FREMONT COUNTY
School District 1
Achieve Every Summit

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Fremont County School District #1
Lander, WY

District Technology Plan

July 1, 2013 – June 30, 2016

Superintendent: Dr. Mike Bowman

Adopted: (draft for WDE scoring)

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District Mission Statement

> We will be a learning community where all members are respected and every individual is challenged to achieve excellence.

The goals related to this mission statement for the next three years are:

- Improve academic achievement and performance for all students
- Ensure safe and orderly school environments
- Ensure efficient and effective district, school and department operations

The current District Mission Statement is a result of focused work, planning, and goal-setting by the Fremont #1 School Board, Superintendent, and many District stakeholders.

Technology Mission Statement

> The District Technology Office provides excellence to the District learning community by delivering and maintaining infrastructure and applications to improve student achievement, promote efficient and effective operations, foster a secure work environment, and deliver quality customer service.

The Technology Office mission statement was developed in 2009 during our Continuous Improvement training, and written specifically to tie in with the District's three mission statement goals.

Introduction

Fremont County School District #1 is located in the west central part of Wyoming and is located at the base of the Wind River Mountain Range. The school district covers 3,147 square miles and includes the communities of Lander, Hudson, Jeffrey City, and the surrounding rural areas. The administrative offices are located in Lander.

Lander is the largest community within the school district and provides the majority of our student population. The 2010 Census population for Lander was 7,487 people (a 9% increase from the 2000 census), while the population for the school district (Lander and outlying areas) is approximately 11,000. Native American students comprise about 20% of the district's enrollment. From the 2010 census, about 9% of Lander households are in poverty.

The current student enrollment is 1,699 students. Fremont County School District #1 is currently comprised of six schools.

Lander Valley High School:	grades 9-12	487 students
Pathfinder High School (alternative high school):	grades 9-12	36 students
Lander Middle School:	grades 6-8	352 students
Baldwin Creek Elementary School:	grades 4-5	258 students
Gannett Peak Elementary School:	grades K-3	564 students
Jeffrey City Elementary School:	grades K-6	2 students

Like many other school districts, instructional technology is a critical part of day-to-day activities and student learning in our district. Technology is viewed as an educational tool used to enhance the educational experience of the students. The goal of all educational technology decisions at Fremont #1 is to seamlessly integrate technology into the classroom and curriculum. Professional development and curriculum integration goals are designed to accomplish this end and to support teachers in becoming self-sufficient with technology.

Up-to-date information about our school system can be found at:

www.landerschools.org	Our public website and school websites
www.landerschools.org/technology	Website for the Technology Office

Technology Planning Committee

Fremont County School District #1 recognizes the need to expand school boundaries to engage businesses, community services, parents, and government entities with education planning, delivery, and evaluation. Such partnerships bring many assets to the classroom, school, and district levels. Partnerships also help bridge classroom learning to real-world applications.

Our team includes community members and parents, who are essential in providing feedback, brainstorming, and exchanging expertise. The following District staff and community have contributed to this plan's development by participating in the Technology Planning Committee:

District Technology Committee (members may change during cycle)			
School / area	**Member**	**Role**	**Technology Plan Responsibilities**
Technology	Chris Brown	Technology Director	Overall management, coordinating, and evaluation of district technology
Technology	Charlie Clifford	Assistant Technology Director	Network and workstation management; strategic planning
Technology	Shawna Pickinpaugh	Educational Technologist (secondary)	Instructional implementation and evaluation
Technology	Michelle Woodruff	Educational Technologist (primary)	Instructional implementation and evaluation
District Administration	John Metcalfe	Assistant Superintendent of Curriculum	Provide link between Curriculum Coordinating Council and Technology Committee
District Administration	Renee' Cook	District Data Manager	Provide data to analyze student proficiencies
Baldwin Creek Elementary	Nicole Jordan	Library Media Specialist	Provide feedback from librarian perspective
Gannett Peak Elementary	Kristy Nelson	Classroom teacher (elementary)	Provide feedback from teacher perspective
Lander MS	Brian Janish	School principal	Coordination of goals for the new Middle School
Lander Valley HS	Dean Schaff	Classroom teacher (secondary)	Provide feedback from teacher perspective
Lander Valley HS	Students in LVHS Tech Club	Student representative	Student perspective.
Special Education	Casey Widhalm	Assistive Technology specialist	Provide link between special education services and technology needs
School Board	Dave Clark	School Board member	Liaison with district school board and district goals statement

Required Constituency

The following table identifies the members and their roles for Title IID tech planning:

Parents / Guardians	Kristy Nelson
Students	LVHS Tech Club officers
Charter Schools	There are no charter schools within the boundaries of Fremont #1
Private Schools	The following person was appointed to represent potential private school interests: John Metcalfe
Home Schools	The following person was appointed to represent potential private school interests: John Metcalfe
Community-based organizations	NOLS (National Outdoor Leadership School) representatives CWC (Central Wyoming College) representative
Teachers	Paul Primrose, Carrie Johnson, Dean Schaff
Title I staff	Casey Widhalm
School Administrators	Chris Brown, Brian Janish, John Metcalfe
Librarians	Nicole Jordan
Other Partners	Shawna Pickinpaugh, Michelle Woodruff

Evaluation

Evaluation-driven reports will permit periodic formative and summative assessment of technology integration toward achieving program benchmarks while increasing student performance. Reports are generated to fulfill Federal, State, and district requirements and to provide stakeholders with performance feedback. In addition to standard reports, evaluation information and reports will be disseminated through various methods (e.g. newsletters, public website, board presentations, the District Facebook and Twitter presence).

The following formal internal performance and activity reports will be generated as an evaluation for the goals and action steps for this 2013-2016 Tech Plan:

Report Title	Description	Staff Responsible	Schedule for Delivery
Year-End Performance Reports	Describe project strategies, lessons learned, and progress towards achieving objectives (including effectiveness of implemented strategies at achieving objectives).	Technology Office	Annually in May (as part of school board report)
Mid-term Progress Report	Summarize data collected, indicate data that is missing or of poor quality; present preliminary findings and perceived trends apparent in data analysis.	Technology Office	Once (at tech plan midterm date; date determined by WDE)
Continuous improvement progress reports	Reports on Tech Office efficiency and overall progress toward meeting the District's initiative of continuous improvement	Technology Office	Annually (as part of school board report)
Professional development surveys	Evaluation of yearly efforts for teachers in each school to address teacher preparation and delivery of instruction	Educational Technologists	Annually in May
Scheduled parent / student activities evaluations	Evaluation of tech equity goal activities (parent night, summer student activities, etc)	Educational Technologists; Technology Office	Annually in May (after year's activities are completed)
Final Tech Plan Goals report	Final report (at end of year 3) of goals attained and progress realized	Technology Office; Technology Committee	Once (at plan end date; date determined by WDE)

To obtain accurate and timely information for these formal reports, the following data and assessments will be utilized as they are created during the term of this Tech Plan:

Data	Report	Explanation
Standardized assessments	PAWS reports; Year-end performance reports; Final Tech Plan goals report	PAWS data is used to drive technology and curriculum integration needs in reading, writing, and math. As our needs change, additional technology resources, software, and subscriptions are identified and purchased to help the District in these areas.
Local assessments	MAP testing scores, WDE required reports, data and reports generated from District software (such as SuccessMaker, Renaissance Place, System 44, Read180, etc)	The District uses MAP tests to determine student proficiency and achievement. Also, WDE district and school reports are used to report student tech literacy. As part of this tech plan, an assessment for eight grade technology literacy will be developed and implemented.
Professional development data	Professional development evaluation (annual)	Evaluations and outcomes from our two Educational Technologists are used to determine how to focus our professional development goals.
Surveys	Professional development evaluation (annual)	Survey data is used to develop professional development strategies, and in this new plan will also be used to evaluate teacher technology skill sets
Total Cost of Ownership	Continuous Improvement annual report	Evaluation of technology purchases as part of our Continuous Improvement initiatives
Administrative networking tools	Continuous Improvement annual report	Purchase reports to evaluate purchasing streamlining goal, quarterly narratives published to all staff and presented to the School Board to show growth in operating efficiencies and department achievement
Data management tools	Year-End Performance Reports	Student information system data is used to generate reports as needed by administrative staff
Communication tools	Continuous improvement progress reports; Organizational Assessment annual visits	Use of new staff-only “Summit” intranet to improve and streamline District communications, forms-keeping, announcements, etc

Strengths and Weaknesses of Current Plan (2009-2013)

A strength of our current technology plan is that it pulls data from a number of different sources to try to create a true picture of tech usage. However, many of these different sources are more focused on specific aspects of instruction. In the future, we are hoping to see additional ways (including leadership from the WDE) to better evaluate the overall usage and implementation of instructional technology.

