

Technology Plan
Ronan School District #30
2011-2014

Technology Plan Summary Sheet

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Ronan School District #30

INTRODUCTION

Technology Plan Mission Statement

To provide a safe environment which promotes innovation and gives all individuals the opportunity to gain and utilize the skills needed to pursue a successful future.

Description of Technology in District

The Ronan School District #30 is located in the town of Ronan and in the town of Pablo, two rural communities of approximately 6000 residents. A key aspect of these towns is that they are located on the Flathead Indian Reservation, which is why 61% of the almost 1400 students attending the Ronan School District #30 (grades Kindergarten-12) are of American Indian descent. All of the schools are designated as Title I School-Wide, and 60% of the students qualify for the Federal free and/or reduced breakfast and lunch program.

In the 1990's, staff created a district technology plan to implement the use of computer technologies in the Ronan School District. Since then, considerable work has been accomplished. Our school district works within a networked environment in which all classrooms and work areas are equipped with networked computers and telephones with voice mail. All computers are equipped with a suite of applications. Staff members are able to have network and email accounts so that they may collaborate and seek information. From any computer in the district, members of the network access files from their own dedicated space on servers and from shared drives at their school and across the district. The district is linked in a voice and data wide-area network, and is linked via the Internet to all colleges, universities, and K-12 schools.

The Ronan School District #30 has a history of implementing technological tools for teaching and learning. Through the support of the Board of Trustees and administrators the districts have built an infrastructure with full voice/video/data connectivity between all buildings and to every K-12 classroom. In addition, the schools have a fixed multipurpose computer lab serving each building, multimedia desktop computers, and a broad array of software systems for enhancing administration, teaching, and most importantly, learning.

This technology plan targets implementation for the next three years and turns toward future efforts to maximize the use of these investments in all aspects of the school districts and classrooms.

The Ronan School District joins to envision educational possibilities into the future. This plan conveys next steps in using technology more productively and in weaving it more thoroughly into daily learning and teaching.

Technology Mission Statement

The technology mission of Ronan School District #30 is to achieve quality learning, instruction, communication, and management through the optimum utilization of technology.

Technology Vision

In the Ronan School District, the learning community will be technologically literate life-long learners. Learners will be able to interact successfully in a technological environment to achieve their personal, education, and workplace goals. They will skillfully use technology to access, retrieve, and use information school-wide, community-wide, nationally, and internationally.

Beliefs

Skillful use of technology supports the development of process skills such as flexibility, adaptability, critical thinking, problem solving and collaboration which are essential to success in our rapidly changing information age.

Technology allows us to better serve the diverse learning needs of our students.

Our schools must prepare students to be lifelong learners who are responsible for their own learning, skilled in accessing and processing information, confident in using technological tools, able to solve complex problems alone or collaboratively, capable of being creative and innovative, and able to communicate locally, nationally, and world-wide.

Technology Goals

The Ronan School District #30's Technology Plan consists of the following four major goals designed to encompass students, teachers, parents and community, and technology skills:

- 1. Teachers will acquire technology and information literacy skills and be able to integrate technology into all areas of the curriculum in order to help students achieve high academic standards.**
- 2. All students will acquire technology and information literacy skills.**
- 3. Provide the greatest possible access to information resources.**
- 4. Create partnerships with parents and the community.**

Our instructional philosophy is that all learners will gain increasing exposure to and competency with technological tools for learning. This upward spiraling of utilization and integration of technology will broaden as students advance through the school system resulting in learners that can appropriately utilize technology to enhance their learning, productivity, and personal expressions.

It is understood that in order to maximize the impact of these tools, teachers must carefully match learning opportunities with available technology, integrate technology into all curricular areas, extensively support

students as they engage in learning, and adequately assess the impact of its use. To achieve this, teachers must receive professional development in technology.

Link to District Mission Statement

This technology plan has a strategic relationship to the Ronan School District #30's mission statement:

School District No. 30 is a public education institution serving a diverse community. We provide an equitable learning opportunity in a safe environment for all students. We exist to educate and empower students for present and future individual achievement and contribution to their community and society.

The Ronan School District joins to envision educational possibilities into the future. This plan conveys next steps in using technology more productively. Technological tools provide a vehicle to promote innovation, and enable learners to be knowledgeable, strategic, and self-determined. Access to the Internet via local and wide area networks permit students to gather information from on-line resources to answer informational questions and develop solutions to problems. Application of data collection and graphing, are examples of tools that will help students develop critical thinking and problem solving skills, and as a result, students will obtain and utilize skills which will help them pursue a successful future. Technology can empower students, change the way students learn, enable students to experience hands-on application, and foster creativity as well as problem solving.

Link to Five-Year Comprehensive Education Plan

Technology is an integral part of the Five-Year Comprehensive Education Plan in each of Ronan School District #30's four schools:

- **K W Harvey Elementary School (Grades K – 4)**
- **Pablo Elementary School (Grades K – 4)**
- **Ronan Middle School (Grades 5 – 8)**
- **Ronan High School (Grades 9 – 12)**

Goals one in our Five-Year Comprehensive Education Plan is to “All students will score proficient/advanced in reading on the MontCAS 2 by 2014.” The second goal at all levels in our Five-Year Comprehensive Education Plan is to “All students will score proficient/advanced in mathematics on the MontCAS 2 by 2014.” A chart is included in the five-year plan that shows explicitly how much each grade level and each sub group needs to improve for all students to reach the benchmark by 2014. Technology will play a major part in helping to achieve this goal especially through Internet resources at the elementary schools and the SpringBoard program at the middle and high schools. The classroom records are maintained on PowerSchool and PowerGrade, the computer software administrative program used to track student attendance and performance. This software is also an interface with the parents and students, allowing them to access student grades and assignments. Additional technological solutions to help attain these goals will be aggressively sought and implemented.

