

Barneveld School District *Information & Technology Plan* **2009-2012**

*This is a three-year, combined comprehensive
information and technology plan.*

Barneveld School
PO Box 98
Barneveld, Wisconsin 53507

Joe Bertone, District Administrator

Approved by the Board of Education on January 14, 2009

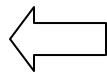
Information Technology Literacy Skills

EXECUTIVE SUMMARY

Since a major remodeling project thirteen years ago, the Barneveld School District has been committed to creating and maintaining a solid infrastructure for technology applications. With a computer to student ratio of less than 3:1, and with at least one computer in every classroom, computers are readily available throughout the school. However, just having ready access to hardware and software is not sufficient to assure that our staff is technologically literate, or that our students are proficient in 21st century skills.

Our students need to develop these skills that will be vital in living and working in an information-based world. These identified skills include:

- digital literacy
- inventive thinking
- communicating effectively
- working cooperatively
- ability to create high quality products.



21st century skills

Technology provides us with a wide array of tools to help develop, master, and apply these critical higher level thinking skills.

The district also must provide opportunities for ongoing and sustained technology staff development, so that teachers transform their curriculums to a student-based learning mode.

Our previous Technology Plan placed emphasis on hardware, software and networking, along with a Staff Development plan to bring our staff up to speed with technology applications. Since that time, hardware has been added, the network updated and more online resources have become available. The Library/Media program has become more integrated with subject or grade level curriculums. Now a Technology Planning Committee is formulating a new plan, based on the results of recent staff and student assessments. With the support of the administration, this new technology plan will be molded to meet our identified needs.

Table of Contents

1. INTRODUCTION			
1.1	Evidence of Relevant Research and Best Practices Review		4
1.2	District Information and Technology Vision Statement		6
1.3	District Information and Technology Mission Statement		6
1.4	Indication of Relationship between Plan and Vision and Mission Statements		6
2. BACKGROUND			
2.1	Community/School District Demographics		7
2.2	District Information and Technology Team		7
2.3	District Technology Planning Committee		8
2.4	Overview of Planning Process		8
2.5	Community Resources and Adult Literacy Providers		8
3. CURRENT STATUS AND NEEDS ASSESSMENT			
3.1	<u>Assessment of Progress Toward Previous Plan's Goals</u> Achieved/Postponed/Continued/Modified Objectives		9
3.2	<u>Reflections on Wisconsin Information and Technology Planning Focus Areas</u>		
3.2.a	Analysis of Educator Proficiency		15
3.2.b	Analysis of Effective Teaching and Learning Practices		18
3.2.c	Analysis of Access to Information Resources and Learning Tools		19
3.2.d	Analysis of Support Systems and Leadership		20
4. GOALS AND OBJECTIVES			21
5. IMPLEMENTATION ACTION PLAN			25
6. DISSEMINATION TO STAKEHOLDERS			34
7. MONITORING, EVALUATION, AND REVISION OF THE PLAN			34
7.1	Monitoring and Evaluation Process		
7.2	Process of Reporting to Community Stakeholders		
7.3	Process and Timeline for Ongoing Long-Term Planning		
APPENDICES			35

1. INTRODUCTION

1.1 Evidence of Relevant Research and Best Practices Review

Evidence that the planning committee reviewed the Relevant Research and Best Practices

Education must take an introspective search to determine how best to prepare our students to succeed in the 21st century. According to *Digital Economy 2003*, a study by the U.S. Department of Commerce, education lags behind most industries in incorporating technology. Research confirms that the manner in which technology is used in the schools determines whether there is a positive impact on education. Barnett's study in 2001 (ERIC Digest, October 2001) concludes that using computers primarily for "drill and practice" is much less effective than using computers as tools in active learning processes like collaboration, problem-solving and communication. Three conditions were important in making computer learning effective:

- Students have ready access to computers
- Technology is available in the classroom and in lab settings
- The role of the teacher shifts more to that of a facilitator
- The software meets both student needs and instructional objectives (Barnett, 2001)

The 21st century learner also needs to be presented with learning that is based on authentic inquiry and problem-solving based learning. According to a study by Kimble (Kimble, 1999) technology allows students to gather and manipulate real world data through use of spreadsheets and databases. This allows learners to produce authentic end products and to share and collaborate with others who are working on the same problem. Using technology in this way to promote higher level thinking skills produces significant learning gains in students.

However, a paradigm shift cannot occur in our school without proper preparation of the teachers themselves. Just having access to technology itself does not guarantee change. Research shows that professional development programs are successful if they contain these elements:

- Training that is embedded in curriculum development planning
- A measured "Phase-in" of technology skills so that teachers can comfortably and confidently master the skills
- An overall awareness and realization by teachers of how learning and teaching have evolved (Schwab and Foa, Phi Delta Kappan , April 2001)

A NCREL study entitled "Critical issue: providing professional development for effective technology use" found that the classroom teacher was the most important factor in the full and effective implementation of technology in schools. The study emphasized the importance of

relating technology staff development to student learning and applications directly to the curriculum. This process should be planned carefully to allow time for teachers to master skills and imbed the technology into their curriculums by providing on-going support and sufficient resources.

A key component in a successful educational program is a robust and high quality library media program. Numerous studies by Curry Lance et. al. in a number of states shows clearly the positive correlation between a strong library media program and student achievement. Key to success was the role of library media personnel in collaborative activities with classroom teachers, the quality and depth of available resources and their accessibility. These gains were shown in a variety of socio-economic settings and under a number of other varying factors, such as teacher experience and teacher-pupil ratio.

Woods and Blanche (School Library Media Manager, 2008) showed a direct correlation between student achievement and school library/media programs who were lead by library media specialists who served in the role of librarian/media specialists/teachers. This hybrid modern role requires personnel to work collaboratively with teachers in meeting the intellectual needs of students, assist teachers and students in locating, processing and presenting information. The new librarian also manages, organizes and maintains information resources and teaches information skills. The library still plays a vital role in promoting reading, not just in print, but in all formats. The library media specialist is not only a teacher, but an administrator, information specialist, and collaborative instructional partner.

