Technology Plan

July 1, 2009—June 30, 2012

ANCHOR BAY SCHOOLS
5201 County Line Road
Suite 100
Casco MI 48064
586-725-2861
District Code: 50040
Macomb Intermediate School District

http://www.anchorbay.misd.net

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Table of Contents

Page:

Introductory Materials (Section 2)

District Mission Statement

The Anchor Bay Schools, in partnership with the community, will produce lifelong learners, who respect diversity, adapt to change and function as responsible citizens.

District Profile

Anchor Bay is a unique community located on the northeast corner of Lake St. Clair, about 20 miles from Detroit. The district serves five municipalities in northern Macomb and southern St. Clair.

The socio-economic status of Anchor Bay students varies from economically disadvantaged to upper middle class in the five communities we serve.

Anchor Bay is proud of its students and its strong community support. The Board has implemented three bond issues in the past decade, including four new buildings and an aquatic center. A significant portion of the bond issue was designated for upgrading and improvement of technology in all buildings.

Each school year brings many challenges and changes, yet Anchor Bay Schools remains focused on providing our students with the best education possible to meet the challenges of their future. By focusing our energies and resources on common goals with a shared vision of the future, we believe we can accomplish this task together. The following pages outline the goals we have established as we pursue our vision and mission.

School Buildings

Anchor Bay High School (9-12)
6319 County Line Road
Fair Haven MI 48023
Student Population: 1892
Professional Staff: 93

Anchor Bay Middle School North (6-8)
52805 Ashley
New Baltimore MI 48047
Students: 859
Professional Staff: 38

Ashley Elementary (K-5)
52347 Ashley
New Baltimore MI 48047
Students: 559
Professional Staff: 31

Francois Maconce Elementary (K-5)
6300 Church Road
Ira MI 48023
Students: 215
Professional Staff: 21

Lottie M. Schmidt Elementary (K-5)
33700 Hooker Road
New Baltimore MI 48407
Students: 374
Professional Staff: 25

Sugarbush Elementary (K-5)
48400 Sugarbush Road
New Baltimore MI 48047
Students: 388
Professional Staff: 24

Early Childhood Center
52680 Washington
New Baltimore MI 48047
Students: 441
Professional Staff:
1(Cert) (2 w/BA & 6 w/Assoc)

Anchor Bay Middle School South (6-8)
48650 Sugarbush Road
New Baltimore MI 48047
Student Population: 593
Professional Staff: 42

Lighthouse Elementary (K-5)
51880 Washington
New Baltimore MI 48047
Students: 580
Professional Staff: 29

Dean A. Naldrett Elementary (K-5)
47800 Sugarbush
New Baltimore MI 48047
Students: 308
Professional Staff: 18

Great Oaks Elementary (K-5)
32900 24 Mile Road
Chesterfield MI 48047
Students: 463
Professional Staff: 24

MacDonald Elementary (K-5)
5207 County Line Road
Casco MI 48064
Students: 237
Professional Staff: 16

Compass Pointe Learning Center
51518 Industrial Drive, Unit H
New Baltimore MI 48047
Students: 120
Professional Staff: 3

Vision and Goals (Section 3):

The Anchor Bay Schools believes that technology is a multi-dimensional tool that can:

- assist in enhancing the quality of and method by which curriculum and instruction is delivered to students;
- assist and encourage students in developing complex and higher order thinking and communication skills;
- improve communication between home, school and community

Technology Vision:

All learners will employ technological tools to guarantee their success as members of a global society.

Technology Goals:

Our belief in life-long education supports our community of learners by providing:

- A curriculum integrated with technology
- Investments in technological advancements
- Continuous professional and technical development

DISTRICT TECHNOLOGY PLANNING TEAM/CONTRIBUTORS

Name	Position
• Leonard Woodside	Superintendent
• Heather Bade	School Board Technology Committee
• Robert Bidlingmaier	School Board Technology Committee
• Ron Osborne	School Board Technology Committee
• Tim Sizemore	Supervisor of Technology Services
• Gail Eckstein	Director of Elementary Education
• Ken Krause	Director of Secondary Education
• Kyle Anderson	Director of Business Services
• Judy Stefanac	Principal – Anchor Bay High School
• Marv Sauer	Plante Moran
• Danielle Fair	Teacher–Anchor Bay High School
• Colleen Girimonte	Teacher–AB Middle School South
• Jon Middeldorf	Teacher–AB Middle School South
• Ringo Mukhtar	Teacher–AB Middle School North
• Mark Van Hecke	Teacher–Anchor Bay High School
• Kathleen Vredevoogd	Elementary Media Specialist/ Technology Teacher
• Yolanda White	Teacher—MacDonald Elementary/ Parent
• Becky Marries	Teacher—Anchor Bay High School
• Christina Shelton	Teacher—Anchor Bay High School/ ABSD Web Master

I. CURRICULUM

Technology is an essential tool for the attainment of the curricular goals and objectives of Anchor Bay Schools. Through our curriculum, we will produce a technologically literate learner as defined by the Michigan Department of Education:

Technology literacy is the ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning in all subject areas and to acquire lifelong knowledge and skills in the 21st century.

MDE Michigan Educational Technology Standards and Expectations
http://www.techplan.org/

A. CURRICULUM INTEGRATION (Section 4)

DISTRICT GOAL: Staff and students will utilize technology as an integral part of the learning process to achieve curriculum standards. These are examples of strategies being employed throughout the District to integrate technology into the curriculum:

Elementary

Each elementary class works with a technology teacher at least once a week in the building's computer lab. This technology teacher is available for consultation and collaboration with classroom teachers as time permits. As much as possible, lessons taught by the technology teacher's focus on topics that support and enrich what is being done in the classrooms. The Elementary Technology Curriculum is reviewed on an ongoing basis to ensure that the District Goal is met.

In addition to district-wide initiatives, individual buildings have adopted strategies that use technology to improve student achievement and encourage curriculum integration:

One elementary school has been piloting a Computer Lab on Wheels program. The lab consists of 24 laptop computers on a cart with a wireless network connection. The cart is taken to classrooms for research, writing, skill practice, simulations/virtual field trips and other activities. Based on the success of this program, it is hoped that it can expand to other elementary buildings as funds become available.

Some buildings have purchased a subscription to Study Island http://www.studyisland.com/login.cfm, a web-based MEAP preparation program. Title I buildings are using SuccessMaker http://www.successmaker.com/, a program that provides supplemental instruction in language arts, math, science and social studies. Earobics http://www.earobics.com/, a reading intervention program, is used in one elementary school. Many of the elementary buildings provide the Accelerated Reader http://www.renlearn.com/ar/ reading practice software program to their students.

Secondary

At the middle school level, a scope and sequence is in place for grades 6, 7 and 8 identifying the state and district content standards taught at the respective grade levels. The curricula for the 6th Grade Keyboarding class, the 7th Grade Technology class, the 7th Grade Computer Education class and the 8th Grade Computer Technology class have been written in terms of weekly plans coordinated with benchmarks, key concepts, assessments and instructional resources.