Lessons learned from this 2009-2013 Tech Plan include:

- The speed and growth of innovation and progress is making long-term tech planning – at least in terms of hardware and software – very hard to do. When the last plan was written and approved in 2009, technology such as affordable and usable tablets (such as the IPad) were barely existent, technologies such as server virtualization were still in infancy, and traditional devices such as Windows PCs were nearly the "only game in town." Today, the number of options are growing and plans laid in one year may not end up being the best choice in a short while.
- Although funding is becoming tighter, professional development is still a priority. We are evaluating and researching different methods of delivering in-district professional development that can reduce funding use while still maintaining
- Technology integration with curriculum should still be the driving force behind our tech planning and implementation.

A more formal evaluation is expected at the end of the 2012-2013 school year, at the end of the plan.

Review of Policies and Procedures

The District has policies in place regarding technology appropriate usage, copyright and fair usage, and privacy and security of computer communications. In the future, additional policies may be put in place, including a CIPA-related Internet safety policy, updates to our existing policies on bullying and harassment, etc.

An Acceptable Use Policy is in place at schools for student and parent agreement. The policy covers student use of technology, privacy expectations, Internet usage, mobile technology usage, and other school-related issues.

A number of procedures have been instituted in the last three years regarding technology usage and tracking, including:

- Implementation of a browser-based technology request application that is accessible to all staff. Reports from this application drive our continuous improvement goals.

- Design and implementation of a detailed database of District technology assets, including workstations, servers, and network equipment. The database allows for easy tracking of purchase details, warranty and service work, configurations, and change management.
- Work with the District Warehouse to streamline technology asset inventory and dovetail their efforts with the technology asset database.
- Implementation of a centralized document storage area for Technology work and materials that can be accessed securely from offsite.
- Implementation of a centralized electronic repository for past technology purchase orders and paperwork that significantly speeds up retrieval speeds when checking on purchase histories.
- Feedback from our Continuous Improvement reports and PDSA activities also drive our future changes in procedures.

Total Cost of Ownership

Evaluation of technology purchases is done annually as part of our Continuous Improvement initiative. The District also evaluates overall technology cost (acquisition, maintenance, service, power, cooling, software licensing, security, etc) and makes adjustments as necessary to provide better service at a reduced cost. Additional information regarding TCO is found in the Infrastructure section of this Technology Plan.

Use of Standards

The District currently references the NETS-T and NETS-S standards for technology literacy in our technology curriculum. A goal for this Tech Plan cycle is to formally adopt the full NETS-S, NETS-T, NETS-A (for administrators), and NETS-C (for instructional coaches). This will give the District a consistent set of standards and expectations for all stakeholders.

Professional Development data

Evaluations of professional development offerings are done annually by our PD Director. Such reports are used to drive future offerings and to establish a record of how instructional technology has been supported and modeled in the District. These reports are used when we create offerings for each semester, as well as data from teachers themselves as to what their current needs are.

Administrative Networking Tools

Evaluation of administrative software tools is ongoing. Fremont #1, like most other school districts, uses a number of different tools, databases, and applications to complete our daily business of educating students and managing the school district.

Data Management Tools

The District relies utterly on its student information system and its need for accurate, consistent data entry. Evaluation of the capabilities of Infinite Campus (our SIS) is ongoing and is done by the District Curriculum Office, who maintains the overall system and oversees data entry and reporting.

Communication Tools

In the last two years, several communication goals have been set and achieved. The District as of 2012 has a totally-revamped and modern website, done after an evaluation (as part of the pervious Tech Plan) of our previous solution that was found to be lacking in consistency, aesthetics, and usefulness.

Also, we have fully committed to alternate forms of modern communications, such as Facebook and Twitter, to supplement and enhance our outreach to parents and the community.

Enhancing Education Through Technology (Title IID) Program Goals

District mission statement: *We will be a learning community where all members are respected and every individual is challenged to achieve excellence.*

Primary Program Goal #1: Improve student achievement through the use of technology in elementary and secondary schools (Section 2402 (b)(1))

- Transition the District from the client-server model of collaboration and computing to a modern cloud-based design to allow for true "anytime, anywhere" learning and teaching
- Evaluate and transition the District to a one-to-one technology model for students in grades 6-12 (or as determined)
- Continue to ensure that all District classrooms are 21st century technology-rich classrooms incorporating modern, high-quality, and consistent instructional technology as well as continue research-based practices to increase student achievement and to reach our school improvement goals, especially for high-needs schools and students

Primary Program Goal #2: Technology Literacy – ensuring that every student is technologically literate by the time the student finishes the eighth grade regardless of student's race, ethnicity, gender, family income, geographic location or disability. *(Section 2402 (b)(2)(A))*

- Refresh and modernize our K-8 district technology standards and assessments and ensure alignment with Common Core standards as well as ISTE's NETS-S standards to measure technology literacy in K-8 students
- Continue to promote tech equity and literacy by establishing participatory programs for District parents and students (annual tech fair, excess inventory giveaways, etc)

Primary Program Goal #3: Effective integration of technology resources and systems - encourage effective integration of technology resources and systems with teacher training and curriculum development to establish research – based instructional methods that may be widely implemented as best practices by state educational agencies and local agencies. *(Section 2402 (b)(2)(B))*

- Research and implement a research-based system to assess technology literacy in all teaching staff, with the goal of having all teaching staff achieve a moderate to high proficiency score in the use of technology to accomplish teaching and learning goals
- Continue to seek "excellence" in our network and communications infrastructure for our existing and new school facilities. Our infrastructure will be robust, secure, and flexible and will allow full implementation of our technology goals and objectives
- As part of our District's overall Strategic Plan, the Technology Office will strive to increase and modernize the role of technology as a communications and efficiency tool for District staff to complete their everyday administrative tasks

Partnerships

Fremont County School District #1 recognizes the need to expand school boundaries to engage businesses, community services, parents, and government entities with education planning, delivery, and evaluation. Such partnerships bring many assets to the classroom, school, and district levels. Partnerships also help bridge classroom learning to real-world applications

Our team includes community members and parents which are essential for the efficient development of information technology in providing feedback, brainstorming, and exchanging expertise. Our current partners and their roles in our District include:

Partnership Members (participating names may change during cycle)		
Organization	**Member / representative**	**Role in Partnership**
CPU VentureTech	(various)	Advises on District technology infrastructure, set up of infrastructure, recommends possible innovations and improvements
Pine Cove Consulting	(various)	Advises on District communications (IP phone) setup
CDWG	Jamison Bills	Advises on District software subscriptions and purchases; suggests improvements in purchasing
Wyoming Enterprise Technology Services	(undetermined)	Provides technical assistance and support with in-district and statewide connectivity
CenturyLink	(undetermined)	Advises on District communications; recommends possible innovations and improvements
CIC (Computer Information Concepts)	Various staff	Advises with implementation and support of the District's student information system
Central Wyoming BOCHES	John Metcalfe (Fremont #1)	Advises with curriculum work for our high school concurrent credit classes; also offers technology and career-based classes
Continuous Improvement	Rick Sulewski	Advises with implementation of continuous improvement planning and implementation; help set department goals and vision statements
Wyoming Department of Education	Various staff	Provides school- and district-level support with program development, evaluation

Curriculum Integration

Effective technology integration starts with an aligned technology curriculum as a foundation so teachers and students understand criteria and direction. School improvement goals along with district goals provide a map for implementation and envisioning technology use. Through the span of the previous technology plan, all schools in the district continued to make adequate yearly progress with increasing scores in reading and mathematics on state assessments. However, in the last two years, certain subgroups at North Elementary and Pathfinder HS did not meet AYP, and District efforts are focused on meeting the needs of these students.