Now nine years into the 21st century, we must take a long introspective look at the teaching and learning that takes place in our district. Literacy takes on an added dimension to include information and communications technology. Students function in a media rich environment and embrace this fast moving, dynamic and engaging medium. Their school environment must mirror the real world, allowing them to play a part in inquiry and problem-solving activities, Teachers also are 21st century learners. They must be adapters, visionaries, collaborators, risk takers, learners, communicators, learners and modelers (Solomon, 21st Century Connections). Implementation of our Technology Plan will help insure that our curriculum reflects the real world that our students must function in.

1.2 District Information and Technology Vision Statement

The Barneveld School District strives for academic excellence. To that end, Information and Technology Literacy become seamlessly integrated throughout the curriculum. This opens up a broad base of learning experiences, creating successful life-long learners who experience, create and solve real-world problems in a dynamic information-drive society.

1.3 District Information and Technology Mission Statement

To provide a robust information and technology program that provides students with skills, attitudes, and knowledge to become successful learners and doers in a rapidly-changing global digital society.

1.4 Indication of Relationship between Plan and Vision and Mission Statements

It is the intent of the Barneveld School District to empower each student with the attitudes, knowledge and skills to become a life-long learner by providing an environment that values curiosity, challenge, cooperation, respect and creative and critical thinking. The District's Information and Technology Vision and Mission statements strongly support the District's mission statement. Barneveld School District has always been proud of its ability as a small school district to provide quality education to our students. We realize that our graduates enter an intense world of competition at institutes of higher learning and in the world of work. Our students must be prepared to solve problems, work collaboratively and to locate and evaluate information.

2. BACKGROUND

2.1 Community/School District Demographics

Barneveld is a small rural community, population of about 1100 people, with an additional 1000 people residing in the township of Brigham. The population continues to rise slowly as several subdivisions have been built at the village outskirts. There are a few small businesses—a farm implement dealership, a concrete plant, a golf clothing business and an electronics factory, to name a few. The majority of adults in the village and township are commuters. The number of farmers in the district continues to fall, and the remaining farms are becoming larger. The community is slowly becoming more ethnically diverse, although the minority population is still small. The school is a preK-12 district housed in one building, although the pre-K program is held in the nearby public library. There are 461 students, including 36 students in the pre-K program. Economically disadvantaged students are only 14% of the population. The district is unique in that almost 25 % of the staff are themselves graduates of Barneveld.

2.2 District Information and Technology Team

Names and titles of District Information & Technology Team

Ray Rickert - Technology Coordinator

Mary Roenneburg - Library/Media Director

Don Hugill - Parent

Tami Bowser - Parent and school board member

Deb Kabler - Barneveld Public Librarian

Joe Bertone - District Administrator

Kevin Knudson – Principal/Athletic Director

Duane Elfering - Technology Education teacher

Ted Thompson - School board member

Pete Shatrawka - Parent and school board member

2.3 District Technology Planning Committee

The planning committee consists of all the members of the Information and Technology Team

Adult literacy/Community-School Relations Sub-committee

Deb Kabler - Barneveld Public Librarian

Ray Rickert - Technology coordinator

Mary Roenneburg - Library/Media Director

2.4 Overview of planning process

The Information and Technology Plan Committee started discussion on the revision of the Technology Plan in April, 2008. A tentative timeline was established for activities in the fall. In April middle school teachers completed an assessment of the 8th grade information technology literacy skills. Staff members themselves were assessed using Loti and a locally-produced online survey in August. On September 10th, 2008 the entire Committee met to review DPI guidelines and go over the results of recent assessments. It was decided that drafts to the Technology Plan would be posted online, and an online discussion and editing forum be set up. Ray Rickert and Mary Roenneburg attended two workshops sponsored by DPI on September 24th and October 6th at CESA 3. Staff members were contacted requesting input on how we could restructure our staff development program based on results from our surveys. An eighth grade assessment based on TRAILS and a locally-produced survey was conducted in October, 2008.

2.5 Community Resources and Adult Literacy Providers

Community resources and adult literacy providers explored or utilized in the plan

The Barneveld Public Library is working with the school district on community programs on environmental education. These programs will be held twice a year, with speakers and activities taking place in the local area. Students will be involved by preparing projects based on the environmental themes.

A need was identified to make computers more accessible to our elderly population. There are only a limited number of computers available for public use at the public library. The school will donate used computers to the senior center and offer workshops on beginning computer use.

Distance learning classes offering continuing education to health professionals, fire/rescue personnel and local farmers have been made available to the community for almost thirteen years. Programs that have been held in the past include Master Gardening, Nurse Certification and Agricultural Production.

3. CURRENT STATUS AND NEEDS ASSESSMENT

3.1 Assessment of Progress Toward Previous Plan's Goals

Goal 1: To use technology to increase efficiency, access information and enhance communication between and among staff, students, parents and the community, and to forge a commitment from the entire educational community to prepare students for the world beyond the classroom					
Objective 1: <i>By June 2008, the District will have in place a complete infrastructure to support management and communication systems</i>					
Activities	Person(s) Responsible	Resources Needed	Timeline	Evidence of Progress	Actual achievement level
Update school web page a. Post school information forms b. Teacher web pages c. Community/business links	Tech coord. IMC director, admin., community leaders, PTO	Time, server space	12-05 through 6-08	Log of web page updates	School web page updated, some forms now posted: only a few teacher web pages are on site: only a few community/business links included
Develop community survey to determine technology training needs	Tech. coord. and IMC director	Time	3-06	Compiled results	Survey in spring 2008 showed no interest: community class was offered in Oct. 2008
Improved teacher-parent communication and parental access to student info	Tech coord., admin., teachers	Time, Skyward updates	6-06	Survey parent usage, Family Access log reports	Skyward parental access to student grades, attendance, lunch account info.