Link to OPI “ED Tech” Technology Plan

A brief overview, below, illustrates how the goals of this plan are aligned with the goals and objectives of the “ED Tech” Technology Plan. Further information is detailed within the description of the goals and objectives.

Ronan School District #30 Goals	Office of Public Instruction’s ED Tech Goals
<ol style="list-style-type: none"> 1. Teachers will acquire technology and information literacy skills and be able to integrate technology into all areas of the curriculum in order to help students achieve high academic standards. 2. All students will acquire technology and information literacy skills. 3. The district will provide the greatest possible access to information resources. 4. The district will create partnerships with parents and the community. 	<ol style="list-style-type: none"> 1. All Montana teachers will be effective and efficient integrators of technology into their curriculum and instruction. 2. All Montana teachers and principals will be technologically proficient. 3. All Montana students will be technologically proficient by eighth grade.

GOALS

Curriculum Integration Strategies

Goal 1: Teachers will acquire technology and information literacy skills and be able to integrate technology into all areas of the curriculum in order to help students achieve high academic standards.

“Most teachers have been prepared for a model of teaching dramatically out of step with what is needed to prepare the nation's students for the challenges they will face in the future...Ensuring that the nation has effective 21st-century teachers requires more than just providing sufficient access to technology for teaching and learning. We should improve the preparation of new teachers, including their knowledge of how to use technology for effective teaching and learning; increase the quantity, quality and coherence of technology-focused activities aimed at the professional development of teachers; and, improve the instructional support available to teachers who use technology.”¹

The District recognizes the fundamental fact that technology is of no assistance to education unless it is fully integrated into the curriculum, aligned with state standards. To this end, the District developed Goal 1.

¹ “National Educational Technology Goals”
Ronan School District #30

Goal #1: Teachers will acquire technology and information literacy skills and be able to integrate technology into all areas of the curriculum in order to help students achieve high academic standards.

Objective 1a. Identify and acquire research-based software and online resources needed to implement integrated curricula and improve academic achievement.

Activities	2011-2012	2012-2013	2013-2014
1. Purchase new textbooks with software support.	Continue Activity	Continue Activity	Continue Activity
2. Montana Digital Academy (MTDA), online courses	Implementation	Continue Activity	Continue Activity
3. Maintain site licenses for approved programs.	Continue Activity	Continue Activity	Continue Activity
4. Purchase additional software programs.	Continue Activity	Continue Activity	Continue Activity
5. Pursue access to Advanced Placement (AP) course training opportunities via distance learning (online).	Continue Activity	Continue Activity	Continue Activity
6. Extend Online Resource use	Continue Activity	Continue Activity	Continue Activity

Objective 1b. Provide staff professional development opportunities in technology integration, whereby 100% of district teachers will rate themselves as a “3” or better as measured by the Teachers’ Technology Use in Teaching and Learning section of TAGLIT by spring 2014.

Activities	2011-2012	2012-2013	2013-2014
1. Provide teachers with training and/or assistance in learning how to integrate software and the Internet into the curriculum.	Continue Activity	Continue Activity	Continue Activity
2. Provide staff development technology literacy workshops throughout the year.	Continue Activity	Continue Activity	Continue Activity
3. Build a technology training library, including instructional Website Portal and instructional aides and videos.	Increase the Scope of Activity	Increase the Scope of Activity	Continue Activity
4. Peer based training and workshops on technology integration.	Continue Activity	Continue Activity	Continue Activity

Objective 1c. Strengthen integration practices and skills so that 100% of teachers will rate themselves as a “3” or better by the Teachers’ Technology skills section of the TAGLIT by spring 2014.

Activities	2011-2012	2012-2013	2013-2014
1. Continue to offer specific technology staff development.	Begin New Activity	Continue Activity	Continue Activity
2. Website Portal with instructional aides and videos.	Increase the Scope of Activity	Increase the Scope of Activity	Continue Activity
3. Offer specific guidance to teachers on technology vocabulary allowing them to more accurately respond to Taglit.	Begin New Activity	Continue Activity	Continue Activity

Objective 1a. Identify and acquire research-based software and online resources needed to implement integrated curricula and improve academic achievement.

Activities/strategies include the following:

- Establish a core of research-based software that each student will use.
 - Online Resources will be utilized as a basic skills teaching tool for special education and at-risk students.
 - When new textbooks are purchased, we will get the software package to support book.
- Provide additional research-based software in coordination with the goals of the Five-Year Comprehensive Education Plan as areas of need emerge.

Objective 1b. Provide staff professional development opportunities in technology integration, whereby 100% of district teachers will rate themselves as a “3” or better as measured by the Teachers’ Technology Use in Teaching and Learning section of TAGLIT by spring 2014.

Activities/strategies include the following:

- Continue collecting data regarding technology.
- Establish PIR time devoted to allowing teachers time to learn how to integrate both software and the Internet into the curriculum. Including
 - Provide in-service devoted to technology.
 - Equivalent ‘Graduate Credit’ given for local technology courses for lane change movement on Teacher Salary Schedule.
 - Maintain a resource portal that will contain instructional aides and knowledgebase.
- Establish peer based workshops and review to facilitate specific goals for teachers

Objective 1c. Strengthen integration practices and skills so that 100% of teachers will rate themselves as a “3” or better by the Teachers’ Technology skills section of the TAGLIT by spring 2014.

Activities/strategies that will strengthen professional development include the following:

- Continue to offer specific technology staff development and assistance to staff with integrating technology into the curriculum.
- Enhance the Ronan School District #30 Schools Internet/Intranet home page with links to Internet resources. To save time for both teachers and students, the links will provide authoritative, reliable resources.

Montana Content Standards for Technology

The Technology Plan for the Ronan School District #30 School Districts is aligned with Montana’s four Content Standards for Technology. Montana’s Four Content Standards for Technology are:

1. Students will use digital tools and resources for problem solving and decision making.

Students must select and use digital tools to make sound, accurate, data-supported decisions and presentations.

