

2009 ET-IL Plan

District: Alamosa RE-11J
District Entity Number: 0100

Submitted: 2/3/2009, edited 2/16/2010

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Total number of computers district wide: 848

Internet connected student/computer ratio for district: 2.5

Internet Connection Speed: 10 Mbps

Number of classrooms: 200

Number of classrooms with Internet access: 200

District is seeking to be qualified for:
Title IID Competitive/Formula Funds
E-rate Funds
Accreditation Assurance

Needs Assessment Results

Progress since 2006

Our 2006 plan was to focus on the following:

1. Teachers becoming more familiar with district technology standards and information literacy standards, as well as be more willing to collaborate with Library Staff and the Technology Integration Specialist.
2. Teachers becoming better able to provide assistance with technology, specifically as students use of the Internet for research and other school related activities.
3. Teachers encouraging students to focus on understanding by using higher level questioning with their students. (21st Century Skills)

We have individual teachers who have shown marked improvement in all the above areas. They are acting as role models for other teachers. However, this is a slow process in which we are taking baby steps. Student achievement, professional development and collaboration will always be works in progress.

Specific Areas of Improvement

- A technology training lab was purchased and teachers have been able to participate in staff development throughout the school year.
- We produce a Technology Spotlight Blog which highlights items on our website as well as good classroom resources for teachers.
- We have enhanced our district website and more teacher have classroom websites that we had three years ago.
- We have implemented a keyboarding program in grades 4 and 5.
- We are using NWEA to assess student progress and Alpine Achievement as a data warehouse.

Needs Assessment Completed in February 2009

Our needs assessment was comprised of three parts:

1. We opted to move away from the self-assessment model we used in 2006 and use a standardized skills assessment. We asked teachers to take the same online assessment that our 8th graders will be taking the first week in May, 2009. (InfoSource Learning, Student Technology Proficiency (NETS-S2007) for Windows/Office 2003.)
2. We spoke with small groups of teachers at the middle school and high school to determine the curricular projects that are ready to be implemented if there is technology to support them.
3. We completed a thorough inventory of our technology/telecommunications infrastructure.

Assessment Results

Only 36% of our staff was able to pass the technology assessment with an 80% or better. However, our median score was 74%.

We were weakest on Standards 2 & 4, averaging 68% on Standard 2 and only 60% on Standard 4.

- Standard 2: use digital media and environments to communicate and work collaboratively, including at a distance to support individual learning and contribute to the learning of others.
- Standard 4: use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

We averaged around 72% on each of Standards 1 & 3

- Standard 1: demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- Standard 3: apply digital tools to gather, evaluate, and use information.

We averaged 88% on Standard 5 and 81% on Standard 6

- Standard 5: understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- Standard 6: demonstrate a sound understanding of technology concepts, systems, and operations.

Focal Areas for 2009-2012:

Our focus for 2009-2012 will be to provide opportunities for teachers to improve their skills in all six standards, but specifically focusing on Standards 2 and 4. In our Middle School, only 32% of our teachers earned a passing score. Since our goal is to turn out technology literate students by the end of 8th grade, we need technology literate middle school teachers. While our students are receiving technology instruction in grades 4 – 6, we need to develop a plan for this to continue in grades 7 and 8.

We have certain teachers and/or departments who have exciting ideas for integrating technology into their curriculum but have been unable to do so effectively due to equipment constraints. We intend to use stimulus funding to provide these Teacher Leaders with the equipment necessary to make their ideas a reality.

Goals, Objective and Strategies for ETIL:

Our ETIL Vision:

We envision a lifelong learning environment in which the tools of technology support teaching and learning in all areas and enhance literacy, communication, instruction, and information management to promote educational excellence throughout the district. In this regard, we believe that:

- ✓ Educational Technology and Information Literacy (ETIL) should support curriculum and learning.
- ✓ ETIL planning should be an ongoing, dynamic process.
- ✓ ETIL training should be ongoing, embedded, problem-centered, and relevant to each teacher's needs.
- ✓ A support infrastructure should be created, strengthened, and maintained.

Our ETIL Goals

- ✓ **Goal 1 – Student Achievement**
Improve overall student achievement by addressing content area (Reading & Writing) knowledge and skills with Information Literacy and technology-supported components; aligned with state standards.
- ✓ **Goal 2 – Staff Development**
Provide ongoing professional development and instructional support which encourages utilization of information resources and technology in the classroom and collaboration in Information Literacy and Educational Technology.
- ✓ **Goal 3 – Tech Literate Students by 8th Grade**
Provide Educational Technology and Information Literacy opportunities to students so that by the end of their 8th grade year they will be technology literate.

Note: See the Section on Action Plans for details on how these goals will be implemented.

District Goals & Guidelines

Guiding Principals

1. School professionals accept responsibility for effective instruction of all students.
2. Staff will engage in Professional Learning Communities (PLCs).
3. School improvement will emphasize the utilization of best practices.
4. Administrators will serve as efficient managers and effective instructional leaders.

Board Goals

1. Develop and support safe and mutually respectful environments.
2. Support parent/teacher partnerships.
3. Shared accountability to increase student achievement.
4. Improve and maintain the District's financial standing.
5. Support expanded technology.

District Accreditation Plan

District Commendations – December 2005:

1. All schools have attained Average status on the SAR based on 2005 achievement performances.
2. 100% of the District's subpopulations demonstrated improvement, as measured by weighted indices, in reading and writing.
3. Increased attention to curriculum and its alignment throughout the District.

District Actions to be taken in the future:

- ✓ Continue to demonstrate reasonable achievement growth/progress in reading, writing and math in order to maintain current accreditation status.
- ✓ Continue to demonstrate reasonable progress in closing the achievement gap between subpopulation performances.

ETIL Standards for Students

Our local standards are based upon the ISTE standards. In order to completely align with ISTE standards, there are a few areas that we need to improve upon and we will work over the next three years to accomplish this.