Content areas that develop specific technology skills have been identified. Examples of integration strategies include an emphasis on teaching research skills, projects that emphasize problem-solving skills such as beginning programming, and application of science principles at Flight, Rocketry and engineering/architecture stations.

Some teachers are using Project 3D-VIEW http://www.3dview.org/index.html with their science and geography students. This is a NASA-supported program that provides teacher training and resource materials. The project "combines NASA mission earth data and three types of 3D learning technologies in a comprehensive curriculum-based program for student explorers using … 3D-viewers and the internet." These teachers plan to offer training to others who are interested in using the program.

No Child Left Behind requires that school districts report the percentage of its 8th graders who are technologically literate. All Middle School students are required to take at least one technology course before going to the high school or pass an 8th grade technology proficiency test. These are used to determine the percentage of technologically literate 8th graders in the District.

At the high school level, a scope and sequence is in place for classes taught in grades 9-12 identifying the state and district content standards taught at the respective grade levels. The curriculum has been reviewed in light of the new state requirements for high school graduation. A half credit technology course is required for graduation for the Class of 2009 and 2010. Beginning with the class of 2011, this requirement will drop. However, in meeting the online learning experience graduation requirement beginning with the class of 2011, students will fulfill this requirement by successfully completing the English 10 course research paper or an equivalent learning experience in grades 9-12. When students graduate from Anchor Bay High School, they will be competent and productive members of an increasingly technological society able to hold responsible positions in business, education, government and numerous other fields.

Technology is used in extracurricular activities. For example, the High School yearbook staff uses computers to word process all of the writing in the yearbook. They also find, cut and paste clip art for the page layouts. They use digital cameras to take photos and then use computer software to manipulate these images to appropriate size and orientation. In the future, they hope to use a computer program for the entire layout and design of the yearbook.

At Anchor Bay High School, examples of other initiatives include:

- Science classes use wireless laptop carts in their Computers on Wheels program.
- Security and administrative personnel use Personal Digital Assistants (PDAs) to assist them with student identification.
- Supplemental software programs and resources have been purchased for use with the Language Arts, Science and Math curriculum materials.
- The Global Issues social studies course requires students to do research and reports using a variety of websites.

- Student projects across curricular areas require students to design PowerPoint presentations that they deliver in their classes.

- Students in the Web Design classes maintain the school district website.

- Students in business classes earn certification for proficiency in a variety of areas.

- Broadcasting classes use technology extensively in designing their productions

District-Wide Initiatives

Through the Macomb ISD, Anchor Bay Schools has a subscription to Discovery Education Streaming. Educators use this Internet-based, video-on-demand service to access thousands of educational videos, video clips, articles, clip art, lesson plans and images. Staff members have been trained to use DE Streaming and will receive additional training as features change.

As new textbooks are adopted, it is anticipated that electronic support materials will also be purchased. "Best Practice" DVDs, student resources, and other materials are already available for the High School Language Arts, Science and Math programs and the Elementary Math and Science programs.

Forms, technology resources and key curriculum documents are available on the ABSD network for easy access by staff members. IEP's are available in a secure area of the network for use by members of each student's team. Teachers have the ability to provide templates, shortcuts to web sites, etc. to their students through virtual Pick Up boxes and collect assignments through virtual Drop Off boxes on the network. Each building has space on a shared drive to facilitate collaboration among teachers.

Elementary teachers use a Microsoft Word form version of the report card. After extensive staff training, all teachers are using this option. The forms are reviewed regularly by the Report Card Committee. Changes are made as needed and additional training is provided during staff meetings. Because the Macomb ISD is moving to the PowerSchool student information system for the 2009-2010 school year, revisions to the grade book and report card processes are anticipated.

Secondary teachers currently use Integrade software for their grade books. They are able to print progress reports, email student information to parents and create report cards electronically using this program. The District is investigating the possibility of providing student progress information to parents through a web-based program. Similar options are being explored for the elementary schools. As the Macomb Intermediate School District moves to the PowerSchool student information system, changes to the current procedures are expected.

Library functions including circulation, cataloging and inventory are completely automated. Staff and students can access the catalogs, place holds on books, create and print bibliographies, etc. from any computer on the District network.

North Central Association Accreditation/AdvancEd

As part of the NCA (North Central Association) Accreditation/AdvancEd process, the schools are developing improvement goals and identifying research-based strategies for implementing the goals. Technology tools are used to analyze needs, identify resources and implement strategies. Results from these strategies will be analyzed on an ongoing basis to determine whether they have been effective and should be continued, modified, expanded or discarded.

B. STUDENT ACHIEVEMENT (Section 5)

Anchor Bay Schools is continuing to review the existing Technology Curriculum using the Michigan Educational Technology Standards. Representatives from grades K-12 are working to align the existing curriculum with state and national standards and develop strategies to improve instruction through the effective use of technology. Part of this process includes reviewing and recommending student materials and resources necessary for implementation of the instructional strategies. We are combining these efforts with other District initiatives such as NCA Accreditation/AdvancEd and compliance with No Child Left Behind.

When the PowerSchool web-based student information system is introduced in the fall of 2009, staff members will have additional tools available to track student achievement. They will be able to analyze assessment data, student sub-group scores and classroom grades in a variety of ways. The system will be accessible from anywhere with an Internet communication.

Curriculum Integration and Student Achievement (Sections 4 and 5)

DISTRICT GOAL: Staff and students will utilize technology as an integral part of the learning process to achieve curriculum standards.

Objectives and Strategies	**Sample Projects and Initiatives**	**Timeline***
Objective 1. Technology will be integrated into the curriculum.		
Staff members will have knowledge of and utilize the technology resources available to them	Provide Professional Development and in-service training emphasizing integration strategies	Ongoing, See PROFESSIONAL DEVELOPMENT section
Staff will model technology in their everyday activities.	Staff uses productivity software, communication tools, administrative databases, etc. to accomplish tasks	Ongoing
	Staff uses electronic grade books, attendance system, report cards, etc.	Ongoing Moving to PowerSchool in fall of 2009
	High School administrative and security staff use PDAs to identify students	Ongoing
Technology will support current and future curriculum outcomes.	ABSD Technology Curriculum	Ongoing review
	Use of technology tools to analyze student assessment information	Ongoing
	Creation of teacher web sites, blogs, Blackboard sites, etc.	Ongoing
	Review of core collection of software and hardware to ensure that it supports curricular goals	Annually
	Automated library system and catalog available on the ABSD network	Ongoing
	“Computer on Wheels” portable laptop cart programs	Ongoing Expansion as funds permit