2. Students will collaborate and communicate globally in a digital environment.

Digital tools can facilitate collaboration and communication by opening pathways to a global learning environment. All learners share the responsibility to practice and advocate the safe and responsible use of these tools.

3. Students will apply digital tools and skills with creativity and innovation to express his/herself, construct knowledge and develop products and processes.

Digital tools can support creative and innovative expression, which is increasingly necessary in our changing world. The use of these tools can also facilitate the realization and fulfillment of one's talents and interests. The education community has the responsibility to provide access to the new avenues for creation and require nuanced understandings of digital citizenship and ownership.

4. Students will possess a functional understanding of technology concepts and operations.

Solely teaching application- and device-specific skills is no longer sufficient. While core computer skills are required to harness the power of digital tools, these skills need to be adaptable to the quickly changing technological landscape.

Technology Literacy Development

Goal 2: All students will acquire technology and information literacy skills.

The need to prepare students with the skills they need to participate fully in our increasingly technological society has become a major priority for the nation. A meaningful, unified approach to providing students with the skills they will need for their futures must be more than a checklist of isolated technology skills; rather, these skills are only a first step in assuring all our children become proficient information and technology users.

Also necessary are information problem-solving skills, such as how to define tasks, identify information-seeking strategies, locate and access information, determine information's relevance, organize and communicate the results of the information problem-solving effort and evaluate the effectiveness and efficiency of the solution. The call for this new '21st-century literacy' in no way supplants current efforts by states and districts to set and even raise academic standards for students; it simply reflects the fact that the bar for an educated citizenry and workforce continues to rise to reflect changes in society.

In requiring these skills of students, we will ensure that the opportunities made possible through the use of technology will be available to all students as they progress through school, regardless of personal or socioeconomic factors. Even for those students who do not pursue technology careers, ensuring technology and information literacy skills will provide a number of benefits.

To ensure that students are prepared for their future we should include technology and information literacy in state and local standards for what students should know and be able to do; ensure students use technology appropriately and responsibly; develop new student assessment tools; and strengthen partnerships with industry to help meet the workforce needs of the future.²

² "National Educational Technology Goals"
Ronan School District #30

The District acknowledges the challenges that await our students as they prepare to enter the modern world. Basic academic skills no longer suffice to secure employment in today’s high-tech world. In this spirit, the District will make all efforts to improve the potential of its students through the deployment of this goal.

Goal #2. All students will acquire technology and information literacy skills.			
Objective 2a. Develop a comprehensive K-12 Technology Curriculum aligned with Montana State Content and performance Standards in order to improve student academic achievement. 100% of students will rate themselves as a “3” or better as measured by the Students’ Technology Skills section of the TAGLIT by Spring 2014.			
Activities	2011-2012	2012-2013	2013-2014
1. Develop a Technology K-12 Curriculum (Scope and Sequence aligned with Montana Content Standards) through the District Technology Committee.	Complete Benchmarks	Review Benchmarks	Continue Activity
Objective 2b. Provide student opportunities in technology that are vocationally oriented.			
Activities	2011-2012	2012-2013	2013-2014
1. Studio Productions Class	Continue Activity	Continue Activity	Continue Activity
2. SMARTLAB Technology Class at MS & HS	Continue Activity	Continue Activity	Continue Activity
3. Business Lab with Multimedia, Accounting, and Data Processing Curriculum.	Continue Activity	Continue Activity	Continue Activity
4. CADLab with Drafting, Modeling, and Design.	Continue Activity	Continue Activity	Continue Activity
5. FFA/VoAG Wireless Lab	Continue Activity	Continue Activity	Continue Activity
Objective 2c. Provide student opportunities that will deliver rigorous academic courses using technology.			
1. Pursue student access to Advanced Placement (AP) program course opportunities via distance learning (online).	Continue Activity	Continue Activity	Continue Activity
2. Student involvement and enrollment in Online Courses both collegiate and secondary.	Continue Activity	Continue Activity	Continue Activity
3. Students in the middle school and high school will use the “SMARTLAB” to enhance learning of technology and higher level thinking skills.	Continue Activity	Continue Activity	Continue Activity

Objective 2a. Refine the comprehensive K-12 Technology Curriculum aligned with Montana State Content Standards. 85% of students will rate themselves as a “3” or better as measured by the Students’ Technology Skills section of the TAGLIT by spring 2008.

Activities/strategies include the following:

- Baseline data collected Fall 2002
- Review and revise the Technology Curriculum.
 - Refine measurable goals in line with the state’s benchmarks for grades four, eight, and upon graduation.
 - Track and assess technology literacy skills via the Taking a Good Look at Instructional Technology (TAGLIT) self-assessment tool.

Objective 2b. Provide student opportunities in technology that are vocationally oriented.

Activities/strategies include the following:

- Broadcasting Media class.
 - Provide opportunities for experience in broadcasting and studio production.
- SMARTLAB Technology Classes
- Multimedia Class (Adobe Masters Collection)
- AutoCAD, SolidWorks, Chief Architect

Objective 2c. Provide student opportunities that will deliver rigorous academic courses using technology.

Activities/strategies include the following:

- Continue offering opportunities to students to take Advanced Placement and/or distance learning courses on-line. Additionally, it is important to retain Internet capabilities to serve students already taking AP courses offered on-site.
- Online Courses (MTDA)
- Application Use:
 - a. Word
 - b. Excel
 - c. Web
 - d. PowerPoint
 - e. Web Browser

Equitable Access

Goal 3: The district will provide the greatest possible access to information resources.

An integral part of school improvement and reform efforts in the 21st century, in the United States and abroad, will be student and teacher access to educational technology, such as computers connected to the Internet. Universal access to the Internet will help end the isolation of teachers; exponentially expand the resources for teaching and learning in schools and classrooms; provide more challenging, authentic and higher-order learning experiences for students; and make schools and teachers more accountable to parents and communities.

