



# Technology Plan

Adopted May, 2005

## 1b. Technology needs assessment

The following resources were utilized to determine technology priorities within the district:

1. PDC survey
2. Staff Wellness survey
3. Periodic, impromptu administration, teacher, and student interviews and discussions.
4. Surveys - administered throughout the year
  - a. Parent/Community
  - b. Administration/Faculty
  - c. Student
5. End-of-the-year technology inventory
6. Vocational requirements
7. Seward County Community College discussions
8. District Technology Committee meetings
9. Revenue sources from local, state, and federal funds and grants
10. Input from business and community members in collaboration meetings

Below is a description of each of the resources and how they were utilized:

1. **PDC survey:** All district staff members complete a Professional Development Survey in the spring that will include a technology component.
2. **Staff Wellness survey:** The use of technology in the staff development program will be assessed through the survey administered to all faculty members.
3. **Periodic impromptu administration, teacher, and student interviews and discussions:** On an ongoing basis, technology committee members host discussions with various school populations to determine technology needs, including hardware, software, staff development, and technology integration.
4. **Surveys** are administered to parents, community members, administration, faculty, and students. Community and parent surveys assess the technology skill and comfort level of adults. Information gleaned from the surveys provides valuable data to the 21<sup>st</sup> Century Afterschool program, which coordinates adult learning opportunities for the community. These surveys also provide the committee with data on the connectivity level of student homes. Surveys given to administration and faculty members assess technology skill levels, usage and integration across the curriculum as well as instructional delivery methods. Staff members are also asked to create their dream technology wish list. Student surveys will assess technology skill levels, the impact they feel technology has on their learning, how they would like to see teachers incorporate technology, and what technology they would like to access. Data compiled from all surveys allows the committee to determine needs and prioritize future technology acquisition, staff development, and learning opportunities for students and community members.

5. **End-of-year technology inventory:** The district technician completes an end-of-year inventory to account for all technology in the district. This inventory is analyzed to determine what equipment needs to be replaced, moved, repaired or added to meet the educational needs of the district.
6. **Vocational requirements:** Vocational courses offered are analyzed for technology needs to ensure proper support of the established student competencies.
7. **Seward County Community College discussions:** Each fall SCCC meets with adjunct teachers to discuss course objectives, curriculum and learning strategies. An articulation agreement between the district and SCCC allows students to take concurrent courses for credit. Hardware and software needs for each course are addressed at this time.
8. **District Technology Committee meetings:** The District Technology Committee meets regularly throughout the school year to monitor progress toward meeting the goals of the district technology plan. Major duties of the committee include the sharing of information, ideas and requests from constituent groups, the evaluation of current methods and practices, the recommendation of new technologies, resources, and strategies gleaned from current research, and the proposal of purchases and adoptions of technologies to the Superintendent and Board of Education.
9. **Revenue sources from local, state, and federal funds and grants:** Possible resources of revenue for technology include the district general fund, the local option budget, and federal funds and grants.
10. **Input from business and community members in collaboration meetings:** Annual collaboration dinners bring together influential business, community and education members. Discussions are held to determine ways that the groups can assist each other in meeting their individual goals. Education leaders learn what skills are needed to be successful in the workforce. Also, they discover what services the school can provide to meet the needs of the community and surrounding businesses. In turn, community and business leaders are offered opportunities to enhance and aid in the educational arena.

Data collected from the surveys and school improvement plan needs drive planning for technology acquisitions. After reviewing survey results and the school improvement plan, the technician and the technology committee work together to make recommendations to the district administration. The administration uses the survey results and the technician/committee recommendations to make proposals to the Board of Education. During the school year, the technician takes care of the needs that often arise. He discusses the needs with the administrative council and appropriate action is taken.

It is the goal of the technology committee that teachers have access to resources needed to integrate technology into instructional delivery across the curriculum. Another goal of the committee is to provide students with learning opportunities that include meaningful technology experiences across the curriculum. Involving the community in the school will also increase learning opportunities for students. To these ends, the district focuses on providing the hardware and software necessary to support the curricular goals.