Objectives and Strategies	Sample Projects and Initiatives	Timeline*
	Support for extra-curricular activities (band, year book, etc.)	Ongoing
	Discovery Education Streaming resources are available to staff and students	Annual subscription provided by MISD
	Electronic textbooks and support materials purchased along with new curriculum series	Ongoing
	Support for special education students through resources such as web-based simulations, Assistive Technology Team, networked IEPs, etc.	Ongoing
	Audio enhancement systems installed in elementary classrooms	Ongoing
	Individual building initiatives such as Study Island web-based MEAP Preparation program, Project 3D-VIEW, SuccessMaker, Earobics, Accelerated Reader, etc.	Annual Subscription
	Curriculum information brochures available to the community through the District web site	Ongoing
Objective 2. Staff will work together to develop and present integrated interdisciplinary units that utilize technology.		
Technology teachers will be members of interdisciplinary teams	NCA (North Central Association) Accreditation/AdvancEd Goal Committees	Ongoing
Staff members will have knowledge of and utilize the technology resources available to them	Provide Professional Development and in-service training emphasizing integration strategies	Ongoing
Staff and students will have access to state-of-the-art technology as funds permit.	See INFRASTRUCTURE SECTION	

Objective 3. Students will become technologically literate learners as defined by the Michigan Educational Technology Standards and Expectations.		
Students will understand the ethical, cultural and societal issues related to technology.	ABSD Technology Curriculum	Ongoing Review
	See ACCEPTABLE USE POLICY section	
Students will develop positive attitudes towards technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.	ABSD Technology Curriculum	Ongoing Review
Staff and students will have access to state-of-the-art technology as funds permit.	See INFRASTRUCTURE SECTION	

*It is anticipated that the strategies listed as Ongoing will extend through the 2011/2012 school year.

C. TECHNOLOGY DELIVERY (Section 6)

In addition to the computer labs and broadcast equipment in every building, the District has a variety of technologies in place to facilitate the delivery of specialized courses. There are five mobile video conferencing units and two permanent units. The High School has a Distance Learning Lab, and the second unit is housed at François Maconce Elementary school. Portable video conference units are taken to other elementary and middle school buildings. The units were purchased with the Technology Bond funds. These tools enable students and staff to participate in collaborative projects, virtual field trips, conferences experts, and courses that would not otherwise be possible. Utilizing resources such as the TWICE database http://www.twice.cc/ to identify opportunities, classes have participated in projects and field trips such as the ASK Author/Specialist Videoconferences and a Virtual Autopsy program for High School health occupations students.

Through the Macomb Intermediate School District, every elementary student has the opportunity to participate in at least one virtual fieldtrip before moving on to middle school. All elementary buildings have been participating in this program. Upper elementary students have taken part in the Gadget Works simple machines program offered by COSI Columbus. A similar program, Manatee Mondays, is available to the middle schools through the Macomb ISD. This program helps support the middle school environmental science curriculum.

The Blackboard online course delivery system is available to Anchor Bay teachers. It enables instructors to create a web site containing class documents, information, communication tools and other resources. Students enrolled in the class can access the information from anywhere with an Internet connection.

A school district policy and guidelines on educational options includes procedures for delivering instruction and awarding credit for virtual courses. The policy will offer students expanded opportunities to receive credit counting toward graduation utilizing online courses.

Other examples:

- Discovery Education Streaming includes delivery of professional development through online audio and video presentations. Offerings include the *Principal Series, Teaching through Technology,* and the *Teacher-to-Teacher* series.

- The Computer on Wheels program brings wireless laptop carts to classrooms

D. PARENTAL COMMUNICATION AND COMMUNITY RELATIONS (Section 7)

Anchor Bay Schools is committed to keeping the community informed through a variety of means. Members of the community receive a District newsletter three times a year. In addition to print versions of newsletters, electronic versions are posted on building and classroom web sites. A Community Broadcast and Announcements channel is available through the local cable provider.

The Anchor Bay Schools web site is located at http://www.anchorbay.misd.net. It includes a staff email list, access to individual building web sites, minutes from School Board meetings, an interactive District calendar and other District information as well as resources for students, staff and the community. Each building web site includes newsletters, a calendar of events, contact numbers, and other information. All elementary teachers have a permanent web page that is accessible from the building site. Some have developed additional classroom pages, blogs, etc. linked from their teacher pages. Many teachers have created classroom web sites through the Blackboard system at the MISD or through other providers.

A district-wide voice mail system is available 24 hours a day for parents to leave messages for teachers or the school office staff. All staff members can also be reached through their Anchor Bay email accounts.

An automated emergency notification system has recently been implemented. The District is able to contact all parents in a particular building or the entire district via phone, e-mail or text message. SchoolMessenger http://www.schoolmessenger.com was the selected vendor. It has agreements in place with phone companies to ensure that these messages receive top priority. It can place about 5,000 phone calls within fifteen minutes. This system can also be used to notify parents of snow days any other school emergency events.

The PowerSchool http://www.powerschool.com/ student information system will be implemented in fall of 2009. This system includes tools for communicating student progress.

This Technology Plan will be posted on the Anchor Bay Schools web site and will be available in all administrative offices.

PARENTAL COMMUNICATION AND COMMUNITY RELATIONS (Section 7)

GOAL: Involve the community in the planning, implementation and support of technology within the Anchor Bay Schools.

Objectives and Strategies	Sample Projects and Initiatives	Timeline
Objective 1. Increase awareness of the available technologies within Anchor Bay Schools.		
Involve parents and community in technology meetings.	Planning for reorganization of the Technology Committee to include all stakeholders.	Current and Ongoing
Communicate information related to District technology initiatives and gather feedback	Administrative updates regarding District technology initiatives are presented at parent and community meetings.	Ongoing
Objective 2. Increase community participation in supporting the use of technology.		
Partner with public libraries, local businesses and community volunteers.	Collaborations such as public library support of the Accelerated Reader computer-based reading promotion program.	Ongoing
Promote school-home communication through available technologies.	Anchor Bay School District web site	Ongoing
	Individual building web sites	Ongoing
	Staff email	Ongoing
	A district-wide Broadcast System is available for building-to-building transmissions.	Ongoing
	Community Broadcast & Announcements Channels	Ongoing
	District voice mail system	Ongoing
	Staff and classroom web sites	Ongoing
	Parent Groups post their newsletters on the school web sites.	Ongoing
	SchoolMessenger parent email notification system	New in 2008-9 and Ongoing
	PowerSchool communication tools	Introduced in fall of 2009

E. COLLABORATION (Section 8)

Currently, all adult education students have the opportunity to participate in technology coursework such as computer maintenance, programming, Microsoft applications, website design, business computer technology and computer graphics. The Compass Pointe Learning Center has a lab equipped with 30 student stations. Students can access software from E2020 http://www.e2020inc.com/ as a supplemental instructional tool as well as NovaNet www.pearsonschool.com/novanet. The District is investigating the purchase of updated versions of the programs.

ESL (English as a Second Language) students focus on software with an emphasis on learning the English language and obtaining United States citizenship. Two programs incorporated into ESL studies are Learn to Speak English and English Discoveries.

GED students can use various web sites that help them assess their preparedness before taking the actual GED test. For example, any resident of the State of Michigan can access a variety of academic and career resources through the LearningExpress Library. This program is available through the Michigan Electronic Library http://mel.org. It includes practice tests for a variety of careers and GED preparation materials. The program analyzes the results of the user's test and identifies areas of strength and weakness.