Offer community workshops on identified needs	Tech coord. and IMC director, interested staff and community members	Time	6-06	Presentation of at least two workshops	9-07 Internet safety workshop for parents
Student intraschool communication	Tech coord.	Time, software	6-07	Student accounts established	Due to concerns about network security and student safety. This was not implemented
Work cooperatively with village officials on meeting community technology needs	Tech coord., IMC director, admin, community leaders	Time, cooperation with community leaders	6-07	Coop. school-community plan	A school-wide security camera system was implemented with cooperation from law enforcement and other local safety personnel

Goal 2: District stakeholders commit to developing technical solutions in alignment with educational needs increasing student and teacher productivity

Objective 2.1: *By June 2007 the level of technical support personnel needed will be evaluated and addressed*

Activities	Person(s) Responsible	Resources Needed	Timeline	Evidence of progress	Actual achievement level
Survey to determine level of tech support	Tech coord., admin.	time	6-06	Survey results	Survey in Sept. 06 and Aug.08
Create student media aide course at high school level	Tech coord., IMC director, guidance, principal	Time, sample guidelines	9-06	Students enrolled in class	Course was created in Sept.06; a summer student aide has been hired each summer since 2005 to help with computer maintenance

Add tech. aide	Tech coord., admin	District funds	9-06	Aide hired at least 50%	Aide position was present in 06-07, but position eliminated due to budget cuts
----------------	--------------------	----------------	------	-------------------------	--

Objective 2.2: *By June 2007 hardware, software and other information sources, both print and non-print, will be distributed to meet educational needs*

Activities	Person(s) Responsible	Resources Needed	Timeline	Evidence of progress	Actual achievement level
Add lab	Tech. coord., admin.	District funds	6-06	Completed open lab	Elementary computer lab was upgraded and retrofitted
Purchase and install SRA software	Tech. coord., library	District funds	6-06	Software installed in lab	SRA software installed for 05-06 school year: network comp. issues caused use to change to EasyTech in 9-07
Form elem. Software Committee	Tech. Coord., library, comm.. members	time	6-06	Written guidelines for choosing/implementing elem. software	Committee has met several times since 2005 and made recommendations
Upgrade network bandwidth	Tech. coord.	District funds	6-06	Installation	Capacity has been upgraded from 3 Mbps to 5 Mbps within last 2 years
Purchase and install online subscriptions and databases	Tech. coord., library	District funds	9-06	Software installed in media center and labs	Have purchased World Book (all editions), netTrekker, Easy Tech,

					Enchanted Learning, I Know That, Kidspiration
Upgrade existing circulation software	Tech. coord., library	District funds	12-06	Software installed on all workstations	Have updated with periodic product upgrades but still using InfoCentre
Analyze print collection annually	Library	time		Follett Titlewave analysis	Analyzed yearly with Follett Titlewave
Evaluate need for wireless, laptops, implement as needed	Tech coord.	Equipment, time	9-08	Survey of teachers and students	Some wireless laptops added, as well as wireless printing stations
Upgrade media center, print collection to meet curriculum changes	Library	Common School funds	12-07	Ordering new materials	Heavy weeding and purchase of elem. Nonfiction and fiction materials
Create mobile lab w/laptops and wireless as needed w/ network access	Tech. coord.	Equipment, time	9-08	Inventory, log of usage	Teachers did not see this as a need as computer labs available for use; some wireless access points added throughout building

Goal 3: To provide ongoing sustained training and support for staff to integrate instructional design with technology to improve student learning across all content areas.

Objective 3: *By June 2008, 100 per cent of teaching staff will show proficiency in District Technology Literacy Standards*

Activities	Person(s) Responsible	Resources Needed	Timeline	Evidence of progress	Actual achievement level
------------	-----------------------	------------------	----------	----------------------	--------------------------

Develop staff benchmarks	Tech. coord., library, admin. Tech. Committee	Time, sample standards	9-06	Completed standards	All staff were expected to master existing programs (netTrekker, Kidspiration, I Know That), training was presented
Develop staff tech training plan	Tech. coord., library, admin. Tech. Committee	Time	9-06 through 6-07	Completed plan	A specific and detailed plan was not completed: main obstacles were lack of in-service time and lack of funding for reimbursement
Present summer workshops	Tech. coord., library, outside hires	Time, stipends	9-07	Log of teacher participation	Not completed, no funding
Train team leaders to model tech. use	Tech. coord., library, team members	Release time	9-07	Team leader team established	Not completed, no funding
Continue to monitor staff integration of technology	Tech. coord., library, staff	Time	6-08	Compiled results enGauge	Surveys were administered

Goal 4: Students, staff and community will use, access and apply information technology skills to facilitate and work with higher level thinking skills in the learning process.

Objective 4: *By June 2008, 100% of students will score in the proficient or advanced levels of WKCE assessment in reading, language arts and math.*

Activities	Person(s) Responsible	Resources Needed	Timeline	Evidence of progress	Actual achievement
Develop benchmarks for 8 th gr. Technology literacy	Tech. coord., library, staff	Time	6-06 to 6-08	Completed benchmarks	Continued alignment of curriculum areas to ITL Standards

Train elem. staff SRA software	Tech. coord., library, staff	Time, software	6-06	Log of training	Completed.
Survey community to identify interest in educational opportunities	Tech. coord., library	Time	6-06	Survey results	Survey administered 9-06, no interest expressed
Develop educational opportunities for community members utilizing school's technology resources	Tech. coord., library, SRTNC, community members	Time	9-06	Class outlines, log of offerings	Classes available through distance learning
Identify Curriculum areas that meet ITL standards and areas where standards are missing	Tech. coord., library, staff	Time, ITL Standards, local curriculums	12-06	Teacher survey, documentation of curriculum, areas	Survey March 08 showed few gaps
Review and Identify ITL benchmarks	Library, staff	Time, Wis. ITL Standards, local curriculums	12-06	Documentation of benchmarks	Completed in May 08

Success Stories of Current Plan directly affecting educational environment

One of the most effective and successful initiatives of the current plan was the implementation of Skyward Family Access. This is a feature of our student records software that allows parents to access their child's information on-line. They can access discipline, grades, assignments, schedule, and food service information. It has been a huge asset for parents and aided them in playing a more active role in their children's education career. There are few other technology initiatives that have made such an immediate and positive impact. It has greatly improved the communication between parent and teacher with email addresses being readily available. Family Access has become an integral part of the educational program at the Barneveld School District and will continue to be.

