# Benson Public Schools ISD 777 Three Year Technology Plan

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## Benson Public Schools 1400 Montana Avenue Benson MN 56215 320-843-2710 Table of Contents

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#### Introduction

This technology plan focuses on the next four years at Benson Public Schools. The plan is comprehensive in that it includes a thorough review of who, what, where, and how in regard to implementation.

Benson Public Schools technology plan has been created under the guidelines as set forth in the Technology Planning Guide, Minnesota Department of Education.

#### A. Planning and Needs Assessment

Rob Lee, IT Director, will serve as the organization-wide sponsor for purposes of providing organization-wide leadership and communication, as well as direct guidance for the site administrators. The site administrators, Mike Knutson (grades 5-12) and Brad Johnson (grades EK-4) are responsible to oversee their respective parts of the technology plan. At each site, the administrators should make use of additional staff in order to implement the plan. Dennis Laumeyer, ISD 777 Superintendent, and the Board of Education shall retain ultimate authority in terms of expenditures and overall approval of policies and procedures surrounding the plan.

Our technology planning steering committee consisting of, community members at large, business persons, students, parents, school faculty, school administration, and school board members should examine areas for policy or procedure development or revisions that are related to the technology plan. This committee shall meet at least on a quarterly basis to discuss progress, address concerns, and make future recommendations for our technology plan.

The school board should take action on the recommendations of the committee, after recommended approval by the superintendent. A disaster recovery plan should be developed. Currently, daily backups are completed on all servers. Offsite storage of backups is done on a weekly basis.

Independent School District 777, located in west central Minnesota, consists of three main school buildings with an enrollment of 907 students. We have seen changes in the demographics of our school population because of student population decline. The Junior and Senior High Buildings are currently connected with fiber optic cable. The Northside Elementary is also connected to the High School and the Junior High with fiber optic cable. Internet connectivity is delivered to us a fiber optic connection from our ISP (LCTN). Technology is procured according to priority. Priority is established by a number of factors such as: need, cost, relationship with curriculum, future expansion, and compatibility with current system. The technology equipment inventory is updated once a year.

ISD 777 must continue to purchase new hardware and software programs/upgrades in order to keep current the more than 400 computers and related technology that is used in the district. This is achieved by the work of our Technology Planning Committee and technical staff. In addition, all sites should be connected via fiber optics or other high speed methods. It may be necessary to purchase additional remediation, learning and administrative software programs and/or training in order to implement graduation standard requirements.

Currently, all buildings, Northside Elementary, Benson Elementary, and Benson Jr/Sr High Schools, are networked. Every classroom in the school district has at least one networked

computer. Some classrooms have more than one networked computer. There are five desktop computer labs, a PC lab at Northside Elementary, one PC lab in the industrial technology wing, a PC media center lab, and two PC labs in the senior high school. We also have two wireless mobile carts that contain 30 PC notebook computers each, one 30 iPad tablet cart at NS, one 30 iPad tablet cart at BHS that are available to be checked out.

#### B. Vision, Goals, Objectives, and Strategies for Technology

The long term mission of ISD 777 focuses on purpose, constituents' served/targeted population, products and services. The purpose of this plan is to provide students, faculty, and when appropriate, the community, the opportunity to enhance their education through the use of technology while preparing them to be productive and educated citizens who are adept in the use of cutting edge technology.

Most specifically students and faculty, but the community as well, will be provided with the hardware, software, and training to enable them to feel comfortable with computer technology, internet, ITV, cable television production, video conferencing and other up to date, ongoing, technology.

The long term technology vision includes relevance and use of technology in order to accomplish the mission. ISD 777 will make use of its current technology, and established technology buying cycle, in order to accomplish its mission.

Benson Public Schools will need to purchase/upgrade additional administrative software for the purpose of tracking graduation standard requirements to the detail that the district finds satisfactory.

One of the main agenda items our Technology Committee is currently working on is exploring our options on deploying some type of one to one initiative.

The district utilizes Google Apps for education throughout the district.

We currently use Northwest Evaluation Association (NWEA) for doing computerized assessment testing.

Benson Public Schools will need to purchase/upgrade hardware and software for purposes of interdisciplinary instruction. .

Currently ISD 777 is using the available technology to report MARSS, STARS, UF ARS, EDRS reporting, and various state reporting. ISD 777 should look for opportunities in expanding the use of technology for State and Federal reporting.