II. PROFESSIONAL DEVELOPMENT

F. Professional Development – Section 9

Since the implementation of the State of Michigan's TTI (Teacher Technology Initiative) in the fall of 2001, the Anchor Bay School District has offered technology-training opportunities to staff members. In addition to in-district programs, this has included workshops and training in conjunction with the Macomb Intermediate School District and Saginaw Valley State University.

Technology staff development is provided throughout the year during District Professional Development days and presentations at staff meetings. Topics are chosen with input from the staff, and planning is an ongoing process. Sessions emphasize the integration of technology into the content areas and support of district initiatives. (See Attachment A) As funding and resources allow, district technology training offerings will expand to include sessions before and after school and in the summer.

Staff members are also encouraged to explore classes offered by the MISD (http://www.solutionwhere.com/misdtraining/cw/coursebyInterest.asp), online professional development courses such as those provided by Michigan LearnPort. (http://www.learnport.org/) and Ed2Go (through various colleges in Michigan), and other opportunities such as those listed under Computer Science/Technology in the Michigan Department of Education's SBCEU listing System (http://www.solutionwhere.com/mi_sbceu/main.asp).

The Technology Supervisor regularly attends meetings of the Macomb Instructional Technology Advisory Committee (ITAC). Library Media Paraprofessionals meet as a group at least once a year to learn new library software applications and discuss common concerns. As funding permits, Technology Teachers have the opportunity to attend the annual MACUL (Michigan Association of Computer Users in Learning) Conference.

The District reviews professional development offerings to align them with the Michigan Educational Technology Standards for Students (METS http://techplan.org/), National Educational Technology Standards for Teachers (NETS-T) and the National Educational Technology Standards for Administrators (NETS-A) as set forth by the International Society for Technology in Education (ISTE http://www.iste.org).

TIMELINE FOR PROFESSIONAL DEVELOPMENT ACTIVITIES*			
Fall	**Winter**	**Spring**	**Summer**
• End of Summer/ Beginning of Fall: Finalize plans for technology PD sessions for the current school year • Provide scheduled training sessions • Distribute, collect and evaluate feedback sheets from sessions—Make adjustments as needed • Training programs available through the MISD, Ed2Go, Michigan LearnPort, etc.	• Provide scheduled training sessions • Distribute, collect and evaluate feedback sheets from sessions—Make adjustments as needed • Prepare and distribute staff needs assessment survey • Training programs available through the MISD, Ed2Go, Michigan LearnPort, etc.	• Provide scheduled training sessions • Distribute, collect and evaluate feedback sheets from sessions—Make adjustments as needed • Begin planning offerings and arrange for presenters for the next school year • Distribute information to staff regarding summer training sessions • Training programs available through the MISD, Ed2Go, Michigan LearnPort, etc.	• Training programs available through the MISD, Ed2Go, Michigan LearnPort, etc. • Evaluate post-training surveys from trainers

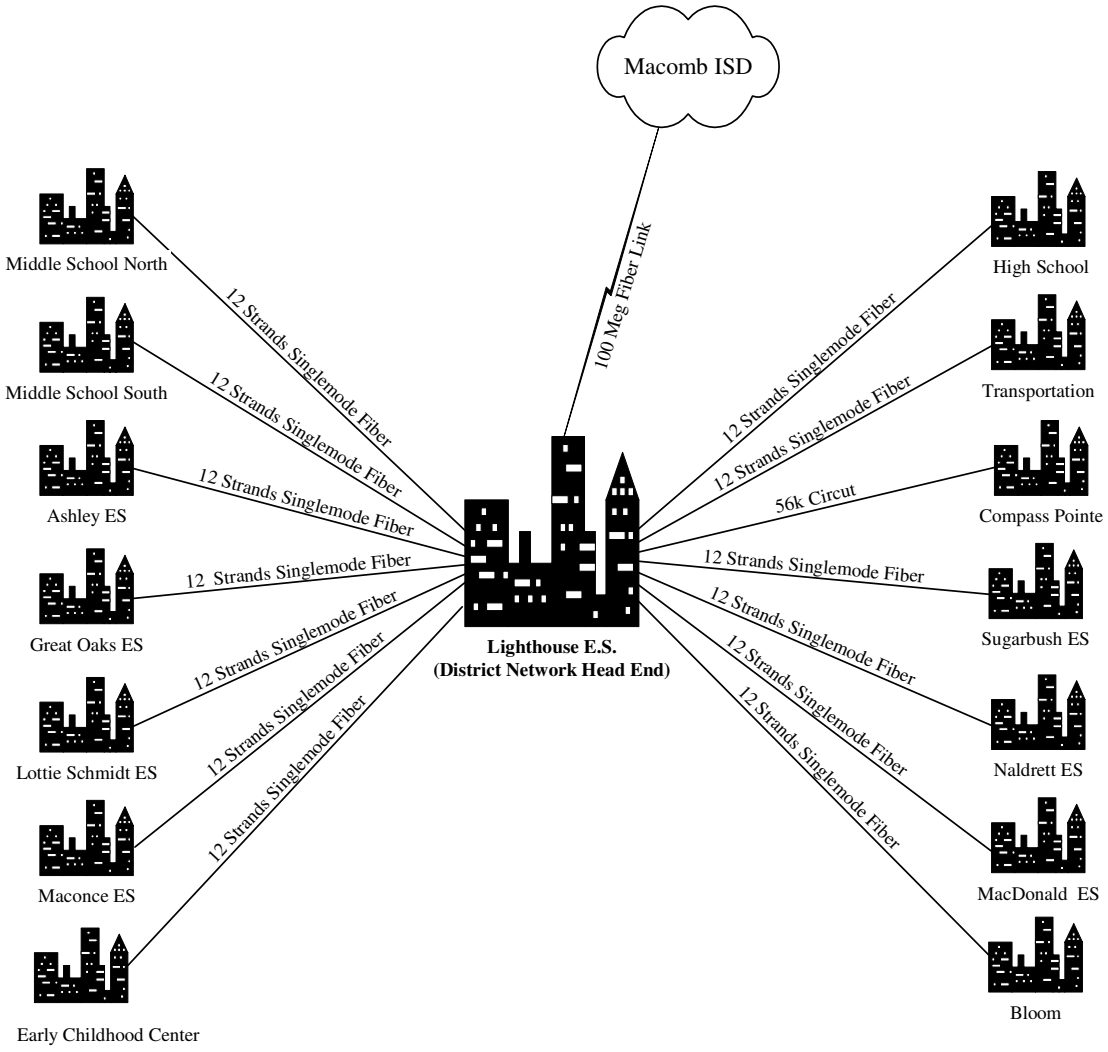
*The number of District technology professional development offerings will depend on available resources and funding as well as need

G. Supporting Resources – Section 10

Resources that support the use of technology include:

- District policies: Copyright, Web Development, Distance Learning, Acceptable Use, etc.
- District Technology Curriculum
- State and National Technology Standards:
  - National Educational Technology Standards NETS for Teachers, Administrators, Technology Facilitators and Leaders http://www.iste.org/AM/Template.cfm?Section=NETS
  - Michigan Educational Technology Standards METS K-12 http://www.techplan.org/
- Technology integration resources for staff are available on the District network
- Training materials and resources developed in-district are available on the District network
- Anchor Bay School District web site http://anchorbay.misd.net/
- Purchasing of software and hardware through the REMC Statewide Cooperative Acquisitions Project http://remc.org/bids/
- Public Performance Site Licenses for all schools in the District to ensure copyright compliance
- DE Streaming professional development and multimedia curriculum materials http://www.discoveryeducation.com/Software manuals
- Michigan Electronic Library Databases, Tests, Tutorials and Resources http://mel.org/
- Michigan Online Resources for Educators
- http://more.mel.org//SPT--BrowseResources.php?Editing=0
- Michigan LearnPort Statewide Professional Development Community http://www.learnport.org/
- Professional Development resources from Discovery Education Streaming http://www.unitedstreaming.com
- Michigan Department of Education's SBCEU course listing System (http://www.solutionwhere.com/mi_sbceu/main.asp)
- TWICE: Two Way Interactive Communications in Education http://www.twice.cc/
- Macomb Intermediate School District support through the Instructional Technology Services department http://www.misd.net/IT/default.htm
- PowerSchool http://www.powerschool.com/ (beginning in the fall of 2009)
- Technology Supervisor, Technology Support Staff, Technology Teachers and Library Media Paraprofessionals

III. INFRASTRUCTURE/TECH SUPPORT
HARDWARE – SOFTWARE



Anchor Bay Schools Fiber Network Overview

H. Infrastructure Needs/Technical Specification, and Design (Section 11)

WAN

The Macomb Intermediate School District contains the AS400 and a Bess Proxy N2H2 internet filtering that the entire district goes through for internet access. Currently, the District is connected to the Macomb ISD via a 100Mb Fiber Link and connects to the Macomb county fiber. There are approximately 2,500 networked computers throughout the district. Lighthouse Elementary School is the head end of the District, for voice, video, and data technologies.

The current WAN consists of all buildings being linked via multiple strands of single mode fiber. This fiber carries data, voice and video to all buildings. The router at the head end connects to the Macomb count fiber. A Cisco router 6500 with redundant router powers this connection. The network is secured by a Cisco Pix firewall.

Anchor Bay School District is a member of the Macomb ISD Technology Consortium, will utilize Internet Access and telecommunications services provided through this Consortium to support its mission. The Consortium will seek E-Rate funding discounts to provide Internet Access and Telecommunications Services to its members. The Internet Access acquired by the Consortium and delivered to each member district through the Macomb County fiber wide area network will provide appropriate throughput, latency, and reliability to meet each member district's educational services needs. The telecommunications services to be acquired by the Consortium will include Digital Transmissions Services, including but not limited to, Integrated Services Digital Network (ISDN) PRI circuits that will be used to enable distance-learning experiences for member districts. Some, if not all, of the ISDN PRI circuits to be acquired will be from the Sprint ISDN VPN service, which facilitates communications among other school districts and educational institutions (colleges, universities, etc.) who are also members of the Sprint VPN.

LAN

The current LAN for each building consists of Cisco switches connected by gig fiber uplinks to the head end at Lighthouse Elementary. Each school's data and phone traffic is segmented by VLAN. All schools are connected with Cisco 4000 at the MDF and Cisco 3500/2950 at the IDF via gig fiber uplinks for each building. The wiring type is Cat5 and Cat5e. Some buildings have IDF closets connected by multimode fiber with gig uplinks. With the additions to the some of the elementary buildings, Middles Schools and at the High School, all equipment that is installed is tested for inoperability.

During the summer of 2008, the District used the last of the 2003 technology bond to updated workstations in the majority of the buildings. All workstations have access to the Internet/network. This will ensure that all teachers and students have increased access to all technologies including students with high-needs.

Servers

During the summer of 2008, the District used the last of the 2003 technology bond to update the central file/print servers and the NAS (Network Attached Storage). The servers now have Windows 2003 Server installed. All users will logon and have access to their own private folders. This will allow the District to control the software installed on all workstation and make it easier to upgrade software on workstations by applying the application remotely to the desktop. All data will be stored on the NAS. The current capacity of the NAS is 8 TB of disk space upgradeable to 16 TB. This data will be backed up automatically with an installed backup tape changer for monthly back ups and a secondary NAS for daily disk-to-disk backup.

Phones

Our current phone system is NEC. Internal dialing to every building is possible through a four-digit dialing code. A digital voice mail system is in place. The phone system utilizes three digital PRI lines from CMC Communication, which also allows for caller ID. Analog lines are installed at each building for emergency 911 situations and as a backup line in the event that the fiber or equipment should fail between buildings.

Video

Our video head end equipment is located at Lighthouse Elementary School and is ready for the digital transitions. Each classroom in the District has a TV and VCR/DVD. Each building has a fiber feed to 37 channels from Comcast Cable Company. All channels are controlled at the head end. Specific channels have been approved by the Technology Committee for each building. All buildings have broadcast capabilities. This includes local broadcast carts, and a district broadcast channel for each school, and one broadcast channel for the entire District.

A. Each school has its own video network consisting of:
    1. 29 cable channels and up to 37
    2. Two video carts
    3. Two VCR/DVDs in the Head End Room

B. Each classroom has:
    1. One networked TV
    2. One networked VCR/DVD
    3. S-video connection to TV from the teacher's workstation

Elementary Schools

A typical classroom has a networked teacher workstation, three-student workstation and a laser printer. Each elementary school classroom is presently wired with five data drops and one voice drop. The library media centers have at least six data drops and one computer lab with thirty data drops. Each building also includes administrative drops for the building principal and office staff. Each elementary building presently utilizes a file server for program sharing and printing. There is one HP LaserJet black and white printer in the office and a HP Color Laser print for the entire building to use in the library media center.

The teacher's computers were replaced in the summer of 2008 along with the computers labs replaced in 2006 and will continue replacing the current student computers in the classroom with the existing computers from the upgraded lab when possible. The District will be adding wireless carts with a printer for the elementary schools along with approved curriculum software if funding is available.

The core list of software on a Standard Elementary Student computer includes:

Windows XP
Microsoft Office XP
Type to Learn Jr.
Type to Learn 3
Tux Paint
Kidspiration
Kid Pix Studio Deluxe
Accelerated Reader (6 buildings)
Other Free/Open-Source Programs (e.g. Audacity and Photo Story 3 in the labs)

We will continue to upgrading the computer Labs and add wireless notebook carts as funding is available.

Middle School

A typical classroom has a networked teacher workstation. The library media center has at least six data drops and two computer labs with thirty data drops. Each building also includes administrative drops for the building principal and office staff. Each building presently utilizes a centralized file server for program sharing and printing. There is one HP LaserJet black and white printer in the office, library media center, and computer labs. Each classroom has a color inkjet printer.