Recently the district felt the need to invest in a video surveillance security system with lock down capabilities at front and rear entrances and internal monitoring of hallways and external building premises. It has greatly reduced discipline issues within the school and improved the safety of everyone. Not only has the security system has proven to be a major deterrent in acts of vandalism, stealing and bullying but also an invaluable asset in apprehending the suspects. The district took the initiative after neighboring school district had break-in's and vandalism, and before a worst case scenario occurred. The security system is tied in with the local

police department which allows them access to the cameras if needed to help monitor or defuse a critical situation. In the event of a major crisis parents can be notified from the student record system using the Message Center via an emergency email.

It is important that students have a safe environment and that the community takes an active role in supporting their education. Although the classroom environment is crucial to a students learning, it is equally important that life outside of the classroom also supports a students overall education. It takes parents to have a child but a community to raise one.

3.2 Reflections on the Wisconsin Information and Technology Planning Focus Areas

3.2.a Analysis of Educator Proficiency

A local survey was developed and administered to staff members through Zoomerang in August 2008. The survey explored three areas:

- Proficiency with software application programs
- Technology training
- Hardware needs

The survey showed that most teachers now feel comfortable with basic Word processing, e-mailing and publishing. They showed less proficiency in database applications (11% comfortable), and using projection devices (23 % comfortable). They also did not share technology experiences with colleagues at school (only 15 % regularly shared) and there was no sharing with peers at other schools. When asked about their preference for delivery of technology staff development, almost half the staff did not feel all-day workshops either during the summer or during in-service days were effective. 59% were open to the idea of following an independent study curriculum online. 63% expressed desire to either work with a small group or one-on-one with a trainer. Regarding hardware and infrastructure, 50% of teachers identified having more networked printers as the first or second priority. Almost a third (32%) ranked having electronic whiteboards as a high priority.

Teachers also participated in a LoTi assessment in August 2008. Five empirically-validated professional development categories were assessed:

- Proficiency with technology use
- Student influences with instructional practices
- Using technology for complex thinking projects
- Locating resources and/or assistance to increasing existing classroom technology use

- Overcoming challenges to beginning classroom technology use

Using technology for complex thinking projects was clearly the category identified as being a high priority for professional development (12 out of 25), while all other categories were identified as mid-level priorities.

In the LoTi Technology use profile generated a profile of each participant in three areas:

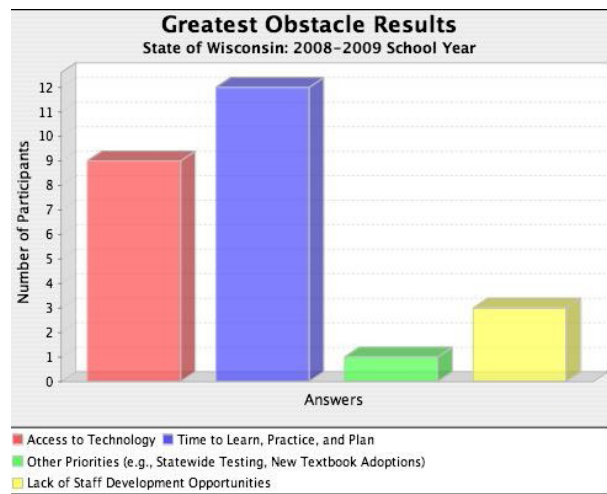
- Level of technology implementation (LoTi)
- Personal computer use (PCU)
- Current instructional practices (CIP)

The median level for LoTi was at level 2, “exploration”. Approximately one-third of the staff had progressed to level 3, “infusion”.

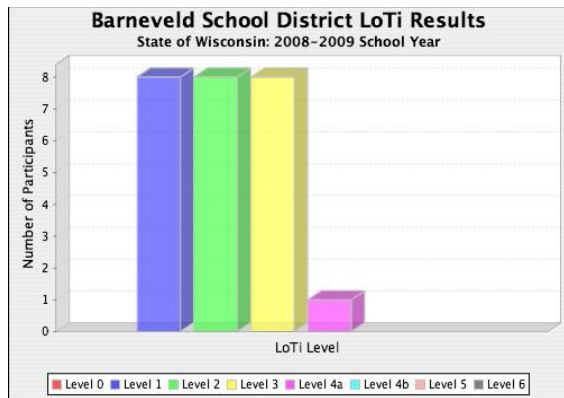
The median PCU score was level 5, “somewhat true of me now”. Five teachers were at levels 5 and 6.

The median score for CIP was level 4, “somewhat true of me now”. Only two teachers chose levels 6 and 7.

84 % of respondents felt technology was relevant to their instructional setting. One other important point identified by the survey was that a majority of the staff identified lack of time to learn, practice and plan (13 of 25) as the greatest obstacle to utilizing technology.



Overall, the LoTi findings show us that although teachers have adequate access to computers and are comfortable in their basic operations, there was limited progress in transitioning from a teacher-centered curriculum to a learner-centered one. 64% of users were in levels 0-2 of the LoTi framework for technology integration.



Median LoTi Score: Level 2 (Exploration)
Mode LoTi Score: Level 3 (Infusion)

Recommendations were to move more teachers from the lower levels (0-2) to higher levels (4a) of implementation. Staff development should center on increasing participants’ confidence and competence with designing level 4b (Target Technology) instructional modules.

