M&O in 2007 as it may tend to confuse voters. It would be difficult to run the tech levy in the fall of 2007 due to the number of board elections being held at the same time. Waiting until late winter of 2008 will put the district's technology too far behind and our kids at risk of not being prepared for the future.

The Committee felt strongly that the Tech Levy must become as important as the Maintenance & Operations levy. A strong school district is vital to our local community. Without funding for technology this is not possible.

The Committee wants to assure the Board that they are willing to work to make the levy a success.

Questions about technology or budget items may be sent to the Port Angeles School District at **budget_questions@pasd.wednet.edu**.

Budget suggestions may be sent to **budget_ideas@pasd.wednet.edu**.

² Appendix A lists the committee's recommendation on how levy monies should be used.

Appendix A

How Tech Levy Funds Should Be Used

Equipment Replacement	\$605,000
Teacher Training	220,000
Other Technology (non IT) ³	70,000
Small parts replacement ⁴	<u>45,000</u>
Total	\$940,000

³ This would include equipment for science, art, physical education, etc.

⁴ The Information Technology department use a large number of small capital items to maintain the district's data and phone network. These monies would be used for telephones, headsets, keyboards, etc.

Appendix B Improving Learning with Technology: What Works

There is a growing body of research that technology can have a positive impact on student achievement if certain factors are present.

- Research reviews have generally concurred that:
- *When combined with traditional instruction, the use of computers can increase student learning in the traditional curriculum and basic skills area.*
- *The integration of computers with traditional instruction produces higher academic achievement in a variety of subject areas than does traditional instruction alone.*
- *Students learn more quickly and with greater retention when learning with the aid of computers.*
- *Students like learning with computers and their attitudes toward learning and school are positively affected by computer use.*
- *The use of computers appears most promising for low achieving and at-risk students.*
- *Effective and adequate teacher training is an integral element of successful learning programs based or assisted by technology.*

While evidence indicates that computers can help students improve their performance on tests of basic skills, many researchers investigating the use of technology in education have found that technology is most powerful when used as a tool for problem solving, conceptual development, and critical thinking. For more information, see [Improving Learning with Technology: What the Research Says](#), the [ETDC Educational Technology Research Clearinghouse](#), or the [Focus on Effectiveness](#) website.

Technology Solutions That Work: Early Literacy and Secondary Mathematics The [Technology Solutions That Work \(TSW\) Database](#) from the Metiri Group is designed to put research about early literacy software and secondary mathematics at the fingertips of every interested educator in Washington State. It provides a comprehensive analysis of what research says works and doesn't work with technology products intended to improve reading and mathematics, and also gives information about the targeted audience for which the materials were designed to impact. In particular, it may help educators to find technology solutions that increase learning among students who are underachieving. Availability of this database does not imply endorsement by OSPI of any software programs listed, but rather is intended to be a resource to assist districts and schools in their consideration of software purchases.

The products in both subject areas are grouped into categories of *What Works*, *New and Promising*, *Inconclusive*, and *Can't Recommend*. Within each category, the Literacy products are grouped by comprehension, fluency, phonics, vocabulary, and phonemic awareness, while the Mathematics products are grouped by numbers & operations, measurement, algebra, geometry, probability and statistics, advanced or integrated, and problem-solving.

All Washington schools now have access to these online research databases through April 2006 at no cost. In order to access the information contained on this site, it is necessary to get a "token" from your district technology, reading, or mathematics specialist. If your district does not already have a token, contact your regional [Educational Technology Support Center \(ETSC\) Director](#), or the Reading, Mathematics, or Educational Technology office at OSPI.

For more information on how this tool fits with other reading or mathematics instructional materials, visit the OSPI [Reading](#) or [Mathematics](#) websites. For additional "how-to" directions on getting started with the database, go to <http://www.edtech.wednet.edu/resources/metiri/>.

Appendix C**Excerpt from No Child Left Behind (NCLB) Act**

Title II, Part D, Goal 2(a) of the NCLB Act states that by eighth grade each student must be technologically literate. The sample of technology literacy standards below suggests the proficiencies necessary for a student to be considered technologically literate. These standards were developed by the U.S. Department of Education and the International Society for Technology in Education. The proficiencies in each grade build upon previous ones, enabling the students to reach technological literacy by the eighth grade. A major focus of the technology literacy standards is their integration into each content area within each grade level.

1. Basic Operations and Concepts

Demonstrate an understanding of the use and purpose of a variety of technology devices and learning resources.

2. Productivity Tools

Ability to use technology productivity tools for creative purposes and for content-specific use to support learning and research.

3. Social, Ethical, and Human Issues in Dealing with Technology

Demonstrate an understanding of social, ethical, and human issues dealing with technology, such as working independently or collaboratively with others and understanding changes in information technologies and their effect legally, ethically, and socially.

4. Technology Communications Tools

Ability to use technology communications tools to gather information, communicate with others, and create products either independently or collaboratively.

5. Technology Research Tools

Demonstrate the use of technology research tools for problem solving and illustration of ideas in order to accomplish a variety of activities.

6. Technology Problem-Solving and Decision-Making Tools

Use technology problem-solving and decision-making tools to demonstrate an understanding of technology tools and their application to learning, and to evaluate electronic sources.

Appendix D Community Technology Advisory Committee Membership

	Committee Composition	Volunteers	
	Nippon Paper	Scott Adams	
	Pacific Office Equipment	Tom Baerman	
	Citizen	Leonard Beil	
	First Federal	Daniel Bradshaw	
	Clallam County Board	Mike Chapman	
	City of Port Angeles	Jim Harper	
	Port Angeles School District Board	Jeff Hinds	
	Lower Elwha	Tracey Hosselkus	
	Peninsula College	Ken Jacobson	
	Peninsula College	Emma Janssen	
	Port Angeles School District	Jim Jones, Jr.	
	Port Angeles School District Board	Charlie McClain	
	PenComm	Naomi Riggins	
	CPI	Bill Roberds	
	Mayor, Port Angeles	Karen Rogers	
	League of Women Voters	Vicci Rudin	
	IT Director, Port Angeles School District	Gary R. Smith	
	Peninsula College	Steve Snyder	
	Surgeon	Robert Watkins	