In the summer of 2008, we updated the centralized file server at the District's head end at Lighthouse Elementary. The servers are Windows 2003 and are connected via a gig uplink to the network. In the summer of 2006, we replace the teacher workstations and upgrading the labs at Middle School. To provide equity between Middle School North and South, we upgraded the teacher workstations at Middle School South in the

summer of 2008. There will be three workstations in each classroom: one teacher and two students. Networked LaserJet printers for the office, computer lab and library media center.

The core list of software on a Standard Middle School Student computer* includes:

Windows XP
Microsoft Office XP
Type to Learn 3
Other Free/Open-Source Programs

*Each Middle School Labs has its own specialized software IE Lego Lab Software

We will continue to upgrade the computer Labs in both Middle schools and add wireless notebook carts as funding is available.

High School

All classrooms have a networked teacher workstation, laser printer and additional drops in the classroom for future use. There are multiple student labs in the business, technology, electronic, health, food, and science areas. All classrooms currently have a TV/VCR with S-Video to connect local teacher workstations to the television for presentations.

The core list of software on a Standard High School Student computer* includes:

Windows XP
Microsoft Office XP
Other Free/Open-Source Programs

*High School Labs has its own specialized software for each department, e.g. AutoCAD

Projects for the summer of 2007 were completed by adding ceiling mounted projectors in all of the labs. Updating the computer labs in the summer of 2008 was also completed.

Standard Teacher Computer Software

Windows XP
Microsoft Office XP
Power School
Other Free/Open-Source Programs

Distance Learning Equipment

The District has purchasing five portable video conference units for the Anchor Bay Schools District to share. We currently use the MISD video conference for the elementary project and would like to start have video conference internally/externally for more opportunities for all of the students at the Elementary and in the Middle School. Currently the High School does have one, which is used on a regular basis.

Security Cameras

Anchor Bay Schools District with the 2003 bond successfully installed security cameras in every building. The security cameras are connected to a digital unit that stores video for about 5-7 days and is viewable via any computer in the district that has the appropriate login rights. This system is upgradeable to handle eight cameras per unit with each unit having its own address there should be on issues upgrading the security camera system as needed.

Interoperability

To assure that there will be no interoperability problems with all previously installed equipment, we are using the same vendor's equipment for any new upgrades to the network and servers.

Technical Support

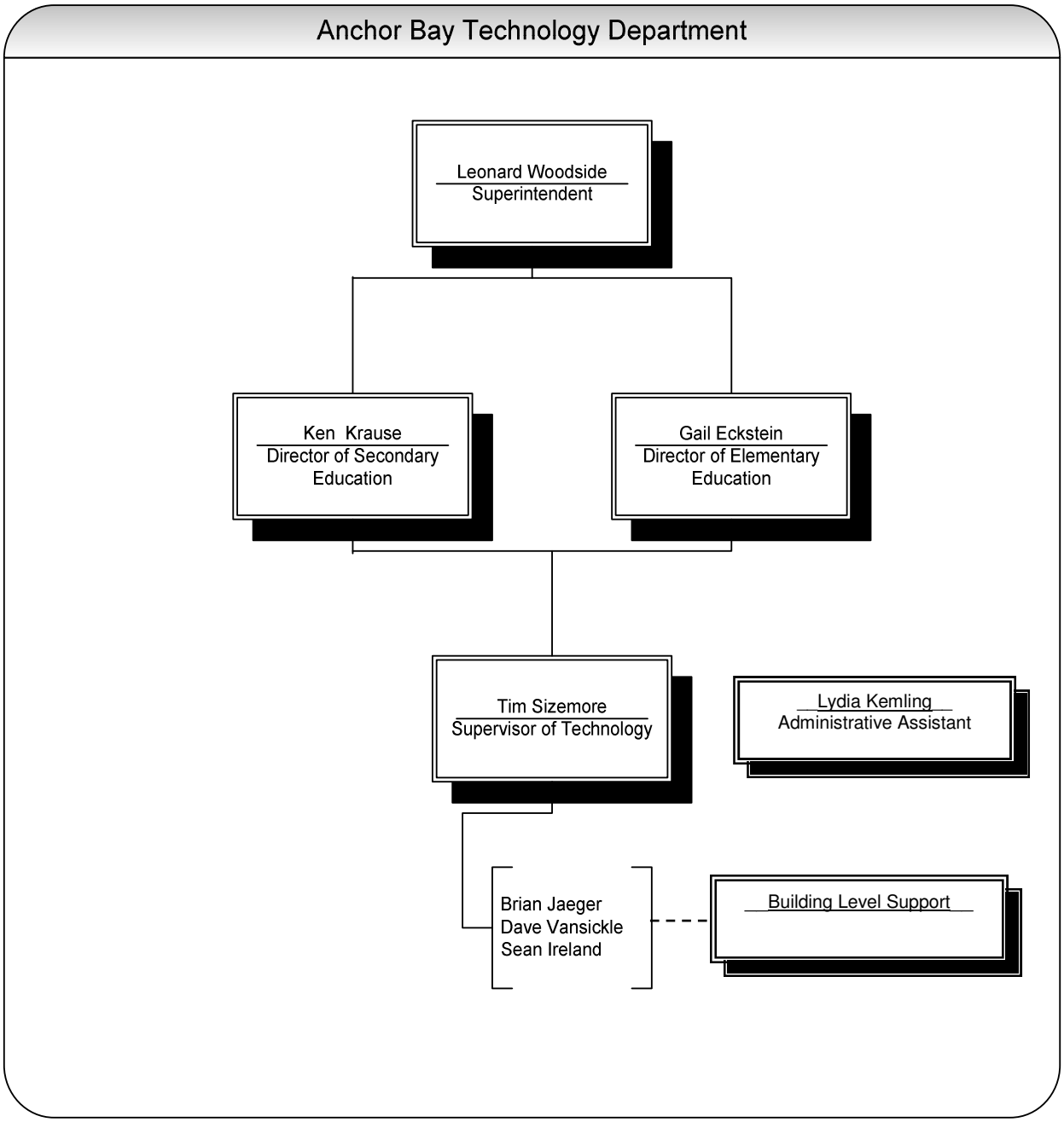
Anchor Bay Schools has a two-level support structure. The Library Media Paraprofessionals at each building offer the first layer of support. If problems cannot be resolved at a building level, they address the problem by entering a trouble-ticket on the web at https://absinfo.misd.net/helpdesk/. There are a total of eleven building-level library media paraprofessionals. They are responsible for troubleshooting computer, network and video systems. They receive training from the District Technology Department via meeting and professional development days

There are three district technicians responsible for resolving problems that are beyond the scope of the building technicians. District technicians also provide training to the building-level technicians. They are also responsible for the inventory of hardware and software.

The Supervisor of Technology provides system support as needed, oversees the technology plan, administers the budget, helps in the planning of new initiatives, works in detail with all of the building projects, provides a vision for technology and its use within the District, and works with the Directors of Curriculum in planning professional development activities.