Change and Growth from Previous Plan

Previous Tech Plan (written in 2008): In order to continue providing tech integration support to teachers, two technology education specialists were hired in 2005 using a combination of Title I and State IF funds. These two staff members are shared between schools to promote classroom implementation and a model of embedded professional development through coaching. This model compliments the one used to increase instructional expertise through instructional facilitators used in every school in the district. Other specialists team with principals and teachers and other district instructional facilitators in order to build communication about best practice methods that are then modeled and refined through observation. The most important aspects of curriculum integration of technology are now a guaranteed part of instruction, as technology is now integrated into the paradigm of nonnegotiable curriculum components as well as into the practice of all educators and administrators throughout the district.

The following activities were completed as part of the previous plan:

- All schools continue to be standardized on Infinite Campus to create report cards, manage student standardized test scores, manage discipline needs, and manage student demographics.
- The MAP Testing program is a computer adaptive testing program that the District subscribes to from NWEA. It assesses student abilities in Reading, Language Arts, and Math for grades 2-10. Students are assessed twice every school year. NWEA gives the District a metric for gauging student strengths and weaknesses in learning, as well as how teachers are teaching.
- An online subscription to Odysseyware – an instructional program to help the students with credit recovery in the areas of Language Arts, Science, Social Studies, and Math – was implemented for Pathfinder HS students as well as for Lander Valley HS students.
- Various student learning applications (Waterford Early Learning, SuccessMaker, Read180, ReadAbout, System 44, etc) have joined our list of existing interventions. All of these titles are web-based, allowing us maximum flexibility in deployment and use.
- A number of assistive technology software titles have been purchased and are available on all District computers.

Objectives for this Tech Plan

This information is a summary of the Curriculum Integration Action Plans:

Objective (from Action Plan)	Progress Expected	Measurement of Progress
Continue to implement K-8 district technology standards and assessments to measure technology literacy in K-8 students	• Revision and integration of standards into K-8 curriculum maps	Adoption of standards; embedding of standards in district curriculum maps
Promote tech equity and literacy by establishing participatory programs for District parents and students	• Annual tech fair, summer tech camps, Lights-On programs • Formal system of excess inventory giveaways	Feedback and attendance at events; participation in inventory giveaway
District teachers will continue to build upon our foundation to integrate 21st century technology and research-based practices into classroom instruction	• Employ an online learning management system that will allow for secure "anytime, anywhere" access • Technology incorporated into formative assessment work	Usage of learning portal for 7-12 students; usage of formative assessment technology; professional development and awareness of available technology
Create 21st century technology-rich classrooms at all schools that incorporate modern, high-quality, and consistent instructional technology for teacher and student use	• Baseline classroom instructional tech published • Acquisition of instructional technology where needed to standardize classrooms and student experience	Acquisition of technology meeting instructional standard at both new school buildings as well as existing buildings

More information on objectives and goals to meet these objectives may be found in the Action Plan section.

Strengths and Weaknesses

One area we feel is a strength is the depth and breadth of our curriculum offerings for technology. The District has a large number of software purchases and annual subscriptions that are used to help determine much of our curriculum. From formative assessment to assistive technology, daily instruction to student virtual field trips, technology is already heavily embedded into our curriculum and teaching.

However, there are improvements to be made. District staff are constantly identifying and suggesting improvements and changes to technology interventions. Since our elementary reconfiguration in the summer of 2011, interventions that formerly were different at each elementary school are now consolidated and staff are continuing their efforts to maximize their usage. We are also ensuring that all three elementary schools (or two, after the new building is completed in 2013) has equal hardware resources to support curriculum.

Improvement of Student Academic Achievement Through Technology

The District Curriculum Office employs metrics to evaluate and measure the effectiveness of technology-based interventions. During the last several years, this office has spearheaded an investigation into the number of interventions we supported, and looked at data from each school and specific intervention.

This data helped us redefine and streamline our interventions when we consolidated our elementary schools in the summer of 2011. A number of ineffective or indeterminate interventions were dropped. This chart shows the current major interventions and the grades they are used in:

Intervention	Grade(s) employed	Data usage
Waterford Early Learning	• K-1 at North Elementary	• Placement of students
SuccessMaker	• 2-3 at Gannett Peak • 4-5 at Baldwin Creek • Jeffrey City School	• Placement of students • Remediation
System 44 / Read180 / Read 180 NG	• Grades 4-5 at Baldwin Creek (System 44) • Grades 9-12 (Read180)	• Remediation
Renaissance Place	• Grades K-1 at North • Grades 2-3 at Gannett Peak • Grades 4-5 at Baldwin Creek • Grades 6-8 at Lander MS • Jeffrey City School	• Placement of students • Remediation • Data shared with parents
OdysseyWare / VHS	• Pathfinder HS • Lander Valley HS	• Remediation • Credit recovery • Advanced classes

Distance Education

Currently, the District does not have an overall formalized plan for distance education with entities outside the District, although we are using distance education technologies internally to deliver instruction via Virtual High School and OdysseyWare classes.

The District currently has two dedicated WEN video classrooms, one at Lander Valley HS and one at Pathfinder HS. Additionally, there exists several independent distance learning systems for students at Lander Middle School, Baldwin Creek Elementary, Gannett Peak Elementary, and Jeffrey City School (a rural school 45 miles from Lander). The video systems at the elementary schools are used for point-to-point instruction delivery (Gannett Peak to Jeffrey City) as well as for educational videoconferencing

opportunities (such as videoconferencing with subject experts and authors). The video systems at the secondary schools are mainly used for staff meetings and state work groups.

Student Technology Literacy

The District has an articulated curriculum that incorporates technology literacy at a number of levels. In 2009, a keyboarding literacy sequence was adopted for students in grades 2-8. More recently, social media and collaboration literacy has been incorporated into media classes at the Lander Middle School.

Evidence of Alignment

A strong, ongoing goal of the District is to improve student and parent engagement. In our District Strategic Plan (2012-2015), all schools are scheduled to provide data to the School Board demonstrating that these skills are embedded into daily instruction.

Our District Professional Development plan also calls for increased professional development for technology integration, with an eye specifically toward improving classroom engagement. In order for students to achieve higher using technology, teachers must be fully comfortable with the application and higher-level use of technology. Increased and targeted professional development in these areas will further this goal.

Equitability of Resources

The District strives to ensure equitability of resources for all students. According to the Pew Internet and American Life Project and Intel Corporation, there are still 30 million American households that do not have a computer. This gap in access is troubling as technology has become a baseline need for social, civic, economic and educational participation. Students in the 21st century must be equipped with the skills and tools to succeed and participate in our increasingly technology-rich, knowledge-based economy.

A separate goal of this Tech Plan is to assist with equity issues by formalizing a giveaway program for excess technology inventory. Additional programs will be established by this goal to increase technology awareness and literacy within the community of Lander.

Resource Distribution and Equitability of Resources

The District takes active steps to ensure that technology resources are available to all teachers and students as needed. Informal needs assessments have been performed annually with principals to

ensure that not only are there sufficient resources for technology in their schools, but that their teachers feel adequately trained on those resources.

Currently, 100% of Fremont #1 classrooms have a mounted projector and an interactive whiteboard. All teachers either have a desktop / tablet combo, or a notebook computer, for their own use. Many classrooms have several student computers. All schools have several computer labs and mobile carts that teachers can employ with their students. Schools have a wide array of other technology tools available for use: "clickers" for formative assessment, digital cameras and recorders for multimedia projects, Kindles for e-readers, dedicated "kit" workstations for specific learning objectives, and more.