The following is a list of current hardware, software and peripherals within the district:

## **HARDWARE & PERIPHERALS**

### **Elkhart Elementary School**

**Computer Lab** - The current lab consists of 20 PC platform computers.

**Whiteboard technology** - Two sets, including a Whiteboard, computer, projector and wireless mouse are available for teacher use in the classroom. These sets are mobile and can be moved based upon teacher need.

**Classroom Performance System (CPS) units** - Two sets of software and student handheld remotes

**Classroom Computers** - Each classroom has at least three computers for student use. Computers will be rotated out of the lab and into classrooms as needed to ensure they meet the needs of the classroom activities. Age, condition and capability of the computers will be assessed annually.

**Library** - Four computers and a printer are available for student and class use. One PC server, workstation, barcode reader, and printer are available for administrative use.

**Teacher Computers** - All teachers currently have an Apple eMac on their desktop.

**Office** - Administration has three Apple computers and a printer.

**Printers** - Five printers are available for teacher use. They are located in central locations for easy access for all.

**Digital photography equipment, including still and video cameras** -- four cameras are available for teacher and student use. They are housed in the library so that all have access to them.

**TV/DVD/VCR** - Eight TV's and twelve VCR's and one DVD are on hand for use in the classroom.

**Scanner** - One scanner is accessible to all teachers for use in instructional activities.

**Fax** - a fax machine is offered for use in classroom activities.

**Copy machine** - Four copy machines are available for use.

### **Elkhart Middle School**

**Computer Labs** - Two computer labs containing a total of forty computers are available for student use, both consisting of Mac platform computers. Two 32" TV's with S video hooked to presentation computer in each lab.

**Whiteboard technology** - Four sets, including a Whiteboard, computer, projector and wireless mouse are available for teacher use in the classroom. These sets are mobile and can be moved based upon teacher need.

**Classroom Performance System (CPS) units** - Four sets of software and student handheld remotes

**Mobile Computer Lab** - One mobile lab consisting of twenty Dell laptops, laser printer, and a wireless access point (airport) is available for use in individual classrooms.

**Classroom Computers** - Each classroom has at least six computers for student use. Computers will be rotated out of the lab and into classrooms as needed to ensure they meet the needs of the classroom activities. Age, condition and capability of the computers will be assessed annually.

**Library** - Eight computers and a printer are available for student and class use. One PC server, workstation, barcode reader, and printer are available for administrative use.

**Teacher Computers** - All teachers currently have an Apple eMac on their desktop.

**Office** - Administration has two Apple computers and two printers.

**Printers** - Six printers are available for teacher use. They are located in central locations for easy access for all.

**Digital photography equipment, including still and video cameras** -- Five cameras are available for teacher and student use. They are housed in the library and computer classroom so that all have access to them.

**Presentation equipment** - One projector

**TV/DVD/VCR** - Six TV carts and eight VCR's are on hand for use in the classroom. Nine TV's and VCR's with S video for use with computers for presentations.

**Scanner** - Two scanners are accessible by all teachers for use in instructional activities.

**Fax** - a fax machine is offered for use in classroom activities.

**Copy machine** - Three copy machines are available for use.

### **Elkhart High School**

**Computer Labs** - Two computer labs containing a total of forty computers and six printers are available for student use, both consisting of PC platform computers.

**Whiteboard technology** - Four sets, including a Whiteboard, computer, projector and wireless mouse are available for teacher use in the classroom. These sets are mobile and can be moved based upon teacher need.

**Classroom Performance System (CPS) units** - Five sets of software and student handheld remotes.

**Mobile Computer Lab** - One mobile lab of 20 iBook laptops, a laser printer, and a wireless access point (airport) is available for use in individual classrooms.

**Library** - Twelve Apple eMac computers and three printers are available for student and class use. One PC server, workstation, barcode reader, and printer are available for administrative use.

**Teacher Computers** - All teachers currently have an Apple eMac on their desktop.

**Office** - Administration has five computers, a color laser printer and a black and white printer.

**Printers** - Three printers are available for teacher use. They are located in central locations for easy access for all.

**Digital photography equipment, including still and video cameras** -- Five cameras are available for teacher and student use. They are housed in various technology-related classrooms so that all have access to them.