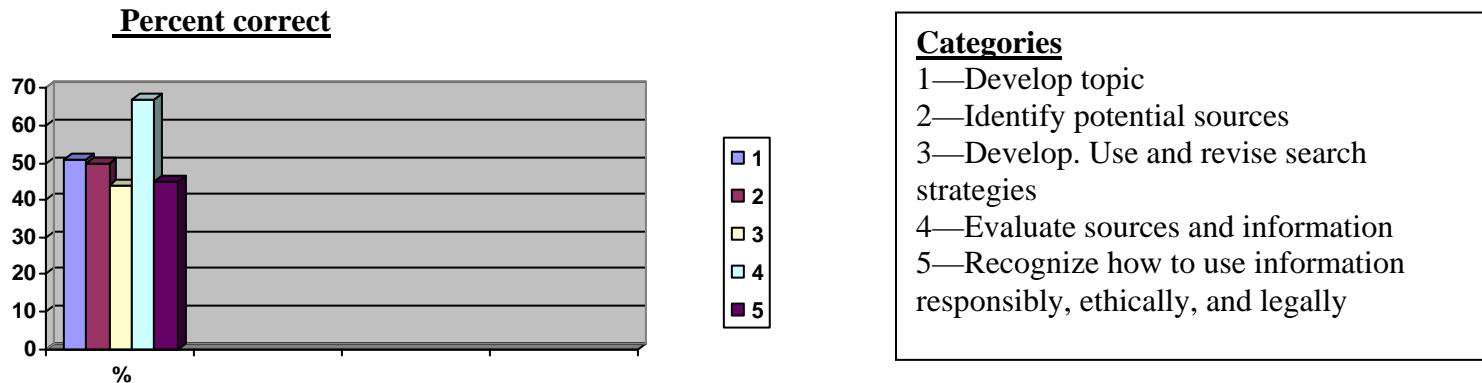
Another important item to note is that in the past the Technology Coordinator and the Library/Media Director alone have been responsible for almost all technology training. With no other staff members available to help share the load, it is extremely difficult to provide consistent and comprehensive technology planning and training to all staff members. Training of peer staff technology mentors and student assistants would allow more immediate and personalized training and help to teachers.

3.2.b Analysis of Effective Teaching and Learning Practices

In March 2008 teachers of middle school students were asked to align their curriculum standards with those of the Information Technology Literacy Standards. Comparing the results to a 2005 survey showed that alignment has improved from about 75 to 95 per cent. By the end of 8th grade our students have taken part in activities aligned to almost all ITLS standards. Middle school students participate in many joint library/information-classroom projects, ranging from making brochures of imaginary companies in Publisher, to producing video taped simulated interviews of Civil War figures, to making online Jeopardy quiz games. These projects occur in all subject areas.

Eighth graders complete a Computer Literacy class that covers all aspects of Microsoft Office and explores multimedia production using PowerPoint and graphics programs. In addition eighth graders take a Technology Education course that involves using CNC, creating multimedia projects and which covers technology terms and components.

TRAILS online assessment was given to the 8th graders in October 2008. Results show an overall median correct score of 28/48, or 51%. This was the first formal assessment of 8th graders, and it was administered early in the school year. It shows that these students may need additional work on establishing the search process and on responsible use of information.



Students in grades 1-4 have been participating in the EasyTech curriculum for computer and information technology skills since September of 2007. Elementary classes use the computer lab on at least a weekly basis. Built-in assessments are administered as the students work independently on the curriculum. Results are compiled online. The EasyTech curriculum is aligned to the new ISTE standards.

Most recent district WKCE test results generally show higher scores than state averages in both reading and language arts at all grade levels (4, 5, 6, 7, 8 and 10). In the areas of math, science and social studies, scores again tended to be higher than state average, but there just a few areas where local student achievement had either a lower level of advanced standing or a significant level of minimally/basically proficient. Some of these results are as follows:

WKCE Test Results 2007-2008

Grade level	Subject area	Local advanced	State advanced	Local minimal/basic	State minimal/basic
4	Reading	23	41	0	4
4	Language Arts	32	29	20	23
4	Science	17	19	23	24
4	Social studies	57	66	6	7
5	Math	62	41	4	23
6	Math	50	35	22	24
7	Math	47	31	16	22
8	Science	55	28	3	24
8	Reading	85	44	3	15

Although local scores are generally higher than state average, there are areas where the level of students at minimal or basic mastery could be reduced.

3.2.c Analysis of Access to Information Resources and Learning Tools

Our goal is to provide access to network resources and the Internet to meet the needs of all students and staff throughout the school day. Except for a few dedicated computers, all of our workstations are networked so that users may access their personal files, shared files for projects, and Internet resources. In addition, workstations can access our subscription based data bases and programs—World Book online (all three editions) netTrekker, EasyTech, I Know That, Kidspiration and Enchanted Learning. Workstations are set up so they can print to several different printers. Badgerlink is used extensively for reference materials by middle through high school. In the way of assistive technology two of our networked programs, World Book and Kidspiration, offer read-aloud features. The new World Book for Students presents not only read-aloud function, but also bridges the information gap between the Kids edition and the

Student edition. Students with identified special needs also use some online remedial resources. Some learners use audio books in English literature classes.

There are three computer labs with 18-22 networked workstations apiece, with an additional 22 workstations in the combined library/media center. Each lab is equipped with a projector. In addition there are four Averkey TV to PC units placed on mobile TV carts throughout the school.

The media center collection has been analyzed through Follett Titlewave in March and October 2008. Analysis showed a large number of aged materials in the nonfiction sections, especially in the areas of social sciences and life sciences (both over 90%). A thorough weeding was done in both the elementary and middle/high school collections in April 2008 in the elementary and middle/high school nonfiction sections, and in October in the middle/high school fiction and nonfiction sections. An emphasis was placed on rebuilding the elementary nonfiction collection in the 2008-2009 school year order. It is difficult to justify purchasing a large number of nonfiction titles in the middle/high school when students rely primarily on online sources. A number of additional online databases are being reviewed for possible addition. Also, there is a need for a more sophisticated graphic organizer to succeed Kidspiration.

The present online catalog, InfoCentre, lacks features of newer online electronic catalogs and should be replaced in the near future. Its management capabilities and inclusion of web-based resources is very limited.

Both regular classroom teachers and special education teachers have expressed the need for adaptive software and hardware for students with special needs. Presently there are no voice recognition software programs, and only a limited ability to read text aloud from online sources. Students with visual or physical handicaps have no adaptive hardware available, such as assistive or modified keyboards, or computer mice.

3.2.d Analysis of Support Systems and Leadership

The district employs one full-time technology coordinator and one full-time certified library/media specialist. The combined preK-12 library/media center is open from 7 am to 3:45 daily. Adult aides work in the media center for approximately three hours per day. This is adequate level of support for the library/media program. A student aide is employed during the summer to assist the technology coordinator with cleaning and updating computers. The district also contracts network support on an on-needed basis during the school year. At the present time, we do not identify a need in the area of support services and leadership.

Current School District policies are attached in an addendum. These policies were revised and approved in October, 2008.