The quality of Internet access is critical. Broadband access will be the new standard. Slow, unreliable connections that cannot support interactivity or rich multimedia content will no longer be sufficient. To take advantage of access to technology for improved teaching and learning, it will become increasingly important to build and support network infrastructures-wired or wireless, desktop or handheld-that allow multiple devices to connect simultaneously to the Internet throughout every school building and community in the nation.

To realize the goal of universal access to educational technology for students and teachers, we should ensure sustained and predictable funding for technology; ensure that technology plans reflect the educational needs of students and are regularly updated; improve the affordability, reliability and ease of use of educational technology; ensure that school buildings and facilities are modern; strengthen our commitment to eliminating the digital divide; and ensure that all students have equal opportunities to access and use technology.³

In the interest of supporting the previously outlined goals, it is necessary to provide sufficient equipment and personnel. This was the impetus beyond the District’s third technology goal.

Goal 3. The district will provide the greatest possible access to information resources.			
Objective 3a. Ensure adequate quantity and quality of computers.			
Activities	2011-2012	2012-2013	2013-2014
1. Four student workstations per classroom at K-4 level.	Maintain	Maintain and Rotate Out Aging Equipment According to Replacement Schedule	Maintain and Rotate Out Aging Equipment According to Replacement Schedule
2. Student workstations in classroom as needed.	Maintain	Maintain	Maintain
3. One teacher workstation per classroom.	Maintain and Rotate Out Aging Equipment According to Replacement Schedule	Maintain	Maintain
4. K-4 computer lab a. KWH lab (new in 2009) b. Pablo School (new in 2010)	Maintain and Rotate Out Aging Equipment According to Replacement Schedule (Page 20)	Maintain Maintain and Rotate Out Aging Equipment According to Replacement Schedule	Maintain Maintain
5. 5-8 computer labs (new in 2009)	Maintain	Maintain	Maintain
6. Additional Computer Lab for RMS	Implement	Maintain	Maintain
7. 9-12 computer labs a. Writing Lab 40 machines b. Business Lab c. CAD Drafting Lab 10 machines d. Wireless VoAG/FFA Lab	Maintain and Rotate Out Aging Equipment According to Replacement Schedule	Maintain Rotate out Writing Lab	Maintain
8. K-12 library workstations	Maintain	Maintain and Rotate Out Aging Equipment	Maintain
9. Special education workstations	Increase the Scope of Activity by Adding New Equipment	Maintain	Rotate out Aging Equipment

³ “National Educational Technology Goals.” U.S. Department of Education: Office of Educational Technology. Online. Internet. 4 March, 2002. Available: www.ed.gov/Technology/elearning/index.html.

10. Wireless Netbooks in High School	Implement	Maintain	Maintain
11. Wireless Netbooks in Middle School	Implement	Maintain	Maintain
12. SMARTLAB in Middle School	Maintain	Maintain	Maintain
13. SMARTLAB in High School	Maintain	Maintain	Maintain

Objective 3b. Provide telecommunications and network infrastructure.

Activities	2011-2012	2012-2013	2013-2014
1. Switched network	Maintain	Maintain	Maintain
2. 10 megabit connection to Internet/Gateway	Maintain	Maintain	Maintain
3. 30 megabit connection for WAN	Maintain	Maintain	Maintain
4. Cabling and termination for building LANs	Maintain	Maintain	Maintain
5. District-wide Wireless Mesh	Implement	Maintain	Maintain
6. File servers and application servers	Maintain and Rotate Out as Needed	Maintain and Rotate Out as Needed	Maintain and Rotate Out as Needed
7. Exchange Mail server	Maintain	Maintain	Maintain
8. District-wide Voice Over IP phone system	Implement	Maintain	Maintain
9. Media Streaming Services	Expansion	Maintain	Maintain

Objective 3c. Provide additional technology to enhance instruction.

Activities	2011-2012	2012-2013	2013-2014
1. Digital Devices (Tablet or handheld) Classroom (K-4) Instructional Aide (5-12)	Implement	Maintain	Maintain
2. LCD Projectors	Expansion	Maintain	Maintain
3. Telephones in each classroom	Maintain	Maintain	Maintain
4. Printers	Phase-out individual printers in favor network high capacity printers	Maintain and Rotate Out Aging Equipment According to Replacement Schedule	Maintain and Rotate Out Aging Equipment According to Replacement Schedule
5. Promethean/SmartBoard	Expansion	Maintain	Maintain

Objective 3d. Develop a technology support staff for maintenance of equipment.

Activities	2011-2012	2012-2013	2013-2014
1. District Information Technology Administrator	Continue Activity	Continue Activity	Continue Activity
2. District Computer Technicians	Continue Activity	Continue Activity	Continue Activity

Community Integration Strategies

Goal 4: The district will create partnerships with parents and the community.

Digital content and networked applications will support transformative changes in our approaches to teaching and learning.... Today, there exists tremendous opportunities for the creation of powerful digital content and networked applications.... Technology applications can increase parental involvement and improve the accountability and efficiency of school administration.⁴

In order to be successful, every component of education must have the full support of the local community. Technology is no different.