Future usage needs are determined by curriculum adoption and the ongoing evaluation of technology-based interventions.

High Needs / High Poverty Schools and Students

Currently, the following District schools are categorized as high-needs and qualify for Title I funding: Pathfinder Alternative HS, Lander MS, North Elementary, Gannett Peak Elementary, and Baldwin Creek Elementary. This Tech Plan addresses the specific needs of these schools by tailoring equipment purchases, software purchases, and professional development to staff to better utilize technology-based interventions.

Parent Involvement

Parents are actively courted to attend and participate in curriculum meetings and in strategy planning sessions such as our current Common Core Standards project. Other technology-related parental opportunities for technology literacy include our first annual Summer Technology Giveaway, held in June 2012. This was a formal program of donating excess technology inventory to students and parents. Over 140 computers and monitors were given to participants, 100% of what we offered.

Teacher Preparation and Delivery of Instruction

Principals require teachers to submit lesson plans for review and these are used in the teacher's evaluation. As part of this process, principals ensure that classroom instructional technology is being used appropriately and adequately. Principals also monitor the use of technology interventions (software, subscriptions, and hardware) to make sure such usage meets the expectations of the building's school improvement goals and meets the needs outlined in our district curriculum.

Classroom Evaluation of Technology Delivery

The District's adopted observation walkthrough forms have a section specifically for noting both technology integration and 21st century skills observation. Principals note usage when they observe it, and also offer suggestions and guidelines for ideas to the teacher. Our principals model technology usage when they observe – through their IPads, principals enter their notes as they observe them, take photos of classroom activities, and in most cases deliver a PDF copy of the walkthrough observation to the teacher before they have even left that classroom.

Student to Computer Ratio

Currently, the District has approximately 1,970 computers total. Subtracting the staff-only desktops and mobile notebooks brings the number to about 1,700. Thus, the following student-use computers are available at each school site:

School	Total number of student-use devices	Total students (Spring 2013)	Ratio of students to computers
Lander Valley HS	450	487	1.4 to 1
Pathfinder HS	48	36	1 to 1
Lander MS (6-8)	260	352	1 to 1
Baldwin Creek (4-5)	260	258	1.54 to 1
Gannett Peak (K-3)	375	564	1.3 to 1
Jeffrey City School	2	2	1 to 1

Note that in the summer of 2013, North and Gannett Peak will be combined into a single school named Gannett Peak, and moved into a new school building whose construction is being completed now. Those two schools have been shown in this table as being combined already.

A goal of this Tech Plan is to ensure that enough computers are in place at each school to support the full educational mission of that school (testing cycles, dedicated labs for classes, mobile computers for classrooms, etc).

Professional Development

Student achievement is positively impacted through the continuous introduction of appropriate technology tools that help teachers ensure that lessons are engaging students on many learning levels and challenging them cognitively. The primary focus is to teach teachers how to choose the most effective tools within technology to link the use with instruction to differentiate for greater student achievement.

While there has been growth with teachers and increased utilization with students, there is much more to be done. Individual and small group training is necessary in order for teachers to become proficient. Teachers have grown from the need of a district leader to a team partner with technology implementation. Principals and school improvement committees need assistance in order to incorporate the use of these tools to ensure that all students and teachers become proficient. This issue is remedied by employing two education specialists to work with teachers, principals, and committees. Since student and teacher baseline data has been gathered and analyzed, there is a more clear understanding as to the direction with effective implementation.

Changes and Growth from Previous Plan

The District's technology professional development has grown tremendously during the previous tech plan. The District has three years of baseline data identifying teacher change with education technology. Data are divided into six areas that align with ISTE teacher goals: technology operations and concepts; planning and designing; teaching, learning, the curriculum; assessment and evaluation; productivity and professional practice; and social, ethical, legal, and human issues. While growth has occurred, the pace needs to increase. Nearly 20% of staff reported growth from minimal use categories to confident use. More support is needed in order to provide teachers with 'just in time application' of technology tools.

Some changes in this Tech Plan will include the implementation of a system to measure teacher technology integration skills and literacy, so that the Educational Technologists can better target and deliver professional development to these teachers. We are stating a goal of having all District teachers at either proficient or advanced levels of tech integration (no teachers will be basic at the end of this Tech Plan cycle).

Objectives for this Tech Plan

This information is a summary of the Professional Development Action Plans:

Objective (from Action Plan)	Progress Expected	Measurement of Progress
Implement a research-based system to assess technology literacy in all teaching staff, with the goal of having all teaching staff achieve a moderate to high proficiency score in the use of technology to accomplish teaching and learning goals	• Foundation of a system to quantify teacher skill level in technology integration • Target goal to have 80% of teachers at either proficient or advanced level	Scores from tech literacy assessment; schedules for targeted professional development Continued targeted coaching and professional development
Continue traditional District professional development offerings (such as Summer Tech Academies and "Tech Tuesdays") but also add additional new offerings, especially for non-teaching staff	• Implementation of targeted professional development opportunities for different groups • Opportunities for non-teaching staff will be offered	Attendance and other information logged in MyLearningPlan; scores from LoTI tech literacy assessment
Continue to support two full-time Educational Technologist (a specialized instructional facilitator) positions, as budget permits	• Hiring and retention of two full-time Educational Technologists	EdTech logs of time spent and projects completed

More information on activities and measurements to meet these objectives may be found in the Action Plan section.

Strengths and Weaknesses

The District has continued to offer various technology professional development opportunities to teachers. Annually, such offerings have included schedules of "Tech Tuesday" after-school workshops, day-long summer workshops. However, one identified weakness is that we are currently doing little to truly differentiate the professional development opportunities available for staff with different interest and ability levels. Thus, a major goal of this tech plan cycle is to create a metric by which we assess overall tech fluency and can differentiate instruction to teachers.

Another weakness continues to be the relative lack of options for non-teaching staff. Little has been done for support personnel, office workers, etc. in using technology to communicate and work more efficiently. Activities in this Tech Plan specifically target the needs of these groups.

Teacher Preparation and Delivery of Instruction

Professional development is a critical piece for teacher preparation, especially for the wide range of technology assets the District currently possesses.

The last Tech Plan brought the creation of two full-time Educational Technologists, one for the elementary schools and the other for secondary schools. These positions are actually instructional facilitators that focus on technology integration strategies and teacher tech coaching. They do not have fixed daily schedules, so they can go around to classrooms during the day to provide needed hands-on help immediately instead of hours or days later. These two positions have been able to provide targeted professional development directly to teachers in their classrooms, and have also assisted with numerous technology integration projects. This ensures that teachers are confident as technology is embedded into daily lessons.

Title IID Program Goal of Technology Integration

This District Tech Plan supports the Title IID program goals of technology integration and professional development. Our goals (on page 9) are written to align with the three federal program goals. Action steps written in the Action Plans (below) are written as discrete, measureable steps that help the District reach those goals.

The District also participates in Title IID consolidated and competitive funding opportunities. When a competitive grant is written, the District's goals and outcomes also align with Title IID program goals.

Technical Support

The District has in place procedures and personnel to provide instructional and technical support to District users (staff and students).

Currently, there are two full-time Technology Office staff members, and two full-time Educational Technologists. The Technologists are instructional facilitators that work with teachers to incorporate technology. Instead of teachers attending a special technology class held in isolation from their classroom and peers, these specialists assist teachers, first by collaborative planning, then by short 'how to' technology sessions that lead to implementation and follow up. Most of their assistance is provided "live" in the classroom.

Additionally, the District contracts with a part-time Assistive Technology Specialist that does many of the same tasks as the Educational Technologists, but focuses on the specific needs that Special Education staff have with technology usage and integration.