Benson Public Schools currently manages its own web page. It is updated on a daily basis. The web pages are maintained by our staff. The web site offers daily announcements, daily breakfast and lunch menus, sport/activity schedules; it has various links on the page to other community sites as well as homework help sites. Job postings, alumni information, and other community related information are also posted on our web page. Currently, we offer e-mail to administration and staff to our domain. Each student in grades 7-12 has a Google email account.

Supplies are purchased through the Internet and from computer and supply retailers. We do use the web to extensively research price information and obtain price quotations.

Students will use technology to access, retrieve, evaluate and interpret visual/auditory information. Example: Desktop video, Accelerated Reader Program, electronic card catalog, Follett Destiny and other resources and software currently available in the library. ITV and video conferencing courses are also available to students, staff and the public.

Students, staff and administration will be linked through the network to facilitate communication and shared resources. Student system information will be more accessible for administration and staff. Information stored could be shared on a district wide level to facilitate the graduation standards tracking and progress. Special education staff would be able to more closely monitor the progress of their students and also allow regular classroom instructors access to the needs of their special education students. Library patrons would be able to utilize research information on a district level rather than a building level.

Students, staff, and the public use technology to access, retrieve, evaluate and interpret visual/auditory information. On line courses, learning sessions, webinars and other on line computer learning opportunities are available. We have also implemented video conferencing equipment to allow our staff and students to further their communications and learning outside the district without having to leave the building.

#### C. Policies and Procedures

#### **Technology Standards for All Students**

- Students at all grade levels, K-12 will 1. Understand basic technology operations and concepts.
- 1.1 Demonstrate a sound understanding of the nature and operation of technology systems, including networked environments.
- 1.2 Develop sufficient technical skills to successfully use, troubleshoot and maintain the technology and telecommunications tools in daily life, work situations, and learning environments.
- 1.3 Discriminate among a variety of technologies and media to select appropriate technology for specific purposes.
- 2. Use technology responsibly and ethically.
- 2.1 Practice responsible use of technology systems, information, and software.
- 2.2 Understand the ethical, cultural, environmental, and societal implications of technology and telecommunications.
- 2.3 Understand what digital legacy and digital footprint is.
- 3. Use technology to communicate effectively and creatively.
- 3.1 Use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
- 3.2 Use technology to collaborate, publish, and interact with peers, experts, and other audiences.
- 3.3 Create, produce, and present ideas in a variety of forms, including text, video, graphics, and conversation.
- 4. Use technology for thinking, learning, and producing.
- 4.1 Enhance content-area learning with technology-infused lessons.

- 4.2 Construct new meaning and knowledge by synthesizing information.
- 4.3 Use computer modeling, image processing, simulations, and data manipulation to develop critical thinking and understanding.
- 4.4 Use a variety of tools to produce quality products.
- 5. Use technology for research, problem solving, and decision-making.
- 5.1 Use technology to locate, evaluate, collect, and organize information from a variety of sources.
- 5.2 Review information analytically and transform it into useful knowledge to solve problems.
- 5.3 Work with group to collaboratively solve a problem and present results.

Grades K-2: Performance Indicators

1. Understand basic technology operations and concepts.

1.1 Demonstrate a sound understanding of the nature and operation of technology systems, including networked environments.

Use appropriate terminology in describing technology.

Develop skills in basic computer operations (keyboard functions, logon, logoff, mouse techniques.)

- 1.2 Develop sufficient technical skills to successfully use, troubleshoot and maintain the technology and telecommunications tools in daily life, work situations, and learning environments. Successfully operate computers, VCRs, printers, audio tapes, and other technologies.
- 3. Discriminate among a variety of technologies and media to select appropriate technology for specific purposes. Use multimedia resources (interactive books, software, encyclopedias) to support learning.
- 2. Use technology responsibly and ethically.
- 2.1 Practice responsible use of technology systems, information, and software.

Cooperate with others while using technology.

Care for and safely operate equipment.

- 2.2 Understand the ethical, cultural, environmental, and societal implications of technology and telecommunications. Demonstrate positive and ethical social behavior when using technology (follow rules.)
- 2.3 Educate what digital legacy and digital footprint is.
- 3. Use technology to communicate effectively and creatively.
- 3.1 Use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

Create documents using word processing and desktop publishing software.

3.2 Use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.

Share information with others using data

networks and telecommunications (telephone,

and email with class).