**Presentation screen** -smaller screens for presentations in classrooms, one larger screen for presentations in the auditorium.

**TV/DVD/VCR** - Ten TV carts equipped with a DVD or VCR player are on hand for use in the classroom.

**Scanner** - One scanner is accessible by all teachers for use in instructional activities.

**Fax** - Two fax machines are offered for use in classroom activities.

**Copy machine** - Three copy machines are available for use.

### Elkhart Cyber School

**Student Computers** - One hundred eighty computers loaned to virtual students and teachers for use in their homes. These computers remain the property of USD 218 and are serviced by USD 218 tech support staff.

**Teacher Laptop/Docking Stations** - Teachers each have a laptop/docking station computer for their use.

**Tegrity Machine** - One Tegrity machine, consisting of a computer, projector, and LCD writable panel for use with editing software that allows teachers to create audio and video lessons for students to view on the internet.

**Printer** - One printer is available for teacher use.

**Copy machine** - One copy machine is available for use.

**Scanner** - One scanner is on hand for teachers to use in creating online lessons, or returning student work.

**Digital still and video cameras** - One still and one video camera are accessible to all teachers for use in online classroom activities.

**Presentation equipment** - One projector and screen are on hand for use in large presentations to students and families.

**Fax** - One fax machine is on hand for teacher use in exchanging papers with students.

### Point Rock Academy

**Mobile Computer Lab** - mobile lab of 20 Dell laptops on hand for student use.

**Student Computers** - Six PC desktop computers are available for student use.

**Teacher computers** - Each teacher has an eMac computer.

**Printer** - One printer is available for use by students and teachers.

**Copy machine** - One copy machine is available for use.

### District Office

Four Apple Macintosh computers; one Gateway Tablet PC

One inkjet printer, two laser black/white printers and one color printer

Presentation equipment - One projector

One copy machine

One postage meter

Six PDAs for administration

Four cell phones for administration and three cell phones for emergency situations in each building

### Technology Department

Various spare hardware parts are kept in inventory for emergency needs

### **NETWORK**

Our district consists of three separate physical buildings - elementary, middle and high schools.

All buildings are connected to one another on a WAN (Wide Area Network) and to the internet with fiber optic cable.

District is dual platform so students are exposed to both Mac and PC formats.

Norton is used to protect all PC computers.

SonicWall Pro Firewall is installed to protect the Local Area Network (LAN) and to filter internet content.

Access to the internet through T-1 connection

Thirty-eight hubs and twenty switches keep the network connected.

Seventeen servers host our programs, software, and websites.

Hot spots are available across each campus through eighteen wireless access points (airports).



## **SOFTWARE**

### **Elkhart Elementary School, Elkhart Middle School and Elkhart High School**

**Operating Systems** - All computers are equipped with the latest version of necessary operating system that is supported by that computer.

**Integrated Software** - Microsoft Office is used by both Mac and PC platforms within the district, AppleWorks.

**Student Management System** - PowerGrade/PowerSchool is used to manage all student data, including demographic information, attendance and grades.

**Communication Software** - First Class email system is used by all district employees to facilitate communication and the transfer of files. Outlook express is also used by the district employees to receive communications from other areas.

**Library Management System** - Winnebago Spectrum

**Educational Software** - Various software programs are purchased and used by teachers across the curriculum to support the goals of the building school improvement plan and to meet curricular standards.

### **Elkhart Cyber School**

**Operating Systems** - Teacher computers are equipped with Windows XP; student computers run with Windows 98 to eliminate compatibility problems and to decrease tech support issues.

**Integrated Software** - Microsoft Office is used by students and teachers.

**Student Management System** - PowerGrade/PowerSchool is used to manage all student data, including demographic information, attendance and grades.

**Communication Software** - First Class email system is used by all district employees to facilitate communication and the transfer of files.

**Curriculum Delivery Software** - Blackboard is used to post all curriculum for online access by students.

**Educational Software** - Skills Tutor and various other software programs are purchased and used by teachers across the curriculum to support the goals of the building school improvement plan and to meet curricular standards.

### Point Rock Academy

**Operating Systems** - Teacher computers are equipped with Windows XP; student computers run with Windows 98 to eliminate compatibility problems and to decrease tech support issues.