Timelines for Technology Acquisitions

Anchor Bay Schools has a 5-year plan to recycle the computers: Year 1 new computers are placed in the labs, year 2-3 keep the current lab computers working properly under the manufacturer warranty, year 4-5 place the current lab computers into the classroom for year 4-5. Once the computes have outlived there life expectancy and/or are too costly to repair computers are recycled. Servers are also rotated every 5 years, the main servers are replaced with new ones and the current servers become backup server and then the plan starts all over if funding is available.



I. Increase Access (Section 12)

The District has an Assistive Technology Team in place. The team has present at staff meetings in the elementary schools to increase awareness of the services they can provide. It has also created a binder for each of the schools that includes information about the services and equipment that are available to students and staff. It is planned that these presentations will expand to the secondary buildings in the future.

Assistive technology issues must be considered as part of the IEP process. The IEP team, with guidance from an assistive technology team representative, determines which strategies and devices may be used to assist the student. The student and team try the device and evaluate its effectiveness, making modifications as necessary. The staff is also encouraged to consult with the AT team members on an informal basis regarding students who do not have an IEP but could benefit from assistive technology. A member of the AT team attends regular meetings of the Macomb Intermediate School District's Assistive Technology Representative Group.

Other strategies for increasing access to technology for all stakeholders are included throughout this plan, particularly in Curriculum—C. Technology Delivery and Curriculum—E. Collaboration.

IV. FUNDING AND BUDGET

J. Budget and Timetable (Section 13)

The figures below represent the preliminary fiscal year 2009 operating budget for technological services along with estimates for fiscal year 2010 and 2011 for the Anchor Bay School District. These budgets support the Technology Department in implementation, professional development, equipment acquisition, and overall maintenance of all District technological systems.

Fiscal Year	2008-2009	2009-2010	2010-2011	2011-2012
Staff	$230,716	$235,330	$240,037	$244,838
Telephone Services	16,244	16,569	16,900	17,238
Conferences/Publications	1,914	1,952	1,991	2,031
Purchase Service - Equipment Replacement or Repair	41,350	42,177	43,021	43,881
Supplies	5,000	5,100	5,202	5,306
Fiber Optic Fee - MISD	50,956	51,975	53,015	54,075
Total Technology Budget:	$346,180	$353,104	$360,166	$367,369

K. Coordination of Resources (Section 14)

Anchor Bay Schools is committed to funding the upgrade of technology in the schools and administrative offices for staff and students. Given that technology changes rapidly, the District planed for a bond in the winter of 2003. This bond issue was successful. The 2003 bond issue will provide additional technology and technology improvements throughout the District. This bond will provide approximately $3 Million for the purchase of new hardware, software and peripherals. This will be spread out over the next five years. To assure that there will be no interoperability problems with all previously installed equipment, we are using the same vendor's equipment for any new upgrades to the network and servers. Anchor Bay Schools has successfully applied for E-Rate over the last five year and has been successful in receiving some funding from this program each of the five years to help with our technology endeavors.

Whenever possible, the District seeks out opportunities for grants and other sources of funding to support its technology initiatives.

2003 Technology Bond Planned Budget Summary

Item	Component	Consists of	Total	Completed All Items Below
1	Infrastructure Cost	LAN Wiring (D,V,V,Fiber) and WAN Fiber	$ – $ 172,700	x
2	LAN/WAN Equipment LAN/WAN Install	Required LAN/WAN Hardware & Software LAN/WAN Equipment Installation	$ 201,967 $ 28,275	x
3	Network Mgmt. Hardware Network Mgmt. Install	Software and Hardware Installation/configuration of Net.Mgmt. System	$ – $ –	x
4	Analog Voice Equipment Analog Voice Install	Voice Equipment; PBX phone set, trunk cards Installation of voice Equipment	$ 45,080 $ 6,762	x
5	Analog Video Equipment Analog video Install	Analog video Head End equipment Installation of Analog Video equipment	$ 27,500 $ 3,300	x
6	TV/VRC/DVD Equipment TV/VCR/DCD Install	TV/VCR/DVD Equipment TV/VCR/DVD Install	$ 123,350 $ 18,503	x
7	File Servers Hardware File Servers Software File Servers Install	File Server Farm Hardware File Server Farm Software File Servers Hardware/Software Installation	$ 148,610 $ 18,000 $ 41,611	x
8	WS/LT/Periph. Hardware WS/LTPeriph. Install	Desktop PC/Mac,Laptop PC/Mac Printers etc. Installation/configuration of Peripherals	$ 1,318,800 $ 57,180	x
9	IP Multimedia: Videoconferencing, Digital Video Streaming & Broadcasting IP Multimedia Install	Video conference units, MCU,presentation system and auditorium modifications, digital video broadcast units and Video-on-Demand systems. Installation/configuration of Multimedia Equipment	$ 271,230 $ 31,191	x
10	Voice Over IP (VOIP) Voice Over IP Install	Voice Over IP Hardware & Software Voice Over IP Hardware and Software Install	$ – $ –	
11	Wireless LAN Hardware Wireless LAN Install Other	Access Points, Wireless NICs, Laptops and Carts Wireless LAN Installation Design Fees etc.	$ – $ – $ 198,00	
12	Miscellaneous Miscellaneous Install	Miscellaneous Hardware, Software and Services Miscellaneous Hardware, Software & Services Installation	$ 152,000 $ –	x
		Total	$ – $ 2,864,059	

V. MONITORING AND EVALUATION

L. Evaluation (Section 15)

To assess whether the goals of the Technology Plan are being met, the District will use the measures outlined in the following table. If analysis of the results from these measures indicates that adjustments are needed in order to achieve the goals, alternate strategies will be designed and implemented with input from the appropriate committees. Evaluation of the Technology Plan will be an ongoing process performed in conjunction with other school improvement initiatives such as North Central Association Accreditation/AdvancEd and ongoing curriculum review.

Goal: The effectiveness and use of technology will be evaluated on a regular basis.

Objectives and Strategies	Measure used	Frequency	Responsibility
Objective 1. The effectiveness and use of technology by our students will be evaluated on a regular basis.			
Student outcomes will be assessed.	Percentage of students passing Middle School technology courses or 8th grade technology proficiency test to determine the percentage of technologically literate 8th graders in accordance with NCLB	Annually	Middle School Technology Teachers; Directors of Elementary and Secondary Education
	MEAP/other standardized tests and district-required assessments	Annually	Directors of Elementary and Secondary Education
Objective 2. The effectiveness and use of technology by our staff will be evaluated on a regular basis.			
Maintain a record of staff development activities.	Information included in personnel files; Reported to the State as part of the Registry of Educational Personnel (REP) Report	Annually	Directors of Elementary and Secondary Education; Technology Supervisor
Encourage discussions of technology integration in teacher evaluations.	Staff evaluation of professional development activities	Completed after each session	Directors of Elementary and Secondary Education; Technology Supervisor; Building Principals
	Staff evaluations by administrators	Non-Tenured: Annually; Tenured: At least once every three years	Building Principals

Objectives and Strategies	Measure used	Frequency	Responsibility
Other areas to be evaluated			
Maintain a record of troubleshooting calls	ABSD Help Desk Issue Management tickets and logs kept by building level support people	Ongoing	Technology Supervisor
Maintain a record of requests for purchase of hardware and software.	Building "wish lists" developed with principals, their staff and parents and the District Technology Committee	Ongoing	Technology Supervisor; Building Principals

M. Acceptable Use Policy (Section 16)

Internet access for the Anchor Bay Schools is through a proxy server at the Macomb Intermediate School District, which uses the N2H2 Bess filtering software. The Anchor Bay School District is in full compliance with CIPA, the Children's Internet Protection Act. See Attachment B for the actual policy.