Goal 4. The district will create partnerships with parents and the community.			
Objective 4a: Develop online communication tools.			
Activities	2011-2012	2012-2013	2013-2014
1. Provide teacher designed resource web sites for students and parents.	Continue Activity	Continue Activity	Continue Activity
2. Provide Activities Schedule, School Calendar, Lunch Menus on Internet.	Continue Activity	Continue Activity	Continue Activity
3. Provide School Library Software on-line.	Continue Activity	Continue Activity	Continue Activity
4. Offer voice mail so parents can communicate with teaching staff.	Continue Activity	Continue Activity	Continue Activity
5. Provide Staff is video and text conferencing services	Implement	Continue Activity	Continue Activity
6. Continue PowerSchool and Power Grade (administrative software) on-line in order for parents to monitor and reinforce students' attendance and grades.	Continue Activity	Continue Activity	Continue Activity
7. Establish online curriculum documents.	Continue Activity	Continue Activity	Continue Activity
Objective 4b: Expand opportunities in adult-based learning and virtual educational.			
Activities	2011-2012	2012-2013	2013-2014
1. Extended hours at high school for computer access through the after-school program.	Continue Activity	Continue Activity	Continue Activity
2. Offer access to college credit courses via the Internet.	Continue Activity	Continue Activity	Continue Activity
3. Offer additional adult computer-training hours/courses.	Continue Activity	Continue Activity	Continue Activity
4. Participate in Distance Learning Network through MSEL.C.	Continue Activity	Continue Activity	Continue Activity

⁴ "National Educational Technology Goals"

Infrastructure

Existing Infrastructure and Future Considerations

The District is fortunate to have these several strong points in its existing technology infrastructure:

- Internet and Ethernet network services in every classroom and office throughout the Districts
- Computers in every classroom
- A full-time Information Technology Administrator, and two full-time technology technician for the District

Statement of interoperability: All technologies purchased by the District should be interoperable. TVs, VCRs, and DVDs will carry composite and S-Video jacks as input and output interfaces (HDMI where needed). All computers will be standardized on OEM equipment. All network equipment will function using the TCP/IP protocol suite, linked by Layer-2 switches.

Computer Lab Profiles				
K W Harvey and Pablo Elementary Schools (Grades K-4)				
Name	# of computers	Personnel	Uses	Future Considerations
Computer Lab	24 computers in each school lab	In-house District Technicians	Knowledge Box Writing Projects Reading Tests Internet Access Educational Programs	Increase the Scope of Activity
Ronan Middle School (Grades 5-8)				
Name	# of computers	Personnel	Uses	Future Considerations
Computer Lab	25		Writing Projects Reading Tests Internet Access Educational Programs Typing Lessons	Additional Computer Lab to accommodate 5 th grade
CLS Smart Lab	12	1 teacher	Technology Classes for All Students	Mac Integration
Library	10	1 teacher	Library, Internet, and homework	Expansion

Ronan High School (Grades 9-12)

Name	# of computers	Personnel	Uses	Future Considerations
Writing Lab	40		Scheduled on a First-Come, First-Served Basis Various Projects SpringBoard	
Library	12	Librarian (shared) and Paraprofessional (shared)	Card Catalog Research Word Processing Reading Tests Classroom Work	
Business Lab	24	Teacher	Digital Multimedia Yearbook Accounting	
Drafting Lab	10	Drafting Teacher	CAD (Computer Assisted Design)	
Science Lab	8	Teacher	Science Based Curriculum	
High School CLS Smart Lab	12	Teacher	Technology Classes for All Students	Mac Integration
VoAG/FFA Wireless Lab	12	Teacher	Online Resources Presentations	

Anticipated Equipment Replacement Schedule

<i>Item</i>	<i>Replacement Period</i>
Workstations (desktops and laptops)	5 years
Printers (inkjet)	Phase-out
Printers (laser)	5 years
TVs	Phase-out
VCRs	Phase-out
IP Phones	as needed
Servers	3 years
Hubs/Switches	5 years
Routers	as needed
Digital Cameras & LCD Projectors	5 years
Digital Devices (Tablet and Handheld)	3 years

BUDGET

Narrative

General

This budget is intended only as a roadmap to guide future technology purchases. If funding for any of the listed projects is not feasible, the School Board is not obligated to proceed.

Funding sources are listed as *possible* places to obtain adequate monies for each individual project. Because of the difficulty of obtaining specific funding commitments over a three-year span of time, the funding of each project will be handled in consultation with the Federal Projects Coordinator and Grant Writer, the Superintendent, and the School Board as the projects become due.

Any project marked with a “grant contingent” funding source will be implemented *only* in the case that the Information Technology Administrator and the Grant Writer are able to secure sufficient external funds. Grant funding may replace General Fund expenditures for any project for which external monies can be secured.

Any project marked as E-rate-fundable will need to rely on the General Fund if the program is not extended.

Computer Purchases

Computer replacement numbers are based on the recommended replacement period for computers (three to five years) combined with the recommendations of Goal 1 of the Technology Plan. Thus, in some cases computers passing five years in age are scheduled for replacement, while in other cases new computers are required to meet an objective of the Plan. In some instances, replacements will be staggered across two or more years in order to mitigate the possibility of excessive expenses for a single yearly budget. Purchases are also staggered to avoid future “lump purchase” scenarios where a significant proportion of the district’s computers pass the five-year mark at one time. In general student labs and staff use computers are rotated out every three years to be tiered down to Internet accessible student use computers. The ultimate goal is no computer is older than five years without some sort of upgrade.

Computer prices are based on a figure of \$900 per computer with the exception of graphics workstations, which are priced at \$1,200 per computer. An exact figure is difficult to specify due to the general volatility of computer prices.

Peripheral and Multimedia Purchases

Peripheral purchases are based on the recommendations of Goal 1 of the Technology Plan in conjunction with the replacement schedule. The following pricing is assumed when determining total costs:

Digital cameras \$150 each
Laser printers (network capable) \$3000 each
LCD projectors \$700 each
DVD players \$50 each
Telephones \$200 each
Smart Boards \$2000 each
Promethean All-in-one \$3200 each
Digital Tablet \$600 each
Digital Handheld \$300 each

Telecommunications and Network Infrastructure

Infrastructure costs are based on the recommendations of Goal 3 of the Technology Plan and, in the case of network equipment, i.e. routers, switches, and file servers on the replacement schedule.

This section of the budget is especially sensitive to the future of E-rate, as all of the equipment costs and rents incurred by telecommunication and network equipment are compensated by E-rate.