Elementary Assessments: Prior to the completion of Grade 5, students will:

1. Demonstrate network access skills.
2. Be introduced to telecommunications.
3. Produce a computer generated document using basic editing skills.
4. Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively. (1)
5. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide. (1, 2)
6. Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use. (2)
7. Use general purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum. (3)
8. Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom. (3, 4)
9. Use technology resources (e.g., calculators, videos, educational software) for problem solving, self-directed learning, and extended learning activities. (5, 6)
10. Determine which technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (5, 6)
11. Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources. (6)

Middle School Assessments: Prior to the completion of 8th Grade, students will:

1. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. (2)
2. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. (2)
3. Follow Internet safety guidelines (i-Safe program)

4. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (3, 6).
5. Independently produce and evaluate quality documents: i.e. word processing using intermediate editing techniques, spreadsheet using basic math functions and charts and graphs, and basic desktop publishing.
6. Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. (4, 5, 6)
7. Use the computer to problem solve, obtain data, develop documents, generate new ideas, create action plans, conduct research and use email.
8. Use technology to complete a research project focusing on an essential question. (History Fair)
9. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom. (4, 5)
10. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. (5, 6)

Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (2, 5, 6)

3.5 ETIL Rubric

Skill	Advanced	Proficient	Partially Proficient	Unsatisfactory
Variety of Sources	Information is independently gathered from a variety of sources, both print and non-print. All facts are backed up by more than one source.	Information is independently gathered from for than one source. Most facts are backed up by more than one source.	Some information is gathered from more than one source, but help was needed. Facts are backed up by only one source.	Information is gathered from only one source. Facts are either not backed up or are backed up by only one source.
Copyright & Citing Sources	Source information is collected for all graphics, facts and quotes. All documented in desired format. Permission has been obtained for all web resources that require them.	Source information is collected for all graphics, facts and quotes. Most documented in desired format. Permission has been obtained for most web resources that require them	Source information collected for most graphics, facts and quotes. Documentation is not in desired format. Permission has been obtained for some of the web resources that require them	Very little or no source information was collected. Information is not properly documented. Permission has not been obtained for web resources that require them
Creative Use of ETIL Choices	Use of the appropriate tools and resources to effectively accomplish the task. Innovative use of graphics, sounds, email, software, and Internet resources.	Use of the appropriate tools and resources to effectively accomplish the task. Several creative sounds, graphics and links used.	Use of tools and resources to adequately accomplish the task. Some use of interesting sounds and graphics.	Use of tools and resources do not effectively accomplish the task. No evidence of independent resources.
Attractiveness	Makes excellent use of font, color, graphics, effects, etc. to enhance the product.	Makes good use of font, color, graphics, effects, etc. to enhance to product.	Makes use of font, color, graphics, effects, etc. but occasionally these detract from the content.	Use of font, color, graphics, effects etc. but these often interfere with the content.
Organization	Content is well organized and easy to follow. Headings or bulleted lists are used as necessary to group related material.	Content is logically organized for the most part. Headings or bulleted lists are used to group material.	Content is somewhat organized and fairly easy to follow.	There was no clear or logical organizational structure, just lots of facts.

Scoring will be a collaborative effort between teachers and library staff.

3.6: 21st Century Learning Skills

Over the next three years, our ETIL strategies will build the following skills in both students and teachers:

- ✓ Information & Communication Skills
- ✓ Thinking & Problem Solving
- ✓ Interpersonal Skills
- ✓ Self-Direction Skills
- ✓ Global Awareness
- ✓ Civic Literacy

3.7: The Parent/Community Component

We have the following in place for communicating with our parents and community:

- ✓ The District Web Site provides the parents and community with board minutes, nutritional information, and links to PowerSchool, teacher web sites, CDE and other relevant sites.
- ✓ PowerSchool for Parents provided parents will up-to-date information on their student's attendance, grades, and lunch balance. As our teachers begin to utilize this tool more effectively, it will provide better and more accurate data to our parents. Training opportunities will be provided to parents during each of the next three years.
- ✓ Teacher Web Sites provide parents with additional information regarding activities in the classroom. Over the next three years, we will train our secondary staff in web design and substantially increase the number of teacher web sites.

The i-Safe Parent program will be implemented in the fall of 2006. Alamosa School District believes that parents are an essential element in keeping kids safe while online.

3.8: Determining Technology Literacy by 8th Grade

Our District Goal 3 focuses specifically on this topic. The middle school will use the ETIL Rubric to evaluate 8th grade History Fair projects. In addition, we will create and evaluate an assessment in the 8th grade Technology Class to determine proficiency. We have established 5th grade and 8th grade indicators to help with this.

Technology Literacy is knowledge about what technology is, how it works, what purposes it can serve, and how it can be used efficiently and effectively to achieve specific goals.

From Kindergarten through 8th Grade, students will receive age appropriate technological opportunities. The district will utilize the following:

- ✓ ETIL Standards for Students (See Section 3.2)
- ✓ ETIL Rubric (See Section 3.6))
- ✓ ETIL 8th Grade Hands-on Skills Assessment (To be created in Fall 2006)

3.9 Other ETIL Definitions:

Collaboration exists when teachers, the TIS, and the LMS work with each other to define the goals and objectives they wish their students to achieve, the Information Literacy and Educational Technology standards they wish to meet, and the instructional design they will use to accomplish the above.

Digital learners are in charge of their own learning - which is self directed and self paced; but such self management does not just emerge - it has to be facilitated; learners need to be skilled in learning responsibility and in developing their own knowledge base.

Educational Technology consists of the tools used to support teaching and learning. It is the intellectual processes and abilities needed for students to understand the link between technology, themselves, and society in general.