3.3 Create, produce, and present ideas in a variety of forms, including text, video, graphics, and conversation.

Enhance documents with graphics, including clip artandoriginal

artwork, using paint, chart, and draw programs.

Make presentations using technology.

4. Use technology for thinking, learning, and producing.

4.1 Enhance content-area learning with technology-infused lessons.

Use a variety of technology resources to support learning (lessons on public drives.)

4.2 Construct new meaning and knowledge by synthesizing information.

4.3 Use computer modeling, image processing, simulations, and data manipulation to develop understanding.

Make a graph to sort and understand information.

4.4 Use a variety of tools for quality production.

5. Use technology for research, problem solving, and decision-making.

5.1 Use technology to locate, evaluate, collect, and organize information from a variety of sources.

Use key words as a search strategy.

Use technology to locate, evaluate and collect information (electronic encyclopedias, library catalog, selected Internet sites, and magazines)

5.2 Review information analytically and transform it into useful knowledge to solve problems.

Use technology to research a problem or decision to be made.

5.3 Work with group to collaboratively solve a problem and present results. Work with a team to fmd information, make decisions, and create a product.

#### Grades 3-5: Performance Indicators

1. Understand basic technology operations and concepts.

- 1.1 Demonstrate a sound understanding of the nature and operation of technology systems, including networked environments. Demonstrate an understanding of concepts underlying hardware, software, and connectivity. Navigate computer systems (organize documents into folders, move between different applications.)
- 1.2 Develop sufficient technical skills to successfully use, troubleshoot and maintain the technology and telecommunications tools in daily life, work situations, and learning environments. Apply strategies for identifying and solving routine hardware and

software problems that occur during everyday use. Develop keyboarding skills. Use home row fingering position with appropriate fingering stretches, keyboarding faster than handwriting (approximately 10-15 wpm.)

- 1.3 Discriminate among a variety of technologies and media to select appropriate technology for specific purposes. Select and use appropriate tools and technology resources to accomplish a variety of tasks.
- 2. Use technology responsibly and ethically.
- 2.1 Practice responsible use of technology systems, information, and software. Cooperate with others while using technology. Demonstrate respect for privacy and work of others. Care for and safely operate equipment.
- 2.2 Understand the ethical, cultural, environmental, and societal implications of technology and telecommunications. Demonstrate positive and ethical social behavior when using technology (follow rules.) Understand basics of copyright law of ownership of information and copyright law. Understand how technology is used daily in industry, business and education.
- 2.3 Educate what digital legacy and digital footprint is.

- 3. Use technology to communicate effectively and creatively.
- 3.1 Use a variety of media and formats to communicate information and ideas effectively to multiple audiences. Create written documents using writing process steps, word processing skills, and publishing programs. Revise documents using word processing program features, including spell checking. Use a spreadsheet to create tables, graphs and charts, and explain what each means.
- 3.2 Use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences. Communicate with others using email. Develop good habits for managing email. Send and receive files for proofreading and/or feedback.
- 3.3 Create, produce, and present ideas in a variety of forms, including text, video, graphics, and conversation. Enhance documents with graphics, including clip art and original artwork, using paint, chart, and draw programs. Communicate ideas by creating and delivering a presentation.
- 4. Use technology for thinking, learning, and producing.
- 4.1 Enhance content-area learning with technology-infused lessons. Use a variety of media and technology resources for directed and independent learning activities in the curriculum areas (lessons on public data, online research projects.)
- 4.2 Construct new meaning and knowledge by analyzing and synthesizing information. Compare and contrast information using two or more resources.
- 4.3 Use computer modeling, image processing, simulations, and data manipulation to develop understanding. Sort and analyze information using databases and spreadsheets.
- 4.4 Use a variety of tools for quality production.
- 5. Use technology for research, problem solving, and decision-making.
- 5.1 Use technology to locate, evaluate, collect, and organize information from a variety of sources. Use key words as a search strategy for locating information. Use technology to locate, evaluate, collect, and organize information (electronic encyclopedias, library catalog, selected Internet sites, magazines)
- 5.2 Analyze information and apply understanding to solve problems. Use technology to research a problem or make a decision.
- 5.3 Work with group to collaboratively solve a problem and present results. Research a problem or decision to be made using technology and work with a team to create a product.