Technology Support Staff

Present staff include an Information Technology Administrator and two Technology Assistants Job descriptions for the Information Technology Administrator and Technology Assistants are appended to this Plan.

Fringe benefits for positions, including health care and social security, are not included in this budget. Such overhead would cost an additional 16% of personnel costs.

Software and Technology-related Books

Software purchases are determined by Goal 1 of the Technology Plan. As per the Plan, the previously-approved software listed in this section of the budget will be expanded and maintained, while additional purchases will be determined through the District Technology Committee. The line listed as “Approved Software” is the budget for any additional software the Technology Committee may approve.

Grand Total of Budget	2011-2012	2012-2013	2013-2014
Technology Budget General Fund	\$150,000	Undetermined	Undetermined

Computer Purchases (quantities are in parentheses)				
Project	Expenditure by Year			Funding Source(s)
	2011-2012	2012-2013	2013-2014	
1. Four workstations per classroom at at K-4 level	Tiered Down at PES	Tiered Down at KWH	Tiered Down at PES	
2. Teacher workstations a. K-4 b. 5-12	\$25,200	\$22,500		General Fund (Elem) General Fund (Elem and HS)
3. K-4 Computer labs a. KWH (new 2008) b. Pablo (new 20010)		\$23,400	\$23,400	General Fund (Elem)
4. 5-8 Computer labs a. computer lab (new 2008) b. new computer lab	\$29,700		\$29,700	General Fund (Elem)
5. 9-12 Computer labs a. writing lab (new 2009) b. business lab (new 2007) c. CAD drafting lab (new 2008) d. VoAG/FFA Lab	\$25,200	\$37,500	\$25,200	General Fund Technology Fund Carl Perkins
6. 9-12 CLS Smart lab		\$19,200		AP Grant General Fund (HS) Carl Perkins
7. 5-8 CLS Smart Lab			\$16,800	AP Grant General Fund
8. K-4 library workstations (new 2007)	\$7,200			General Fund (Elem)
9. 5-12 library workstations (new 2007)	\$18,000			General Fund (Elem) General Fund (HS)
10. Special education workstations (Elem)	\$6,900	\$6,900	\$6,900	Special Ed Funds (Elem)
11. Special education workstations (HS)	\$4,600	\$4,600	\$4,600	Special Ed (HS)
Total	\$116,800	\$114,100	\$106,600	

Peripheral and Multimedia Purchases (quantities are in parentheses)				
Project	Expenditure by Year			Funding Source(s)
	2011-2012	2012-2013	2013-2014	
1. Laser printers for K-8	\$4,000		\$4,000	General Fund (Elem)
2. Laser printers for 9-12		\$4000		General Fund (HS) Carl Perkins
3. LCD Projectors for K-8	\$2,100	\$2,100	\$2,100	General Fund (Elem) Technology Fund (Elem)
4. LCD Projectors for 9-12	\$2,100	\$2,100	\$2,100	General Fund (HS) Carl Perkins Technology Fund (HS)
5. Promethean Boards K-8	\$6,400	\$6,400	\$6,400	General Fund (Elem) Technology Fund (Elem)
6. Promethean Boards 9-12	\$6,400	\$6,400	\$6,400	General Fund (HS) Technology Fund (HS)
Total	\$21,00	\$21,00	\$21,00	

Telecommunications and Network Infrastructure (quantities are in parentheses)				
Project	Expenditures by Year			Funding Source(s)
	2011-2012	2012-2013	2013-2014	
1. Migrate 3COM 100 to Cisco GigE Switches at KWH and RMS.	\$90,000	\$10,000	\$10,000	General Fund (Elem) E-rate Technology Fund (Elem)
2. Migrate 3COM 100 to Cisco GigE Switches at RMS.	\$45,000	\$5,000	\$5,000	General Fund (HS) Technology Fund (HS)
3. Wireless APs	\$20,576			
4. Managed Ethernet Connection to Internet and Pablo.	\$42,120	\$42,120	\$42,120	General Fund E-rate
5. Cabling for building LANS	\$1,200	\$1,200	\$1,200	General Fund
6. File Servers	\$8,250	\$8,250	\$8,250	General Fund
7. Voice over IP phone system	\$18,000			General Fund
Total	\$215,146	\$66,570	\$66,570	

Technology Support Staff				
Project	Expenditures by Year			Funding Source(s)
	2011-2012	2012-2013	2013-2014	
1. Information Technology Administrator Salary	Undetermined	Undetermined	Undetermined	General Fund
2. Technology Assistant Salary	Undetermined	Undetermined	Undetermined	General Fund
Total	Undetermined	Undetermined	Undetermined	

Software Licenses				
Project	Expenditures by Year			Funding Source(s)
	2011-2012	2012-2013	2013-2014	
1. Desktop software licensing	\$20,000	\$20,000	\$20,000	Tech Budget
Total	\$20,000	\$20,000	\$20,000	

Professional Development				
Project	Expenditures by Year			Funding Source(s)
	2011-2012	2012-2013	2013-2014	
1. Technology literacy workshops	Undetermined	Undetermined	Undetermined	Title II, Part D
2. Technology training library (books and software)	Undetermined	Undetermined	Undetermined	Title II, Part D
Total	Undetermined	Undetermined	Undetermined	

Evaluation

Ongoing monitoring and evaluation are critical to the success of the districts' technology plan. Monitoring strategies will include yearly physical inventories of the status of infrastructure and technology components, surveys of professional staff regarding technology use and integration, and formal and informal observations of students utilizing technology. These data will be synthesized and compared to the goals in order to determine progress toward the technology plan. Based on the conclusion drawn from these ongoing evaluations, the districts may choose to modify the plan to align it to current needs and circumstances.

Staff Assessment

TAGLIT has been given to teachers every other year (2007 and 2009). The Taking a Good Look at Instructional Technology (TAGLIT) survey was administered to all teachers in the District. These results are appended to the Technology Plan and will be updated, pursuant to Title II, Part D goals. TAGLIT results will help formulate revisions to the plan.