Policies and Procedures

The District has identified a process for certified and classified staff professional development. Annually, school goals and priorities are identified and scheduled by building principals for "Wednesday early-out days". These days are scheduled by building principals to meet professional development needs for the buildings, or for District initiatives.

Additionally, personal professional development opportunities are available from District-hosted workshops, regional and national offerings. These opportunities are first approved by building administrators for their suitability,

All attendees of personal professional development offerings are required to complete a questionnaire in MyLearningPlan.com, a subscription-based service the District uses to track professional development time and effort. The results from this data collection are used to drive future professional development initiatives and needs.

Resource Access and Use

The District is taking active steps to ensure that technology resources are available to all teachers and students as needed. Informal needs assessments have been performed annually with principals to ensure that not only are there sufficient resources for technology in their schools, but that their teachers feel adequately trained on those resources.

Currently, all Fremont #1 classrooms have a mounted projector and an interactive whiteboard. All teachers have a dedicated desktop or notebook computer for their own use. Many classrooms have several student computers; however, all schools have several computer labs and mobile carts that teachers can employ with their students. Schools have a wide array of other technology tools available for use: "clickers" for formative assessment, digital cameras and videorecorders for multimedia projects, dedicated "kit" workstations for specific learning objectives, and more.

We are always seeking ways to continuously improve access to technology resources. One change made this year, for instance, is the availability of assistive technology tools on all District computers, not just ones purchased and used by Special Education staff.

Student Learning and Technology Literacy

A goal of this Tech Plan is to formalize and implement a definition for student technology literacy. Such a definition is needed for WDE annual reports.

Alignment to School Improvement Plan / District Staff Development Plan

In the fall of 2012, the District has adopted a new Strategic Plan (see Appendix) that sets out goals for the next three years. One goal is to increase overall student engagement into classroom instruction. The professional development goals and activities outlined in this Tech Plan help the District achieve this strategic goal. By ensuring quality, sustained, and targeted professional development to all teachers for technology integration, we can ensure that all our teachers are fully prepared to model and demonstrate 21st century skills to their students, and can incorporate them into their daily instructions.

Our District Professional Development plan also calls for increased professional development for technology integration, with an eye specifically toward improving classroom engagement. In order for students to achieve higher using technology, teachers must be fully comfortable with the application and higher-level use of technology. Increased and targeted professional development in these areas will further this goal.

Infrastructure and Connectivity

Making everything happen depends on the reliability, flexibility, and suitability of the District Network. Day-to-day work, student content applications, state reports, communications, and much more depend on internal as well as external connectivity.

The emergence of the ubiquitous Internet – a single global communications network – is one of the seminal events of the early 21st century. Reliable and fast connectivity to this network has become an essential part of modern life. Being disconnect for even as short as five minutes from the Internet is a generally equivalent to a loss of a half-day of instruction for District teachers and students.

The District considers itself blessed that we enjoy the benefits of an ultrafast managed network, plenty of access to computers and tablets, and instructional technology in every District classroom.

The purpose behind all of our technology purchases and work is to help students learn. The professional development and curriculum integration components of this technology plan are dependent upon a reliable, secure, and fast computer network. However, maintaining the District Network is a continuous and ongoing process considering the continuous advances in technology and the ever-changing needs of the staff and students. The school district is constantly evaluating whether the benefits of new technology will meet the needs of its users. The District Technology Director is ultimately responsible for ensuring that the computer infrastructure is adequate to meet the needs of all stated district goals.

Change and Growth from Previous Plan

Major changes and renovations to our infrastructure during the last three years include:

- The total number of computers (desktops, notebooks, netbooks, and tablets) in the District has nearly doubled from 2008 to 2012. The District has gone from about 1,050 total devices to nearly 1,990 devices. This does not count the 150+ devices that students are bringing to school daily to complete their schoolwork, collaborate with their peers, and maintain communications.
- A new school building (Lander Middle School) was opened in the fall of 2011. Another new school building (Gannett Peak Elementary) will be opened in the fall of 2013. Both schools are fully modern schools with a full technology suite, including wiring, wireless access, classroom technology, and a "smart" building with environmental and security controls.
- CenturyLink-provided fiber optic connectivity installed in the summer of 2012 has fixed significant shortcomings in inter-building bandwidth and network traffic. Now, all our in-town schools are connected at a minimum speed of 100mbit Ethernet.
- Internet bandwidth has increased by a factor of 10 – from 20mbit in the fall of 2011 to 200mbit as of spring 2012.
- New wireless network equipment and management were implemented in 2009 at 2010 at all sites.

- A total rebuild of our network domain was accomplished during summer 2009, bringing consistency, standards, and current best practices to our system of network servers, accounts, shares, and security. Twelve new servers were purchased to replace aging units. A new domain name, *landerschools.org*, was purchased and implemented as the name of the new network domain.
- Server virtualization, network management software, and other "back-end" initiatives have allowed Tech Office staff to make better use of their time and tech funding.

Strengths and Weaknesses

Our "new" schools are the Admin building, Lander Valley HS, Lander Middle School, Baldwin Creek Elementary, and Gannett Peak Elementary. These sites have very good internal wiring, with fiber backbones between departments. Power is currently adequate for needs. A multi-gigabit fiber-optic backbone connects these buildings together. The core network room is located at LVHS and Internet connectivity for the District is terminated here.

A continuing weakness is the infrastructure at our Pathfinder HS, now housed at the site where North Elementary used to be (before consolidation into our new building in 2013). This site has poor internal wiring and power, and computer labs are situated in rooms that are not conducive to best arrangements and practices. However, as of summer 2012, these sites do have 100mbit fiber connectivity back to the network core.

Currently Fremont County School District #1 is in the process of deciding on the renovation and/or replacement of the Starrett building. By the 2014-2015 timeframe, Pathfinder HS and the Central Admin building may move to the newly-renovated Starrett building and would have better wiring and power.

An additional identified weakness is the number of Tech Office staff in relation to the number of total computers and network resources the District currently uses. A goal of this Tech Plan is to evaluate and redirect tech funding and effort to provide the maximum support and management that our current budget can allow.

Objectives for this Tech Plan

This information is a summary of the Infrastructure and Connectivity Action Plans:

Objective (from Action Plan)	Progress Expected	Measurement of Progress
Maintain "excellence" in our network and communications infrastructure for our existing and new school facilities.	• Fiber-optic network to connect all in-town schools • IP phone system at all schools by 2013 • Construction of new Gannett Peak School	Phone system modernization work completed; new Elementary School online
Evaluate and transition the District to a one-to-one technology model for students in grades 6-12 (or as determined)	• Pilot program at LVHS expanded for 2013-2014 • Pilot at Pathfinder HS (35 students) • Progress as evaluations allow	Acquisition of equipment Usage as defined by teacher evaluations and principal evaluations
As part of our District's overall continuous improvement project, the Technology Office will strive to increase the role of technology as a communications and efficiency tool for District staff to complete everyday administrative tasks	• Implementation of Google Apps • Addition of applications to complement intranet • Implementation of online classroom environments • Revamp of computer purchasing cycle; addition of instructional technology to replacement cycle • Better software and subscription usage data	Use of Google Apps by all staff and departments for custom applications (maintenance, calendaring, etc) Purchase cycle ongoing; streamlining of our software and subscription list

More information on objectives and goals to meet these objectives may be found in the Action Plan section.

Equitability of Resources

The District strives to ensure equitability of resources for all students. According to the Pew Internet and American Life Project and Intel Corporation, there are still 30 million American households that do not have a computer. This gap in access is troubling as technology has become a baseline need for social, civic, economic and educational participation. Students in the 21st century must be equipped with the skills and tools to succeed and participate in our increasingly technology-rich, knowledge-based economy.

When instructional technology is purchased in the District, a process is in place to ensure that all students have equitable access. Previously, our Special Services department has assisted with additional recommendations and purchases, such as screen readers, touchscreens, assistive software, etc.

A separate goal of this Tech Plan is to assist with equity issues by formalizing a giveaway program for excess technology inventory. Additional programs will be established by this goal to increase technology awareness and literacy within the community of Lander.