#### Grades 6-8: Performance Indicators

- 1. Understand basic technology operations and concepts.
- 1.1 Demonstrate a sound understanding of the nature and operation of technology systems, including networked environments. Demonstrate an understanding of concepts underlying hardware, software, and connectivity. Navigate computer systems (organize documents into folders, move between different applications, use program help and navigation aids.)
- 1.2 Develop sufficient technical skills to successfully use, troubleshoot and maintain the technology and telecommunications tools in daily life, work situations, and learning environments. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. Develop keyboarding skills to 20-25 wpm with 90% accuracy on timed test. Demonstrate and use ergonomically appropriate posture and techniques to perform tasks.

- 1.3 Discriminate among a variety of technologies and media to select appropriate technology for specific purposes. Select and use appropriate tools and technology resources to accomplish a variety of tasks.
- 2. Use technology responsibly and ethically.
- 2.1 Practice responsible use of technology systems, information, and software. Cooperate with others while using technology. Care for and safely operate equipment. 2.2 Understand the ethical, cultural, environmental, and societal implications of technology and telecommunications. Demonstrate legal and ethical behaviors when using information and technology, and discuss consequences of misuse. Demonstrate understanding of intellectual property and copyright law by properly crediting work of self and others. Identify examples of copyright violations. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. Identify technological skills needed for school success and
- 2.3 Educate what digital legacy and digital footprint is and what is being left behind in their digital past.
- 3. Use technology to communicate effectively and creatively.

jobs. Research the accuracy and relevance of information sources.

- 3.1 Use a variety of media and formats to communicate information and ideas effectively to multiple audiences. Create multi-page documents using writing process steps, word processing skills, and publishing programs. Revise documents using word processing program features, including spell checking, thesaurus, and grammar checker. Use advanced editing and text formatting. Use a spreadsheet to create tables, graphs and charts, and explain what each means.
- 3.2 Use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences. Communicate with others using email. Develop good habits for managing email.
- 3.3 Create, produce, and present ideas in a variety of forms, including text, video, graphics, and conversation. Enhance documents with graphics, including clip art and original artwork, using paint, and draw programs. Design, develop, publish, and present products (i.e. presentations, web pages, documents, and videotapes) for a variety of audiences.
- 4. Use technology for thinking, learning, and producing.
- 4.1 Enhance content-area learning with technology-infused lessons. Use a variety of media and technology resources for directed and independent learning activities to support learning.
- 4.2 Construct new meaning and knowledge by combining and synthesizing different types of information.
- 4.3 Use computer modeling, image processing, simulations, and data manipulation to develop understanding. Use content-specific tools, software, and simulations (environmental probes, graphing calculators, exploratory environments, web tools, visual learning aids) to support thinking and learning. Sort, organize, interpret and display information using spreadsheets and databases.
- 4.4 Use a variety of tools for quality production.
- 5. Use technology for research, problem solving, and decision-making.
- 5.1 Use technology to locate, evaluate, collect, and organize information from a variety of sources. Use search strategies, including logical operators and keywords and sort records in a prepared database. Use technology to locate, evaluate, collect and organize information (electronic encyclopedias, library catalog, selected Internet sites, magazines) 5.2 Review information analytically and transform it into useful knowledge to solve

problems.

5.3 Work with group to collaboratively solve a problem and present results. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate problems, issues, and information, and to develop solutions.

- Grades 9-12: Performance Indicators
  1. Understand basic technology operations and concepts.
- 1.1 Demonstrate a sound understanding of the nature and operation of technology systems, including networked environments. Demonstrate an understanding of concepts underlying hardware, software, and connectivity. Navigate computer systems (organize documents into folders on network drive, move between different applications and various drives, use program help and navigation aids.)
- 1.2 Develop sufficient technical skills to successfully use, troubleshoot and maintain the technology and telecommunications tools in daily life, work situations, and learning environments. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. Develop keyboarding skills to 25-30 wpm, and demonstrate ergonomically appropriate posture and techniques to perform tasks.
- 1.3 Discriminate among a variety of technologies and media to select appropriate technology for specific purposes. Select and use appropriate tools and technology resources to accomplish a variety of tasks. Make informed choices among technology systems, resources, and services. Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems.
- 2. Use technology responsibly and ethically.
- 2.1 Practice responsible use of technology systems, information, and software. Cooperate with others while using technology. Care for and safely operate equipment.
- 2.2 Understand the ethical, cultural, environmental, and societal implications of technology and
- telecommunications. Demonstrate legal and ethical behaviors regarding the use of technology and information. Demonstrate understanding of intellectual property and copyright law by properly crediting work of self and
- others. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole. Identify technological skills needed for jobs. Research the accuracy and relevance of information sources.
- 2.3 Educate what digital legacy and digital footprint is and what is being left behind in their digital past.
- 3. Use technology to communicate effectively and creatively.
- 3.1 Use a variety of media and formats to communicate information and ideas effectively to multiple audiences. Create multi-page documents using word processing skills, writing process steps, and publishing programs. Revise documents using word processing program features, including spell checking, thesaurus, and grammar checker. Use advanced editing and text formatting. Use a spreadsheet to create tables, graphs and charts, and explain what each means.
- 3.2 Use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences. Communicate with others using email. Develop good habits for managing email. Efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.
- 3.3 Create, produce, and present ideas in a variety of forms, including text, video, graphics, and conversation. Enhance documents with graphics, including clip art and original artwork, using paint, and draw programs.