Technology Equipment Review

The technology deployed at the Ronan School District #30 Schools undergoes continual monitoring and review. The Information Technology Administrators and District Technology Committee oversee this review, but all staff members contribute. Factors considered are as follows:

- Effectiveness/limitations of the technology,
- Useful life expectancy,
- New developments in technology,
- Needs of the user community and
- Availability of the technology (do we have adequate deployment?).

At the end of each school year, a concerted effort is made to replenish and replace software, equipment and infrastructure that has reached end of life. At this time, we also try to anticipate the technology that should be deployed before the start of the next school year.

Appendix A

District Technology Committee

Many thanks in the development of this curriculum to the following individuals on the District Technology Curriculum Committee:

Andy Holmlund, Superintendent
Cory Fuchs, Information Technology Administrator
Sarah Wilkerson, District Technology Assistant
Kit Edington, District Technology Assistant
Chris Isle, District Curriculum Director
Yearly Appointed Board Members

Appendix B

School District No. 30 Ronan/Pablo Schools

INFORMATION TECHNOLOGY (IT) ADMINISTRATOR POSITION

Job Summary

The IT Administrator will occupy a key leadership role in the implementation of educational technology throughout the district. Responsibilities will include general management of networks and computer installations; administration of technology staff development programs; oversight of technology budgeting process; liaison with all building staff on technology issues and promotion of the use of technology by teaching staff in the district. The successful candidate will be required to provide written and oral reports to the Board and the community regarding technology planning, accomplishments and goals.

Duties and Responsibilities

Staff Development:

1. Plans, coordinates and conducts technology training for all staff.
2. Oversees technology training budget.
3. Works with administrators in establishing alternative funding streams for the enhancement of technology training and the integration of technology in the classroom.

Networking:

1. Oversees the installation and operation of computer networks throughout the district.
2. Maintains district standards for equipment and software; oversees the inventory of equipment.
3. Plans future improvements for computer technology for the district.
4. Establishes, implements and coordinates maintenance of the district-wide network.
5. Assists building level technicians in the performance of their duties.
6. Plans, coordinates and conducts technical training sessions for staff.

Planning and Budgeting:

1. Responsible for district technology budget.
2. Reviews all technology budgetary requests.
3. Develops planning documents which include action timelines, budgets and evaluation.
4. Conducts annual technology needs assessment.
5. Acts as the liaison with vendors for the purchase of computer equipment (in conjunction with the district purchasing department).
6. Produces written documentation, proposals and recommendations as needed.
7. Chairs the District Technology Committee; attends building level technology meetings and provides direction and guidance to all district staff in the area of technology.
8. Recommends changes in district procedures and policy which will enhance the use of educational technology.

Staffing:

1. Recruits, selects, recommends action and assigns duties for any technology department personnel.
2. Works with principals and other staff in the hiring of any technology related position.

Other:

1. Oversees the implementation of access to Internet in each building.
2. Coordinates the development of district web page development.
3. Researches, recommends and promotes the use of new technologies by staff and administration.

Reporting Relationship:

The IT Administrator will report directly to the Superintendent of Schools, is expected to work directly with building-level administrators and is also accountable to the Board of Trustees.

Minimum Qualifications:

Demonstrated network experience with emphasis on WindowNT, Windows XP, other Microsoft products, Novell, Power School, and multi-media applications.

Data Communications – Networking such as Cat 5 connecting, fiber optics, hubs, routers, bridges, switches.

Demonstrated ability to produce written reports and communicate clearly (oral presentations, publications or on-line documents).

Familiar with the use and application of technology in educational work settings.

Ability to troubleshoot, perform and coordinate basic technology repairs.

Demonstrated ability to establish positive rapport with teachers, administrators, vendors, co-workers, customers and outside organizations and agencies.

Terms of Employment:

Twelve months per year. The district will provide annual vacation and benefits at approved increments. Salary will be commensurate with training, experience and qualifications.

Appendix C

RONAN SCHOOL DISTRICT NO. 30

Job Description

Job Title INFORMATION TECHNOLOGY ASSISTANT

Reports to Information Technology Administrator

Evaluated by Information Technology Administrator

Evaluation Performance of this job will be evaluated annually in accordance with provisions of board's policy and state law.

Objective To assist the Information Technology Administrator, Administration, Staff, Students, and Board of Trustees towards the integration of technology in the curriculum and management of all computer/network systems district wide, in order to facilitate learning along with implementation of the districts usage policies.

Terms of Employment 12 month contract (July - June), \$13.52 hr/40 per week

QUALIFICATIONS:

1. High School diploma or equivalency
2. Experience in the operation of computers and networks
3. Ability to interact positively with District Staff and Students
4. Experience and knowledge of computer repair, maintenance, and deployment
5. Independent problem solving abilities and self direction
6. Ability and willingness to learn and expand knowledge
7. Ability to work in a diverse and changing environment

SPECIAL CHARACTERISTICS:

1. Experience and knowledge of Windows Operating Systems and Microsoft products
2. Programming and/or Scripting experience
3. Experience and knowledge of networking and networking concepts
4. Experience and knowledge of networking applications, e.g. databases, e-mail, web, etc.

