Sweetwater County School District #1

Technology Plan

Main Plan Authored April 10th, 2003
Last Update – June 21st, 2005
V2.7

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About this Plan

This technology plan for Sweetwater County School District #1 represents a five-year view. Technology is constantly evolving, changing and growing, therefore, our technology plans and initiatives must keep pace with these technological changes. The plans contained within this document and developed as a result of this document are living plans. As new facts are discovered and technologies mature and emerge, we will make the appropriate alterations to this plan to ensure we always have a roadmap to the future. This document will serve as the guide for technology funding decisions and integration of technology into our curriculum.

The following was used in developing the concepts, plans and proposals in this document:

- Meetings held in the 2001-2002 school year by the Technology Advisory Committee and the Director of Technology
- Use Surveys
- Needs Surveys
- Professional experience from the Director of Technology
- Research by the Director of Technology
- Interviews with district faculty, administration and community members
- Discussions with Parents and Students
- Planning during the 2002-2003 school year

This document will give a brief overview of the current state of technology within the district, as well as detail our technology vision, mission and goals. The document will then describe our plans and initiatives under the headings of Partnerships, Curriculum Integration, Professional Development, Infrastructure, General and finish with Implementation Information.

Our Technology Plan is not meant to bring "bleeding edge" technology into the district. It is meant to provide a robust infrastructure, a well-integrated curriculum, and options for our professional development and provide the district with the ability to be successful in a technology enriched world.

A copy of this technology plan will be given to all district employees and copies will be made available to the public via the Sweetwater County School District #1 internet web site.

Ending dates of 2007 represent an effort that spans the five years of this plan.

Why have a Technology Plan

Without a technology plan, we are at best wandering in a dense forest without a compass. Organizations without technology plans cannot effectively manage their day-to-day technology operations. They are unable to make wise choices in hardware and software purchases. The technologies eventually run the organization, instead of the organization running the technology. In education, without a clear technology plan, we place our students at a disadvantage in having the most current technology and technology integrated with our curriculum. Therefore it is vital that a technology plan is in place to guide the district and provide a technology roadmap to our future.

State of Technology in Sweetwater County School District #1

As of September 2002

Sweetwater County School District #1 is in its technology adolescence. The district has made many strides towards technology use and adoption. The district is fully wired for networking capabilities with some local wireless LANs. Computers can be found on every teacher and administrator's desk, with various computer labs for student use. PowerSchool has been implemented to help manage the day-to-day operations with its centralized Student Information System. The district relies heavily on the email system for daily communication and personnel coordination. Libraries have adopted Alexandria and eLibrary. Accounting and Fiscal Management have adopted the AS400 platform for day-to-day fiscal management of the district. In addition, the district web site plays an integral role in communicating information.

Yet, with all of these strides, Sweetwater County School District #1 is at a crossroads. Technology changes and adoption are stressing the current infrastructure and installed technology capabilities. Our network is undersized by a factor of 5 and we do not enjoy the rewards of having a true intranet. With network traffic growing at a rate of 30% annually, we are on the verge of total gridlock within 18 months. Over 60% of the computers within the district have reached an age where the manufacturer no longer supports them and we can no longer buy parts for them. In addition, the district has not taken full advantage of wireless, handheld, speech recognition and self-paced training technologies. There is limited enthusiasm for technology within the district and technology as a whole is treated in a timid manner. Our technology partnerships with external organizations, companies, parents and students are limited. We do not take advantage of controlled and bulk technology and computer purchases, thus we do not reap the cost savings and consistency by having a centralized purchasing plan and an approved products list. We currently do not have a technology renewal plan, thus we lack a defined plan for technology upgrades and a roadmap to guide our purchases and ensure we are purchasing hardware and software for the right reason and use. With our reliance on technologies such as email and PowerSchool, we are ill prepared for a disaster or major hardware or software failure. Thus, we need to ensure we have a robust disaster recovery plan. Technology evaluation within the district does not follow a standardized process, we must develop and implement a process that guides how we evaluate and make decisions on using and installing new equipment and capabilities, along with integrating technology into our curriculum. An appropriate tracking and trending metrics program needs to be implemented to demonstrate the state of technology and how we are progressing. Finally, one of the largest issues facing the district and the technology team is staffing. The technology team is currently supporting over 5,000 users and 3,000 computers with 6 staff

members. This equates to 1 support person per 833 users or 500 computers, factoring in our Technology Reps at the secondary schools, this would give us an approximate figure of 1 support person per 500 users or 300 computers. Our support ratio needs to be lowered to 1 to 350 users or 200 computers. In short, there are not enough technology team members to support the user and hardware base within the district, this is causing frustration within the user community as problems cannot be dealt with in a timely manner. It is virtually impossible for the technology team to make proactive changes as they are constantly fire fighting and are mostly in a survival mode. We must add staff to the technology department to get out of the reactive mode and get into a proactive mode. In conclusion, the time is right to set a new technology direction and to take charge of our technology environment to ensure we are successful for years to come.

The contents of this technology plan will address all of the above items and provide details on how we will use and integrate technology.

In August of each year, a new State of Technology in Sweetwater County School District #1 will be published. Starting in August 2003, the State of Technology narrative will include measurement information, as well as show progress, strengths and weaknesses.

Technology Vision

We will construct a technology enriched learning environment and community, which will adapt in a rapidly changing world, thus enabling ALL students to reach their highest potential as learners, leaders, citizens and family/community members.

Technology Mission

Sweetwater County School District #1 will use technology to empower students to become better problem solvers and decision makers while they integrate vast amounts of information in an environment promoted by challenging, student-centered instruction. All staff members will be empowered to champion technology and construct an environment that embraces and integrates technology into every aspect of the learning environment.

Our Technology Oversight committee members and partners developed the above Vision and Mission statements, during the 2001-2002 school year.

Technology Goals

We will achieve our vision and mission by:

1. Establishing partnerships with parents, students, faculty, local community members, local business members and technology companies.

2. Integrating our technology initiatives and capabilities with our curriculum.

3. Providing an environment that allows faculty and staff to develop their technical skills.

4. Continually upgrading our technical infrastructure to keep pace with technological changes.

5. Providing an environment that rewards technical adoption and innovation.

6. Following the plans and policies listed in this document to ensure we have consistency and fairness throughout our technology use and integration.

7. Support School Improvement Initiatives & Planning
   a.) Student problem solving
   b.) Reading comprehension

8. Improving student technology literacy.

9. Creating an environment that is enthused about technology.

10. Making factual based decisions.

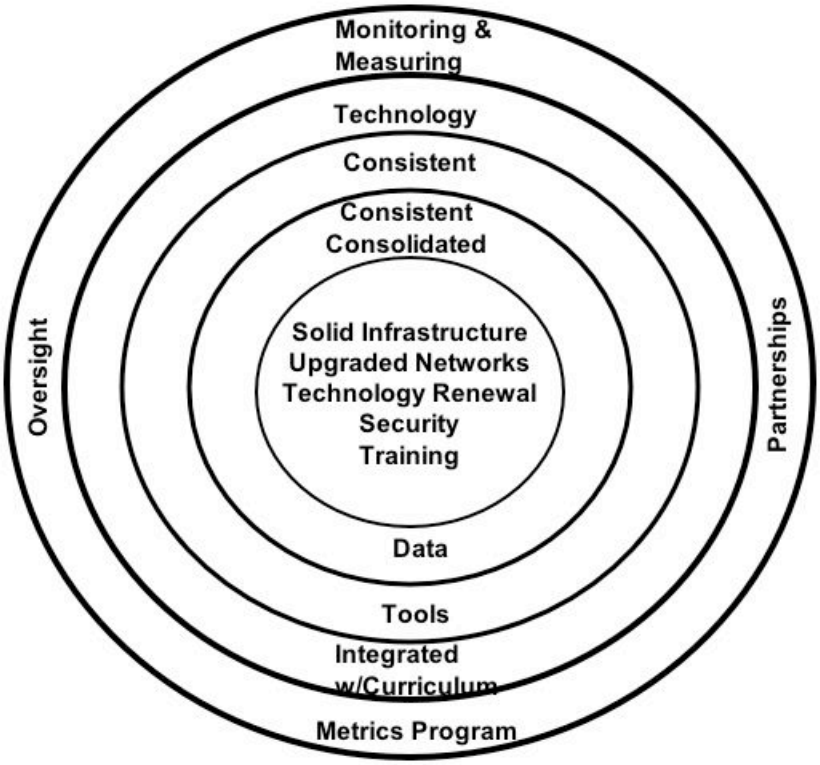
11. Holding annual reviews of all plans.

12. Developing technology champions to demonstrate and teach how technology can benefit everyone.

13. Provide Correctives/Enrichments for students (via technology)

Technology Target

As we move to implement our technology plan, the following target helps illustrate that we must first focus on the infrastructure and slowly move out towards the edges of the target. By taking this approach, we will build a solid foundation to launch all of our technology initiatives.



Five Years and Beyond

Over a five-year period, with effective implementation of our Technology Plan, we will see the following:

- No intimidation by technology
- Consistent and accurate data
- School campuses with full wireless networks
- Handheld devices enabling our student to be connected to the school and classrooms while on campus
- eBooks used by students to further reading, writing, spelling skills
- Access to a modern computer and modern technology
- Students not having to wait for a lab to open up to get their homework done, getting their research going or to collaborate with others
- Special needs and at risk students using technology and the technology integrated into the curriculum to correct behavioral problems, giving them a sound foundation for functioning in our technology enriched world and to adapt and learn in a rapidly changing environment
- Interactive Science Projects from a handheld or laptop device – allowing for real-time experiment results
- Interactive Math assignments from a handheld device with connections to other students and the teachers – allowing for instant feedback and group collaboration
- Foreign Language classes (French, Spanish, etc.) with speech recognition and writing assignments via a handheld
- Business Classes utilizing technology to provide our students with well rounded backgrounds in office management, business planning, financial management, accounting, software development and technology integration
- Students downloading assignments from the district web site to their home computer, laptop or handheld device
- Students submitting assignments and projects via the district web site/portal
- Upgraded CAD classes using state of the art hardware and software
- Staff and Students not worried about "Is the network up", "Will my computer work today", "Is PowerSchool up and running"
- Technology and District decisions based on fact and following our proven technology plan
- Decisions made with PVA (Portable, Versatile & Affordable) in mind
- Students using distance learning when they are away from the classroom
- Students using online courses to accelerate their learning or to fill gaps in various subject areas
- Consistency in our approach and application of technology

Student Exit Criteria

Students graduating from the district need to have the following:

- Basic understanding of computers and technology
- Moderate typing skills
- Understand the role technology plays in our day-to-day lives
- Basic use of word processing and spreadsheet applications
- Basic understanding of computer and technology history
- Basic understanding of computer networks

Impact on Wyoming's and Sweetwater County's Economy

The opportunity to impact the economy of Wyoming and Sweetwater County is very great. If each student graduating from our school district possesses the skills listed above in Student Exit Criteria, we will establish a base of potential workers that can be productive in the following sectors:

- Small Business
- Large Business
- Technical Companies
- Help Centers
- Mining and Industrial with Computer/Technology automation

If businesses or corporations can tap into an existing technology educated community, they will be more inclined to build or locate their business in our area. Presently, the Rock Springs and the Sweetwater County area do not possess a substantial technically educated work force. This places us at a disadvantage when trying to entice businesses or corporations to relocate to our area. If our school district embarks on a series of programs and steps listed in this technology plan, we have the ability to establish a technically educated work force and positively influence our future and economy.

Assessment Triangle

All aspects of the Technology Plan for Sweetwater County School District #1 will employ and utilize assessments to determine the programs overalls effectiveness and impact on student achievement.

The following picture illustrates our Assessment Approach:

The combination of student achievement, staff development and achievement along with our surveys, metrics program and balanced scorecard will help us determine the program's overall effectiveness. Both quantitative and qualitative measurements will be taken to gauge progress and impact. All sides of the triangle must provide data in order to develop correct conclusions.

The Metrics Program and Balanced Scorecard are described in further detail throughout this plan.

WEN Funding Information

Our district receives telecommunications, internal connections, and Internet from the Wyoming Equality Network (WEN). The WEN provides connectivity to all our schools by providing a fiber based DS3 from the Qwest MUX to the Central Admin Bldg. Each School within the District connects to the Central Admin. Bldg. with one or more T1 lines. The Wyoming Equality Network is a state mandated and legislatively funded state wide network.