Engaged Learning challenges students to employ information technologies to investigate authentic problems which parallel curriculum questions and topics. Engaged learners are responsible for their own learning, energized by learning, strategic, and collaborative.

Information Literacy is the ability to identify information needs, seek out resources to meet those needs, and then analyze, synthesize, evaluate, and communicate the resulting knowledge.

Collaboration & Integration:

Teachers in the Alamosa School District have the opportunity to collaborate with several different individuals. Each building has its own Library Media Specialist and/or para-professional willing to assist teachers in Information Literacy skills. The Technology Integration Specialist and Technology Director are available to help teachers incorporate meaningful technology in their classrooms. Each elementary school has a Literacy Specialist who offers assistance in all areas of literacy.

Programs and staff member involved:

- ✓ ETIL: This team consists of two staff members per building along with the Technology Director and Technology Integration Specialist. The breakdown is as follows: three library media specialist, two building principals, four teachers, and two technology staff members.
- ✓ E-Rate: The Director of Technology is responsible for E-Rate, but collaborates with the Technology Integration Specialist around the ETIL plan.
- ✓ Title II-D Consolidated Application: The Assistant Superintendent is responsible for this but collaborates with the Technology Integration Specialist around the ETIL plan.
- ✓ Accreditation: This team consists of the Superintendent, Assistant Superintendent, Literacy Specialists, building administration, board members, and parents on the school accountability committee.
- ✓ Curriculum & Assessment: The Assistant Superintendent coordinates curriculum and instruction, but collaborates with curriculum teams in the key curricular areas.
- ✓ Professional Development: The Assistant Superintendent coordinates all professional development, but collaborates with building Principals, Literacy Specialists and the Technology Integration Specialist.

Mechanisms for Collaboration:

Our district uses Professional Learning Communities (PLCs) which provide an excellent opportunity for staff members to collaborate. The middle and high school staff have 90-minutes of PLC planning time each week. In 2008-2009, we had one late start day each month which provided staff with two hours of PLC time per month. In 2009-2010, we will have two early release days each month, providing staff eight hours per month of PLC time in which to collaboratively use data to drive their instruction.

All ETIL components will work within the boundaries of the PLCs as well as utilizing the embedded staff development model that our district has used for the past six years. The technology training lab allows an opportunity for teachers to come together during the school day to collaborate and improve their technology skills.

Administrative Involvement:

Two building principals are on the ETIL planning team. District level administration is supportive of PLC release time and providing subs for teachers using the technology training lab. Building principals are responsible for organizing a staff development plan

for each school year and recent focus has been on helping teachers utilize Alpine Achievement and NWEA for data analysis.

Curriculum Integration

The ETIL team made a concerted effort to focus on technology that is currently in place in our district. Due to funding limitations and time limitations, we chose to focus on increasing the effectiveness of our current tools rather than attempting to implement new tools. We have been using Renaissance Learning products like Accelerated Reader and Accelerated Math as tools to help students improve their skills in reading and math. Students are also taking NWEA online assessments twice a year. Teachers have access to Kidspiration/Inspiration for classroom projects.

We were able to start a keyboarding program in our 4th and 5th grades. This has greatly reduced the amount of time students require to complete an assignment. Therefore, more teachers at Evans Elementary are adding projects to their curriculum requiring students to use technology and information literacy skills.

Many teachers in our district provide their students with opportunities to work with technology to help improve and illustrate their level of understanding. Over the next three years, the ETIL staff development will continue to focus on extending the opportunities. We are offering technology training in many Web 2.0 tools in our technology training lab.

Fostering Student Achievement

As a district, we use many tools to help us assess and progress monitor our students. These include DIBELS, NWEA, and Renaissance Learning products. Teachers are then able to look at all the data from these tools as well as CSAP scores through Alpine Achievement in order to use the data to drive their instruction.

At the middle and high schools, students are encouraged to utilize educational technology and information literacy skills in their classrooms. There is currently a wide range in the exposure that students receive based upon the classroom teacher, but we are working to narrow that gap.

Coordination with other Programs

Our Title I schools began using a new English curriculum last year that includes many technological resources for teachers to use with their students.

The Technology Integration Specialist is working closely with those teachers in the Induction Program to integrate technology into their induction portfolio and into lessons.

The technology training lab allows the Technology Integration Specialist to work with groups of teachers on innovative curricular ideas.

Professional Development:

Professional Development Committee

In 2008-2009, our district created a Professional Development Committee whose charge is to create and prioritize Professional Development for all district staff based on need. All schools and content areas are represented on this committee.

Professional Learning Communities

The Alamosa School District uses Professional Learning Communities (PLCs) in each building. We believe that PLCs encourage collaborative teamwork focused on learning, collective inquiry into best practices and current reality, and a commitment to continuous improvement. The administration has developed a staff development model in which these PLCs will function. The ETIL team will work within the PLC structure to meet the majority of our objectives.

Professional Development Days

The district has three professional development days built into the school calendar. For 2009-2010 the decision has been made to offer as much differentiated professional development as possible. On one of the professional development days in August, teachers will have a menu of professional development options and will be able to attend the three that are most relevant to them. This will be followed by a half-day of differentiated professional development in October and another in January. The format for these days will be to use the morning for professional development and the afternoon as a teacher workday in which they will have time to practice what they learned. The ETIL team is hopeful that this process will continue in future years.

Embedded Professional Development

The Embedded Professional Development model involves a trainer working with teachers on a professional development goal. The trainer will model an instructional approach or provide hands-on time to practice a new skill. Teachers are given time to apply the approach/skill in their classroom. The acquisition of the technology training lab in the fall of 2007 has allowed additional opportunities for embedded professional development in the area of ETIL.

Technology Proficiency of Staff

We used the InfoSource NETS 2007 assessment to determine staff proficiency for 2008-2009. However, we have determined that a project-based approach where teachers demonstrate their skills with technology is a more effective way to measure proficiency and to be certain that teachers will incorporate technology into their curriculum.