ATTACHMENT A

SAMPLE PROFESSIONAL DEVELOPMENT OFFERINGS

Technology Session Descriptions
April 24, 2008 Professional Development Day

AlphaSmarts as Assistive Technology: Helping Students Write

In this session, you will see the various features of AlphaSmarts, which make them a great tool for students with physical, learning, or communication challenges. We will also discuss lesson ideas and troubleshooting.

Assistive Technology for Struggling Students

What is Assistive Technology? How can AT be used for everyone in your classroom - not just for special education students? What are some general accommodations I can use for students who are falling behind or for ADHD students? Come see some Assistive Tech devices (low tech to high tech). Please come and be willing to share what you have done in your classroom to help struggling students!

Best Web Sites for Students

Exceptional web sites for every grade level, content area and specialty will be demonstrated. The emphasis will be on sites that your students can use. Participants will have time to explore and create their own lists of favorites.

Blogging and Podcasting

Blogs (We**b Logs**) are online journals that are increasingly being used by teachers and students to publish information and opinions. This session will show you how to create and use a classroom blog. You will have time to set up your own site. You will also get an introduction to Podcasting, which is a way of sharing audio and video information over the Internet.

DE Streaming (formerly called UnitedStreaming Video)

DE Streaming is a K-12 video-on-demand service that provides free access to thousands of educational videos, digital images and clipart. This session will cover some advanced features including Assignment Builder, which lets you easily create a web site using just the materials you want your students to access, and a Quiz Center. Basic features of the service and how to create an account will also be reviewed.

Equipment: Hands-On Practice + Videoconferencing

This hands-on session will feature SmartBoard interactive white boards, Elmo projectors, multimedia projectors, digital microscopes, and other devices. After a short demonstration, participants will spend the rest of the session trying out the equipment. There will also be a demonstration of our portable videoconferencing units and the TWICE database, which helps you locate distance learning programs and virtual field trips.

Excel and Word: Charts, Graphs and Tables

Learn how to get yourself organized for assessments and report card marking with some simple spreadsheets. Bring a copy of your report card and a class list to customize your own spreadsheets.

Free Tools on the Internet for Teachers

Free tools gathered from educational technology workshops will be presented. The emphasis will be on tools that teachers can use to save time or be more creative. Worksheet makers, photo editing tools, writing aids, mapping tools and more will be included. Participants will have time to explore the sites and create their own lists of favorites.

Microsoft Publisher

Discover the usefulness of Publisher. We will explore the many different templates available for classroom use. You will choose a few that work for you then create samples you can use immediately in your classrooms. Please bring any classroom information you might need to make a document, for example, a newsletter or calendar dates. NOTE: Teachers who do not currently have Publisher on their computers should be getting it this summer.

PowerPoint and Video Streaming in the Classroom

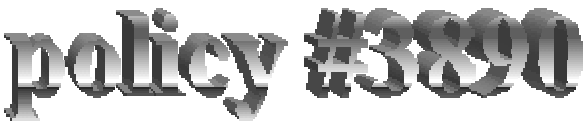
Learn classroom applications of PowerPoint including how to embed a video from DE Streaming (formerly United Streaming Video) into presentations. A basic knowledge of PowerPoint is helpful, but everyone is welcome! This session includes a brief introduction to the features of DE Streaming. Instructions for setting up an account will be included.

Teacher Web Sites: Creating a Site beyond the Basic Page

This session is for people who want to create a more detailed web site than the basic page we will all be making next year. (That page will be created with training and assistance at a staff meeting in the fall.) It will begin with a brief demonstration of ProtoPage and Blackboard, two free tools that work well for classroom teachers. Time will be given for you to get started on your own ProtoPage site.

ATTACHMENT B

ACCEPTABLE USE POLICY



INTERNET POLICY

Anchor Bay Schools is devoted to using the best technology can offer, in its effort to help students become lifelong learners. To that end, the Internet and other telecommunications networks are vial tools.

Students and teachers have the conditional right to access telecommunications networks to facilitate their growth in skills and their research. Users of telecommunications networks have the responsibility to follow all Board-adopted guidelines when using school facilities or school district passwords.

General Responsibilities:

- All Internet or other network passwords will be issued to faculty and staff only.
- Faculty and staff are responsible for all use of their passwords on school facilities.
- Students may not use personal passwords from school facilities.
- Access to toll numbers may be made only within the limitations of reauthorized school accounts. The holder of the password is responsible for all charges made while accessing with that password.
- Faculty and staff will supervise all student use of telecommunications networks authorized by their passwords.

Responsibilities while using telecommunications networks:

- Users have the responsibility to respect the privacy of all users; they shall not intentionally seek information on, obtain copies of, or modify files, data, or passwords belonging to other users.
- Users have the responsibility to respect all copyright laws; copyrighted materials shall not be uploaded. School programs may not be downloaded for use at home.
- Users shall not incur charges for downloading materials without prior authorization.
- Users shall not develop or use programs that harass, infiltrate or other wise interfere with the use of others.

- Users shall not access, download or bounce materials, which would be otherwise prohibited in the schools, including but not limited to pornography, material that incites or encourages violations of laws, substance abuse or harassment on the basis of gender, race, ethnicity or condition of disability.
- It is the user's responsibility to keep virus programs off school equipment. Disks from outside the school may not be loaded on school computers.
- It is the user's responsibility to maintain the integrity of the system, by using appropriate logon and logoff procedures, reporting all malfunctions immediately, and powering off all equipment after use.

Users of telecommunications networks in the schools shall:

- Use the Internet for the support of education, research and information only.
- Obey all copyright laws.
- Report any misuse, illegal access, tampering or malfunction immediately.
- Accept responsibility for care of equipment.
- Keep all passwords confidential
- Report security problems immediately.
- Use passwords only for authorized access, and not at other times.

Users shall not:

- Access inappropriate files.
- Access or modify accounts or files.
- Use the Internet in any way, which would violate the Code of Conduct.
- Incur charges without prior authorization.
- Reveal personal or confidential information.
- Use passwords other than those authorized for school use, or at times other than authorized.

The school district reserves the right to access, read, delete any information on district files or charged to district passwords.

Failure to follow these guidelines and procedures will result in loss of access and/or disciplinary action.

Adopted: April 1996

BOARD OF EDUCATION
ANCHOR BAY SCHOOLS

Anchor Bay School District
52801 Ashley
New Baltimore, MI 48047
(810) 725-2861

I, (Please Print Your Name Clearly) , have read the Anchor Bay School District Internet Access Usage policy and agree to conduct myself according to this policy #3890.

School **Signature/Date**