Cost associated to the WEN is based on the number of students as well as the number of schools and type of connectivity. The WEN Infrastructure biennium budget provides for the basic WEN services, and districts pay for any additional services or network enhancements. The cost for these additional enhancements is paid for through our district technology budget/general funds, etc. The WEN funding is dependent on legislative funding each biennium. Because of this, the district's responsibility and that of the state may vary from biennium to biennium.

You will find a detailed account of the state's responsibilities and district responsibilities, related to the WEN Infrastructure, on the attached budget sheet.

BUDGET/INVENTORY ANALYSIS FOR E-RATE COMPONENTS

The Analysis Sheet was prepared in accordance with Section 54.508(b) of the FCC's Rules and Regulations, Chapter 1 of Title 47 of the Code of Federal Regulations.

DISTRICT: Sweetwater County School District #1	**FUNDING YEAR:** 2004 thru FY 2006

Prepared by: WDE and Chase Hafner

Specific E-Rate Service(s) Requested: Internal connections, Internet, and Telecommunications services. This request is made as part of the Wyoming Administration and Information state consortium application.
Title II D Goal(s) which is/are addressed by the service (either reference to a location within the plan or a brief narrative description): 1.) Technology Integration into Curriculum – WEN provides our district the ability to integrate via the data network. 2.) Increasing ability of Teachers to Teach – Participating in WEN Video Trainings, Providing Web Based Services and daily use of Data Network.

State of Wyoming – Wyoming Equality Network (WEN) responsibilities			
Current level/amount of service: All schools	**Level after E-Rate request is filled:** SAME	**Budget $ for State's share (for each charge**	**Planned budget source or line item for each amount:**

connected by T1		**involved in the service):** $132,816.24	Wyoming Department of Education WEN Infrastructure Biennium Budget

District – Wyoming Equality Network (WEN) responsibilities			
Current level/amount of service:Internet connections for all schools	**Level after E-rate request is filled:** SAME	**Budget $ for district's share (for each charge involved in the service): $** 30,866.16	**Planned budget source or line item for each amount:** Budget items will be funded by General fund – line items within the 3850 Technology budget.

* This budget sheet is designed to represent cost for the Wyoming Equality Network for a biennium budget cycle. The actual dollar amounts provided are based on one year's billing history. The states share of the budget is subject to change in the next biennium based on legislative funding and cost increase or decrease according to contract amendments and upgrades. Amendments to this budget sheet will be provided when appropriate.

NON-ELIGIBLE REQUIREMENTS TO MEET GOALS – State of Wyoming responsibilities†

Hardware required:	**Current level:**	**New required:**	**Budgeted $:**	**Source of funds:**
Current Level of hardware required to maintain WEN	Need current level Of routers	None	$45,000	WEN Infrastructure Biennium Budget

Software required:	**Current level:**	**New required:**	**Budgeted $:**	**Source of funds:**
Current Level of software required to maintain WEN	Caching, firewall, content filtering	None	$577,600	WEN Infrastructure Biennium Budget

Professional development required:	**Current level:**	**New required:**	**Budgeted $:**	**Source of funds:**
Teacher training to develop and	Some teachers	Continuing district training for WEN	$77,500	WEN Distance Education

teach at a distance	trained to teach on WEN Video.	Video use, and distance education/web based teacher training		Biennium Budget

Retrofitting required	**Budgeted $:**	**Source of funds:**
None at this time	0	Funding would come from the WEN Infrastructure Biennium Budget

Maintenance required:	**Current level:**	**Location of serviced items:**	**Budgeted $:**	**Source of funds:**
Current level needed to maintain the WEN	Basic yearly maintanance	H.S. aggregation point, schools throughout district	$734,367.08	WEN Infrastructure Biennium Budget

† This area is the sole responsibility of the State of Wyoming Department of Education. Funding may vary according to legislative approval and funding. All areas under "required" address the basic services provided by the WEN this level of service is what is necessary to maintain the current level of operation of the WEN. The professional development mentioned in the section represents the professional development focus of the Department of Education.

NON-ELIGIBLE REQUIREMENTS TO MEET GOALS – District responsibilities **

Hardware required:	**Current level:**	**New required:**	**Budgeted $:**	**Source of funds:**
PowerSchool Servers, Email Servers, DNS Servers, Network Monitoring Servers, Student Email, BLOG and Storage Servers, Anti-Virus Servers, Updated Client Computers	Various	See Section IV Infrastructure and Connectivity	$235,000.00 yrly budgets (Note - $400,000.00 extra includes leased computers in the 04-05 school yr.)	General Fund – Technology Line items - Budget 3850.

Software required:	Current level:	New required:	Budgeted $:	Source of funds:
PowerSchool, Antivirus, Skills Tutor, Total Reader, Read Naturally,	Various	See Section II Curriculum Integration and Section IV Infrastructure and Connectivity	$185,000.00	General Fund Technology Line items – Budget 3850

Professional development required:	Current level:	New required:	Budgeted $:	Source of funds:
PowerSchool University, NECC, Technology Integration	Various	Completion of selected Professional Development	$52,000.00	General Fund – curriculum and Technology, Grants.

Retrofitting required	Budgeted $:	Source of funds:
This section is included on above items – See Section IV Infrastructure and Connectivity	See Above	General Fund

Maintenance required:	Current level:	Location of serviced items:	Budgeted $:	Source of funds:
PowerSchool Maint., Anti-Virus Maint, Network Equipment Maint contracts	Various	Central Admin – IT	$162.000/00	General Fund Technology Line Items – Budget 3850

* *This area is the sole responsibility of the district. The Wyoming Department of Education does not provide funding from legislative funds. Information provided is based on the districts technology goals that are aligned with the state technology plan goals.

I. Partnerships

Partnerships are key to our success in researching, deploying and using technology within the district. We will establish and build our partnerships with parents, students, local community members, local business members and technology companies. These partnerships will provide valuable information to grow our technology over many years.

The following details our plans for Partnerships:

I.1 Technology Oversight Committee

The Technology Oversight Committee for Sweetwater County School District #1 will consist of 6 to 8 people. This team will be responsible for:

- Overseeing Technology Integration and Technology Partnerships
- Taking input from the Technology Advisory Committee, the Parent Technology Advisory Committee and the Student Technology Needs and Use Committee and taking appropriate action from these committees
- Developing nomination forms and guidelines for all technology awards
- Reviewing & Awarding Student Technology Achievement Awards
- Reviewing & Awarding Parent Technology Involvement Awards
- Interpreting assessment and measurement results – providing reports after interpretation
- Oversight of all annual reviews
- Oversight of technology and curriculum integration
- Oversight of all technical training programs
- Maintaining the Approved Products List (APL)

The Technology Oversight Committee will meet at least once a month during the school year. The committee is responsible to publish the committee charter and goals each year. Committee charter and goals will be discussed during the first meeting of the year. In addition, this committee will assemble the appropriate committee members for:

- The Technology Advisory Committee
- The Parent Technology Advisory Committee
- Student Technology Needs & Use Committee

Members of this committee are:

- Chase Hafner, Director of Technology & Committee Chair

- Bruce Metz, WMJH Technical Rep. – Filled Each Year
- Secondary Member, Open – Filled Each Year
- General Member, Open – Filled Each Year
- Curriculum Member, Open – Filled Each Year
- Administration Member, Open - Filled Each Year
- Elementary Member, Open – Filled Each Year
- Board Member, Open – Filled Each Year

The Director of Technology will make appointments to this committee.

In August of each year, the Director of Technology will assess this committee to ensure it is meeting its goals and determine if adjustments need to be made.

Implementation Information

Assigned To	Chase Hafner for Construction of Committee Oversight Committee for all responsible items
Start Date	September of each year
End Date	June of each year
Budget	~ $1,500
Measures of Success	▪ Committee meets as scheduled ▪ Committee assembles Technology Advisory Committee, Parent Technology Advisory Committee and Students Need & Use Committee by October of each year ▪ Committee administers awards in a timely fashion ▪ Committee develops board proposals for furthering technology

I.2 Technology Advisory Committee

This core committee is responsible to advise the Technology Department, the District and the Technology Oversight Committee on the following:

- Contents of the technology plan
- Revise & Establish goals and objectives for technology within the district
- Submit proposals to introduce new technologies
- Discuss the best way to integrate technology with curriculum
- Develop solutions for resolving technology weaknesses
- How to fund new initiatives

This committee is also responsible for:

- Making recommendations on how to implement proposals or solutions from the Parent Technology Advisory Committee
- Making recommendations on how to implement proposals or solutions from the Student Technology Needs & Use Committee
- Promote Parent and Student involvement in district technology efforts
- Training district personnel on new technologies or technology initiatives
- Discussing technology needs in the business world and what steps can be taken in the district to ensure students graduating from the district possess basic technology skills
- Informing Parents and Students of new technology initiatives
- Holding informative sessions for the district and public
- Interpreting assessment and measurement results – providing reports after interpretation
- Conducting annual reviews

This committee will be made up of the following:

- District Administration Personnel
- Technology Team Personnel
- High School Administration & Faculty Personnel
- Junior High School Administration & Faculty Personnel
- Elementary Administration & Faculty Personnel
- Local Government Leaders
- Local Business Owners

The Technology Advisory Committee will be formed each year. The Technology Oversight Committee is responsible for assembling this committee each year. The committee can consist of no more than 30 people. The committee is required to meet on a monthly basis. More frequent meetings can occur as business warrants.

In May of each year, committee members are responsible for providing the following:

- Annual Report detailing committee progress
- Information for the State of Technology in the District
- Recommendations for committee operations

For the 2001-2002 school year, this committee consisted of the following:

Rae Lynn Job	OTL
Connie Nerby	OTL
Greg Lundvall	Technology Center
Todd Dulaney	Technology Center
Jack Adams	Business Manager
Darrin Jennings	Elementary Administrator
Gerald Mattinson	Junior High Administrator
April Caudill	High School Administrator
Carol Hvidston	Special Services
Lamar Scott	Special Services
Christie Sabourin	Assessment
Suzanne Martin	Title I
Dr. Michael Sutphin	Board Member
David Guiterrez	High School Teacher
Louise Ryckman	Elementary Teacher
Bruce Metz	Junior High Teacher
Leslie Davies	Library/Media Specialist
John Freeman	Alternative Education
Lynne Demshar	Elementary Cluster Secretary
Peggy Little	Elementary Cluster secretary
Marj Moretti	High School Secretary
Sandy Van Vleet	CAB Secretary
Ted Schroeder	Business Department
Nathan Wiest	Counselor
Phil Kellog	City of Rock Springs
Don Hartley	Industry
Greg Bailey	Small Business – McDonald's Owner
Dave Kathka	BOCES
Jim Moore	WWCC

Implementation Information

Assigned To	Technology Oversight committee for team development Business Members for presenting technology integration Chase Hafner
Start Date	September of each year
End Date	June of each year
Budget	~ $1,500
Measures of Success	▪ Holding regularly scheduled meetings

	▪ Developing board proposals ▪ Technology presentations for students and staff ▪ Completing list of responsible items

I.3 Parent Technology Advisory Committee

The purpose of this committee is to ensure that parents are involved in the decision making process for technology use and integration. The Technology Oversight Committee will form this committee each year.

Participation in this committee is on a volunteer basis. Each year the Technology Oversight Committee will develop a memo to be sent home with students requesting parent participation. Total committee membership should not exceed 16 parents. This committee must meet on a monthly basis and as required.