Design, develop, publish, and present products (presentations, web pages, documents, videotapes) that demonstrate and communicate curriculum concepts to audiences inside and outside of the classroom. Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

4. Use technology for thinking, learning, and producing.

4.1 Enhance content-area learning with technology-infused lessons. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning. Evaluate technology-based options, including distance education for lifelong learning.

4.2 Construct new meaning and knowledge by synthesizing information.

4.3 Use computer modeling, image processing, simulations, and data manipulation to develop understanding content-specific tools, software, and simulations (environmental probes, graphing calculators, exploratory environments, Web tools, visual learning aids) to support thinking and learning. Sort, organize, interpret and display information using spreadsheets and databases. Investigate and apply expert systems, intelligent agents, and simulations in classroom and real world situations.

4.4 Use a variety oftools to produce quality products.

- 5. Use technology for research, problem solving, and decision-making.
- 5.1 Use technology to locate, evaluate, collect, and organize information from a variety of sources. Use technology to locate, evaluate and collect information (electronic encyclopedias, library catalog, selected Internet sites, and magazines). Use a variety of electronic sources to access resources and media and apply sophisticated search techniques to collate, interpret, and publish a research project.

5.2 Review information analytically and transform it into useful knowledge to solve

problems.

5.3 Work with group to collaboratively solve a problem and present results. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate problems, issues, and information, and to develop solutions.

Data and network security is achieved through a combination of logins and passwords within our Novell e-directory database along with specific software applications that require a separate login and password. Also all servers and data locations are behind locked doors with limited access. We also have a firewall in place for protection from the outside world.

The purpose of our internet policy is to set forth policies and guidelines for access to the school district computer system and acceptable and safe use of the Internet, including electronic communications.

Currently ISD 777 is using a Sonic Wall NSA-2600 security appliance for a firewall and as an internet content filter to deny access to inappropriate sites on the web. The technology committee should look to find other more expansive means of internet filtering. The NSA-2600 allows for the blocking of sites by category, specific domain names or keywords, tracking of sites visited by users, and the ability to restrict and allow internet access by

On a yearly basis, each student, their parent or guardian, and the students supervising teacher is required to read and sign a computer/internet use agreement form before using any of the district's computers. Each school staff person is also required to read and sign a similar form before computer use.

## D. Technology Infrastructure, Management, and Support

The LCTN manages the Internet access from our school District LAN to the Internet Point of Presence (POP). The LCTN leases Gigabit WAN for video and data services from NuTel Communications providing ITV, video conferencing and WAN services.

The LCTN provides the following video services:

- \* Manages the Audio/video router distributing signals for each class on the ITV network.
- \* Manages the cross connect channels to CMDLN and other PSEO sites.
- \* Creates and manages the joint ITV schedule
- \* Provides access to other K-12 schools for classes, meetings, staff development and Special Education services.
- \* Promotes and creates connections to other sites for video field trips with codecs.
- \* Provides connections to IP video and Internet 2 connections

The data service provides a 1 Gbps WAN which connects up the 18 other Public School Districts and allow us to share the Internet access. The LCTN/MRVED recently signed a 10 year lease agreement. The LCTN puts out the RFP for the Internet POP and through a committee and the Governing Board of LCTN & MRVED, selects a vendor. The LCTN then configures and manages all IP traffic, including routers, DNS servers, and other servers for the Districts. Currently the District shares 1 Gbps of broadband Internet access with other schools.