Therefore, the Technology Integration Specialist has designed an online course for all teachers. In the fall of 2009, it was piloted at the middle school so it would have an immediate impact on our 8th graders. In spring 2010, it was rolled out to the high

school staff. The elementary schools will be brought on board in 2010-2011. The goal is for all teachers to have successfully completed the course within a three-year time span (SY 2009-2010 through SY 2011-2012).

Learning in a 2.0 World Online Professional Development

This course is an online, self-directed exploration of various Web 2.0 tools, with a specific emphasis on Google Apps. It is designed to help answer the question: "How can we as learners begin to take advantage of the opportunities of the read/write web so we may understand more clearly the pedagogies of using them in the classroom?"

This course will provide teachers with the opportunity to understand how Web 2.0 technology can help them facilitate global connections and conversations and create personal learning networks. Transforming their own personal learning practices will allow them to see how Web 2.0 tools can impact their curriculum and teaching. It is our intention to make this project-based course as robust and meaningful to teachers as possible.

The determination of technology proficiency for our staff will be based upon the successful completion of this course. Teachers who have successfully completed the course will be given priority in receiving our limited technology resources.

ETIL Summer Workshops

Early June is always a good time to offer professional development for our teachers. The Technology Integration Specialist asks for input on the workshops to be offered and schedules at least 10 days of ETIL workshops. In June 2009, she has scheduled 8 different workshops over a 10-day period. Participants will have a hands-on opportunity to review and explore some of the online resources, programs, software, and hardware available to support them in the classroom. The institute will be designed to expose teachers to the many tools and resources available to them as they work and teach in the Digital Age. Participants will be volunteers who wish to take their ETIL skills beyond the training provided during the school year.

Technology Support Staff Training

The Director of Technology and the Technology Integration Specialist each attend professional development trainings throughout the year. In turn, they provide training and support to the building level technologists.

Description of Network Capacity and District Infrastructure

Our school district consists of the following seven sites, each of which is connected to our Wide Area Network with network access to every classroom and office. The LANs in all buildings are 100 Mb switched networks, providing Internet access to each connected device. Our district supports more than 800 connected devices. We own the domain name alamosa.k12.co.us and any prefix to it.

Description of Buildings

The following is a description of capacity at each building with current equipment.

- 1 administration building
- 3 elementary schools
- 2 secondary schools
- 1 alternative school

Polston - Elementary

Up to 4 computers in every classroom

Library computer lab with 12 computers

Portable lab with 20 laptop computers

All IP addresses are private and assigned dynamically by a DHCP server

All connected computers are behind a firewall, have content filtering and email virus protection

Building Wide 802.11g secure WIFI network

One building tech on site to assist with troubleshooting and mentoring

Boyd - Elementary

Between 5 and 8 computers in every classroom

Library computer lab with 25 computers

All IP addresses are private and assigned dynamically by a DHCP server

All connected computers are behind a firewall, have content filtering and email virus protection

One building tech on site to assist with troubleshooting and mentoring

Evans - Elementary

Up to 3 computers in every classroom

Library computer lab with 15 computers

Instructional Computer lab with 25 computers

All IP addresses are private and assigned dynamically by a DHCP server

All connected computers are behind a firewall, have content filtering and email virus protection

Building Wide 802.11g secure WIFI network

One building tech on site to assist with troubleshooting and mentoring

OMS – Secondary

Each room has at least one computer. (The number of computers in classrooms varies between 1 and 6, dictated by teacher request.)

Business applications classroom with 30 computers

Resource Room Lab with 12 computers

Library computer lab with 20 computers

Two Computer labs with 25 computers each

Mobil lab with 20 computers

Two subnets of private IP addresses are assigned dynamically by DHCP servers

Some IP addresses are assigned statically for mission critical computers. (I.e. Main Office, Foodservices ...)

All connected computers are behind a firewall, have content filtering and email virus protection

Building Wide 802.11g secure WIFI network

One building tech on site to assist with troubleshooting and mentoring

Open High – Secondary

Capacity for 48 computers, currently have 25 computers.

All IP addresses are private and assigned dynamically by a DHCP server

All connected computers are behind a firewall, have content filtering and email virus protection

Building Wide 802.11g secure WIFI network

One building tech on site to assist with troubleshooting and mentoring

Admin

Capacity for 23 computers, currently have 20 computers

All IP addresses are private and assigned dynamically by a DHCP server

All connected computers are behind a firewall, have content filtering and email virus protection

Building Wide 802.11g secure WIFI network

AHS – Secondary

Each room is wired for at least 2 drops

Each room has at least one computer. (The number of computers in classrooms varies between 1 and 6, dictated by teacher request.)

Labs: Business Applications Lab with 30 PCs

Business Applications Lab with 16 PCs

Computer Science Lab with 18 PCs

Math Lab with 18 PCs

Library Lab with 15 PCs

English/Foreign Language Lab with 30 PCs

Publications Lab with 12 Macs

Art Lab with 3 Macs

Media Productions Lab with 8 High-end Macs and PCs
2 Mobil labs with 20 computers each
Building Wide 802.11g secure WIFI network
Two subnet of private IP addresses are assigned dynamically by DHCP servers
Another subnet of private IP addresses are assigned statically for mission critical computers. (I.e. Office, Foodservices ...)
All connected computers are behind a firewall, have content filtering and email virus protection
One building tech on site to assist with troubleshooting and mentoring

Description of LAN / WAN services:

Firewall Services

VPN/NAT routers disallow all inbound connections from the internet except those explicitly allowed. All publicly accessible internal servers run firewall software. VPNs provide WAN connectivity and security.

Content Filter. All web traffic throughout the WAN is directed to proxy/web content filters. Each Building has it's own content filter. This filter is a Linux server running Dansguardian content filtering software. This software utilized active content monitoring as well as commercial blacklisting services.