The objectives of this committee are:

- Work with district personnel to develop solutions to technology weaknesses
- Develop solutions on how to bridge the technology gap between the classroom and a student's home
- Increase communication with parents and guardians
- Make recommendations on technology integration
- Inform the entire parental community of technology efforts in the district

Implementation Information

Assigned To	Technology Oversight Committee for committee membership Chase Hafner to ensure committee participation
Start Date	September of each year
End Date	June of each year
Budget	~ $1,200
Measures of Success	▪ Presents information to students and staff ▪ Develops proposals for bridging technology gaps ▪ Appropriate parent participation ▪ Proposals on technology needs

I.4 Student Technology Needs & Use Committee

The purpose of this committee is to ensure that students have a voice and are involved in the decision making process for technology use and integration. The Technology Oversight Committee will form this committee each year. Committee team members will come from two sources:

- Recommendations for Building Principals, Staff and Faculty
- Volunteering Students

The goals and objectives of this committee are:

- Suggest technology tools, which will help students learn
- Discuss ways to bring enthusiasm into the classroom via technology
- Make recommendations on how to bridge the technology gap between the classroom and a student's home
- Provide a student's perspective of how the district uses or should use technology

Implementation Information

Assigned To	Technology Oversight committee for committee membership Chase Hafner to ensure committee participation
Start Date	September of each year
End Date	June of each year
Budget	~ $500
Measures of Success	▪ Proposals on technology needs ▪ Proposals on technology tools ▪ Proposals on bridging technology gaps

I.5 Student Technology Achievement Awards

Each year we will award Student Technology Achievement Awards for the following:

- Outstanding technology use or achievement at the Elementary Level
- Outstanding technology use or achievement at the Junior High Level
- Outstanding technology use or achievement at the High School Level

Administration personnel, faculty, staff, parents, community members or business leaders may nominate students. Nominations forms will be sent out in the Spring of each year. The Technology Oversight Committee will develop the nomination form as well as review and choose the nomination award winners.

Total number of awards will be determined each year by the Technology Oversight Committee.

Awards will be presented in May of each school year.

Implementation Information

Assigned To	Technology Oversight Committee
Start Date	November of each year
End Date	May of each year
Budget	~ $500
Measures of Success	▪ Achievement nomination forms sent out in a timely fashion ▪ Awards delivered in May of each year

I.6 Parent Technology Involvement Awards

Each year we will present two parents with awards for technology involvement. This award is designed to acknowledge the hard work and effort parents put into our technology plan and advisory committees. Administration personnel, faculty, staff, students, community members or business leaders may nominate parents.

Awards will be presented in May of each school year.

Implementation Information

Assigned To	Technology Oversight Committee
Start Date	November of each year
End Date	May of each year
Budget	~ $300
Measures of Success	▪ Nomination forms sent out in a timely fashion ▪ Awards delivered in May of each year

I.7 Technology Bulletin Boards

In an effort to keep everyone in the district informed in the latest technology news and advancements as well as inform everyone on how we are progressing with technology integration, we will establish technology bulletin boards throughout the district to communicate this information.

These bulletin boards will be updated periodically with the appropriate technology news and announcements.

These boards will also be used as one of the main communications device for the technology committees.

Along with these bulletin boards physically located in the schools, we will also utilize a bulletin board type structure on our web site for information exchange and to promote general technology awareness.

Implementation Information

Assigned To	Susan Magagna
Start Date	Purchase of boards – October of 2002 Updated of boards as required
End Date	Updated of boards as required – at least once a month
Budget	~ $600 for boards ~ $100 for board updates and supplies
Measures of Success	▪ Boards in place ▪ Updated at least once a month

I.8 Ongoing Surveys

We must measure our progress with our partnerships. Therefore, we will periodically survey, district personnel, parents, students, business leaders, local government leaders and community members on how well we are progressing with our partnerships.

These surveys may be delivered in electronic or paper form.

Implementation Information

Assigned To	Chase Hafner Technology Oversight Committee
Start Date	February of each year
End Date	June of each year

Budget	~ $500
Measures of Success	▪ Surveys Delivered ▪ 20% response rate to surveys

I.9 Annual Review Plan

Each part of our partnership plan must be reviewed annually. We must make sure that we are meeting our goals and objectives. Therefore, each committee and team will review their progress annually and provide the appropriate reports detailing progress, needs and corrective actions.

All annual reviews will be given to the Director of Technology and Technology Oversight Committee. These reports will be kept on file for a period of 5 years.

The Director of Technology must provide annual progress reports to the district administrators detailing our use and progress with partnerships. This information will be provided in the director's State of Technology Report.

Implementation Information

Assigned To	Each committee team Chase Hafner
Start Date	April of each year
End Date	June of each year
Budget	~ $200 for supplies
Measures of Success	▪ Reviews completed ▪ Action taken on reviews by August of each year ▪ Reviews delivered to appropriate personnel

II. Curriculum Integration

Technology must be integrated with our curriculum. Technology has become an everyday feature in our life. It is imperative that we enrich the learning environment with technology. We will use technology as a catalyst to enthuse the learning environment for our students and staff.

The following details our plans for Curriculum Integration:

II.1 Special Needs Technology Integration

For students with special needs or students that are at risk, it is imperative that we provide adequate access to technology. Technology will be used as a device to help enthuse the students and help the students learn at a pace, which suits their learning style. A plan will be developed which addresses self-paced training for special needs students. Our plan will focus on how special needs students can gain vital skills to operate in an information enriched highly connected world.

Our special needs plan includes:

- Teaching special needs students how to use a computer
- Teaching special needs students how to use software to enable them to complete day-to-day tasks
- Using self paced training to learn at a pace conducive to the student

The district will also evaluate students through the STaR (STudents at Risk) program to ensure they have the appropriate technological resources.

Additionally, At-Risk Students will be addressed both ends of the at-risk spectrum; #1 At-Risk students requiring assistance to gain basic knowledge about technology and #2 High end achievers that are At-Risk of withdrawing due to lack of a challenge.

The Technology department will rely on the members of the StAR committee to provide feedback on what a student needs. For instance a lower end achiever may need a special piece of hardware or software. The Technology department will procure the appropriate materials and train individuals on the use so a student could use the device or materials to further their education and address their At-Risk needs. The same will hold true for our higher end achievers that are "bored" and unchallenged. Specials devices and materials will be procured for these individuals as well. It is important to note that there is not a one size

fits all answer in this area. A student must be evaluated and then the appropriate tools and materials employed to assist the student.

Implementation Information

Assigned To	Chase Hafner Andy Anderson Rae Lynn Job Connie Nerby
Start Date	November of 2002
End Date	March of 2003 (Phase I) & On-going
Budget	~ $20,000
Measures of Success	▪ Plan is in place ▪ Students show progress in use of technology ▪ Students show progress in skill advancement ▪ Students using self paced or online training

II.2 Assessment Plan

Each program and course utilizing technology will be assessed to ensure the technology is having a positive effect on the students and faculty. The assessments will include one or more of the following:

- Results from curriculum assessments (as defined by OTL)
- Survey of students
- Survey of teachers
- Measurement of computer usage
- Measurement of software usage
- Course test results

The Technology Oversight and Advisory Committees will interpret results from the assessments. This team will also utilize the assessment triangle described in the preface of this document.

During the first semester of the 2002-2003 school year, a list of all programs and courses utilizing technology will be developed. This list will then be prioritized and an assessment schedule will be developed. This list will be kept up to date each year and posted on the district website.

The Director of Technology will work with OTL, Department Heads, Faculty and the Technology Oversight Committee to develop all assessments.

As new programs and courses are developed the Director of Technology will work with OTL, Faculty and Department Heads to ensure technology is appropriately integrated and also determine how assessments will be utilized to monitor technology use, integration and effectiveness.

Implementation Information

Assigned To	Chase Hafner Connie Nerby Rae Lynn Job Select members from the Technology Advisory & Oversight Committees
Start Date	Program List – Fall of 2002 and each year Assessment on going throughout the year
End Date	June of each year
Budget	~ $1,500
Measures of Success	▪ Increased student performance in problem solving ▪ Increased student technology use ▪ Increased technology components in curriculum

II.3 Distance Learning

Distance learning will be utilized for the following:

- To deliver courses to schools with teacher shortages
- To deliver courses to schools in outlying areas
- Research class projects and assignments

The following technologies will be used for distance learning:

- WEN Video
- Internet
- Video Programs
- eLibrary

Distance learning is also utilized for staff development (Internet University Courses, Computer Based Training).

Sweetwater County School District #1 also exports German and Math via the WEN. These courses are produced in the Farson-Eden campus and exported out to other districts needing German or Math.

Starting in 2005, Sweetwater County School District #1 will begin offering online courses for those students wishing to:

- Accelerate his or her learning
- Augment or fill in the gaps for challenging courses
- Take core class requirements when away from the school buildings

Our online courses will focus on core classes – Math, Language Arts, Reading, Spelling, Science and Social Studies.

Online courses will be purchased or developed within the district.

Implementation Information

Assigned To	Chase Hafner Rae Lynn Job Connie Nerby Technology Oversight Committee
Start Date	On-going – Continually evolving
End Date	August 2007
Budget	~ $50,000
Measures of Success	▪ Students using distance learning ▪ Staff using distance learning ▪ # of courses exported ▪ # of courses imported ▪ # of online courses offered ▪ # of online courses utilized

II.4 Continued Offerings

Sweetwater County School District #1 will continue to offer and further develop the following:

- WebQuests – Focus on problem solving and data analysis
- Multi-Media Presentations – Focus on integrating multiple technology aspects
- Auto-CAD – Focus on using technology to understand construction basics along with design dynamics
- Internet Research – Focus on research for individual class research efforts – understanding efficient web research techniques

- Production Classes – Focus on end-to-end production – using video, audio & graphics
- Farson Science – Focus on using technology to present science findings
- Office Products – Use of Microsoft Office and Appleworks in various classes
- Photo & Illustration – Continued use of Adobe Photoshop and Illustrator

Assigned To	Chase Hafner Rae Lynn Job Connie Nerby Technology Oversight Committee
Start Date	August 2002
End Date	August 2007
Budget	~ $20,000
Measures of Success	▪ Students using WebQuests ▪ Students enrolled in Auto-CAD ▪ # of Internet Research projects ▪ # of presentation delivered via technology

II.5 Equity & Access

It is imperative that each student in the district has the ability to use technology. Access to technology will be provided in the following manners:

- Minimum of 6 computers in an Elementary Library
- Minimum of 10 computers in a Secondary Library
- Lab environments
- Each district computer will have access to the district Intranet and Internet

Every teacher, staff and administrator will have a computer on their desk.

The district will have a ratio of 1 computer to every 4 students in 2003 and a ratio of 1 computer to every 3 students by 2005.

Every parent and every student will be provided with access to PowerSchool so that parents and students can check assignments and grades on a regular basis.

The district will provide content filtering for all computers with access to the internet and intranet. Content filtering in 2002 will be provided by the State of Wyoming. Content filtering will be taken over by the district with implementation of the Network Upgrade Phase I(2003). The district will ensure that all

inappropriate websites and material are not accessible by students or staff in the district.

Special needs students and students living in poverty will have individually tailored technology programs for that student. The Director of Technology will work with the Director of Special Services and the Director of Title I programs to ensure we have additional tools to assist these students.

Implementation Information

Assigned To	Chase Hafner Department Heads
Start Date	August 2002
End Date	August 2007
Budget	~ $2,500 – majority of budget in Technology Renewal
Measures of Success	▪ 6 computers in each elementary library ▪ 10 computers in each secondary library ▪ 24 computers in each lab ▪ 1 printer per 60 users ▪ 1 printer in each lab ▪ Ratio of 1 computer to 4 students in 2003 ▪ Ratio of 1 computer to 3 students in 2005 ▪ Metrics showing computer use and demographics

II.6 Research Plan

In order to ensure that the district is utilizing the correct and most robust technologies, we will use a well-defined research plan. This research plan will detail the following:

- Processes used to research and evaluate new technologies
- Tools used to research and evaluate new technologies
- Timelines for researching and evaluating new technologies
- Processes for introducing new technologies
- Scoring model and comparison guidelines

New technologies can be new computer platforms, new software, peripherals, monitors, etc.

The research plan will developed during the 2002-2003 school year. Once developed, this research plan will be shared with all district personnel.

Implementation Information

Assigned To	Chase Hafner
Start Date	January 2003
End Date	October 2003 – updated on-going
Budget	~ $200
Measures of Success	▪ Plan is in place ▪ Research uses plan – removes bias

II.7 Technology Education Library

As we encounter new technologies, use current technologies, research potential technology solutions or develop in-house technology solutions, we will keep an electronic education library of all technologies evaluated, used and/or built. This will serve as a reference for anyone in the district or anyone outside of the district to view the status of a technology solution. The education library will also house courses and curriculum with technology components. The education library will provide real-time data and allow the district to make factual based decisions in our rapidly changing world.

Deployment of the Technology Education Library will occur in 2003.