The District is responsible for the LAN up to the edge switch, but can receive assistance from the LCTN on LAN issues. The LCTN provides the following:

- \* Manages WAN edge Switches (HP Procure gig)
- \* Manages the Border router to Internet
- \* Manages Cisco CSA firewall between the schools and Internet
- \* Manages connection to Internet 2 and video services thru Ridgewater, CMDLN and OET.
- \* Provides mail scanner for schools to eliminate viruses.
- \* Provides expertise on Linux based content filters and firewalls.
- \* Manages the WAN and Access to the Internet so all schools have an equal and fair share of bandwidth, and will increase bandwidth when growth dictates it.

#### **Districts:**

Agree to follow Children's Internet Protection Act, CIPA that includes,

The district provides education to minors about appropriate online behavior, including interacting with other individuals on social networking sites and in chat rooms, and cyber bullying awareness and response.

The districts will maintain records on Acceptable use policy, open meetings, training and changes related to the AU policy.

Districts will manage filter to comply with CIPA.

Districts will agree to a Letter of Agency for the LCTN to hold an RFP, conduct bids and manage contract for WAN and Internet as well as apply for E-rate and Telecom Aid on the districts behalf.

#### E. Role of School Media Center

The high school and elementary schools have media centers and computer labs that are available to students and staff to access research materials, reading materials, Internet access, word processing, the Accelerated Reader program, and video production.

Software program are ordered out of the library budget like books, magazines, and newspapers, so we do have a say in that. The hardware that has been provided was chosen by others and brought in for our use. Video cameras, VCRs, optical players, and editing equipment were purchased on the recommendations of our media services coordinator.

The media center plays a very supportive role in instruction. The teachers use the media centers as research tools. They bring their classes in to do research for papers and projects, and give them access to word processing to type their final drafts.

Books and digital media are checked out by teachers to be used in their classrooms. We have 36 computers in the high school media center and 10 in the elementary media center that access Internet for research, and are used regularly by students individually and in their classes. With the implementation of Graduation Standards, the Accelerated Reader program, and electronic card catalog Follett Destiny, use of the media centers has increased dramatically.

During the past years as the Library Media Center has added new technologies, the media center staff has offered training in a variety of media areas to district wide personnel. Some of the technology applications included library research programs, video editing instruction, digital camera and camcorder classes, and computer basics along with digital media instruction.

Instructing teachers to utilize technology has great benefits to the school as those teachers become more confident and begin infusing what they have learned into their curriculum.

The media center offers many ways to integrate technology with instruction. From basic research in the computer labs to multimedia authoring using full motion digital video, animation and special effects in the editing studio. Students have many opportunities to use technology in the media center. By collaborating with teachers in different subject areas, classes come to the media center to work on projects that include an option for video. For example, students from American Government work in groups to produce a news show with five stories and two commercials. The Mass Communication classes prepare the Senior Video plus other digital video projects. The students use higher order thinking skills as they brainstorm for ideas; create storyboards and learn how to edit video with Adobe Premier and ShowBiz software programs. The Speech and Public Speaking classes test their speaking skills for a daily news show that is broadcast over the school's television network. Students from Western Civilization have the opportunity to produce a video for the grad standard project of their choice. And the Art department has produced short animations done in clay using the stopmotion frame capture method with digital cameras and Adobe Premier.

All of these projects employ a variety of instructional techniques and media to meet the needs and capabilities of each student and fulfills the requirements assigned by the classroom instructor.

The District is fortunate to have aides on our staff to help with the day- to-day operation of the media centers. The librarian supervises two media centers, with the majority of her time being spent in the high school media center. There is an aide at the elementary school who handle the library skills and checking out of materials for grades K-4 and the Accelerated Reader program for grades 2-4. There is one aide at the high school who handles the Accelerated Reader program for grades 5-12, and assists with the 5<sup>th</sup> and 6<sup>th</sup> grade library time. The Accelerated Reader program has expanded dramatically since its inception in 1999.

We encourage our students to use the public library as another source for research and reading materials. The public library and the Pioneerland Regional Library System are wonderful supplements to our school libraries. We can access their database through Internet so we can search from the school library when needed. If students have a library card at the public library we can request the materials from the schools as well.

## F. Staff Development and Training

Benson Public Schools are embarking on an aggressive plan to address the challenging and diverse needs of its students in the twenty-first century. We will provide a comprehensive curriculum that fosters effective communication, creativity, critical thinking, and problems solving. The effective use of technology is an integral component and requires careful preparation. It will serve as a tool that supports quality instruction and improved student achievement.