E-mail virus / spam protection: All e-mail is filtered through a Barracuda Spam Firewall, as well as a Linux server running MailScanner and Spamassassin.

Multi path routing at all buildings provides ISP failover for the entire district.

Servers

Our network is currently served by primarily Linux servers. These servers provide Network Client Authentication, File Sharing, Web, Backup and Print services. The district maintains four Windows 2003 servers. These servers provide Library Catalog, Student Information, Online Assessment and Curriculum services.

We have built redundancy into our network infrastructure by utilizing server virtualization. The district has a centralized backup system.

At all schools, all users have their own login, home directory, and web space accessible through their home directory. All home directories are backed up nightly and are constantly scanned for viruses.

E-mail

We have unlimited e-mail services provided by a Linux server. That server also provides web access to all staff e-mail. We strive to use e-mail as a primary means of communication between staff and administration. All e-mail is filtered through a Barracuda Spam Firewall, as well as a Linux server running MailScanner and Spamassassin.

Printing

We support only IP network printing devices such as HP Jet Direct or IPP enabled printers. We strive to have no computer share connected printers.

Web Site

Alamosa School District is constantly expanding and improving its web site. The website is built on top of an open source content management system. Many faculty members have web pages that provide resources to student and parents. Faculty and students have access to web space available through their home directory. We anticipate continuing to increase the number of faculty and students with web pages over the next three years.

Student Information System (SIS)

Our district uses a web based SIS called PowerSchool. PowerSchool is a Pearson product that includes PowerTeacher, a web based grade book software that all district teachers use. This SIS includes attendance, grading, student information, lunch program, and scheduling functions.

PowerSchool provides web-based access, making this system available to any/every computer, including home computers. PowerSchool also incorporates parental access so parents can view their students' grades, attendance, lunch data, etc.

Minimum Hardware Standard

PC – Pentium 4, 1.5 GHz, 1 GB RAM, and 40 GB hard drive or better

- Operating system Windows XP or Better.
- 100 Mb Ethernet card

The district is currently on a five-year planned obsolescence schedule. Any computers not conforming to the minimum standards will be replaced first.

Base System Software

Microsoft Office 2003 Professional

Mozilla Firefox

Inspiration/Kidspiration

APlus Online Curriculum

With the rise of web based services and applications it has become our goal to move away from local software applications when ever possible.

Description of Telecom Capacity

The following is a description of telecom capacity at each building with current equipment.

- 1 administration building
- 3 elementary schools
- 2 secondary schools
- 1 alternative school

Polston, Boyd & Evans

Each classroom has a telephone with access to all other extensions in the building as well as outside lines and E911 services.

Each extension has a voice mail box.

There are 3 outside lines available at any one time.

The phone system is a Meridian PBX with Voice Mail.

AOHS. AHS & OMS

Each classroom has a telephone with access to all other extensions in the building as well as outside lines and E911 services.

Each extension has a voice mail box.

This school is served by the phone system at the admin building.

The phone system is a Meridian PBX with Voice Mail.

There are 12 outside lines available at any one time.

ADMIN

Each office has a telephone with access to all other room in the building as well as outside lines an E911 services.

Each extension has a voice mail box.

This building is connected by T1 trunk to the phone system at AHS, allowing for inter-office communications with AOHS OMS and AHS.

The phone system is a Meridian PBX with Voice Mail.

There are 12 outside lines available at any one time.

Cellular Services

17 Cellular Telephones for key personal

All Administrators / Principals / Directors are provided with a cellular telephone to aid in effective and timely communication.

Assistive Technologies:

The Alamosa School District works closely with the San Luis Valley BOCS to identify needs and provide assistive technologies to those identified students. Currently Alamosa houses the severe needs population of the surrounding school districts. There are a number of assistive technologies currently in use in both classroom and lab settings. The BOCS staff provides the instruction and needs assessment, while the district support staff provides technical support and implementation of assistive technologies.

Community Access:

We believe that better communication is one of the great benefits technology can provide. The district website is the primary portal to allow for greater exchange of information with the community. For our parents and student access to grades, attendance, news, lunch balances and scheduling information is provided on the web by our student information system. The Alamosa school district offers online courses to

our students. These online courses are delivered by our APlus online curriculum server.

Technology Support Staff:

The district employs a Director of Technology, a Computer Technician, and a Technology Integration Specialist to facilitate the use of technology and information resources by all staff and students. Each building has a building tech that is responsible for general inquiries, minor troubleshooting and reporting problems to district level support staff. The district also employs one Media Specialist and three Media Para-professionals to staff our media centers and facilitate staff and students working with information resources and technology

Obsolescence Planning

The district has adopted a 5 year obsolescence plan. We let the curriculum needs dictate the software lifetime while maintaining current software patches. Outdated computers are donated to community members and organizations or recycled. The general fund supports this level of computer replacement with our current inventory.

Technology Budget 2009 – 2012

Annual Recurring costs:

Personnel: 1 IT Director General Fund \$42,000
Responsible for the overall technology implementation district wide.

Personnel: 1 Tech Integration Specialist Title \$42,000
Responsible for integrating technology in classroom instruction through curriculum development, staff development and classroom interactions.

Personnel: 1 Technician Title \$14,500
Responsible for assisting in Technology maintenance district wide.

Personnel: 5 Building Tech General Fund \$12,500
Responsible for assisting in Technology maintenance for one school.

Personnel: 2 Lab Para General Fund \$16,500
Responsible for managing school computer labs / scheduling / basic maintenance.

Service: 1 Student Information System General Fund \$9,200
Yearly maintenance agreement for Pearson – PowerSchool @ 2100 students

Service: 7 Internet Access General Fund/ Erate Discount 77% \$7,000
14 Mbps outbound internet access at 5 locations provided by two ISP's for redundancy.