Internet Usage Policy

As of Spring 2012, the District has a newly-revised and fully modernized Internet usage policy in place for staff and students. The staff policy is part of the overall district policy. The student policy is included in student handbooks that parents review and sign at the start of every school year. Copies of both are available online.

The new policies identify and discuss modern technology issues, including the use of social media, student-teacher communication, copyright and usage, ownership of materials created during work time, and the use of non-District-supported third party file storage services.

Help Desk Procedures

With the arrival of a new Technology Director in 2008, a new system of technology assistance and help was formalized. A browser-based request application has been introduced to replace the system of multiple voicemail numbers, email, and personal contacts. This system also contributes to our district's continuous improvement goals, as it allows Tech Office staff to generate usage and time-to-completion reports, which are used to show monthly progress toward department goals.

Interoperability Among Programs

Starting in 2008, it became a goal of the Technology Office to ensure that all staff receives an identical, rich network experience. Previously, different computer platforms (Windows, Macintosh) were in use at different schools, and there was little consistent software between buildings (and sometimes within the building as well).

After the summer of 2009, all District-managed computers are PCs. A few Macintoshes are left over for specialized tasks but are not primary machines for staff or students. A consistent list of "baseline" applications was created and installed on all District managed PCs to ensure that staff and students can work on data and software on any computer the District owns.

However, the definition of “interoperability” is changing. An ongoing goal of the Technology Office is to ensure that new purchases of hardware and software are compatible with our hardware and existing software. Procedures are in place to ensure that new purchases meet the District’s standard for interoperability. As part of this Technology Plan, a migration to cloud-based email and collaboration software will ensure that any modern Internet-capable device will be able to fully participate in District communications, collaboration, and schoolwork.

Various Tech Support Needs

Currently, the District operates about 1,950 desktops and mobile notebook computers. The District Network is comprised of over 55 servers (physical and virtual) and over 200 network devices (network switches, network storage, printers, wireless access points, etc). There are over 1,500 wired network ports across all our sites.

There are two full-time employees in the District Technology Office who are responsible for the upkeep and maintenance of the District Network. A part-time contracted Assistive Technology Specialist assists with SpEd-related software and hardware needs. Our two Educational Technologists help with basic-level issues that do not take from their tech coaching time.

Replacement Plan

The District has historically used a five-year rotation plan to determine computer purchases. This has allowed for easier management and planning, although as needs have grown, some buildings have purchased additional equipment “out of cycle” with building funds or with special one-time funds (grants, etc).

In the summer of 2009, we did a “double” replacement year and purchased over 300 new computers for West Elementary, Starrett JHS, and Pathfinder HS. Additionally, over 250 lower-cost netbooks were purchased for various schools to supplement student computer availability. The summer of 2009 saw almost 45% of the total district computers replaced.

We foresee the replacement cycle continuing through the next five years, with possibly some special circumstances (addition of new school buildings and moving grade levels from building to building).

WEN and E-Rate Participation

Our district receives telecommunications, internal connections, and Internet from the Wyoming Equality Network (WEN). The WEN provides connectivity to all our schools by providing T1 lines from an

aggregation point or a satellite connection to our High School and/or Administration building. The Wyoming Equality Network is a state mandated and legislatively funded statewide 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.

A detailed account of the state and district responsibilities, related to the WEN Infrastructure, is located in the budget section of this plan. The dollar amounts listed in the Budget/Inventory Analysis for E-RATE Components table come from the previous technology plan as the district has not received the needed information with all the upgrades and changes to the WEN.

Curriculum Integration - Action Plan (1 of 5)

Goal	District teachers will continue to build upon our foundation to integrate 21st century technology and research-based practices into classroom instruction in order to increase student achievement and to reach our school improvement goals, especially for high-needs schools and students
Program Objectives	Primary Program Goal #1: Improve student achievement through the use of technology … (Section 2402 (b)(1))))
Benchmarks / Indicators	Foundation of formative assessment technology piece; meeting school needs and situations change and evolve
Actions for 2013-2014	▪ Identification of emerging technologies for classroom use ▪ Formative assessment equipment and professional development ▪ Formal rollout of a secure "anytime, anywhere" web-based student classroom environment for class papers, discussion, etc
Actions for 2014-2015	▪ Implementation of assistive technology for all school students (audiobook options, assistive software, etc) ▪ Consideration of other student needs as situations change
Actions for 2015-2016	▪ Combine professional development objectives and coordinate with technology integration in curriculum (check for presence of technology units, embedded skills, tech literacy assessments, etc) ▪ Consideration of other student needs as situations change ▪ Evaluation of current instructional technology equipment and practices (to anticipate next Tech Plan cycle goals and planning)
Target / completion date	▪ Fall 2013: 7-12 teachers formal introduction to online student environment (many already use it) ▪ Fall 2014: Use of environment in majority of grade 6-12 classes
Measurement Tools	▪ Use of instructional technology as seen on LoTi evaluations and principal walkthroughs
Responsible parties	▪ District Technology Office, District Administration, District Curriculum Director, Educational Technologists
Budget	▪ Funding estimates depend on specific school needs
Funding source	▪ General funds, building funds, Title monies
Evaluation activities	▪ May 2014: Survey and usage results from environment usage ▪ May 2015: Final evaluation plan
Baseline data / Other information	Some teachers are already using Edmodo and/or Schoology as a secure online classroom environment.

Curriculum Integration - Action Plan (2 of 5)

Goal	Refresh and modernize our K-8 district technology standards and ensure alignment with Common Core Standards as well as ISTE's NETS-S standards to measure technology literacy in K-8 students
Program Objectives	Primary Program Goal #2: Technology Literacy – ensuring that every student is technologically literate by the time the student finishes the eighth grade … (Section 2402 (b)(2)(A))
Benchmarks / Indicators	Creation and adoption of technology standards for K-8 students
Actions for 2013-2014	▪ Update and revise technology literacy curriculum work done in 2008-2009 school year ▪ Update social media safety training (per new law) ▪ Evaluate implementation of K-8 tech standards (spring)
Actions for 2014-2015	▪ Research and adopt software and subscriptions as necessary to measure and evaluate student technology literacy
Actions for 2015-2016	▪ Continue to adopt software and subscriptions as necessary to measure and evaluate student technology literacy ▪ Evaluation of usefulness and applicability of current definition of tech literacy
Target / completion date	▪ Adoption of standards by Fall 2014
Measurement Tools	▪ Tech literacy measurement as defined by District-adopted definition (or by future WDE / federal definition)
Responsible parties	▪ District curriculum director, building principals
Budget	▪ Estimated $35,000 annually for current software subscriptions ▪ Monies allocated as needed for building / district software purchases in future years
Funding source	▪ General funds ▪ Title IID monies have been used to assist with standards creation
Evaluation activities	▪ Adoption of standards by Fall 2014 ▪ Annual report of 8th grade tech proficiency on WDE-584 report ▪ School-level decisions based on student tech literacy figures
Baseline data / Other information	Our two elementary schools (a K-1 school and a 2-3 school) will be undergoing a school consolidation project in the Summer of 2013. This will give elementary teachers the opportunity to collaborate on tech literacy projects and to ensure that all students receive a consistent exposure to technology.