**Integrated Software** - Microsoft Office is used by students and teachers.

**Educational Software** - Various software programs are purchased and used by teachers across the curriculum to support the goals of the building school improvement plan and to meet curricular standards.

### District Office

**MacIntosh accounting software**

**Aatrix accounting software**

### District-Wide Software

**STAR Reading and Math/AR**

**Skills Tutor**

**Norton Antivirus**

**Student Management System** - PowerGrade/PowerSchool is used to manage all student data, including demographic information, attendance and grades.

**Communication Software** - First Class email system is used by all district employees to facilitate communication and the transfer of files. Outlook express is also used to send and receive communications from other areas.

## **GIFT ACCEPTANCE AND DISPOSAL PROCESS**

Any organization or individual making a gift to the district shall have the prior approval of the board. All gifts will be regarded as district property.

Persons or organizations desiring to make gifts to the schools should contact the superintendent.

Excess or unusable district-owned equipment and supplies will be disposed of at the discretion of the Board.

## **2. Instructional Technology Vision Statement**

U.S.D. 218 continually strives to provide a technology rich learning environment for staff and students through an integrated standards based curriculum and access to the latest technological advancements. By working together, students, faculty, and community create an atmosphere of learning that provides opportunities to learn to work together, improve problem solving skills, increase technology competencies, learn to make responsible and ethical decisions, and adapt to an ever-changing society. The result is an increase in leadership, communication and achievement.

## **3. District Technology Use Goals and Objectives**

### **Goal 1:**

**U.S.D. 218 will use technology to support the goals of the School Improvement Plan as well as to enhance the instructional delivery of state curricular standards.**

### **Objective 1.1**

All students will improve reading comprehension skills.

Tools: the guided reading programs, STAR, Accelerated Reader, leveled reading books, animated literacy, QAR, web authoring software, Skills Tutor, Orchard and other online resources.

Evaluation: CAT-6, Kansas State reading assessment, STAR, AR reading scores, reading portion of PLAN test, guided reading tests, Orchard for state tests, diagnostic reading tests

### **Objective 1.2**

All students will improve problem solving skills.

Tools: thinking maps, Handy 5, online and software testing programs

Evaluation: CAT-6, Kansas State math assessment, PLAN test math section, STAR, teacher created tests

### **Objective 1.3**

All students will increase technology skills.

Tools: wireless mobile laptop labs, Whiteboard units, Classroom Performance Systems (CPS), computers in the classroom, dedicated computer labs, computers in the library, integration of technology into all curricular areas, established technology curriculum standards, internet access, cable access, televisions, DVD players and VCR's, fax machines, digital cameras and video, on the job technology training with school technicians

Evaluation: yearly surveys, teacher created assessments, cross-curricular projects and assignments, teacher evaluations

**Goal 2:**

**Every educator will have the training, resources and support necessary to implement and integrate technology across the curriculum.**

**Objective 2.1:**

All staff will integrate technology across the curriculum.

Tools: workshops, teacher academy trainings, technology committee, in-house training

Evaluation: student, parent, staff and community surveys, PDC paperwork, lesson plans, evidence of technology use for instructional gain (artifacts), administrative observations

**Objective 2.2:**

All staff will expand knowledge of how to use technology to support the goals of the school improvement plan as outlined in the results based staff development plan.

Tools: workshops, inservice, teacher academies, access to technology support, online resources

Evaluation: staff surveys, PDC paperwork, lesson plans, administrative observations

**Objective 2.3:**

All district staff will have access to technology support.

Tools: vendor support, district technician and assistants, peer support and collaboration

Evaluation: survey, technology budget and report, technology team, technology troubleshooting/repair request sheets

**Objective 2.4**

The school district will provide time and support to develop technology skills which will enhance student learning.

Tools: early release staff development time, teacher academies, district technician and assistants, peer support and collaboration, Title II-D funds

Evaluation: surveys, teacher academy agendas, early release agenda, technology budgets, minutes from technology meetings.

**Goal 3:**

**The school district will use technology to increase communication and community involvement to ensure that district goals and needs are attained.**

**Objective 3.1:**

The school district will provide access to resources and learning opportunities for the community.

Tools: 21<sup>st</sup> Century technology classes, photography classes, SCCC college courses, in house training, Powerschool, school web pages, Cat Talk newsletter

Evaluation: community surveys, course syllabi, numbers of projects completed from community members and businesses, hits on web page, logins to Powerschool

**Objective 3.2**

The school district will promote community involvement in school through the use of technology and education.

Tools: 21<sup>st</sup> Century parenting seminars, 21<sup>st</sup> Century adult course offerings, school web page, newspaper articles, Cat Talk newsletter, presentations to community organizations, advisory councils

Evaluation: surveys, enrollment figures, anecdotal feedback, minutes from advisory council meetings, hits on web page

**Goal 4:**

**The district will provide modern tools and resources for staff and students.**

**Objective 4.1:**

The district will continually assess needs and purchase technology hardware, software, networking and all other needs.

Tools: wish list, surveys, inventory, district budget, recommendations from technology committee, technician, administration, district technology plan and available grant monies.

Evaluation: survey, annual evaluation of technology plan and budget, board of education minutes, technology committee minutes

### **3a-1 Technology Use Assessments**

Baseline data has been established, and attainment of the technology goals and objectives is assessed and monitored on a yearly basis. Qualitative and quantitative data from the assessment is used to drive decision making regarding technology integration into the curriculum.

By using several different evaluations and assessments, the district collects both qualitative and quantitative data. Quantitative data is collected from local and state assessments. Qualitative data is collected from surveys.

Various local and state assessments are used to measure student improvement. Results are then used to drive decisions made about technology. In all goal areas of the School Improvement Plan, technology is used as a support tool. As a result, it can be assumed that improvement in each goal area is at least somewhat attributable to the use of technology.

Student, community, and staff surveys are revised and administered annually. Baseline data has been established and yearly results are then used to make decisions about integrating technology into the curriculum, technology purchases, and staff development programs.

#### **Goal 1**

##### **Objective 1.1**

There are many resources available in USD 218 to evaluate student performance in reading. The following items measure reading comprehension: the CAT-6, Accelerated Reading, guided reading tests, and the state reading assessment. The STAR test is a vocabulary test that helps determine a student's starting point in the guided reading program. Other resources that are available are the reading portion of the PLAN test and Orchard for state tests.

##### **Objective 1.2**

The CAT-6, the Kansas math assessment and teacher created tests all measure student mastery on problem solving skills. The STAR tests help determine a starting point when planning instruction. The other test used in the math section of the PLAN test.

##### **Objective 1.3**

Technology skills will be assessed by yearly surveys, given to students, staff and community. Teacher created assessments, cross curricular projects and assignments determine a student's proficiency in the use of technology. Teacher observation will also play a part in assessing student technology skills.

## **Goal 2**

### **Objective 2.1**

Integration of technology will be assessed by annual surveys by students, staff and community. The paperwork submitted to the professional development committee will measure the level of application and impact of technology use by teachers in the classroom. Lesson plans and administrative observation will also provide evidence of integration.

### **Objective 2.2**

The technological support of the School Improvement Plan will be measured by staff surveys, PDC paperwork, lesson plans and administrative observations.

### **Objective 2.3**

Access to technological support will be measured by staff survey and the number of assistance/repair requests submitted to the district technician. The technology budget also shows evidence of access.

### **Objective 2.4**

Time and support to develop technology skills are measured in the following ways. Yearly surveys are administered to staff and students. Teacher academy and early release agendas and sign-in sheets document what is offered and who attended. The committee minutes document discussion of technology needs, issues and purchases. The budget allows for purchases of needed technologies.

## **Goal 3**

### **Objective 3.1**

The surveys completed by community members provide information as to the learning interests and helps to plan future learning events. Course syllabi give detailed information on what is taught. The hits on the district web page and logins to Power School allows the committee to know if the information is being accessed by the community.

### **Objective 3.2**

The promotion of community involvement in school through the use of technology will be assessed in the following ways. Surveys and enrollment figures measure the level of satisfaction within the community. Anecdotal feedback gives specific information in many areas. Minutes from advisory council meetings document feedback from many different parts of the community. Hits on the web page counts how many people access district information.

## **Goal 4**

### **Objective 4.1**

Providing modern tools and resources for staff and students will be assessed by means of annual surveys. An annual evaluation of the technology plan will be conducted by the technology committee and noted in the committee minutes. Changes will be approved by the Board of Education and noted in the minutes.

### **3b. Curriculum Integration and Enhancement**

Alignment to the vision -- curricular integration and enhancement

Technology is a vital part of the School Improvement Plan. Learning opportunities for teachers are provided through scheduled inservices and after school teacher academies. Technology is integrated into learning activities. The technology committee consists of teachers from all levels, the district lead technician, administrators, business community leaders, parents and students. The committee will train and support all teachers with integrating technology into the curriculum. They will also make certain the school improvement process goals will be addressed. The technology committee will stay abreast of current research and share new ways to integrate technology to further student performance.

The district technology curriculum is based on the ISTE standards. Following the technology curriculum ensures that students master the necessary skills.

The professional development committee meets monthly. Staff development needs in the area of technology are discussed when needed. The professional development committee and the technology committee collaborate to find learning opportunities in the area of technology integration. Technology learning opportunities are offered through inservices and teacher academy.

Software purchases support the local standards based curriculum and the School Improvement Plan. This will help to strengthen student academic mastery. The technology committee and the technician will be available to assist teachers with integration and curriculum alignment. It is expected that all instructors will continue to advance in the integration of technology into their instruction.

#### **3b-1 Curriculum Integration Assessments**

Baseline data has been established and regular, ongoing assessment provides quantitative and qualitative data to drive curricular decision making. USD 218's technology curriculum is aligned with the ISTE standards. Goal 1 objectives are directly support the School Improvement Plan. The Goal I evaluations will assess the level of curriculum integration. It is implied that academic growth witnessed in areas addressed by the School Improvement Plan in partly due to integration of technology. Baseline data is established in all areas and is recorded within the School Improvement Plan.

Surveys administered each year measure the level of integration of technology across the curriculum. Support is in place to aide teachers in reaching the innovator/leadership level.



### **3c. Professional Development-Teachers and Administrators**

Technology professional development is articulated in an action plan including multiple strategies and resources and supports building level research based professional development plans and student learning objectives and outcomes. Technology professional development is ongoing and leads to student learning activities in the classrooms.

The professional development committee and the technology committee along with the district lead technician work together to plan staff development activities. These staff development activities support the goals of the professional development plan which in turn supports the School Improvement Plan.

Teachers can earn PDC points for attending and integrating what they have learned at professional development learning opportunities. More points can be earned by taking what the teachers have learned (knowledge) and applying (application) it in instruction to further (impact) student learning.

#### **Plan of Action**

The results based staff development plan is used for NCA/QPA School Improvement. The timeline guides staff toward a successful progression through the following levels:

- Knowledge
- Model/demonstration
- Low risk practice with feedback
- On the job practice with feedback
- Follow up
- Long-term maintenance

#### **Staff Development Outcome**

All teachers will integrate technology into curriculum based instruction. As a result, the goals of the School Improvement Plan will be realized.

#### **Evaluation**

PDC paperwork, state assessment results, CAT 6 results, teacher created test results, administrative observations

### **3c-1 Technology Professional Development Assessment**

Technology professional development clearly brings staff forward in a measurable way. A variety of appropriate assessments are implemented and used to monitor this progress on a regular basis. Qualitative and quantitative data from the assessments are used to drive decision making regarding professional development.

The technology professional development will be assessed by the following means:

#### **Yearly professional development survey**

The staff development survey will help determine what teachers already know and what areas need to be addressed. Goal: to meet all teachers' professional development needs

#### **Annual technology survey**

The technology survey will measure teacher skill level and the use and integration of technology. Goal: to provide resources needed to enhance teacher skill and increase integration of technology into classroom instruction.

#### **Local workshop/in-service evaluations**

Evaluations will be distributed at the closing of trainings. Goal: Tailor workshops and inservices to better meet teacher needs..

#### **Wish Lists**

Principals request wish list from all teachers and staff to determine the needs for hardware, software and professional development. Goal: to be able to meet as many of the reasonable requests as possible.