Service: 37 Telcom / Long Distance General Fund/ Erate Discount 77% \$5,810
Local and Long Distance Telephone service at 7 Locations

Service: 19 Cellular service General Fund/ Erate Discount 77% \$3,320
Cellular telephones for Principals / Directors and Administrators.

Staff Dev. 1 Stipends / Material Title \$5,000

Staff Dev. 1 Travel / Training Title \$4,000

Hardware / Software 150 Planed Obsolescence General Fund \$48,000
Class Room computer replacement.

Hardware 1 Network LAN / WAN Maintenance General Fund \$5,000
Network cabling / switching maintenance and upgrades

2009 – 2010 Project costs

Hardware 2 Mobil Computer labs Title / General Fund \$45,000

Hardware 1 Server Storage Virtualization General Fund \$10,000

Hardware 2 Smart Classroom General Fund \$9,000

2010 – 2011 Project costs

Hardware	2	Mobil Computer labs	Title / General Fund	\$45,000
Hardware	1	Server upgrades	General Fund	\$10,000
Hardware	2	Smart Classroom	General Fund	\$9,000

2011 – 2012 Project costs

Software	900	Windows Upgrade	General Fund	\$30,000
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Total:

Annual Recurring Total: \$214,830
Annual General Fund Allotment: \$149,330
Annual Grant Funded Total: \$65,500
Total Planned Budget Expenditure 2009 – 2012: \$802,490

* A minimum of 25% of Title II-D funding will be designated for ETIL professional development.

Policies and Procedures

The district is committed to providing as many technology resources to as many people as possible. When there is a shortfall of technology funding or some other constraint, curriculum appropriateness is the deciding factor in technology allocation.

The Alamosa School District has policies in place to address safety, security, privacy, and legality issues regarding the use of technology. The district has school board policies that govern technology and its use in a broad oversight manner. There are building level policies to govern appropriate use, plagiarism, and safe school infractions. Yet a third set of policies is used by the technology department staff to ensure safe and efficient utilization of district technology resources.

District Level Policies

The district level policies apply to all students and staff. They are public record and published in every school library, at the community public libraries and online at <http://alamosa.k12.co.us/dist/pageboard-policies.html>. The adoption or change of school board policies are noted in the board minutes and posted on the district website.

School Board Policies:

Staff Acceptable Use — District Policy Files JS & JS-E

Student Acceptable Use — District Policy Files JS & JS-E

Copy Right Compliance — District Policy File EGAD

School Website Publishing — District Policy File JNDB

CIPA Compliance — District Policy File JS

Student Records Release — District Policy File JRA

Student Use of Electronic mail — District Policy File JA

School Level Policies

Each school requires its staff and students to sign an Acceptable Use Agreement at the beginning of each school year. These include the district requirements as well as school level policies that further define appropriate actions and consequences to specific school related issues. School level policies address the use of personal technologies such as cellular telephones or mp3 players. These policies also address student plagiarism concerns and safe school violations.

Technology Department Policies

The Technology Department has a set of policies to govern the safeguarding of sensitive information. These policies include student information sharing guidelines, network security audits, and proper data security precautions. Network data is constantly monitored by technology department staff for inappropriate use and student safety concerns. Any violation of school or board policy will be stopped and appropriate actions will be taken.

Network Security

Our network uses strict firewall policies to ensure that all internet traffic is directed through a web content filter. Our content filtering solution is a highly customized version of the open source software Dansguardian. This is the same software used in many commercial filtering appliances. The district network security policy enforces a secure perimeter so that inbound and outbound traffic is filtered for content and malware. The network infrastructure allows for fine grained logging of all user's computer activities.

Regular network security audits are performed from both inside and outside the network perimeter. We use the open source software Nessus to perform these tests. Nessus provides individual computer security audits to ensure operating system security. We also perform network wide security audits. Every effort is made to find and address vulnerabilities.

Data and network security and privacy are provided by strict firewall policies, encrypted backups, and a strong password policy.

Safe Schools and CIPA Compliance

The district's computer use policies address safe school concerns. All students and staff must sign this policy to gain access to their personal login. Consequences for violation of the rules set forth in this policy are clearly stated and strictly enforced.

The district addresses the issue of CIPA compliance on multiple levels. There is a Board CIPA Compliance Policy. The student and staff acceptable use policies address CIPA specifically. The technology staff monitors network use to ensure network filtering is active at all times. School level policies address specific use of school technology and outline the appropriate monitoring techniques employed by building staff to protect students from inappropriate content.

Action Plan with Goals, Objectives and Strategies

Due to budgetary constraints, our plan focuses on resources that are already in place in our district.

Goal 1: Student Achievement

Improve overall student achievement by addressing content area (reading and math) knowledge and skills with technology-supported components; aligned with state standards.

<p>Action Step 1: An average of 15% of our students in grades 3 – 8 will show improvement on CSAP in reading and math proficiency levels from the previous year.</p>		
Strategies:	Activities/Timeline	Responsible Parties & Budget
<p>Over the next three years, grades K-8 will work to make sure that each year:</p> <ul style="list-style-type: none"> ➤ 90% of students will show an eight-month growth in their Accelerated Reader score. ➤ teachers will utilize Accelerated Reader reports to help them keep their at-risk percentage below 10%. ➤ Teachers will utilize data from NWEA testing and the Alpine Achievement system for differentiating instruction for students. 	<ul style="list-style-type: none"> ➤ We implemented NWEA MAP testing in 2008-2009. Teachers need ongoing training to learn how to access the data, analyze the data, make decisions based on the data, and implement and track the effectiveness of these changes. Consistent training will occur over the next three years. ➤ All K-8 teachers will use Accelerated Reader in a consistent manner. ➤ Teachers will use the data in the PLC meetings in order to have the data drive their instruction. 	<p>Library Media Staff</p> <p>Technology Integration Specialist</p> <p>Literacy Specialists</p> <p>All K-8 school teachers</p> <p>**The annual cost for the RenLearn License is approximately \$5,200.</p>
<p>Comments:</p> <p>Alpine Achievement allows us to look at longitudinal data to see how many students remain stable and how many show improvement from year to year. We will use this data to evaluate our effectiveness in this area.</p>		

Goal 2: Staff Development

Provide ongoing professional development and instructional support which encourages the utilization of information resources and technology in the classroom and collaboration in Information Literacy and Educational Technology.

<p>Action Step 2: By the end of the 2011-2012 school year, 60% of our teaching staff will have participated in differentiated technology professional development.</p>		
Strategies:	Activities/Timeline	Responsible Parties & Budget
<p>Over the next three years, we will provide:</p> <ul style="list-style-type: none"> ➤ Basic Skills workshops for teachers who are not proficient on the technology assessment. The goals will be to increase their comfort level and prepare them for taking more advanced technology workshops. ➤ A variety of intermediate and advanced workshops focusing on web design, web 2.0 tools, and other technology integration as interest arises. ➤ Workshops focusing on data analysis using Alpine Achievement and NWEA. 	<p>The technology training lab will be used to provide technology workshops throughout the school year.</p> <ul style="list-style-type: none"> ➤ Full day workshops will be offered at least once a month. Teacher interest will drive the topics covered and the frequency. ➤ Summer workshops will be offered for teachers who prefer that structure. 	<p>Technology Integration Specialist</p> <p>Director of Technology</p> <p>**Cost is yet to be determined.</p>
<p>Comments: In 2008-2009, the Foreign Language teachers asked for technology training specific to their content area. The Technology Integration Specialist met with them for three half-day workshops. The content covered was targeted to their needs. There is evidence that these teachers are utilizing all of the content covered in their classrooms. The Technology Integration Specialist would like to see this model used with more teacher groups.</p>		

Goal 3: Technology Literate by 8th Grade

Provide ETIL opportunities to students so that by the end of their 8th grade year they will be technology literate.

<p>Action Step 1: In May of each school year, 90% of graduating 8th graders will be able to pass the InfoSource Learning Technology NETS – S2007 (or similar) online assessment.</p>		
Strategies:	Activities/Timeline	Responsible Parties & Budget
<p>Elementary School Keyboarding</p> <ul style="list-style-type: none"> ➤ We began a keyboarding curriculum at grades 4 and 5 in 2008-2009. Over the next three years, the curriculum will be modified to increase the content covered. <p>Middle School Computer Class</p> <ul style="list-style-type: none"> ➤ Historically, this was a keyboarding class. As students learn to touch type in grades 4 & 5, the 6th grade curriculum will change to an applications class. <p>Middle School Library</p> <ul style="list-style-type: none"> ➤ The Library Specialist will work with students to create the reference pages for their reports in a “just in time” manner. 	<p>Year 1</p> <ul style="list-style-type: none"> ➤ Modify the 5th grade keyboarding class to move through a review of touch typing in semester 1 and teaching applications in semester 2. ➤ Modify the 6th grade computer class so that only three weeks are spent on touch typing review and the remainder of the semester is spent on overall technology literacy. <p>Years 2 - 3</p> <ul style="list-style-type: none"> ➤ Revisit each computer class curriculum in May. Use the results of the technology assessment to help determine what additions/changes need to be made for these classes to be most effective. 	<p>Library Media Staff</p> <p>Technology Integration Specialist</p> <p>Evans Elementary & Middle School computer teachers</p> <p>**No cost to the district</p>
<p>Comments: Currently, all 4th & 5th grade students spend 30 minutes per week in a keyboarding class. All 6th grades spend one semester in a computer class where they learn how to use technology to improve upon their school products. All high school freshmen are required to take a one-semester technology class that focuses on ETIL skills. We will continue to fine-tune these classes to help students improve their ETIL skills.</p>		

Goal 3: Technology Literate by 8th Grade

Provide ETIL opportunities to students so that by the end of their 8th grade year they will be technology literate.

<p>Action Step 1: By the end of 2011-2012, 90% of middle school students will be actively involved in a technology enhanced lesson in each of their core curricular classes.</p>		
Strategies:	Activities/Timeline	Responsible Parties & Budget
<p>➤ As core curricular areas are developing a more structured curriculum, they will be encouraged to consider integrating technology in a consistent manner.</p>	<p>Year 1</p> <ul style="list-style-type: none"> ➤ Meet with teacher leaders in each core curricular areas during their PLC planning times to develop technology enhanced lessons for each grade level. <p>Years 2 - 3</p> <ul style="list-style-type: none"> ➤ Each teacher in each core curricular area will implement the lessons developed in year 1. ➤ The teacher leader group will meet each April to determine the effectiveness and practicality of these lessons and make adjustments as needed. 	<p>Middle School Library Staff</p> <p>Technology Integration Specialist</p> <p>Middle School teachers</p> <p>**No cost to the district</p>
<p>Comments: The schedule at our middle school changed immediately after submitting our 2006 ETIL plan. It has taken a couple of years to develop this new schedule so it is effective. Our middle school computer class, which used to cover all three grades, now is only offered in Grade 6. We need to develop a sustainable method for providing ETIL opportunities to students in Grades 7 & 8.</p> <p>The ETIL team developed a rubric for grading the ETIL portion of student work. We have also established 5th & 8th grade benchmarks. These will serve as a resource for our planning of technology enhanced lessons.</p>		

Evaluation

Each action step contains measurable objectives that will be used for evaluation. Many of these require an evaluation of Year 1 before deciding how to approach Years 2 and 3. In late March of each year, the ETIL team will meet to discuss the ETIL plan, make modifications as necessary, and approve ideas for the following year.

Student Evaluation:

Students will show an eight-month reading growth per school year in the Accelerated Reader program. Classroom teachers will be responsible for this.

Students will show improvements over time on their CSAP scores, specifically in the area of reading. Classroom teachers will be responsible for this.

Fifth Graders will be evaluated on their keyboarding and basic word processing skills in May. The keyboarding instructor and Technology Integration Specialist will be responsible for this.

Eighth Graders will be evaluated using InfoSource's NETS 2007 online assessment, until CDE provides a state-wide alternate. The Library Media Specialist will be responsible for scheduling this inside the Spring NWEA testing window.

Staff Evaluation:

Over the next three years, we will see a marked increase in the number of middle and high school teacher web sites, blogs or wikis. We will also see all teachers utilizing PowerSchool more effectively as a communication tool with parents and students. The Technology Integration Specialist will be responsible for this.

Over the next three years, we will see an increase in the number of units incorporating technology at the middle and high schools. The Technology Integration Specialist and Technology Director will be responsible for this.

Over the next three years, all teachers will be more effective at using Alpine to access their data and make data-drive decisions. Building principals will be responsible for this.

We will use a combination of our self evaluation tool and the online technology assessment with all staff members in March of each school year. The results of these will help drive the professional development for the following school year. The Technology Integration Specialist will be responsible for this.

2009 ETIL Plan Evidence

8th Grade Technology Literacy Scores

Spring 2009 – Infosource Student Technology Proficiency (NETS-S 2007) for Windows/Office 2003

Students scoring $\geq 75\%$ -- 7%

Spring 2010 – Technology Literacy Assessment Program (TLAP)

Students scoring $\geq 75\%$ -- 42%

Staff participation in Learning in a 2.0 World

Number of staff successfully completing the 3.0 Graduate Credit Hour course between October 1, 2009 and September 1, 2010:

Polston – 12

Boyd – 7

Evans – 5

OMS – 21

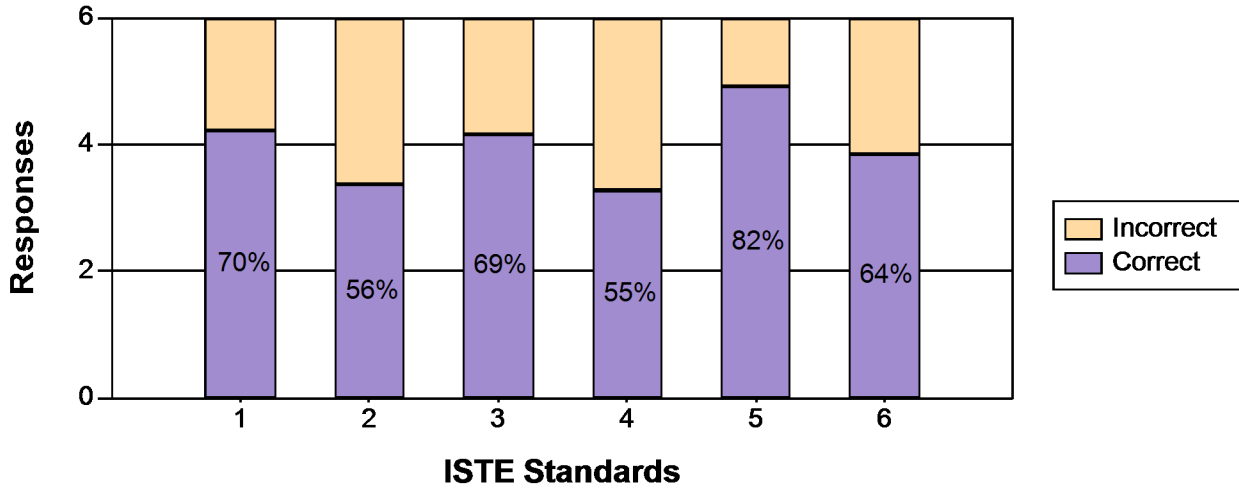
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8th Grade Technology Literacy School Results

School: Ortega Middle School (0114)	District: Alamosa RE-11J (0100)
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Average Results by ISTE Standard

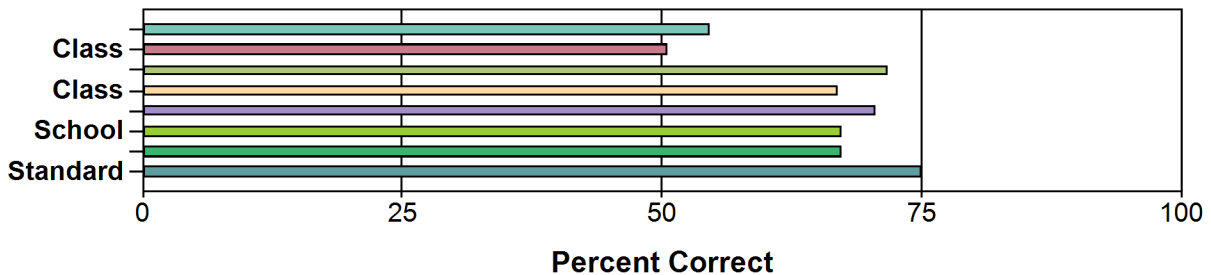


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|-------------------------------------|---|
| 1. Creativity and Innovation | 4. Critical Thinking, Problem-Solving & Decision-Making |
| 2. Communication and Collaboration | 5. Digital Citizenship |
| 3. Research and Information Fluency | 6. Technology Operations and Concepts |

School Summary

Registered Students: 141	Classes Assessed: 5
Assessments Completed: 125	Students Proficient: 53 (42%)

Class and School Proficiency Results



Group 1 2010 Average (71%)	Gooden 2010 Average (55%)
Group 2 2010 Average (67%)	School Average (67%)
Group 3 2010 Average (72%)	District Average (67%)
Jenkins 2010 Average (50%)	8th Grade Proficiency Standard (75%)