Curriculum Integration - Action Plan (3 of 5)

Goal	Transition the District from the client-server model of collaboration and computing to a modern cloud-based design to allow for true "anytime, anywhere" learning and teaching
Program Objectives	Primary Program Goal #1: Improve student achievement through the use of technology … (Section 2402 (b)(1)))
Benchmarks / Indicators	Transition to a cloud-based modern collaborative solution
Actions for 2013-2014	▪ Implementation of solution in the Summer of 2013 ▪ Research and adopt additional subscriptions as necessary to measure and evaluate overall effectiveness
Actions for 2014-2015	▪ Continue usage of product for all staff, all 6-12 students ▪ Research and adopt additional subscriptions as necessary to measure and evaluate overall effectiveness
Actions for 2015-2016	▪ Evaluate usage for 2-5 students ▪ Evaluation of usefulness and applicability of current solutions
Target / completion date	▪ Adoption of Google Apps or similar cloud-based solution
Measurement Tools	▪ Tech literacy measurement as defined by District-adopted definition (or by future WDE / federal definition)
Responsible parties	▪ District Technology Director, building principals
Budget	▪ Use of Technology budget ▪ Actual funding very hard to estimate given time frame and changing conditions
Funding source	▪ General funds
Evaluation activities	▪ Adoption of cloud-based collaboration technology by entire District ▪ Annual survey to include satisfaction gauge
Baseline data / Other information	Some cloud-based collaboration already going on at HS level. Pilot program underway in 2012-2013 to bring different elements under District "umbrella" to standardize and leverage different solutions

Curriculum Integration - Action Plan (4 of 5)

Goal	Continue to promote tech equity and literacy by establishing participatory programs for District parents and students (annual tech fair, summer tech camps, Lights-On, excess computer giveaways, etc)
Program Objectives	Primary Program Goal #2: Technology Literacy – ensuring that every student is technologically literate by the time the student finishes the eighth grade … (Section 2402 (b)(2)(A))
Benchmarks / Indicators	Creation of programs for District students and community; increase technology access and support for summer school students and teachers
Actions for 2013-2014	▪ First annual Tech Fair (either as a separate night or combined with other established District parent nights) ▪ First formalized give-away of excess computer inventory, targeting high-needs students and families
Actions for 2014-2015	▪ Continue with programs, adjusting as necessary to meet changing situations and needs
Actions for 2015-2016	▪ Continue with programs, adjusting as necessary to meet changing situations and needs
Target / completion date	▪ These activities will be completed at the end of this tech plan cycle, and then reevaluated for continuation in the next cycle
Measurement Tools	▪ Attendance logs at annual tech fair; informal evaluations after programs; attendance at student summer camps; response rate for inventory giveaway
Responsible parties	▪ District Technology Office, building principals, educational technologists, lead teachers
Budget	▪ Estimated $500 annually for Tech Fairs ▪ Time and effort (mostly donated) for annual excess inventory giveaways
Funding source	▪ Building funds as appropriate for tech fair nights; other District funding sources may be developed (Lights-On, CAN project, etc); Title IID funding for some student activities (summer camps)
Evaluation activities	▪ Annual evaluation for continuation of programs (in May)
Baseline data / Other information	Historically (3-4 years ago), some summer student tech opportunities were offered, but this has not occurred now for some time. Our elementary schools have annual “Math Nights” and “Art Nights” and related events – technology will take a larger part in these events

Curriculum Integration - Action Plan (5 of 5)

Goal	Continue to ensure that all District classrooms are 21st century technology-rich classrooms that incorporate modern, high-quality, and consistent instructional technology for teacher and student use
Program Objectives	Primary Program Goal #1: Improve student achievement through the use of technology … (Section 2402 (b)(1)))
Benchmarks / Indicators	Baseline classroom instructional tech published; acquisition of instructional technology where needed to standardize classrooms and student experience
Actions for 2013-2014	▪ Reaffirm instructional technology baseline established in 2010 ▪ Instructional technology baseline in place at our new Gannett Peak Elementary School (construction complete Summer 2013)
Actions for 2014-2015	▪ Additional needs as necessary ▪ Coordination with ongoing one-to-one initiative
Actions for 2015-2016	▪ Additional needs as necessary
Target / completion date	▪ These activities will be completed at the end of this tech plan cycle, and will be in place for any future additions
Measurement Tools	▪ Establishment of instructional technology baseline; acquisition of modern, consistent equipment in all District classrooms
Responsible parties	▪ District Technology Office, building principals, educational technologists
Budget	▪ Estimates will depend on baseline package to be decided on, as well as a complete inventory of existing technology
Funding source	▪ General funds ▪ SpEd funds as appropriate ▪ Title I grant funds and school purchases as appropriate
Evaluation activities	▪ Annual evaluation of purchases and progress made toward goal ▪ Equipment placed in new schools when their doors open
Baseline information / Other information	100% of our classrooms already have our previous baseline instructional technology components (whiteboard, projector). Additional multimedia technology, such as document cameras, will be considered for addition for all classrooms.

Infrastructure and Connectivity - Action Plan (1 of 3)

Goal	Maintain "excellence" in our network and communications infrastructure for our existing and new school facilities. Our infrastructure will be robust, secure, and flexible and will allow full implementation of our technology goals and objectives
Program Objectives	Primary Program Goal #3: Effective integration of technology resources and systems ….. (Section 2402 (b)(2)(B))
Benchmarks / Indicators	Next-generation District network online in all existing and new schools; implementation of modernized IP phone system at all school sites
Actions for 2013-2014	▪ Participate in infrastructure and communications installation at new Gannett Peak Elementary School ▪ All District sites and classrooms now on IP phone system; redesigned 911 emergency functionality ▪ Remodel of existing Starrett building for Admin / Pathfinder HS ▪ District Network server redesign – phase one
Actions for 2014-2015	▪ Research and implementation of additional fiber-optic connectivity between core network and existing school sites ▪ Completion of District Network server redesign
Actions for 2015-2016	▪ Research additional needs as necessary ▪ Preliminary planning for network rebuild for 2016-2017
Target / completion date	▪ New Gannett Peak infrastructure completed by May 2013 ▪ Remodel of Starrett building dependent on state financing and District plan for Pathfinder HS (discussing in Summer 2013)
Measurement Tools	▪ Network management software (internal and WEN-managed) as included in quarterly continuous improvement reports ▪ Phone system usage and uptime
Responsible parties	▪ District Technology Office; District Administration; contractors for new buildings and network wiring installation
Budget	▪ Estimated $80,000 - $100,000 annually (Technology budget)
Funding source	▪ General funds ▪ New building funding during construction
Evaluation activities	▪ Full IP phone system for all District sites by September 2013 ▪ Acquisition of fiber-optic connectivity
Baseline data / Other information	A new elementary school will be opened in 2013. Network wiring substandard at Starrett building and North building (home to Pathfinder HS for the 2013-2014 school year)

Infrastructure and Connectivity - Action Plan (2 of 3)

Goal	As part of our District's overall continuous improvement project, the Technology Office will strive to increase the role of technology as a communications and efficiency tool for District staff to complete their everyday administrative tasks
Program Objectives	Primary Program Goal #3: Effective integration of technology resources and systems ….. (Section 2402 (b)(2)(B))
Benchmarks / Indicators	Improvement in District's communications and application workflows (business paperwork, daily routine jobs, requests, etc); presence of secure staff-only intranet
Actions for 2013-2014	▪ All-staff rollout of Google Apps, after 2012-2013 pilot ▪ Transition email solution into cloud solution ▪ Planning for transition of district email into cloud solution
Actions for 2014-2015	▪ Classroom hosting environment in place for 100% of teachers at LVHS and Pathfinder HS ▪ Continue to work with departments to identify content and workflows that can be delivered via intranet
Actions for 2015-2016	▪ Additional needs as necessary
Target / completion date	▪ Full implementation of Google Apps in September 2013 ▪ Other dates for this goal are fluid and depend on the needs and goals of different District departments
Measurement Tools	▪ In-place intranet and district workflows and content posted; student use of classroom shares (as measured by teachers)
Responsible parties	▪ District Technology Office; District Administration
Budget	▪ Monies as necessary as new applications are determined
Funding source	▪ General funds
Evaluation activities	▪ Full implementation of Google Apps in 2013-2014 ▪ Evaluation and usage figures for online classroom environments, starting in 2014
Baseline data / Other information	Solutions in this goal are being piloted in the 2012-2013 school year This goal combines two other Curriculum Integration goals

Infrastructure and Connectivity - Action Plan (3 of 3)