The policies include:

- K-6 computer acceptable use policy

- 6-12 computer acceptable use policy
- Staff computer acceptable use policy
- Educational materials selection policy
- Materials reconsideration policy
- Interlibrary loan policy
- District webpage policy
- Technology concerns for students with special needs
- Instructional materials copyright policy (unchanged)
- Citizen request for re-evaluation (unchanged)

Administrators were not accessed in the recent LoTi survey. During the past plan, no specific training or activities were attended by administrators. It is important that they continue to develop their personal technology skills so they can demonstrate leadership skills to help bring about the goals of this plan. Administrators also need to identify and support best practices in information and technology literacy skills and in helping develop appropriate training opportunities for teaching staff.

4. GOALS AND OBJECTIVES

GOAL 1

Barneveld School District will create, maintain and constantly assess a quality staff development program that develops awareness, competence and understanding to effectively use information and technology resources

Objective 1a:

Assist staff in developing personalized technology staff development action plans to meet their individual needs supported by an incentive plan

Objective 1b:

Develop Student mentors/teacher trainers/one-on-one training program

Objective 1c:

Identify and share successful strategies with other staff members to increase the level of technology integration throughout all subject areas, and to demonstrate applications of technology to the community

GOAL 2

To improve student achievement (K-12) by creating and implementing a comprehensive, aligned preK-12 curriculum in all content areas that focuses on 21st Century skills and the Wisconsin Information and Technology Literacy Standards.

Objective 2a:

Continue to align curriculum to ITL standards in other subject areas in addition to science, social studies, math and language arts.

Objective 2b:

The District will implement instructional activities that develop 21st Century skills in students, so that students use their knowledge to communicate, collaborate, analyze, create, innovate and solve problems.

Objective 2c:

The District will develop and implement locally imbedded assessment tools to measure ITLS mastery by students.

GOAL 3

The library media center and technology resources will be utilized effectively to enhance the mastery of Information & Technology Literacy & 21st Century skills by all students.

Objective 3a:

Collaborate with teachers to develop student projects that integrate technology and information literacy and 21st Century skills.

Objective 3b:

Identify strategies for highlighting and sharing successful uses of library media and technology resources.

Objective 3c:

Develop staff technology advisory committee to address current technology concerns.

GOAL 4

Increase the level of administrative technology proficiency.

Objective 4:

To increase administrative technology skills and increase administrative role in supporting and implementing the Technology Plan.

5. IMPLEMENTATION ACTION PLAN

Educator Proficiency

Need 1: Current staff development is fragmented. LoTi testing shows that most teachers have not moved beyond exploration of technology. Progress in transitioning from teacher-centered to learner-centered learning is presently at the lower levels of implementation. Teachers feel frustrated by a lack of time to learn, practice and plan technology skills and integration.

Goal 1: Barneveld School District will create, maintain and constantly assess a quality staff development program that develops awareness, competence and understanding to effectively use information and technology resources.

Objective 1a: By the end of the first year of the project to assist staff in developing personalized technology action plans to meet their individual needs.

#	Activity	Completion date/timeline	Personnel responsible	Process/comments	Success indicators	Projected budget considerations
1	Survey staff to ascertain priorities, timeline, delivery	June 2009	Tech coordinator LM Director	Zoomerang survey	Survey completed and results compiled	Tech staff time
2	Select/hire Instructional Technology Advisor/coach	Nov. 2009	Tech coordinator LM Director	Person needs expertise in 21 st Century skills, Technology integration	Person hired	\$2000
3	Create comprehensive staff development plan based on identified needs with	Dec. 2009	Tech coordinator LM Director Instructional	Meetings with Administrator, staff technology advisory committee	Completed plan in place	Tech staff time

	delivery methods to meet varied needs		Technology Advisor/coach			
4	Meet with individual teachers to set up schedules for individualized Staff development	Jan. 2010	Tech coordinator LM Director, Instructional Technology Advisor/coach staff technology advisory committee, staff members	1. Individual meetings with all staff members 2. Completed individual staff development plans with list of resources and timeline	All teachers have schedules set up	None
5	Implement individualized staff development plans	Feb. 2010- May 2011	Tech coordinator LM Director, staff technology advisory committee, staff members	1. Make training resources available to staff 2. Offer individual or small group assistance as needed 3. Staff members start individualized staff development plans at own pace	Check list, periodic monitoring of progress toward goals	Purchase online tech. training programs as needed, compensated & tech staff time

Objective 1b: Develop Student mentors/teacher trainers/one-on-one training program

#	Activity	Completion date/timeline	Personnel responsible	Process/comments	Success indicators	Projected budget considerations
1	Develop student mentor training program	Dec. 2009	Tech. coord., LM Director	Curriculum written and training resources identified or developed in-house	Completed course curriculum in place	Tech staff time

2	Student mentors trained and assigned to teachers	January 2010	Tech. coord., LM Director	Students assigned to individual teachers	Log of meetings and activities	Tech staff time
3	Identify staff members willing to act as peer mentors	March-April 2010	Tech. coord., LM Director	Staff members identified	At least two staff members agree to mentor	Tech staff time
4	Train peer mentors	June 2010	Tech. coord., LM Director	Individual training programs established based on needs	Training completed	Compensated staff time
5	Match staff members to peer mentors as needed	Sept. 2010	Tech. coord., LM Director	Schedule of meeting sessions	Plan implemented	Tech staff time

Objective 1c: Identify and share successful strategies with other staff members to increase the level of technology integration throughout all subject areas, and to **demonstrate applications of technology to the community**

#	<i>Activity</i>	<i>Completion date/timeline</i>	<i>Personnel responsible</i>	<i>Process/comments</i>	<i>Success indicators</i>	<i>Projected budget considerations</i>
1	Present in-service with Instructional Technology Advisor/coach to present ideas for classroom technology integration	January 2010	Tech. coord., LM Director, Instructional Technology Advisor/coach administrators	Large group meeting to be followed by grade/subject group meetings	Program presented	Fee for Instructional Technology Advisor/coach
2	Form sharing group among school districts to share projects	March 2010	Tech. coord., LM Director, staff members	Facilitate online sharing in listservs/blogs or other online discussion groups; present distance learning sharing sessions	Sharing tools set up and implemented	Tech staff time; PC cams and microphones
3	Set up annual Technology Fair,	Each March starting 2010	Tech coord., LM Director,	Technology Fair will occur during spring	Technology Fairs implemented	Tech staff time

	where student-created programs are presented to the public spring		staff members	parent-teacher conferences; individual presentations available online at school web site		
--	---	--	---------------	--	--	--

Effective Teaching and Learning

Need 2: Information and technology literacy standards need to be completely integrated into all subject areas. Assessments of student mastery of ITLS need to be imbedded into the curriculum. WKCE test results, although generally higher than state average in most areas in proficient and advanced, fall slightly below average in minimal scoring in a few areas.

Goal 2: To improve student achievement (K-12) by creating and implementing a comprehensive, aligned preK-12 curriculum in all content areas that focuses on 21stCentury skills and the Wisconsin Information and Technology Literacy Standards.

Objective 2a: Continue to align curriculum to ITLS in other subject areas in addition to Science, social studies, math and language arts

	<i>Activity</i>	<i>Completion date/timeline</i>	<i>Personnel responsible</i>	<i>Process/comments</i>	<i>Success indicators</i>	<i>Projected budget considerations</i>
	Expand alignment to foreign language, music, art, physical education/health, technology education , business	Dec. 2009- Dec. 2010	LM Director, staff members	Alignment to ITLS as identified curriculums revised as part of existing curriculum revision cycle	ITL standards aligned to curriculums	Tech staff time

Objective 2 b. The District will implement instructional activities that develop 21st Century skills in students, so that students use their knowledge to communicate, collaborate, analyze, create, innovate and solve problems.

<i>#</i>	<i>Activity</i>	<i>Completion date/timeline</i>	<i>Personnel responsible</i>	<i>Process/comments</i>	<i>Success indicators</i>	<i>Projected budget considerations</i>
1	Instructional staff will receive in-service training on 21 st century skills	Sept. 2009	Outside speaker, Tech. Coord., LM Director	Speaker will present initial workshop to entire staff Speaker follows up with second workshop	Workshops presented, survey to ascertain awareness	Speaker
2	Curriculums will be re-examined to include addressing 21 st century skills rotational basis ongoing	Sept. 2009- Dec. 2010	Individual staff	Curriculums will be revised during existing cycle of revisions	All curriculums are revised and 21 st century skills identified	None

Objective 2c: The District will develop and implement locally imbedded assessment tools to measure ITLS mastery

<i>#</i>	<i>Activity</i>	<i>Completion date/timeline</i>	<i>Personnel responsible</i>	<i>Process/comments</i>	<i>Success indicators</i>	<i>Projected budget considerations</i>
1	Develop locally produced surveys in conjunction with TRAILS pre and post assessments for 8 th graders	Dec. 2009	LM Director, Tech. Coord.	Tech skills survey developed and posted online	Survey completed and posted online	Tech staff time
2	Give pre and post Surveys to 8 th graders	Pre—Dec. 2009 Post May 2010	LM Director, Tech. Coord.	8 th graders take both pre and post surveys	Surveys administered and results tallied	Tech staff time
3	Continued use of	continuing	Elementary	Elementary classes use	Students work	None

	EasyTech by grades 1-4		staff	Easy Tech in regularly scheduled computer lab time	individually, built-in assessments are administered	
--	------------------------	--	-------	--	---	--

Access to Information Resources and Learning Tools

Need 3: The media center print collection shows age in many areas, more so in the high school collection. Dependence on electronic information sources is increasing, and the availability of these resources must be expanded to meet student needs. Resources for special needs students are very limited.

Goal 3: The library media center and technology resources will be utilized effectively to enhance the mastery of Information & Technology Literacy & 21st Century skills by all students.

Objective 3a: Collaborate with teachers to develop student projects that integrate technology and information literacy and 21st Century skills

#	Activity	Completion date/timeline	Personnel responsible	Process/comments	Success indicators	Projected budget considerations
1	LM Director meets individually with each teacher to determine possible joint projects	Ongoing	LM Director and individual staff	Teachers meet with LM Director to plan joint projects	Log of projects, student samples of completed projects	Tech staff time

Objective 3b: Identify strategies for highlighting and sharing successful uses of library media and technology resources

<i>#</i>	<i>Activity</i>	<i>Completion date/timeline</i>	<i>Personnel responsible</i>	<i>Process/comments</i>	<i>Success indicators</i>	<i>Projected budget considerations</i>
1	Create online collaborative work areas in Wiki sites	ongoing	LM Director, individual staff	Wikis established to plan and present collaborative projects	Log kept of projects	Subscription to premium Wiki
2	Join online curriculum sharing groups	January-May 2010	LM Director, individual staff	Groups chosen by subject and/or grade level	Log kept of entries	Tech staff time

Objective 3c: Develop staff technology advisory committee to address current technology concerns

<i>#</i>	<i>Activity</i>	<i>Completion date/timeline</i>	<i>Personnel responsible</i>	<i>Process/comments</i>	<i>Success indicators</i>	<i>Projected budget considerations</i>
1	Form a staff technology advisory committee consisting of technology coordinator, Library/media director, business teachers, representative from each subject/grade level plus administration	Oct. 2009	Tech. Coord., LM Director, administrator, staff members	Staff members chosen for committee, goal statement prepared for committee	Group formed and guidelines established	Tech staff time
2	Committee will look at preK-12 technology curriculum issues— keyboarding,	Start Nov. 2009-May 2010	Committee members	Scheduled meetings to examine curriculums	Minutes, final report	Tech staff time

	computer literacy classes, integration of ITL skills					
3	Create a report assessing current technology needs, including technology curriculum issues, hardware and software recommendations, staff development plan	May 2010	Committee members	Scheduled meetings to examine curriculums	Minutes, final report	Tech staff time

Objective 3d: The Library/Media Center collection-including print, online and media resources, and related research and productive software and hardware--will be updated and expanded to meet the needs of students and staff in relation to development of 21st century skills

<i>#</i>	<i>Activity</i>	<i>Completion date/timeline</i>	<i>Personnel responsible</i>	<i>Process/comments</i>	<i>Success indicators</i>	<i>Projected budget considerations</i>
1.	The LMC print collection will be weeded and outdated materials replaced with more current resources	Sept. 2009-May 2010	LM Director	Collection will be assessed using Follett Titlewave	Percent of dated materials will decrease 25%	Library budget
2	Online resources will be re-assessed and expanded	Oct. 2009	LM Director and Tech. Coord.	Present databases will be continued Additional reference database will be added	Subscriptions purchased and implemented	New database, cost of present databases
3	Production software and hardware will be	Dec. 2010	LM Director and Tech	Purchase additional items: scanners, digital	Items purchased and made available	Digital cameras, video cameras

	added to provide students and staff with more tools to create projects		Coordinator	cameras, video cameras, movie/graphic software		Movie editing software, graphic design software
4	Determine assistive technology needs of special needs students	Sept. 2009-May 2010	LM Director, Tech Coord., special ed teachers	Assess current technology and review additional technology to meet identified needs	Survey of needs: selection of new technology	Adaptive keyboards, voice recognition software
5	Replacement of current library automation software	July 2010	LM Director	Review available programs	Purchase and install new program	Library automation software

Support Systems and Leadership

Need 4: Administrators need to raise their level of expertise in order to fully understand issues dealing with technology and learning. By embracing technology they will model effective use for the staff.

Goal 4: Increase the level of administrative technology proficiency

Objective 4a: To increase administrative technology skills and increase administrative role in supporting and implementing the Technology Plan

<i>#</i>	<i>Activity</i>	<i>Completion date/timeline</i>	<i>Personnel responsible</i>	<i>Process/comments</i>	<i>Success indicators</i>	<i>Projected budget considerations</i>
<u>1</u>	Assess administrative tech. skill level using LoTi	Sept. 2009	Tech. coord., library/media, administrators	LoTi survey	Completion of survey	Tech staff time
<u>2</u>	Administrators participate in	Jan. 2010	Administrators	Online courses, workshops	Log of classes/courses	None

	personalized tech. skills development activities				attended or completed	
--	--	--	--	--	-----------------------	--

6. DISSEMINATION TO STAKEHOLDERS

Dissemination is an important part of the success of the implementation of the Technology Plan. The Technology Coordinator and the Library/Media Director will meet on a regular basis with the administration to report on progress of the Plan’s activities. In addition, we plan on joining online forums and discussion groups/blogs to share experiences with other school districts. School staff will be informed about the plan through in-service programs and a regularly posted forum on the library Wiki page. Yearly reports will be made to the School Board and available to the community via the district webpage.

7. MONITORING, EVALUATING, AND REVISING OF THE PLAN

7.1. Monitoring and Evaluation Process

A timetable will be developed of the activities of the Technology Plan. It will be the responsibility of the Technology Coordinator and the Library/Media Director to meet weekly and evaluate the progress of the Plan. The Technology Committee will be kept abreast of the Plan’s activities through an online forum posted at the Library Wiki site. In-person meetings will occur at least every six months. The regularly scheduled meetings between the Technology Coordinator, Library/Media Director and administrator will also serve as a means of evaluating and revising the plan as needed. In addition, a yearly staff survey will be administered to gauge the level of success of technology training and the availability of technology support materials and equipment.

Built-in periodic assessments of 8th grader mastery of ITL Standards will help ascertain their mastery level of these skills.

7.2. Process of reporting to community stakeholders

Community members will be kept informed through both postings on the school web site and through the local weekly school newsletter, which is a part of the local community newsletter. It is hoped that showcasing of technology projects during the Technology fairs will also be an excellent means of displaying the technology skills of our students. Collaborative classroom-library projects will continue to be posted on the library Wiki page.

7.3. Process and Timeline for Ongoing Long-Term Planning

With the formation of a Technology Advisory Committee the Technology Coordinator and the Library/Media Director will have additional in-school support to assist in long-term planning. At the end of each school year in the three year plan, the committee will review the Plan and make determinations of additional long-term needs or modifications of already identified needs. The Technology Committee will also serve to offer feedback and ideas for future technology planning.

APPENDICES

Bibliography

Kimble, Carol. The Impact of technology on learning. NCREL, 1999. *Curry Lance et. Al.*

Woolls, Blanche. *The School Library Media Manager*. 2nd edition. Englewood, CO: Libraries Unlimited. 1999.

Digital economy 2003. U.S. Department of Commerce, Economics and Statistics Administration. Washington, D.C. December, 2003

Lance, Keith Curry, Marcia J. Rodney & Christine Hamilton-Pennell. "Measuring up to standards: the impact of school library programs and information literacy in Pennsylvania schools." Greensburg, PA: Pennsylvania Citizens for Better Libraries. (2000).

“Critical Issue: Providing Professional Development for Effective Technology Use” NCREL

<http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te1000.htm>

Solomon, Gwen “Education for the 21st century: the basics” e-boonline

Achieving Learning Impact of Technology

<http://www.imsglobal.org/learningimpact2007/LI2007report.pdf>

Technology and Student Achievement

http://www.learning.com/documents/NAESP_Technology_and_Student_Achievement.pdf

CEO Forum School Technology and Readiness Report

<http://www.ceoforum.org/downloads/report4.pdf>

School Libraries Work!

http://www.ala.org/ala/aasl/aaslproftools/resourceguides/slw3_2008.pdf

Assessing the Impact of Technology on Learning

<http://www.metiri.com/presentations/NC.html>

Barneveld School Board Policies

- Computer Network Acceptable Use Policy(Grades K-5) #364
- Computer Network Acceptable Use Policy(Grades 6-12) #364.1
- Computer Network Acceptable Use Policy(Staff) #364.2
- Website Policy #364.5
- Educational Materials Selection Policy #364.6
- Citizen Request for Re-evaluation #364.7
- Interlibrary Loan Policy #364.9
- Instructional Materials Copyright Policy #361.3
- Technology Concerns for Students w/ Special Needs #361.4
- Materials Reconsideration Policy #361.7

Zoomerang Survey Results (Teachers) – July '08

LoTi Technology Use Profile (All Staff) – Sept. '08

Trails results (8th Grade Assessment) – Oct.' 08

Network Diagram – (Current)

Information & Technology Budget Summary