After surveying our teachers and reviewing MCA and BST scores, Benson Public Schools would like to give our teachers an intense staff development program to meet these challenges. An annual technology training projects will prepare our teachers to integrate technology into the curriculum, sharpen technology skills, and cultivate new skills. The curriculum focused training project will be designed to integrate software and the Internet into classroom learning activities in the subject areas. "Power users" will take part in the end user support training. The selected teachers will serve as resource guides for the integration of technology and the Internet into the current curriculum. To streamline administrative duties, staff will learn to use current technology effectively through tool software training. This will allow for more time on teaching and developing curriculum. These training components in our professional development projects will serve to enhance the effective use of technology by staff, students, and administration.

We expect such involvement will have four positive aspects:

- 1) develop the integration of technology into the curriculum
- 2) develop higher levels of technological skills
- 3) maintain and refresh technology skills
- 4) provide training on new products and equipment

We plan for our plan to have five major components:

- 1) Survey all teachers to identify current technology skills, integration capabilities, and target on specific technology needs.
- 2) Implement and update requirements for educator preparation and professional development to align the use of technology with local, state, and national standards and curriculum.
- 3) Develop a comprehensive technology staff development plan and explore technology sessions that will meet the needs of our personnel.

- 4) Conduct the Technology Academy, Curriculum-Focused Training, End User Support Training, and Tool Software Training for our teachers to explore and develop technology skills that will be implemented into the curriculum and increase proficiency. The focus will be on active-learner, project-based curriculum that is relevant, collaborative and authentic in real world application.
- 5) Review and survey personnel to ensure training, support, and equipment are meeting their instructional and classroom needs. Track the increases in level of campus technology use.

#### Goals and Objectives for the Benson Public Schools

#### Goal:

Benson Public Schools will raise test scores, implement a more technology based curriculum, and meet state technology standards through professional development technology projects.

#### Objective 1:

Conduct a Technology Academy that will develop and increase teacher technology skills.

#### Objective 2:

Implement curriculum focused training to guide teachers in the technology integration of curriculum and learning activities.

#### Objective 3:

Administer End User Support training for experienced teachers who will serve as a support and guide for our novice users.

#### Objective 4:

Develop a hands-on program that includes applications training, information sharing, and integration of technology and Internet resources into the curriculum.

#### Objective 5:

Conduct a Tool Software training project for teachers to develop time saving skills that will increase the time for teaching and developing curriculum.

#### **G.** Implementation Plan

Desktop PC computer hardware will be replaced on the schedule of around 30 to 50 computers per year. Software upgrades are an ongoing process and will be completed as updates are made available for the current application. Telecommunication, network and related hardware will be replaced as proven more advanced technology becomes available or on an as needed basis. Hiring of technology staff will be done on an as needed basis. User and staff training is, and will be an ongoing process.

- 1. The Industrial Tech/CAD/3D modeling computer lab will be replaced by the start of the 2015-2016 school year.
- 2. The Northside Elementary computer lab computers will be replaced by the start of the 2017-2018 school year.
- 3. Two of the districts servers will be replaced. The operating systems on these servers will also be updated from Netware 6.5 to Novell OES2 to Microsoft

Windows. Two other Microsoft Windows servers will be eliminated.

- 4. Ongoing meetings will be held to study implementing a 1 to 1 initiative.
- 5. Room 337 & 339, Sr. high lab computers will be replaced by the start of the 2018-2019 school year.
- 6. A one to one initiative implementation will continue to be discussed and researched and hope to have something in place within the next three years.
- 7. Additional equipment related to technology will be replaced upon failure or on an as needed basis at an unknown cost.

#### I. Evaluation Plan

- 1. Computers from laboratories have been recycled to classrooms on a replacement basis district wide. In addition, district wide technology hardware (e.g. computers, printers) have been purchased.
- 2. Four computers per year are purchased as replacement/upgrades for the media centers.
- 3. Replacement/upgrades in technology in relation to the editing suite have been completed.

The technology planning steering committee will review the progress of the technology plan during its meeting along with updates and future plans. The previous technology plan was followed by the board and administration for hardware upgrades and almost all of the goals have been achieved. The area of staff development and the use of technology in the classroom should be reviewed and a new progress monitoring system be developed.

The reporting and review of expenditures will be accomplished through a five year expenditure cycle as a part of the capital expenditures plan. The School Board will review the expenditures on an annual basis, with the opportunity to comment.