Goal	Evaluate and transition the District to a one-to-one technology model for students in grades 6-12 (or as determined)
Program Objectives	Primary Program Goal #1: Improve student achievement through the use of technology … (Section 2402 (b)(1))))
Benchmarks / Indicators	Replacement cycle adjusted to accommodate new purchasing patterns
Actions for 2013-2014	▪ Formalized "flexible" technology purchasing program in place ▪ New replacement cycle for hardware purchases ▪ Continuous evaluation of different hardware form factors (tablets, netbooks, pocket devices) to meet articulated needs ▪ Pilot project at LVHS expanded for 2013-2014
Actions for 2014-2015	▪ Replacement cycle year two of five ▪ Adjustments made as necessary to purchases and subscriptions ▪ Formal report on program effectiveness
Actions for 2015-2016	▪ Replacement cycle year three of five ▪ Adjustments made as necessary to purchases and subscriptions ▪ Follow-up report on program effectiveness
Target / completion date	▪ Actions as written are completed annually
Measurement Tools	▪ Annual budgets, replacement cycle statistics
Responsible parties	▪ District Technology Office, District Business Director, building principals
Budget	▪ Estimated $130,000 to $150,000 annually (depending on building computer numbers and students, down from $150-$160)
Funding source	▪ General funds allocated annually ▪ SpEd funds as appropriate
Evaluation activities	▪ District computer numbers and needs evaluation (October 2013) ▪ Formal report on program effectiveness (Spring 2015)
Baseline data / Other information	BYOD is already encouraged at grades 6-12. Initial metric show at LVHS alone, over 150 devices are brought daily to school by students, with over 50 at Lander MS. Pilot one-to-one with LVHS seniors occurred during the 2012-2013 school year

Professional Development - Action Plan (1 of 2)

Goal	Implement a research-based system to assess technology literacy in all teaching staff, with the goal of having all teaching staff achieve a moderate to high proficiency score in the use of technology to accomplish teaching and learning goals
Program Objectives	Primary Program Goal #3: … Encourage effective integration of technology resources and systems with teacher training and curriculum development to establish research–based instructional methods … (Section 2402 (b)(2)(B))
Benchmarks / Indicators	Successful implementation of an annual tech literacy assessment for staff; staff scoring at the end of 2015 will meet District expectations
Actions for 2013-2014	▪ Implementation of tech literacy scoring system ▪ All District teachers self-score and work with Educational Technologists to create a professional development plan for technology integration ▪ Targeted coaching for teachers in the basic-scored group ▪ Other tailored professional development and coaching for proficient and advanced groups
Actions for 2014-2015	▪ Target goal to have 80% of teachers at either proficient or advanced level ▪ Continued targeted coaching and professional development
Actions for 2015-2016	▪ Ongoing goal to have 50% of teachers at proficient level, 50% of teachers at advanced level (0% basic)
Target / completion date	▪ By spring semester 2015, all District teachers will be technologically literate (either proficient or advanced)
Measurement Tools	▪ LoTI scoring system: reports from teaching staff and from edtechs ▪ Evaluations from educational technologists and building principals
Responsible parties	▪ District Technology Office, District Administration, building principals, Educational Technologists
Budget	▪ Entirety of Title IID consolidated funds starting in FY11 will be dedicated to this goal; also any Title IID competitive funding the District is able to access
Funding source	▪ General funds ▪ Title IID consolidated funds ▪ Title IID competitive funds (professional development)
Evaluation activities	▪ Evaluations from staff completing proficiency ▪ Scoring sheets for each teacher ▪ Additional evaluation as found in narrative
Baseline data / Other information	Currently no baseline data exists, as we do not have a system to formally assess technology literacy in staff

Professional Development - Action Plan (2 of 2)

Goal	Continue traditional District professional development offerings (such as Summer Tech Academies and "Tech Tuesdays") for staff, but also add additional new offerings for both teaching staff and non-teaching staff
Program Objectives	Primary Program Goal #3: … Encourage effective integration of technology resources and systems with teacher training and curriculum development to establish research–based instructional methods … (Section 2402 (b)(2)(B))
Benchmarks / Indicators	Scheduled PD to meet needs outlined in Tech Plan and on annual tech surveys; information from MyLearningPlan
Actions for 2013-2014	▪ All District teachers self-score and work with Educational Technologists to create a professional development plan for technology integration ▪ Targeted coaching for teachers in the basic-scored group ▪ Other tailored professional development and coaching for proficient and advanced groups
Actions for 2014-2015	▪ Ongoing goal to continue scheduled activities as funding allows
Actions for 2015-2016	▪ Ongoing goal to continue scheduled activities as funding allows
Target / completion date	▪ By spring semester 2015, all District teachers will be technologically literate (either proficient or advanced) as measured by LoTI
Measurement Tools	▪ Attendance and other information recorded in MyLearningPlan online tool, as per district policy on PD
Responsible parties	▪ District Technology Office, Educational Technologists
Budget	▪ Entirety of Title IID consolidated funds (or if any other program replaces Title IID) starting in FY13 will be dedicated to this objective
Funding source	▪ General funds ▪ Title IID (or successor program) consolidated funds
Evaluation activities	▪ Evaluations from PD sessions completed on MyLearningPlan ▪ Additional evaluation as found in trainer narratives ▪ Changes in annual staff tech survey showing effectiveness of planned PD
Baseline data / Other information	Due to lack of funding, some Tech PD has been curtailed during this year. Options are being pursued for increased PD with less cost. Baseline data will be available in May 2013 after Staff Tech Survey is completed

Appendix -

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: Fremont County School District #1	**FUNDING YEAR:** 2013 thru 2016

Prepared by: Chris Brown

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): Improve student achievement through the use of technology in elementary and secondary schools.

State of Wyoming – Wyoming Equality Network (WEN) responsibilities			
Current level/amount of service: 13 X T-1 Circuits, 2 X DS -3 Circuits	**Level after E-Rate request is filled:** Same	**Budget $ for State's share (for each charge involved in the service):** $115,053.36 per biennium	**Planned budget source or line item for each amount:** Wyoming Department of Education WEN Infrastructure Biennium Budget

District – Wyoming Equality Network (WEN) responsibilities			
Current level/amount of service: 1 X T-1 Circuit	**Level after E-rate request is filled:** Same	**Budget $ for district's share (for each charge involved in the service):** $2,304 **per Biennium**	**Planned budget source or line item for each amount:** The district pays $412.78 each month from a line item in the 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	Same	upgrades as needed	See maintenance	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	Upgrades as needed	See maintenance	WEN Infrastructure Biennium Budget

Professional development required:	Current level:	New required:	Budgeted $:	Source of funds:
WEN Training, WSBN Training	Available to all districts/schools	Maintain current levels as well as fulfill any future request	Not budgeted provided as needed	WEN Distance Education Biennium Budget , WEN Infrastructure Biennium Budget, other federal and/or state budgets

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 maintenance	H.S. aggregation point, schools throughout district	$480,031.34 per year	WEN Infrastructure Biennium Budget

† This area is the sole responsibility of the State of Wyoming Department of Education (pertaining to the WEN only). 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:
Completed by district based on tech goals		info based on tech goals		District completes where funding is coming from i.e. IID or district line item.

Software required:	Current level:	New required:	Budgeted $:	Source of funds:
Current Level of software required to maintain WEN Completed by district based on tech goals		info based on tech goals		District completes where funding is coming from i.e. IID or district line item.

Professional development required:	Current level:	New required:	Budgeted $:	Source of funds:
WEN Video teacher training Completed by district based on tech goals		info based on tech goals		District completes where funding is coming from i.e. IID or district line item.

Retrofitting required	Budgeted $:	Source of funds:
Completed by district based on tech goals	0	District completes where funding is coming from i.e. IID or district line item.

Maintenance required:	Current level:	Location of serviced items:	Budgeted $:	Source of funds:
Completed by district based on tech goals		info based on tech goals		District completes where funding is coming from i.e. IID or district line item.

* *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.