Implementation Information

Assigned To	Susan Magana
Start Date	July 2003
End Date	December 2003
Budget	~ $3,500 annually
Measures of Success	▪ Library in place ▪ Use of library – Access - # of hits

II.8 Standards Alignment

Technology will support standards within the district by providing:

- Teachers with the ability to link assignments and grades to defined state and district standards – this linkage will occur in PowerGrade

- Reporting mechanism out of PowerSchool to show progress towards standards
- The ability to maintain a body of evidence for each student, detailing their progress to standards and graduation requirements

The technology department and staff will work with administrators and faculty to ensure all appropriate tools are in place to track progress to standards, maintain a body of evidence and ensure technology initiatives are aligned to standards.

When new or existing technologies are integrated into our curriculum, we will compare the curriculum and technologies to state and federal standards to ensure proper alignment.

Implementation Information

Assigned To	Chase Hafner & Carrie Curtis
Start Date	State standards in PowerSchool Aug. 2002 New standard in place as required Body of Evidence tracking database in place
End Date	February 2004(dependant on state)
Budget	~ $500
Measures of Success	▪ Standards in PowerSchool ▪ Standards reporting out of PowerSchool ▪ Each teachers linking assignments to standards ▪ Body of Evidence database in place

II.9 New Technology Course Offerings

The Director of Technology will work with the Office of Teaching and Learning, Department Heads, Faculty and Administrators to develop new technology course offerings in the Junior High School and High School to get students enthused and educated in latest technologies. These course offerings may include programming classes, technology history classes, the future of technology, etc.

Technology course development is an on-going process and will occur over the life of this plan.

It is imperative that our technology course offerings stay current and are relevant to the future of our students.

Implementation Information

Assigned To	Chase Hafner Connie Nerby Rae Lynn Job Department Heads
Start Date	July 2003
End Date	October 2005
Budget	TBD
Measures of Success	▪ Business and Technology courses staying current with technology changes ▪ New technology course offering every 3 years

II.10 Linkage to School Improvement

Sweetwater County School District #1's improvement plans focus on Math and Literacy. Our curriculum integration supports these plans via distance learning, online course development, ensuring our students have access to technology, development of a technology education library, full alignment and tracking to standards, as well as developing new technology programs.

We also support our school improvements by upgrading our infrastructure to allow our students the ability to use state of the art technology to enthuse their learning (e.g. hand held devices, interactive assignments, etc.).

Our partnerships will provide us with the ability for parents, students and community members to advise us on further areas of focus as well as assist in the introduction on existing or new technologies.

Assigned To	Technology Oversight Committee Department Heads
Start Date	August 2002
End Date	August 2007
Budget	~ $1,000
Measures of Success	▪ Metrics showing linkage to school improvement and initiative projects

II.11 Program & Annual Review Plan

As mentioned in section II.2, every step of the program will be evaluated based on student progress (via many measure listed in II.2). Our assessment triangle

will guide us through our annual review process, looking at all data points on how our curriculum impacts out student achievement.

In addition, every aspect of technology and curriculum will be assessed and reviewed on an annual basis. The Technology Oversight Committee will hold annual reviews and make the appropriate adjustments with OTL to technology curriculum integration plans.

Aside from annual reviews, periodic assessments and reviews will follow the processes described under section II.2 Assessment Plan. As each program is being assembled, we will review that program to ensure proper integration of technology as well as proper student achievement and progress. Sweetwater County School District #1 will also benchmark students and the program against the Student Exit Criteria listed in the preface of this document.

Implementation Information

Assigned To	Chase Hafner Connie Nerby Rae Lynn Job Technology Oversight Committee
Start Date	August 2002
End Date	August 2007
Budget	~ $1,000
Measures of Success	▪ Metrics reports showing progress ▪ Reviews completed and published

III. Professional Development

Professional development is key to our success in adopting and using technology. We will use professional development to develop individual and group skills and ensure all district employees possess the necessary knowledge to champion and use technology. Both certified and classified employees will be included in our professional development.

The district will utilize a timed training philosophy. It is imperative that training be delivered in a time frame where the district employee can use their freshly acquired knowledge. If the time frame between the training and the use of the technology or tool is too long, the employee can forget up to 80% of what was learned in the training sessions. Therefore, as an individual is ready to utilize a current or new technology/tool a training schedule will be developed for that individual.

The district will develop and train employees in the following ways:

- One-on-One
- Group sessions
- Self-Paced
- Computer Based Training (Delivered via Internet/Intranet or CD)

See the next three sections of this document for our development and training approaches. All of these areas will have predefined course work that needs to be completed by each staff member.

The remaining sections describe other plans for other professional development.

III.1 Individual(One-on-One) Development & Training

In many cases it is appropriate to develop or train an employee in a one-on-one setting. As individuals receive new pieces of hardware or software, the technology department may provide a hands-on training overview tailored to meet the employee's needs. An example of this would be an employee receiving a new PowerSchool login account or an employee installing a new version of Appleworks.

Implementation Information

Assigned To	All Technology Center Staff
Start Date	February 2003

End Date	August 2007
Budget	~ $2,000
Measures of Success	▪ Individuals get training when needed ▪ Published of one-one-one training

III.2 Group Development & Training

When on-on-one development and training is not available or feasible, the technology department will schedule a group training session to deliver the appropriate technology training to the impacted employees.

The technology team will make every effort to ensure group training involves a hands-on or lab setting.

The technology department will equip and maintain a working lab with 24 computers, an in-focus projection system and a smart board.

The district will utilize BOCES to the fullest possible extent to provide as many group training opportunities as possible.

Implementation Information

Assigned To	All Technology Center Staff
Start Date	July 2002
End Date	August 2007
Budget	~ $5,000
Measures of Success	▪ Published list of training courses ▪ Partnership with BOCES ▪ Hands on experience ▪ Training delivered when needed

III.3 Self-Paced Development & Training

In many cases, district employees can take advantage of self-paced training. This training will be delivered via the internet. We will utilize capabilities such as Connected University, Apple.Com Self Paced courses, TechLearning.Com, Back2College.Com or Internet training via Cisco, Microsoft, etc.

Implementation Information

Assigned To	All Technology Center Staff
Start Date	October 2002
End Date	August 2007
Budget	~ $5,000
Measures of Success	▪ Signed agreements/partnerships with training providers ▪ Published list of course offerings

III.4 Professional Development Specifics

Using the above mentioned training philosophies we will focus on the following:

- Computer Basics
- Network Basics
- Effective use of WebQuests
- Bridging the Generations and the Use of Technology
- Using Multi-Media
- Linking Assignments to Standards & Standards Reporting
- Effective use of Wireless Technologies
- Using a Mobile Lab
- Using Handheld Devices
- Use and Support of Windows
- Networking Windows and Macs on the same Network

These classes and training efforts will be developed and offered over the next two years. After the two-year period of time, a new set of classes will be offered based on assessments from the prior two years, needs surveys and updated technology directions.

Assigned To	Chase Hafner Technology Oversight Committee Department Heads
Start Date	October 2002
End Date	December 2004 (first phase)
Budget	~ $40,000
Measures of Success	▪ % of Staff attending training ▪ Training assessments ▪ Decrease in trouble tickets ▪ Decrease in help calls

In addition, the District will develop a tiered training approach with a clear roadmap. This roadmap will illustrate the classes and levels that each staff

members must go through and achieve. This is designed to ensure consistency throughout the organization.

III.5 Assessment Program

In order to gauge and benchmark our progress in the Professional Development area, we will utilize various assessment tools:

- Surveys
- Automated Testing
- Pre-screening Tests
- Course Evaluations

In order to ensure that users of technology have a basic understanding of the technology they are using (e.g. computer, printer, software program, etc.), each district employee will need to demonstrate that they possess the required knowledge to operate the technology prior to the technology being deployed to them. This demonstration will be in the form of a basic test. Should a district employee need assistance to pass the basic test, the technology department will work with the individual to develop their skills. This form of assessment is meant to provide the district and district employees with a win-win scenario. The district will know that users of the technology are equipped to perform their job functions and the user will have a good level of confidence that they can operate the technology.

In addition, the Director of Technology and the Technology Oversight Committee will investigate automated assessment tools (e.g. Brainbench, Internet Testing, etc.).

The district will also correlate the results from the professional development with results from student achievement. This will be done via the survey on the staff side and evaluations on the student side. Our goal is to show progress in staff technology levels that directly contribute to student achievement levels.

Implementation Information

Assigned To	Chase Hafner
Start Date	August 2002
End Date	August 2007
Budget	~ $3,500
Measures of Success	▪ Surveys in place

	▪ Course evaluations complete ▪ Each employee completing assessment

III.6 Technology Day

Once a year, the district will hold a Technology Day for all district employees. Technology Day will be a series of workshops for district employees to further their knowledge of various technologies.

The Director of Technology, the Technology Oversight Committee and the Office of Teaching and Learning will coordinate and develop Technology Day.

Technology Day workshops will be scheduled starting with the 2003-2004 school year. The formal proposal for Technology Day will be taken to the board during the 2002-2003 school year to ensure we have proper backing from the school board.

Implementation Information

Assigned To	Chase Hafner, Technology Oversight Committee & OTL
Start Date	Prep work during 2002-2003 school year
End Date	Tech Day each year (TBD)
Budget	~ $12,000
Measures of Success	▪ Technology Day held each year ▪ 70% of staff participate in Technology Day

III.7 Technology Fair

In the spring of each year, the Technology Department will sponsor a Technology Fair. The Technology Fair will involve many hardware and software companies throughout the United States. The purpose of the fair is to:

- Provide District Employees, Students, Parents and Community Members the opportunity to view the latest in technology
- Introduce as many new technologies to the audience as possible
- Enthuse participants about the potential technology can have on our lives
- Further our partnerships with technology companies, students, parents and community members

The Director of Technology, the Technology Department and the Technology Oversight Committee will coordinate all fair activities.

Planning for the Technology Fair must commence in the fall of the school year to ensure maximum participation in the fair.

Implementation Information

Assigned To	Chase Hafner, Susan Magagna, Technology Oversight Committee
Start Date	Planning in the Fall of each year – 2003
End Date	Fair in Spring of each year – starting in 2004
Budget	~ $10,000
Measures of Success	▪ 30% of Students attending fair ▪ 40% of Staff attending fair ▪ Parent participation ▪ 15 or more Technology companies participating

III.8 Annual Review Plan

All aspects of the Professional Development plan will occur on an annual basis. The Director of Technology and the Technology Oversight Committee will coordinate reviews.

Reviews will focus on employee progress and employee needs. In addition we will be able to make a correlation between our staff development and student progress and achievement. This will be achieved through the use of our assessment triangle. For example, as staff members become more proficient in technology areas, we should see a transfer of knowledge to students. Thus increasing student achievement and satisfaction with technology.

Implementation Information

Assigned To	Technology Oversight & Advisory Committee
Start Date	March 2003
End Date	May 2007
Budget	N/A
Measures of Success	▪ Reviews complete ▪ Reviews published ▪ Action taken based on reviews

III.9 Budget

Budget for Professional Development will come from the following sources:

- Annual district budget process
- BOCES
- Competitive State Grants
- Competitive Federal Grants
- Competitive Corporate Grants

Budgeting will follow district, state and federal guidelines.

IV. Infrastructure & Connectivity

Our technology infrastructure is the foundation to our success. With a strong technology infrastructure and consistency we will have the ability to research, use and adopt technology, as it is required.

The following details our plans for Infrastructure and Connectivity:

IV.1 Security and Access

Maintaining a proper level of security will ensure our success and prevent unwanted intrusions. The following details the security requirements for district computing, data and access:

- All employees must use passwords on their email accounts
- All employees with access to PowerSchool must use passwords
- All faculty with access to PowerGrade must use passwords
- All server equipment must be housed in a secure environment
- Access to server equipment will be limited to those with a need to access
- All Network Routers, Switches, Hubs and Equipment Racks shall be secured in a locked area
- All district computers will be required to logon to a network server for authentication and identification
- All Staff (Administrators, Teachers, Aides, Support Personnel, etc.) computers will have software enabled lock mechanisms installed to prevent unwanted access from people walking up to their computer
- All software used over the network must have a time out feature to log the user off after a predefined number of minutes of inactivity

Failure to use the password feature on email, PowerSchool, PowerGrade, etc. will result in the specific users access being shut off.

Employees must not share their login id's and passwords with other employees or non-employees. If an employee is caught sharing their password their account(s) will be deactivated. If an employees account is found active (meaning logged on, etc.) while that employee is out of the office, that employee's account password will be changed and an email sent to the employee indicating their account was active while they were out of the office and they will need to call the Technology Department to obtain their new password.

Parents and students will be given user ids and passwords for access to PowerSchool so they make check on assignments, grades and attendance. If a parent or student is found to be abusing the privilege and attempting to access material not available to them, their user id and password will be deactivated. At which time, they must petition the Director of Technology to regain their access.

The software used for locking an individual's computer and the software used to for network authentication and management will be evaluated and installed during the 2002-2003 school year.

Implementation Information

Assigned To	All Technology Center staff
Start Date	November 2002
End Date	August 2007
Budget	~ $15,000 Requires Board Approval
Measures of Success	▪ All work stations/desktops using security and access software ▪ All staff members using passwords ▪ No sharing of logins or passwords

IV.2 Minimum Technology Requirements

The following lists the minimum technology requirements throughout the district:

- Each administrator, teacher and staff member will have a computer at his or her desk
- There shall be one network printer for every 60 users
- Each Technology, Business, Science, English, Math, etc. course with computer needs shall have access to a lab environment
- Each lab shall be equipped with a minimum of 24 computers
- Each lab shall be equipped with one network printer
- Administrators who print sensitive material shall have a local printer available to them in a secure area in their office
- Each computer in the district shall be equipped with Appleworks
- Administrator computers shall be equipped with Microsoft Office
- Every employee and board member in the district will have an email account
- Every computer in the district will have access to the district network (provided the user reads and signs the Computer Network Use and Access Policy)

- Every staff computer will have a software locking mechanism to secure their computer
- Every computer will be equipped with a browser (Netscape or Internet Explorer)
- All buildings and/or departments shall connect to a local file server for authentication and identification

Request for additional desktop software or hardware need to be sent to the Director of Technology.

Implementation Information

Assigned To	Diana Steele, Susan Magagna, Howard McCort
Start Date	September 2002
End Date	August 2007
Budget	~ $5,000
Measures of Success	▪ Each computer in the district conforming to minimum requirements/standards ▪ Tracking of each computer and inventoried components

IV.3 Network Analysis Plan

All buildings and LANs throughout the district will undergo routine network analysis. All traffic traversing the network will be analyzed to ensure we have the optimum configuration in place. The Network Manager will conduct the routine analysis. Reports will be generated and submitted to the Director of Technology and the Technology Oversight Committee.

The following items will be reviewed as part of the network analysis:

- Volume of traffic traversing the network – total number of MB or GB
- Peak volume times
- Destination of traffic (local, internal, external, etc.)
- Capacity of the network

Included in the network analysis will be passive monitoring of the network. All IP packets traversing our network will be screened for appropriate use and content.

Implementation Information

Assigned To	Todd Dulaney
Start Date	September 2002
End Date	August 2007
Budget	~ $7,500 New Equipment ~ $2,500 Annual
Measures of Success	Network Maps published Network Traffic monitored and trended Capacity Analysis complete and up to date

IV.4 Network Upgrade – Phase I

In an effort to keep our network up to date and possess the ability to transmit all required data, Sweetwater County School District #1's network will undergo the following upgrade:

- All 56K lines in the elementary buildings will be upgraded to T1 lines
- An additional T1 (1.544 mbps) line will be added to the High School
- The district will deploy and use an OC3 (155.52 mbps) as the main transport between buildings and our core router
- The district will no longer router all district traffic through the router at WWCC
- The district will deploy a true intranet – keeping all local traffic local
- Access to the internet will done via an 8 mps connection from the district's core router to the router at WWCC
- The district will deploy a Cisco PIX firewall on-site to prevent unwanted intrusions
- The district will deploy caching and content filtering on-site
- The district will deploy passive networking monitoring to identify inappropriate use of the network and network components

Phase I of the network upgrade will be taken to the board in September/October of 2002. Construction and deployment of the network upgrade will be based on board approval.

Implementation Information

Assigned To	Chase Hafner
Start Date	September/October 2002
End Date	May 2003
Budget	$3,600 Annual $102,000 One Time Requires board approval

Measures of Success	▪ Network upgrades in place ▪ Deployment of Intranet ▪ Deployment of Filtering, Caching & Firewall

IV.5 Network Upgrade – Phase II

Once the core backbone of the network is in place (Phase I of the network upgrade), the district will need to commence with the following:

- All 3Com Superstack switches will be replaced with Cisco switches
- All buildings will be upgraded to gigabit backplane switches to ensure maximum throughput while in the building
- Installation of full network monitoring (content and capacity)

This phase of the network upgrade will occur in Mid 2003-Late 2003.

Implementation Information

Assigned To	Todd Dulaney
Start Date	Spring of 2003
End Date	December 204
Budget	$50,000 Requires board approval
Measures of Success	▪ Upgraded switches in place ▪ Full network monitoring

IV.6 Network Upgrade – Phase III

Phase III of the network upgrade will deploy voice over IP and allow the district to utilize the data network for phone service. This will cut expenses and take advantage of voice over IP.

Upgrades will also include:

- Upgrade EJH, WMJH & RSHS to DS3 (44.736 mpbs) service
- Add additional T1s in larger elementary schools

The full proposal for voice over IP will be developed in 2004.

The district will also monitor the process of the Joint Powers Telecommunications Board in the Rock Springs and Green River areas. There is a potential to bring fiber service to all areas of the district at lower costs.

Implementation Information

Assigned To	Todd Dulaney
Start Date	Spring 2004
End Date	December 2005
Budget	$3000 Annually ~ $75,000 (Voice over IP) Requires board approval
Measures of Success	▪ Increased Bandwidth ▪ Voice over IP active

IV.7 Network Maintenance Plan

In order to maintain a proper working network, all aspects of the network must receive regular maintenance. The network manager will be responsible to perform the network maintenance. The maintenance will include, but not limited to:

- Regular cleaning and vacuuming of equipment
- Inspection of all cabling
- Scheduled reviews of router logs and error reports
- Review of capacity plans in accordance with the network analysis plan
- Review of content filtering and passive monitoring logs
- Proactive replacement of potentially failing equipment

We will utilize a preventive maintenance plan rather than a reactive maintenance plan. For example, if a switch fan is making undesirable noises, we will replace that switch prior to it failing. Preventive maintenance is key to our network remaining stable and available 24X7.

Implementation Information

Assigned To	Todd Dulaney
Start Date	September 2002
End Date	August 2007
Budget	~ $2000
Measures of Success	▪ Maintenance schedule in place ▪ Monthly Review of all logs and reports

	▪ Equipment in good working order

IV.8 Network Wiring

A Wyoming Certified Low Voltage Electrician must complete wiring of all network components. District employees cannot perform any wiring of the network.

To ensure that we are receiving the best price available for wiring services, a bid will be sent out allowing certified Wyoming firms to be awarded the right to perform all network wiring under a cost of $25,000.00. This proposal will be presented to the board in October of 2002.

All patch cables must be purchased from a certified provider. District employees are not allowed to make/construct patch cables.

The Network Manager will label all network wiring. Labeling will include an IP tag on the patch cord and IP tag on the outlet box.

Implementation Information

Assigned To	Chase Hafner & Todd Dulaney
Start Date	September 2002
End Date	May 2004
Budget	~ $10,000
Measures of Success	▪ All wiring work completed by Wyoming Certified Electrician ▪ Awarded bid to one or more firms to be the official wiring firm for SCSD#1

Five schools within the district will be rewired for safety and code concerns during the 2002-2003 school year. These schools are Wamsutter, Superior, Farson, Northpark and EJH. During the 2003-2004 school year, WMJH, RSHS and Lincoln elementary will be the next three schools to be rewired due to safety and code concerns.

A schedule will be developed for the remaining portions of the district during the 2003-2004 school year.

Implementation Information (Rewires)

Assigned To	Chase Hafner & Todd Dulaney
Start Date	September 2002

End Date	July 2005
Budget	~ $60,000 annually for 4 years – Requires board approval
Measures of Success	▪ All wiring work completed by Wyoming Certified Electrician ▪ All schools within the district brought up to code and have no safety violations for network wiring infrastructure.

IV.9 Wireless LANs & Technology

The district will utilize wireless technologies to connect the following:

- Lab computers via Airport or Cisco Wireless technologies
- Building-to-Building LAN/WAN connections
- Buildings that are unable to be hard wired
- Buildings requiring additional bandwidth not available via hard wiring

The Director of Technology and Network Manager must approve all wireless deployment. This will ensure dual platform compatibility and alignment to plans.

Implementation Information

Assigned To	Todd Dulaney & Chase Hafner
Start Date	Summer of 2003
End Date	May 2006
Budget	~ $25,000 Requires board approval
Measures of Success	▪ Deployment of wireless network components ▪ Wireless Labs in all buildings

IV.10 Technology Renewal Plans

Technology is constantly evolving and changing. Therefore it is imperative that we keep our technology current. Each computer, printer, peripheral, etc. will have a schedule for renewal/replacement. Optimally, each computer should be replaced every 5 years – this equates to 20% a year. Each printer or peripheral should be replaced every 7 years. The Director of Technology will take the formal technology renewal plan to the board in the fall of 2002. Upon board

approval, the adopted technology renewal plan will be placed into the technology plan.

Example:
Assuming we have 750 Staff Members (Administrators, Teachers, Secretaries, etc.) and a student population of 4,600, our Technology Renewal would be as follows:

5 Year Plan
750 X 20% = 150
4,600 X 20% = 920

150 + 920 = 1070 computers upgraded each year

7 Year Plan
750 X 14.25% = 107
4,600 X 14.25% = 656

107 + 656 = 763 computers upgraded each year

Our technology renewal program will also include servers, printers, routers, switches, hubs, etc.

***NOTE** The above example shows a ratio of 1 computer to 1 student and 1 staff member. This was done for illustrative purposes only and once we set a ratio for computers to users and set our renewal timeframe we will develop an example reflective of the choices we make. This example will also include other hardware items.*

Implementation Information

Assigned To	Chase Hafner
Start Date	September 2002
End Date	August 2007
Budget	~ $500,000 Annually for full purchase ~ $300,000 Annually for lease Requires board approval
Measures of Success	▪ Technology renewal plan in place ▪ All computer and technology equipment with known schedule for replacement and/or retirement

IV.11 Lab Environments

Lab environments are key to our students being successful in their learning endeavors. All labs in the district shall be equipped with a minimum of 24 computers. Each lab shall also have access to one network printer.

In order to provide equity, access and the ability for a student to use a lab whenever they need to, Open Labs will be established at the High School, East Junior High, White Mountain junior High and the Farson-Eden High School Middle School complex. These open lab environments will be equipped with Apple and Windows based machines and will follow the guidelines described in this section.

Technology in the lab environments must be current and the latest. We cannot place older or hand me down computers or technology in our labs, as it will hinder our student's ability to use the equipment and reduce their enthusiasm for technology. We must provide a technical environment equal to or greater to what the students have access to outside of the school district

In order to meet the guidelines and goals outlined for the Lab Environments, we will pursue wireless mobile labs and wireless static labs. Our wireless technologies give us the ability to turn a lab into a collaborative learning environment and free students and faculty from hard-wired positions.

Implementation Information

Assigned To	Todd Dulaney
Start Date	Spring 2003
End Date	May 2005
Budget	~ $120,000 Parts included in Technology renewal Requires board approval
Measures of Success	▪ Labs is each school ▪ Labs furnished with correct equipment ▪ Open labs in the Junior High and High schools ▪ Wireless components for our labs

IV.12 Approved Products List (APL)

In order to ensure we have consistency in our technology, we will utilize an Approved Products List. The Approved Products List will contain all products that are approved for use in the district. This list will cover hardware, software and network components. The list will be broken down into three categories:

- Active approved products
- Obsolete/Decommissioned approved products
- Non-approved products

The Technology Oversight Committee and the Director of Technology are responsible for maintaining the APL.

A product must be on the APL prior to purchase and installation in the district. If a product in unapproved, it may not be installed without a waiver. Petition for a waiver must be submitted to the Technology Oversight Committee.

Implementation Information

Assigned To	Chase Hafner & Technology Oversight Committee
Start Date	November 2003
End Date	January 2004 – updated as needed
Budget	N/A
Measures of Success	▪ APL in place ▪ Waiver process in place

IV.13 Disaster Recovery Planning

Because technology runs every aspect of the district (network communications, email, PowerSchool, Fiscal Mgmt., etc.) it is vital that we have a disaster recovery plan. The disaster recovery plan will detail what actions will be taken in the event of a building flood, fire or other major human caused or natural disaster.

Key elements of a disaster recovery plan are:

- Off-site back-ups of all major systems
- Pre-selected sites to operate from in the event of a disaster
- Communications plan to notify everyone of an event and procedures to follow
- Pre-negotiated contracts with vendors to obtain replacement equipment

The full disaster recovery plan will be established in the 2002-2003 school year.

Implementation Information

Assigned To	Technology Oversight Committee & All Technology Center Staff

Start Date	September 2003
End Date	December 2003 – updated as needed
Budget	~ $200 for supplies ~ $10,000 Alternate site preparation
Measures of Success	▪ Disaster Recovery Plan in place ▪ Off site backups in place ▪ Vendor contracts in place

IV.14 Back-up Plans

All major systems must have on-site and off-site back-ups. These back-ups should consist of the software and all associated data and configuration files.

Primary systems requiring back up:

- PowerSchool & PowerGrade
- Quick Mail Pro
- Alexandria
- AS-400
- Web Server
- School Management Servers

Local building and administration databases will also require regular back up.

The above mentioned also supports our Disaster Recovery Planning.

Implementation Information

Assigned To	Technology Oversight Committee * All Technology Center Staff
Start Date	November 2002
End Date	August 2007
Budget	~ $500 of supplies
Measures of Success	▪ Back-ups in place ▪ Cataloged inventory of back-ups ▪ Off-site backups and storage

IV.15 District Email Accounts

All district employees and board members are eligible for an email account.

District aides, volunteers, etc. will be given an email account if requested by a member of the administration or building principal.

Additional email accounts may be given to individuals or school organizations that receive prior permission from the Director of Technology.

The current district license for email allows for 750 district emails accounts. If we require more than 750 email accounts, we will need to add additional licenses to our agreement with CE Software.

IV.16 Student Email Accounts

Each student in Sweetwater County School District #1 will be provided with an email account administered by the Technology Department. The domain name for student email accounts will be *springs.sw1.k12.wy.us*.

The Technology Oversight Committee will develop governing rules for student email accounts and appropriate access to these accounts.

Prior to deploying student email accounts, appropriate content filter and passive network monitoring must be in place.

Implementation Information

Assigned To	Diana Steele & Technology Oversight Committee
Start Date	February 2003
End Date	August 2007
Budget	~ $500 – potential licensing
Measures of Success	▪ Each student assigned an email account ▪ Monitoring of student email accounts

IV.17 Technology Inventory

Each piece of technology must be properly inventoried. Our inventory plan will include the following:

- An asset tag and inventory number placed on each piece of equipment
- A scan tag placed on each piece of equipment to allow for quick auditing (the scan tag can be contained on the asset tag)

- Databases or spreadsheet posted on the intranet web site listing all technology equipment in the district

The district will perform inventory audits every two years starting in 2003.

Technology items included in the audit are:

- Computers
- Servers
- Printers
- External Disk, CD or ZIP drives
- Scanners
- Monitors
- Misc. Peripherals

Implementation Information

Assigned To	Technology Center Staff & Business Department Staff
Start Date	Spring 2003
End Date	August 2007
Budget	~ $100 supplies for Labels ~ $500 for scanning equipment
Measures of Success	▪ All technology components tagged ▪ Up to date inventory

IV.18 Product Research

We must have a written process and procedure for investigating and researching new hardware or software products. The purpose for this procedure is to ensure consistency in our research and fairness in our evaluations. Our procedure will take the following into consideration:

- Platform that the products executes on
- Company developing product (well-established, new, etc.)
- Technology that the product is built off of (Java, OS X, Windows, C, etc.)
- Web enabled
- Desktop install
- Network Compatible
- Etc. etc. etc.

As each product is evaluated, categories within the product will be scored. Once all products for a given research endeavor are investigated, we can then compare scores to make our choice. The scoring methodology is meant to take bias and emotion out of the process.

Development of our scoring forms and guidelines will occur in the 2002-2003 school year.

Implementation Information

Assigned To	Chase Hafner
Start Date	December 2003
End Date	February 2004
Budget	N/A
Measures of Success	▪ Plan in place ▪ Scoring model in place ▪ All evaluation use model and plan

IV.19 Product Installation & Testing

As we deploy new products, those products must first be tested in our environment. Therefore, all products will be tested in a lab type environment prior to mass or individual deployment. The purpose of this testing is to ensure that we do not introduce suspect software or hardware into our operating environments. This testing will also ensure that the new product is compatible with currently installed products.

The full testing approach document will be developed in the spring of 2003.

Implementation Information

Assigned To	Technology Center Staff
Start Date	August 2002
End Date	August 2007
Budget	~ $6,000 for new servers
Measures of Success	▪ New products tested prior to deployment

IV.20 Student Information System (PowerSchool)

The current SIS (Student Information System) for Sweetwater County School District #1 is PowerSchool. We will use PowerSchool for all aspects of managing our education environment. PowerSchool will be used for:

- Grade book management via PowerGrade and PowerTeacher
- Attendance
- Housing all student information
- Producing reports and report cards
- Managing special conditions (medical, academic, discipline, etc.)
- Class scheduling
- Teacher schedules
- Student schedules
- Lunch program management
- Parent and student access to view grades, assignment and attendance
- Track graduation requirements
- Link and manage assignments to state and district standards
- Daily management of the student
- Daily management of the district

All schools within the district will use PowerSchool. This will help us achieve consistency in the management and administration of our schools.

In order to ensure that PowerSchool is meeting the needs of all schools within the district, the following changes/upgrades will be made:

- Upgrade Server to G4 processor and OS X
- Upgrade Network (Network Upgrade Phase I) – Increase Bandwidth
- Current PowerSchool customization will be changed – we will change or update the following:
    A. We will revert back to standard PowerSchool screens
    B. We will hold User Analysis sessions to determine what needs to be added and changed within PowerSchool
    C. We will develop (locally or via Apple) the required screens
    D. For the 2003-2004 school year, we will implement our updated PowerSchool screens
- Full user and access analysis – make sure the appropriate personnel is accessing the appropriate areas and data

Aside from the above-mentioned items, PowerSchool will undergo an extensive and detailed evaluation in the 2002-2003 school year to determine its overall effectiveness for the district. Additional recommendations will be made in this assessment.

Implementation Information

Assigned To	Carrie Curtis & Chase Hafner
Start Date	Spring 2003 – Upgrades Fall 2003 – Evaluation
End Date	August 2004
Budget	~ $4,000 new server
Measures of Success	▪ Upgrades complete ▪ Evaluation complete ▪ Decision based on evaluation

IV.21 Technical Support

The Technology Department will provide the following technical and desktop support:

Alexandria	Diana Steele
Apple Computer Repair	Howard McCort
Apple Operating System Help	Diana Steele, Susan Magagna, Bruce Metz, Joe Lewis, Bob Legerski, Pam Walker
Appleworks	Diana Steele & Susan Magagna
Browsers (Netscape or IE)	Diana Steele & Todd Dulaney
Corner Stone & ELO	Todd Dulaney
Firewall & Filtering	Todd Dulaney & Chase Hafner
Fitness Gram	Todd Dulaney
General Apple Computer Help	Diana Steele, Susan Magagna, Bruce Metz, Joe Lewis, Bob Legerski, Pam Walker
IBM Compatible/PC Computer Help	TBD
IBM Compatible/PC Repair	TBD
Microsoft Office	Diana Steele, Susan Magagna or Chase Hafner
Network Help & Troubleshooting	Todd Dulaney
Network Wiring	Todd Dulaney & Chase Hafner
PowerGrade	Carrie Curtis
PowerSchool	Carrie Curtis
PowerTeacher	Carrie Curtis
Printer Support	Diana Steele, Susan Magagna, Bruce Metz, Joe Lewis, Bob Legerski, Pam Walker
Quick Mail Pro	Diana Steele
Routers, Switches & Hubs	Todd Dulaney
Windows Operating System Help	TBD

Escalations Chase Hafner

The Technology Center's hours of operation are 7:00a.m. to 5:00p.m. Monday through Friday. Additional support hours will be handled on a case-by-case or emergency basis.

Our goal for technology support will be a ratio of 1 support person to every 350 users. Please see section V.5 for additional staffing information.

Implementation Information

Assigned To	Chase Hafner Todd Dulaney Diana Steele Carrie Curtis Howard McCort Susan Magagna
Start Date	August 2002
End Date	August 2007
Budget	N/A
Measures of Success	▪ All help calls and emails answered with 24 hours

IV.22 Non-Disclosure Agreements

Because the Technology Department oversees and supports all hardware and software throughout the district, the professionals within the Technology Department have access to sensitive data so they may perform their support duties. In an effort to ensure this sensitive data is not used or shared for inappropriate purposes, all employees in the Technology Department must sign a non-disclosure agreement. This non-disclosure agreement will detail the following:

- Appropriate actions based on the data
- In-appropriate actions based on the data
- What can be shared
- What cannot be shared
- Ramifications for sharing or using sensitive data

The Director of Technology will also recommend to the board and the Administrative Leadership Team that all users of PowerSchool sign the non-disclosure agreement as well.

Implementation Information

Assigned To	Chase Hafner
Start Date	August 2002
End Date	October 2002 – updated as appropriate
Budget	N/A
Measures of Success	▪ All Technology Center staff with signed non-disclosures ▪ All PowerSchool users with signed non-disclosures

IV.23 Hardware Platforms

The following hardware platforms will be supported within the district:

- Apple/Macintosh
- IBM AS400
- PC/Windows based hardware

Sweetwater County School District #1 will be a dual platform district. This will allow for the most flexibility in administering the district and educating our students. Students graduating from the district need to be exposed to the PC/Windows platform and be able to navigate a windows based machine. This exposure will ensure greater success for the student in the business world as the majority of office and automated machinery run from a windows based machine/platform.

Note: Windows based machines may not be purchased or deployed in mass until the following has occurred:

- Phase I of the Network Upgrade is complete
- e-mail filtering is in place
- We have a site license for Norton Anti-virus
- Plan/Agreement for repairing windows machines

Implementation Information

Assigned To	All Technology Center Staff
Start Date	August 2002
End Date	August 2007 – continually evolving
Budget	N/A
Measures of Success	▪ Full use of required hardware by users and

	technology center ▪ Hardware on APL

IV.24 Operating Systems

The following operating systems will be supported within the district:

- Apple Mac OS 9.x
- **Apple OS X**
- AS400
- **Windows XP Professional**
- Windows 2000

Implementation Information

Assigned To	All Technology Center Staff
Start Date	August 2002
End Date	August 2007 – changed as needed
Budget	N/A
Measures of Success	▪ Full use of required software by users and technology center ▪ Software on APL

IV.25 Printers

As mentioned in the Minimum Technology Requirements, there shall be one network printer per 60 users and one network printer per lab environment. Individual desktop printers should be limited to administrative personnel or personnel required to print sensitive material. Sharing of the network printers will maximize our efficiency and keep costs in line.

Printers must be purchased through the Technology Center as to ensure the following:

- Printer is compatible with Apple & Windows platforms
- Printer can be connected to the network
- Printer has appropriate resolution (dpi)
- Printer has desired features (duplex, etc.)

Implementation Information

Assigned To	Technology Center Staff
Start Date	August 2003
End Date	August 2007
Budget	~ $10,000 to establish add'l printers
Measures of Success	▪ Printers available for user per defined plan

IV.26 Software Licensing

All software licenses in the district will be maintained out of the Technology Center. Every purchased license must be forwarded to the Technology Center. Existing licenses will also be forwarded and housed in the Technology Center. The reason for holding/filing all software licenses in a central location is to ensure the following:

- Appropriate licenses are available to the user
- We are not in violation of any licensing agreement
- Expedite installation of software (don't have to hunt down licenses)
- Expedite support of software
- We have the appropriate technical support from the company the software was purchased from
- To be prepared for potential license audits by the software manufacturers
- To prevent software piracy

The district will install inventory and tracking software to monitor and audit each computer in the district for appropriate licenses. At the end of each audit, the user will be required to sign-off on installed software and verify the audit findings.

The detailed centralized software licensing proposal will be taken to the administration and the board by December of 2002.

Implementation Information

Assigned To	Technology Center Staff & Technology Oversight Committee
Start Date	August 2002 – Major audit in summer 2003
End Date	August 2007
Budget	N/A
Measures of Success	▪ Full inventory and audit of all software ▪ Centralized licensing in the Technology Center ▪ User compliance to all license requirements

	▪ Signed license audits by all employees

IV.27 Standardized Software

In order to control the computing and technology environment in the district, we must have uniform software, operating systems on our desktops. Therefore, we will embark on a program to level the district for versions of our operating systems and office productivity software (AppleWorks, MS Ofc. etc.). This will facilitate ease of desktop management and ease of file sharing.

When we update to a new version of our operating system(s) and office productivity software, we will do it building by building and provide a schedule for the district. We will make every attempt to perform the upgrades over the summer while the majority of the staff is away.

Assigned To	Technology Center Staff & Technology Oversight Committee
Start Date	December 2002
End Date	November 2005
Budget	~ $4,000
Measures of Success	▪ Full inventory and audit of all software ▪ Plan for baseline software ▪ Installation/Upgrade to baseline software

IV.28 Web Server & Services

The Technology Center web server will house ALL web pages for the district. This will include (but not limited to):

- District Intranet Web Pages
- District Internet Web Pages
- Department Specific Web Pages
- School Specific Web Pages
- School Sponsored Club or Organization Web Pages
- Teacher and Class web pages

Individuals or groups cannot publish web pages without prior review from the Technology Center.

Individuals or groups cannot obtain DNS (Domain Name Services) names, web hosting or web services on behalf of the district, without prior authorization from the Director of Technology.

All district web pages must conform to the district web guidelines. Guidelines will be published in the 2002-2003 school year. All district web pages will be reviewed annually for content and to ensure the web page contains current and relevant information.

In 2003, the Technology Department will upgrade the current web server.

Implementation Information

Assigned To	Susan Magagna
Start Date	October 2002
End Date	November 2003 – will continue to evolve
Budget	~ $4,500 for new server & software
Measures of Success	▪ New web server in place ▪ Updated web pages ▪ Web pages for all schools ▪ Intranet and Internet web pages

IV.29 Anti-Virus Protection

The district must have appropriate protection from malicious viruses. Therefore, the district will obtain an enterprise license from Symantec for Norton Anti-Virus and Norton System Utilities.

All windows machines are required to have Norton Anti-Virus running at all times. Windows machines must have Norton Anti-Virus set-up to scan the following:

- All incoming documents
- All email attachments
- All documents that are opened in Microsoft Office
- The entire hard drive once a week

Any windows based machine found not to have Norton Anti-Virus installed and active will be disconnected from the network.

Implementation Information

Assigned To	Diana Steele
Start Date	October 2002

End Date	August 2007
Budget	~ $12,000 in annual licensing
Measures of Success	▪ Anti-Virus in place and scanning all files

IV.30 Card Access and Automation

In an effort to increase efficiency, it is recommended that all students in grades 7 through 12 be given ID cards which contain the following:

- Student's Name
- Student's Photo
- Grade Level
- PowerLunch ID #
- Student ID

These cards can be used for the following:

- Expedite lunch lines – swipe card
- Expedite Library checkout – swipe card
- Security
- Access
- Charging for activities

In order to have a program like this succeed and be self-sufficient, it is recommended that each card be issued for a nominal charge, with replacement cards charging a slightly higher fee.

A similar concept could be used for students at the elementary level to help expedite lunch lines and service. However, instead of the student possessing the card, the teacher would hand the card out prior to lunch and collect them after lunch.

Implementation Information

Assigned To	Chase Hafner
Start Date	January 2004
End Date	October 2005
Budget	~ $2,000 for supplies
Measures of Success	▪ ID card program in place

IV.31 IP Management

The Technology Center will administer ALL IP address assignments throughout the district. The district will assign each drop a specific IP address. Equipment utilizing the drop will change their IP address to match the address assigned to the drop.

IPs may not be reassigned without prior authorization from the Network Manager or Director of Technology.

We must make every effort to protect our IPs so they are not used to access our network in an unauthorized manner.

Implementation Information

Assigned To	Todd Dulaney
Start Date	August 2002
End Date	August 2007
Budget	N/A
Measures of Success	▪ All IPs addresses administered by Network Manager

All IP changes will be coordinated with state officials.

IV.32 Data Consistency

Managing technology starts with the management and control of our data. It is vital to our success that we get all our data to a consistent level. We must have single source data. If we have multiple sources for our data, we will never gain control over our data. Therefore, we will embark on an effort to choose our single source data repositories. Once these repositories are in place, local data bases and document repositories will no longer be allowed.

Starting in the fall of 2002, the Technology Team, the Office of Teaching and Learning along with the Technology Oversight committee will begin the planning process for implementing single source repositories and developing our data consistency plans.

The philosophy of our district will be for the Technology Department to provide the infrastructure and tools and the various schools, staff and offices to provide and maintain the data.

Implementation Information

Assigned To	Chase Hafner Rae Lynn Job Connie Nerby Technology Oversight Committee
Start Date	September 2002
End Date	December 2005
Budget	~ $3,500
Measures of Success	▪ Plan developed ▪ Single source repositories deployed ▪ Local repositories retired ▪ Data consistency checks in place

IV.33 Calendaring

In the fall of 2003, the district will install a network based calendaring system. This system is designed to allow for day-to-day calendar management of individuals and groups. The following details the features will deploy:

- Individual scheduling
- Group scheduling
- Schedule look-up
- Repeating meeting scheduling

Implementation Information

Assigned To	Technology Oversight Committee Todd Dulaney
Start Date	October 2003
End Date	February 2004
Budget	~ $2,000
Measures of Success	▪ Calendaring software in place ▪ User training on software ▪ Users converted to software

IV.34 Budgeting

Budgeting will be based on facts. Budgeting for technology will follow all district budgeting guidelines. When preparing our budgets for technology, we will match our budgetary figures and requests and compare them to the district technology plan looking for conformance to the district technology plan and vision, mission and goals stated in this document.

It is recognized that many of the proposals within the Infrastructure and Connectivity require a fair amount of investment. It is also recognized that the school district does not have unlimited funds that can be funneled into these efforts. Therefore, the following will be pursued for funding and budgeting the appropriate programs and efforts:

- Normal District Budgeting
- Competitive State Grants
- Competitive Federal Grants
- Competitive Corporate Grants
- Fund Raising @ the School Level

With the fiscal 2002-2003 budget already set, a majority of the budgeting for these programs will occur in the 2003-2004 budget year and beyond.

IV.35 Annual Review Process

All aspects of Infrastructure and Connectivity will undergo annual reviews. These reviews will focus on:

- Program Effectiveness
- Student and Staff Satisfaction
- Furthering the Technology Vision, Mission and Goals
- Known Issues
- Budget Issues

The Technology Oversight Committee and Technology Advisory Committee will be responsible for conducting the annual reviews.

Information from the annual reviews will use the balanced scorecard/metrics program listed in this document as well as the assessment triangle. Correlations between staff progress/development and student progress/development will be made. It is our goal to show that an improved infrastructure leads to better curriculum integration and higher student achievement. It is the data collected in all phases of the plan that will allow us to show the correlations and demonstrate the progress. This is turn will allow us to modify our plan to address specific weaknesses (either infrastructure, staff or student).

Implementation Information

Assigned To	Technology Oversight Committee, Technology

	Advisory Committee & Chase Hafner
Start Date	April 2003
End Date	April 2007
Budget	N/A
Measures of Success	▪ Annual reviews of all programs & projects ▪ Changes made based on evaluations

IV.36 Building 5-Year Plans

In conjunction with Physical Plant, the following lists the major enhancement projects by building for the next 5 years:

School	Project	Estimated Cost	Estimate Completion
Desert View (Main Bldg.)	Wireless Labs	$24,500	Summer 2004
Overland (Main Bldg.)	Wireless Labs	$24,500	Summer 2004
Walnut (Main Bldg.)	Wireless Labs	$20,000	Summer 2003
Northpark (Main Bldg.)	Cat-5 Rewire Wireless Labs	$21,000 $24,500	January 2003 Summer 2004
Westridge (Main Bldg.)	Wireless Labs	$24,500	Summer 2004
EJH (Main Bldg., West Addition and East Addition)	Cat-5 Rewire Cisco Wireless	$47,000 $28,000	March 2003 Summer 2006
White Mtn. (Main Bldg.)	Cat-5 Rewire Cisco Wireless	$32,000 $25,000	Fall 2003 Summer 2006
RSHS (Entire Campus)	Cat-5 Rewire Cisco Wireless	$58,000 $35,000	Summer 2004 Summer 2005
IHS (Main Bldg., Direct East Modular and New Modular)	Cisco Wireless	$21,000	Summer 2004
Farson (Entire Campus)	Cat-5 Rewire Wireless Labs	$7,000 $17,000	September 2002 April 2003
Wamsutter (Entire Campus)	Cat-5 Rewire Wireless Labs	$16,500 $17,000	December 2002 TBD
Rebound @	Wireless Labs	$22,000	Summer 2003 &

Lincoln (Main Bldg.)			Summer 2004

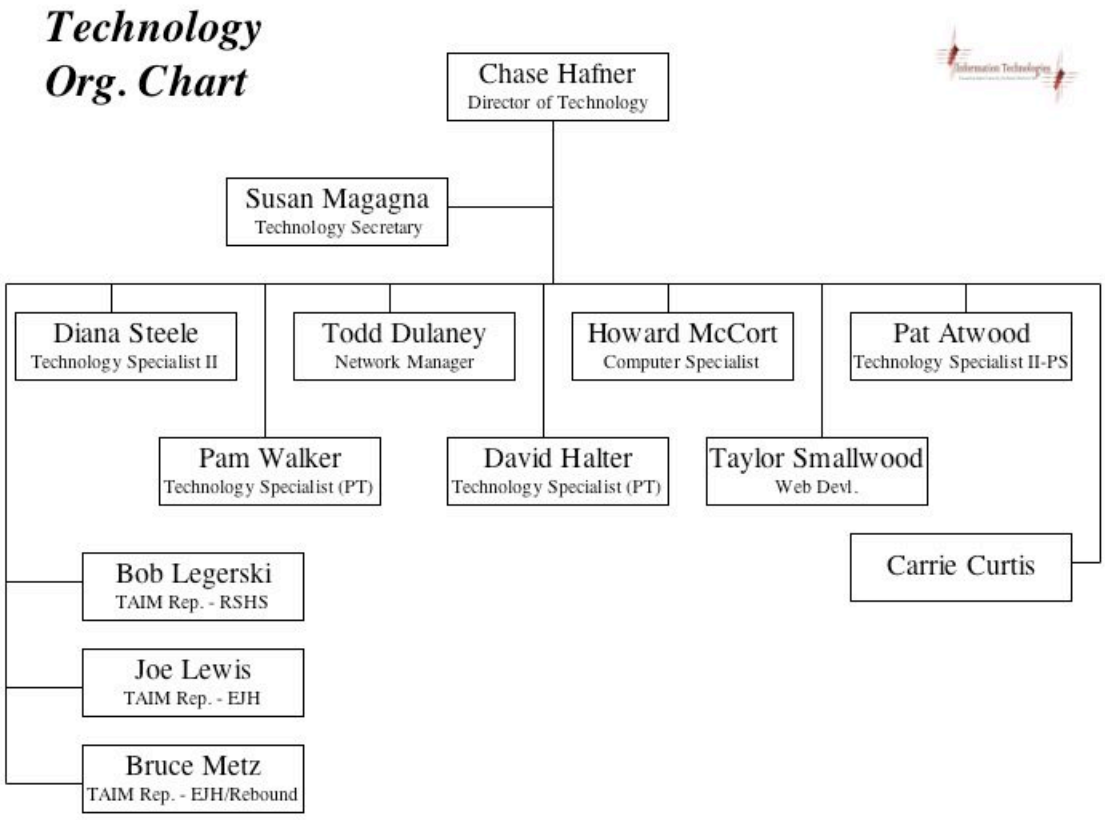
- Wireless Labs listed above will not involve any construction.
- Cisco wireless solutions will involve placing antennas in the ceiling.
- Cat-5 Rewiring involves replacing incorrectly installed Cat-5/Cat-5e cabling.

Implementation Information

Assigned To	Chase Hafner
Start Date	July 2002
End Date	June 2007
Budget	$464,500
Measures of Success	▪ Successful rewire of bad infrastructure ▪ Implementation of wireless capabilities

V. General

V.1 Organization Chart



The above chart shows the current organization and does not incorporate the proposed staffing changes in section V.5.

V.2 Centralized Purchasing

In order to ensure we are spending our software and hardware dollars correctly and also ensure we are purchasing the correct hardware of software, all hardware and software purchases for the district must be done through the Technology Center. All software and hardware budgets will be condensed and placed under the jurisdiction of the Technology Center. Schools and departments will then be prioritized based on need. Separate budgets will be held for school specific fund raising, Title I, Special Needs, etc. It is not the

intention of this procedure to penalize any person or school, yet it is designed to ensure we reap the benefits of bulk buying and correct purchasing in a controlled environment.

Centralized purchasing lends itself to helping manage the Technology Renewal Plan along with technology introduction.

The full Centralized Purchasing proposal will be taken to the board by January of 2003.

Implementation Information

Assigned To	Chase Hafner & Jack Adams
Start Date	December 2002
End Date	August 2007
Budget	Approval by board
Measures of Success	▪ Board approved plan in place ▪ All purchases following the plan

V.3 Rename

During the 2002-2003 school year the Technology Center will be renamed to Information Technologies. The rename is necessary to reflect the work performed by the Technology Department. Information management is as predominant in the technology space as the actual technology itself.

The Director of Technology will coordinate and announce the rename in the fall of 2002.

Implementation Information

Assigned To	Chase Hafner
Start Date	October 2002
End Date	May 2003
Budget	N/A
Measures of Success	▪ Rename complete

V.4 Metrics Program

In order to ensure we are dealing with facts and not here say or emotion. The Technology Center will start a metrics program that will measure and monitor the following:

- PowerSchool Issues and Help Tracking
- Email Issues and Help Tracking
- Software Issues and Help Tracking
- Software Down Time and Outages
- Network Issues and Help Tracking
- Purchasing
- Computer Repair
- Budget
- Etc.

In addition, student and staff data will be collected in a similar manner to help with drawing conclusions on the programs overall effrectiveness.

These metrics will be used to:

- Identify areas of improvement
- Identify strengths
- Identify weaknesses
- Justify costs and budget items
- Illustrate improvement
- Develop a balanced scorecard

Implementation Information

Assigned To	Susan Magagna & Chase Hafner
Start Date	August 2002
End Date	August 2007
Budget	~ $300 for supplies
Measures of Success	▪ Weekly counts from technology staff ▪ Metrics reports published and distributed

V.5 Staffing

In order to keep up with and get ahead of the curve for technology, we will need to add staff to the Technology Center. Technology is currently staffed as follows:

- 1 full time Technology Director
- 1 full time Technology Secretary
- 1 full time Computer Technician for computer repair

- 1 full time Computer Specialist for PowerSchool Administration – supporting 800+ users and ~4300 students
- 1 full time Computer Specialist for email, Alexandria and general desktop support – supporting 695 email users and 3000+ desktops
- 1 full time Network Manager – supporting 16 schools, 3000+ users (10 Month)
- 3 part time Technology Reps – 1 for each Jr. High and 1 for High School
- 2 part time Computer Specialists for the Elementary & Secondary Schools (Part-time 34 hours)
- 1 part-time Computer Specialist for Web Development (Part-time 20 hours)

We need to consider the following:

- Adding 1 full time Computer Specialist to assist in PowerSchool and email support – this is to correct our back log for PowerSchool and email support issue and to stay current
- Adding 3 part time Computer Specialists for District Wide computer support – this will allow us to dispatch people out to trouble shoot and assist throughout the district as well as format or reformat computers as necessary (Part-time 34 hours)
- Changing Network Manager to Classified 12 month as our network components need attention year round
- Changing 3 part time Technology Reps from 50 hours in the summer to 100 hours – this is required to complete software upgrades and ensure the district computing environments are ready for the next school year
- Having Pam Walker report to the Technology Center – this will help us coordinate across the district

V.6 Technology Career Planning

In order to keep top talent in the technical field, we must have a clearly defined technical career path. This career path will have specific benchmarks that an employee must achieve prior to moving to the next level. An employee's position in the career path is directly related to his or her compensation.

Key elements of our Technology Career Path will include, education background, years in a technical field, certifications, continuing education, professional goals.

The Director of Technology will work with Human Resources to establish this technology career path in the spring of 2003.

Implementation Information

Assigned To	Chase Hafner
Start Date	August 2003
End Date	May 2004
Budget	N/A
Measures of Success	▪ New career path and plan in place

V.7 PVA – Portable, Versatile & Affordable

As a district, we will always keep PVA (Portable, Versatile & Affordable) in mind. We will ensure our newer technology is portable. Meaning that it can be used throughout the district and throughout a campus. Our technology integration will be versatile. Meaning that it can be used for multiple purposes. Finally our technology must be affordable. We cannot expect to purchases millions of dollars in hardware and software each year. We will make wise choices and purchase technology items that keep us in an affordable category.

VI. Implementation Plans

VI.1 Review Process

This implementation plan will use proven project management methodologies. All aspects of the plan(s) will be reviewed weekly and monthly. Adjustments will be made based on know facts and data, along with project progress.

VI.2 Balanced Scorecard

All aspects of this Technology Plan and associated implementations will be tracked and trended using a balanced scorecard. Information from the various committees, reviews from sections I.9, II.9, III.7, IV.31, V.3 & VI.1 and management of implementation of the Technology Plan will be used to develop the balanced scorecard.

What is a Balanced Scorecard? A Balanced Scorecard is a detailed report of all statistics and metrics showing progress towards a benchmark. Each category in this plan has an associated implementation schedule and tracking mechanisms associated with it. This information will be used to depict the progress towards a specific benchmark (e.g. network outages, # of standards being used, etc.).

Implementation Information

Assigned To	Chase Hafner & Susan Magagna
Start Date	August 2002
End Date	August 2007
Budget	N/A
Measures of Success	▪ Published balanced scorecard ▪ Decision and budgets based on scorecard

VI.3 Implementation Information

Implementation information may be found throughout the document. At the bottom of each section are the details for which individuals the tasks are assigned to, start and end dates along with budget and measures of success.

All budgets listed in this document are assumed to be annual budgets, unless otherwise stated.

As funds from various sources are secured, they will be utilized and tracked according to the guidelines for those funds. It is anticipated that the district will receive funds for technology from many sources. We will use our master project plans and priorities to determine the correct use of these finds. All budgets and expenditures will be closely monitored and tracked.

VII. Goals and Plan Cross Reference

The following table illustrates how each goal relates to our listed plans and processes.

Goal	Cross Reference to Plan Section
1.) Establishing partnerships with parents, students, faculty, local community members, local business members and technology companies	I.2, I.3, I.4, I.5, I.6, II.4
2.) Integrating our technology initiatives and capabilities with our curriculum	I.2, I.3, I.4, II.1, II.2, II.6, II.7, II.8, III.5, III.6, IV.32
3.) Providing an environment that allows faculty and staff to develop their technical skills	I.7, II.2, II.3, II.6, III.1, III.2, III.3, III.4, III.5, III.6
4.) Continually upgrading our technical infrastructure to keep pace with technological changes	II.4, II.5, II.6, IV.1, IV.2, IV.4, IV.5, IV.6, IV.8, IV.9, IV.11, IV.16, IV.18, IV.19, IV.26, IV.28, IV.29, IV.33
5.) Providing a environment which rewards technical adoption and innovation	I.5, I.6, III.4, IV.28, V.5
6.) Following the plans and policies listed in this document to ensure we have consistency and fairness throughout our technology use and integration	I.8, I.9, II.2, II.9, III.4, IV.1, IV.18, IV.19
7.) Improving students problem solving and decision making skills	II.3, II.4, II.7, II.8, III.6, IV.2, IV.11
8.) Improving student technology literacy	II.3, II.4, II.7, II.8, III.6, IV.2, IV.11
9.) Creating an environment that is enthused about technology	I.1, I.2, I.3, I.4, I.5, I.6, III.5, III.6, IV.2, IV.11, IV.16, IV.30, IV.33
10.) Making factual based decisions	II.5, III.4, IV.3, IV.12, IV.18, IV.26, IV.27, V.4, IV.32
11.) Holding annual reviews of all plans	I.9, II.9, III.7, IV.3, IV.20, IV.26, IV.27, IV.35, VI.1, VI.2
12.) Developing technology champions to demonstrate and teach how technology can benefit everyone	I.1, I.2, I.3, I.4, II.2, II.6, III.5, III.6, V.6

Attachment 1 – Budget Summary

The following summarizes the potential budget required to implement all aspects of this plan. These are approximate figures. As the planning process continues and the implementation of the plan unfolds, we will see decreases and increases. This is simply meant to provide a point of reference and summary.

Budget Summary

Item Number	One Time Costs	Annual Costs
I.1 Technology Oversight Committee		$1,500
I.2 Technology Advisory Committee		$1,500
I.3 Parent Technology Advisory Committee		$1,200
I.4 Student Technology Needs & Use Committee		$500
I.5 Student Technology Achievement Awards		$500
I.6 Parent Technology Involvement Awards		$300
I.7 Technology Bulletin Boards	$600	$100
I.8 Ongoing Surveys		$500
I.9 Annual Review Plan		$200
II.1 Special Needs Technology Integration		$20,000
II.2 Assessment Plan		$1,500
II.3 Distance Learning		$50,000
II.4 Continued Offerings		$20,000
II.5 Equity & Access		$2,500
II.6 Research		$200
II.7 Technology Education Library		$3,500
II.8 Standards Alignment		$500
II.9 New Technology Course Offerings		

II.10 Linkage to School Improvement		$1,000
II.11 Program & Annual Review		$1,000
III.1 Individual Development & Training		$2,000
III.2 Group Development & Training		$5,000
III.3 Self Paced Development & Training		$5,000
III.4 Professional Development Specifics		$40,000
III.5 Assessment Program		$3,500
III.6 Technology Day		$12,000
III.7 Technology Fair		$10,000
III.8 Annual Review		
IV.1 Security & Access		$15,000
IV.2 Minimum Technology Requirements		$5,000
IV.3 Network Analysis Plan	$7,500	$2,500
IV.4 Network Upgrade - Phase I	$102,000	$3,600
IV.5 Network Upgrade - Phase II	$50,000	
IV.6 Network Upgrade - Phase III	$75,000	$3,000
IV.7 Network Maintenance Plan		$2,000
IV.8 Network Wiring	$240,000	$10,000
IV.9 Wireless LANs & Technology	$25,000	
IV.10 Technology Renewal Plans		$500,000
IV.11 Lab Environments	$120,000	
IV.12 Approved Products List		
IV.13 Disaster Recovery	$10,000	$200
IV.14 Back-up Plans		$500
IV.15 District Email		

Accounts		
IV.16 Student Email Accounts		$500
IV.17 Technology Inventory		$600
IV.18 Product Research		
IV.19 Product Installation & Testing	$6,000	
IV.20 Student Information System (PowerSchool)	$4,000	
IV.21 Technical Support		
IV.22 Non-Disclosure Agreements		
IV.23 Hardware Platforms		
IV.24 Operating Systems		
IV.25 Printers	$10,000	
IV.26 Software Licensing		
IV.27 Standardized Software		$4,000
IV.28 Web Server & Services	$4,500	
IV.29 Anti Virus Protection		$12,000
IV.30 Card Access & Automation		$2,000
IV.31 IP Management		
IV.32 Data Consistency	$3,500	
IV.33 Calendaring		$2,000
IV.34 Budgeting		
IV.35 Annual Review Process		
IV.36 Building 5 Year Plans	$464,500	
V.1 Organization Chart		
V.2 Centralized Purchasing		
V.3 Rename		
V.4 Metrics Program		$300
V.5 Staffing		$100,000
V.6 Technology Career Planning		
V.7 PVA - Portable, Versatile & Affordable		

VI.1 Review Process		
VI.2 Balanced Scorecard		
VI.3 Implementation Information		
TOTALS	**$1,122,600**	**$847,200**
Current Annual Budget 2002		$615,000
Anticipated Current Annual Changes		$8,000
Grand Totals	**$1,122,600**	**$1,470,200**

Note – budget figures will change as the plan evolves and new data is discovered.