5. Experience and knowledge of centralized administration, e.g. Active Directory, Altiris, etc.
6. Posses effective time-management and organization skills
7. The following would be beneficial, but not required:
 - I. Cisco certifications
 - II. Microsoft certifications
 - III. CompTIA certifications

PERFORMANCE RESPONSIBILITIES:

1. Install and troubleshoot computer software throughout the district
2. Deployment and allocation of district equipment
3. Assist with server installation
4. Assist District network wiring and management
5. Remain professional and exemplify integrity at all times
6. Perform such other tasks as requested by the Information Technology Administrator
7. Documentation and communication of tasks performed

Appendix D

Ronan Public Schools

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STUDENTS

3612P

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Acceptable Use of Electronic Networks

All use of electronic networks shall be consistent with the District's goal of promoting educational excellence by facilitating resource sharing, innovation, and communication. These procedures do not attempt to state all required or proscribed behaviors by users. However, some specific examples are provided. **The failure of any user to follow these procedures will result in the loss of privileges, disciplinary action, and/or appropriate legal action.**

Terms and Conditions

1. Acceptable Use – Access to the District's electronic networks must be: (a) for the purpose of education or research and consistent with the educational objectives of the District; or (b) for legitimate business use.
2. Privileges – The use of the District's electronic networks is a privilege, not a right, and inappropriate use will result in a cancellation of those privileges. The system administrator (and/or building principal) will make all decisions regarding whether or not a user has violated these procedures and may deny, revoke, or suspend access at any time. That decision is final.
3. Unacceptable Use – The user is responsible for his or her actions and activities involving the network. Some examples of unacceptable uses are:
 - a. Using the network for any illegal activity, including violation of copyright or other contracts, or transmitting any material in violation of any federal or state law;
 - b. Unauthorized downloading of software, regardless of whether it is copyrighted or devirused;
 - c. Downloading copyrighted material for other than personal use;
 - d. Using the network for private financial or commercial gain;
 - e. Wastefully using resources, such as file space;
 - f. Hacking or gaining unauthorized access to files, resources, or entities;
 - g. Invading the privacy of individuals, which includes the unauthorized disclosure, dissemination, and use of information of a personal nature about anyone;
 - h. Using another user's account or password;

- i. Posting material authored or created by another, without his/her consent;
 - j. Posting anonymous messages;
 - k. Using the network for commercial or private advertising;
 - l. Accessing, submitting, posting, publishing, or displaying any defamatory, inaccurate, abusive, obscene, profane, sexually oriented, threatening, racially offensive, harassing, or illegal material; and
 - m. Using the network while access privileges are suspended or revoked.
4. Network Etiquette – The user is expected to abide by the generally accepted rules of network etiquette. These include but are not limited to the following:
- a. Be polite. Do not become abusive in messages to others.
 - b. Use appropriate language. Do not swear or use vulgarities or any other inappropriate language.
 - c. Do not reveal personal information, including the addresses or telephone numbers, of students or colleagues.
 - d. Recognize that electronic mail (e-mail) is not private. People who operate the system have access to all mail. Messages relating to or in support of illegal activities may be reported to the authorities.
 - e. Do not use the network in any way that would disrupt its use by other users.
 - f. Consider all communications and information accessible via the network to be private property.
5. No Warranties – The District makes no warranties of any kind, whether expressed or implied, for the service it is providing. The District will not be responsible for any damages the user suffers. This includes loss of data resulting from delays, non-deliveries, missed deliveries, or service interruptions caused by its negligence or the user’s errors or omissions. Use of any information obtained via the Internet is at the user’s own risk. The District specifically denies any responsibility for the accuracy or quality of information obtained through its services.
6. Indemnification – The user agrees to indemnify the District for any losses, costs, or damages, including reasonable attorney fees, incurred by the District, relating to or arising out of any violation of these procedures.

7. Security – Network security is a high priority. If the user can identify a security problem on the Internet, the user must notify the system administrator or building principal. Do not demonstrate the problem to other users. Keep your account and password confidential. Do not use another individual’s account without written permission from that individual. Attempts to log on to the Internet as a system administrator will result in cancellation of user privileges. Any user identified as a security risk may be denied access to the network.
8. Vandalism – Vandalism will result in cancellation of privileges, and other disciplinary action. Vandalism is defined as any malicious attempt to harm or destroy data of another user, the Internet, or any other network. This includes but is not limited to uploading or creation of computer viruses.
9. Telephone Charges – The District assumes no responsibility for any unauthorized charges or fees, including telephone charges, long-distance charges, per-minute surcharges, and/ or equipment or line costs.
10. Copyright Web Publishing Rules – Copyright law and District policy prohibit the republishing of text or graphics found on the Web or on District Websites or file servers, without explicit written permission.
 - a. For each republication (on a Website or file server) of a graphic or text file that was produced externally, there must be a notice at the bottom of the page crediting the original producer and noting how and when permission was granted. If possible, the notice should also include the Web address of the original source.
 - b. Students and staff engaged in producing Web pages must provide library media specialists with e-mail or hard copy permissions before the Web pages are published. Printed evidence of the status of “public domain” documents must be provided.
 - c. The absence of a copyright notice may not be interpreted as permission to copy the materials. Only the copyright owner may provide the permission. The manager of the Website displaying the material may not be considered a source of permission.
 - d. The “fair use” rules governing student reports in classrooms are less stringent and permit limited use of graphics and text.
 - e. Student work may only be published if there is written permission from both the parent/guardian and the student.

11. Electronic Mail.
 - a. Use of school access Internet for e-mail is restricted to teacher directed or supervised projects. Electronic e-mail is not private. The system administrator on all levels has access to all mail

Internet Safety

1. Internet access is limited to only those “acceptable uses,” as detailed in these procedures. Internet safety is almost assured if users will not engage in “unacceptable uses,” as detailed in these procedures, and will otherwise follow these procedures.
2. Staff members shall supervise students while students are using District Internet access, to ensure that the students abide by the Terms and Conditions for Internet access, as contained in these procedures.
3. Each District computer with Internet access has a filtering device that blocks entry to visual depictions that are: (1) obscene; (2) pornographic; or (3) harmful or inappropriate for students, as defined by the Children’s Internet Protection Act and determined by the Superintendent or designee.
4. The system administrator and building principals shall monitor student Internet access.

Legal Reference: Children’s Internet Protection Act, P.L. 106-554
20 U.S.C. § 6801, et seq.
47 U.S.C. § 254(h) and (l)

Procedure History:

Promulgated on: 5-14-07
Revised: