

STOREY COUNTY SCHOOL DISTRICT

TECHNOLOGY PLAN

FY 2011-2013

SCSD TECHNOLOGY COMMITTEE

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TABLE OF CONTENTS

SECTION IA – EXECUTIVE SUMMARY and MISSION/VISION STATEMENTS

EXECUTIVE SUMMARY

A. Introduction.....	I-1
B. Methodology	I-1
C. Critical Issues (Goals and Objectives)	I-2
D. Funding Requested/Required.....	I-3
E. Grade Level Assessment for Meeting State Standards.....	I-4
F. Conclusion.....	I-5

SECTION IB - MISSION and VISION STATEMENT

A. District Vision.....	I-6
B. SCSD Mission/Vision Statement Overview	I-6
C. Storey County School District Economic and Demographic Overview	I-8

SECTION II - INFRASTRUCTURE SITUATIONS

Past/Current/Future	II-1
Spring 2010 Inventory	II-3

SECTION III - STANDARDS INTEGRATION

National.....	III-1
State Draft Standards	III-1
Computer Content and Integration Curriculum	
Grades K-5	III-2
Grades 6-8.....	III-2
Grades 9-12.....	III-3
Articulation Agreements with 2+2 Institutions.....	III-3
K-5 Technology Standards	III-4
Grades 6-12 Technology Standards	III-24

SECTION IV - CRITICAL ISSUES (Goals and Objectives)

GOAL 1 – Communication.....	IV-1
GOAL 2 – Repairs and Supplies.....	IV-2
GOAL 3 – Training.....	IV-3
GOAL 4 – Scheduling	IV-4
GOAL 5 – Cyclic Replacement of Staff Computers	IV-5
GOAL 6 – Upgrades of Classroom Student Computers.....	IV-6
GOAL 7 – Cyclic Replacement of Library and Computer Classroom Labs	IV-7

SECTION V - APPENDICES

Topology.....	V-1
AUPs.....	V-7

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EXECUTIVE SUMMARY

A. Introduction

Over the last several months, the Storey County School District (SCSD) has been in the process of updating this Information Technology Plan. The 3-year plan is intended to present the District's Information Technology Plan for the fiscal years FY 2011-2013. The major focus of the Plan is to:

- Define the current and proposed information technology layout/topology for the District's technology
- Define goals and objectives that are consistent with National and State goals and objectives
- Define the status of technology into the District's curriculum
- Assess the funding required to bring the District up to/maintain Level I Standards
- Demonstrate that the District is focused on planning and pursuing a systematic process toward the integration of technology and training to enhance student learning and achievement

B. Methodology

The SCSD Technology Committee took the following major steps in the development of this technology plan:

- Inventoried existing hardware and peripheral devices
- Assessed current hardware, software and connectivity needs for attaining and maintaining Level I Standards, and prepared a proposed architecture and cost analysis for Commission on Educational Technology consideration
- Reviewed past/current computer technology mapping with sections of computer technology curriculum and reviewed how technology fits into all curriculum

C. Critical Issues (Goals and Objectives)

The seven (7) critical issues identified for this plan were:

- Communication
- Repairs and supplies
- Training
- Scheduling
- Upgrades of staff computers
- Upgrades of student computers
- Upgrades of Libraries and Computer Classrooms/Labs

Critical issues encompassing National and State directives were used as a guide in the development of the SCSD's goals and objectives for the plan period.

D. Funding Required

Care has been taken The SCSD has taken great care to estimate the funds that will be required to implement the Technology Plan for FY2011-FY2013 ... looking at the needs and how to equally divide the requested funds among the 3 years of this plan. The matrix below provides a summary of the District's funding requirements during the plan period. Appendix area in this plan provides a more detailed account of the funding necessary to implement this technology plan, as well as a summary of significant funding assumptions, which describe each line item in more detailcan be found in the Appendix.

DESCRIPTION	FY2010/11	FY2011/12	FY2012/13
Connectivity/Bandwidth	\$14,000	\$14,000.00	\$14,000.00
Servers	\$6,000	\$6,000	\$6,000
Workstations Student	\$50,000	\$50,000	\$50,000
Workstations Staff	\$15,000	\$15,000	\$15,000
Workstations/ Libraries / School Lab	\$34,000	\$34,000	\$34,000
Technical Education (HS)(*)	\$20,000	\$20,000	\$20,000
OtherProf Development (training, software, etc.)	\$10,000	\$10,000	\$10,000
Site Technology Supplies & Repair (paper, toner, cartridges, etc.)	\$10,000	\$10,000	\$10,000
Tech Support	\$30,000	\$30,000	\$30,000
Ongoing maintenance (computers/peripherals)	\$10,000	\$10,000	\$10,000
Total Projected Cost	\$199,000.00	\$199,000.00	\$199,000.00

(*) Technical Education involves computer education and industrial technology education. Although these two programs normally have been able to find out-of-district funding to help them in attempting to keep up-to-date in areas of technology, this line item is listed under funding requirements as areas are often requested to show sustainability within the school district.

E. Grade Level Assessments for Meeting State Standards

NOTE: The current State of Nevada Department of Education Standards indicate that (by the end of grades 3, 5, 8, and 12) students will meet certain levels of computer technology literacy for their grade/ age level. At the time of development of this technology plan, proposed standards are in draft form, awaiting approval by the state school board. This document reflects the anticipated adoption of the currently proposed standards.

- During the grading period (quarter or semester), class-work performances and testing for understanding occur with various projects at grades K-12.
- In order to monitor student progress toward meeting the computer technology state standards as well as non-computer literacy coursework, a cross-curricular multi-disciplinary project needs to be developed between computer curriculum and core subject curriculum.
- In order to transition computer technology into core curricular areas, the District Technology Committee recommends that within the first 12 months of this technology plan that:
 - A committee be created at each school site to develop a plan of action for implementation of the new standard. This committee should consist of one educator from each subject area (including technology).
 - Plan of action should include methods of training staff and method of measuring competency
 - The district technology committee take the plan of action gathered from each school site and meld it into an overall district plan in order to make recommendations to the School District for implementation.

F. Conclusion

This technology plan is intended to be a “dynamic” and “living” document that will be revised on a periodic basis. Further, the SCSD Technology Committee has set forth the visions, goals, and objectives in this plan to act as benchmarks from which to measure success. *NOTE: The degree to which this plan may be carried out is dependent upon sources of available funding.*

As in the past, a systematic process will be and/or has been used to achieve a comprehensive, District-wide assessment of technology needs for all end users (staff and students) including but not limited to:

- Telecommunication services, hardware, software, and other services to improve education or literacy.
- Adequate computer laboratories, classroom, and administrative computer workstations and associated peripherals
- A plan of action for implementation of computer technology standards integration. *(Please see Section E on previous page for more details.)*
- The implementation and maintenance of SAIN (System of Accountability Information for Nevada)

MISSION and VISION STATEMENT***A. District Vision***

“The Technology Committee will develop a K-12 technology plan that will be goal specific.”.

B. Storey County School District Technology Committee Mission/Vision Statement Overview

The general vision of the SCSD Technology Committee is that technology enhances learning when applied in a planned manner involving the careful integration of curriculum, training, software, and hardware resources across all four school sites and the District Office.

Our students require a variety of educational technologies to meet a wide variety of learning modalities and curricular needs.

- Technology helps us to cultivate a community of learners that extends beyond the boundaries of the traditional classroom. The SCSD Technology Committee acknowledges that technology is not only a specific subject to be taught but also a tool that assists learners to complete tasks. Our students require a multiplicity of educational technologies to meet a wide variety of learning modalities and curricular needs.
- The SCSD Technology Committee acknowledges that technology is not only a specific subject to be taught/learned but also a tool that assists learners to complete tasks. Technology helps us to cultivate a community of learners that extends beyond the boundaries of the traditional classroom.
- Access to interactive technology establishes connections to the world ... making education relevant and motivating students to be engaged in their learning and to remain in school. This connection to the “real world” inspires students to improve their technical and academic skills and better prepares them for the demands of an increasingly technological world.

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- The increased use of technology in our classrooms will significantly aid in contributing to increasing student achievement.
- Through the careful consideration of the various types of learners, Storey County School District will endeavor to provide an equal educational opportunity for all learners regardless of geographical or economic status. This opportunity extends to learners of all ages and is life-long.

In addition, technology has the potential to provide ready access to vital educational information for educators to make informed data-driven decisions to:

- *improve education,*
- *increase educational accountability, and*
- *continually improve the delivery of educational services to Storey County students of all ages. Related to this, programs such as SAIN (System of Accountability Information for Nevada) will play a significant role in the new millennium.*

As listed earlier, this plan is intended to be a “dynamic” and “living” document that will be revised on a periodic basis. Further, the SCSD Technology Committee has set forth the visions, goals, and objectives in this plan to act as benchmarks from which to measure success. *NOTE: The degree to which this plan may be carried out is dependent upon sources of available funding.*

DEMOGRAPHICS***C. Storey County School District Economic and Demographic Overview***

Demographics give a blueprint of the area surrounding the institution organization that will be implementing technology into its program. The demographics of Storey County contribute to the general quality of the learning experience.

Demographics stand to influence potential industrial and residential development. The demographic data listed below covers relevant aspects of Storey County and its four school sites. This section of the plan is important as demographics stand to influence potential industrial and residential development.

Area and Location

Storey County, located in the western part of the State, encompasses 262 square miles, ranking as the second smallest county in the State. The county borders:

- Washoe County on the north and west,
- Lyon County on the east, and
- Carson City County on the south.

The principal communities and population areas are: Virginia City, Gold Hill, Mark Twain, Virginia City Highlands and Lockwood/Rainbow Bend.

Established in 1861, **Virginia City** became the richest mining town in the world. San Francisco was built from the mines of the Comstock, and the Civil War was partially financed from the gold and silver discovered beneath the city. Today's Virginia City is remarkably the same as it was during its heyday with the wooden sidewalks, restored mansions, mine tours, "Old West" saloons, and the Piper Opera House. Mark Twain began his illustrious writing career at Virginia City's own "Territorial Enterprise" and one can visit his and many other museums and other historic sites all within walking distance in this richly historic town.

Today, much of Virginia City is remarkably the same as it was during its heyday with its wooden boardwalks, restored mansions, mine tours, "Old West" saloons, and Piper's Opera House. The city, within the surrounding Comstock Historic District, encompasses the Comstock mines and the town of Gold Hill located a mile south of the Virginia City divide. The entire area is now designated as a national landmark and is easy to reach, just 23 miles southeast of Reno and 23 miles northeast of Carson City.

Virginia City schools include Hugh Gallagher Elementary (K-5), Virginia City Middle School (VCMS) with grades 6-8, and Virginia City HS (VCHS) encompassing grades 9-12. Other than the K-5 school located in Lockwood/Rainbow Bend area, these three schools comprise the balance of the schools in the district.

Gold Hill is located one mile south of Virginia City on State Route 341. It is the present terminus of the Virginia and Truckee short line railroad with legislation to extend the railroad to Carson City. Gold Hill, part of the Comstock Historic District, is home to approximately 30 families. It shares municipal facilities and services with Virginia City. Residents of Virginia City and Gold Hill are employed locally or in either Carson City or Reno areas. Residents look to both cities as local urban centers.

Mark Twain is located six miles east of Virginia City at the base of Six Mile Canyon. It has a volunteer fire department and sheriff's substation. Composed of modular and mobile homes on one quarter (1/4) to five (5) acre plots, Mark Twain is beyond the boundaries of the Historic District. Many of the residents are employed in nearby Lyon County or Carson City. Carson City, the state capital, is the urban center for the Mark Twain area.

Virginia City Highlands is located 6 miles north of Virginia City on State Route 341, a planned community of 1 to 40 acre plots. Covenants and restrictions govern home construction in this upscale community. Most residents are employed in Reno or Sparks with these cities as the local urban centers. It has a volunteer fire department sub-station.

The Lockwood/Rainbow Bend area is located in the northern quadrant of Storey County east of Sparks, accessible from Interstate 80. Several old ranches follow the meandering of the Truckee River. Newer homes are of mobile or modular construction. Lockwood/Rainbow Bend is beyond the boundaries of the Historic District. Hillside Elementary, a K-5 school serves the area students. Older students are bussed to Virginia City via Interstate 80. The area has its own fire department and sheriff's substation.

TRI (Tahoe Reno Industrial) – east of Lockwood/Rainbow Bend is an industrial complex that has become an additional source of revenue for the county and therefore, SCSD. Future plans for development in/near this industrial area would potentially affect population of the county as more employees are required for the businesses. This could, then, affect school populations.

**Section SECTION II
INFRASTRUCTURE SITUATIONS**

INFRASTRUCTURE SITUATIONS

SITUATION	PAST (FY2001-2007)	CURRENT (FY2007-2010)	FUTURE (FY2011-2013)
CONNECTIVITY HGE Hillside VCMS VCHS	(2001-2004) <ul style="list-style-type: none"> ○ The District has five T-1 lines for Internet access and District integration. ○ All the schools have their own Local Area Network (LAN) and Internet Access. (2004-2007) <ul style="list-style-type: none"> ○ The District has 20 MB wireless between sites in VC and a T-1 to Lockwood and a T-1 to the Internet. ○ All the schools and the District Office have their own Local Area Network (LAN) and Internet Access. 	The connectivity includes: <ul style="list-style-type: none"> ○ 54 MB wireless between schools in Virginia City ○ Four T-1 connections to the Internet ○ One T-1 to Hillside Elementary ○ VCMS has wireless LAN capabilities ○ Cable TV access for VCHS and VCMS 	The District will continue with the following: <ul style="list-style-type: none"> ○ 54 MB wireless between schools in Virginia City ○ Four T-1 connections to the Internet ○ One T-1 to Hillside Elementary
INTERNET CAPABILITY HGE Hillside VCMS VCHS	(2004-2007) All the schools have their own Local Area Network (LAN) and a single Internet Access through the Wide-Area Network (WAN).	All the schools have their own Local Area Network (LAN) and a single Internet Access through the Wide-Area Network (WAN).	All the schools will continue to have their own Local Area Network (LAN) and a single Internet Access through the Wide-Area Network (WAN).

**Section SECTION II
INFRASTRUCTURE SITUATIONS**

SITUATION	PAST (FY2001-2007)	CURRENT (FY2007-2010)	FUTURE (FY2011-2013)
HARDWARE HGE Hillside VCMS VCHS	<p>(2001-2004)</p> <ul style="list-style-type: none"> ○ Mismatch of computer operating systems to a Dell Standard with Windows XP ○ No interactive whiteboards <p>(2004-2007)</p> <ul style="list-style-type: none"> ○ The renovation of VCMS and HGE during FY05/06 and FY 06/07 allowed updating of some of staff/student computer systems. ○ Summer 2006 – purchase of 15 interactive whiteboards, plus projectors and audio enhancement for use at Hillside Elementary (HSE) and VCMS. <i>This has allowed more flexibility in teaching methods to increase visibility of information to more students at one time and more interactive teaching methods.</i> ○ Limited donations of faster computers has allowed beginning of upgrading of staff computer hardware at VCHS. <p>Current district status # workstations (Staff & students) - 225 16 servers</p>	<ul style="list-style-type: none"> ○ Although purchase of new computers occurred in the district, XP licensing was continued ○ 30 Interactive Whiteboard layouts ○ 30 audio enhancement systems ○ 32 LCD projectors, ○ IAV at VCHS ○ Upgraded school labs in 3 of 4 schools ○ Upgraded all staff computers ○ Upgraded servers 	<ul style="list-style-type: none"> ○ Upgrade all student computers that are older than 5-years old ○ Start an annual rotation of 25% of all district-wide computers and servers on an annual basis

**Section SECTION II
INFRASTRUCTURE SITUATIONS**

SPRING 2010 INVENTORY

DISTRICT OFFICE

SITE	Technology Type	Newer Than 5 Years Old		Older than 5 Years Old	
		Staff		Staff	
District level Staff	Computers				
	Desktop	10		2	
	Laptop	7			
	Fax Machine	1			
	Copier/Riso	2			
	Printer				
	Laser				
	Color				
	B&W	7		1	
	Inkjet		1		
	Multi Function				
	Camera				
	Digital	1			
	Servers	8			
	Misc				
IPOD	1				

**Section SECTION II
INFRASTRUCTURE SITUATIONS**

HUGH GALLAGHER ELEMENTARY

.SITE	Technology Type	Newer Than 5 Years Old		Older than 5 Years Old	
		Staff	Student	Staff	Student
Hillside Gallagher Elementary	Computers				
	Desktop	7	22		4
	Laptop			1	
	Fax Machine	1			
	Copier/Riso	1			
	Printer				
	Laser				
	Color	2			
	B&W			3	
	Inkjet			2	
	Multi Function	1			
	Whiteboards	6			
	LCD Projectors	6			
	Audio Enhancements	6			
	Camera				
	Digital	1			
	Document	1			
	Servers	2			
	Misc				
	Response Systems	2			

**Section SECTION II
INFRASTRUCTURE SITUATIONS**

HILLSIDE ELEMENTARY

SITE	Technology Type	Newer Than 5 Years Old		Older than 5 Years Old	
		Staff	Student	Staff	Student
Hugh Gallagher Elementary	Computers				
	Desktop	12	1	1	43
	Laptop			2	
	Fax Machine	1			
	Copier/Riso	2			
	Printer				
	Laser				
	Color	1		1	
	B&W	7			
	Inkjet	2			
	Multi Function	1			
	Whiteboards	4		2	
	LCD Projectors	4		2	
	Audio Enhancements	6			
	Camera				
	Servers	2			
	Misc				
	Response Systems			1	

**Section SECTION II
INFRASTRUCTURE SITUATIONS**

VIRGINIA CITY MIDDLE SCHOOL

SITE	Technology Type	Newer Than 5 Years Old		Older than 5 Years Old	
		Staff	Student	Staff	Student
Virginia City Middle School	Computers				
	Desktop	8	49		13
	Laptop	2	22		
	Fax Machine	1			
	Copier/Riso	2			
	Printer				
	Laser				
	Color	1			
	B&W	6		2	
	Inkjet		4		1
	Multi Function	6			
	Whiteboards	7		1	
	LCD Projectors	8			
	Audio Enhancements	8			
	Camera				
	Digital	3			
	Document	1			
	Servers	2			
	Misc				
	IPOD's	3	50		

**Section SECTION II
INFRASTRUCTURE SITUATIONS**

VIRGINIA CITY HIGH SCHOOL

SITE	Technology Type	Newer Than 5 Years Old		Older than 5 Years Old	
		Staff	Student	Staff	Student
Virginia City High School	Computers				
	Desktop	19	58		12
	Laptop	6			
	Fax Machine	1			
	Copier/Riso	3			
	Printer				
	Laser				
	Color	3			
	B&W	3		11	
	Inkjet	2		5	
	Multi Function	2			
	Whiteboards	10			
	LCD Projectors	11		1	
	Audio Enhancements	11			
	Camera				
	Digital	5			
	Video	5			
	Document	1		1	
	Servers	2			
	Misc				
	Response Systems	3		1	
	Graphic Calculator			3	

STANDARDS INTEGRATION

NETS*S (National) (*NETS for Students*)

The primary goal of the ISTE NETS Project is to enable stakeholders in PreK-12 education to develop national standards for educational uses of technology that facilitate school improvement in the United States. The NETS Project will work to define standards for students, integrating curriculum technology, technology support, and standards for student assessment and evaluation of technology use¹

STATE DRAFT STANDARDS

(Beginning FY 2011 and based upon ISTE NET*s STANDARDS and approval by NV State Board of Education in May 2010.)

- 1. Creativity and Innovation:** *Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.*
- 2. Communication and Collaboration:** *Students 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.*
- 3. Research and Information Fluency:** *Students apply digital tools to gather, evaluate, and use information.*
- 4. Critical Thinking, Problem Solving, and Decision Making:** *Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.*
- 5. Digital Citizenship:** *Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.*
- 6. Technology Operations and Concepts:** *Students demonstrate a sound understanding of technology concepts, systems, and operations.*

As standards become approved, further information may also be found on the state website (http://nde.doe.nv.gov/Standards_ComputerTech_Standards.html) – Current information at the indicated site (as of April 2010) lists current standards – not those in draft form awaiting approval.

¹ <http://cnets.iste.org/>

COMPUTER CONTENT AND INTEGRATION CURRICULUM
Grades K-5
(HUGH GALLAGHER ELEMENTARY and HILLSIDE ELEMENTARY SCHOOLS)

Standards are addressed by the State of Nevada at Grades 2 and 5. (*Previously, standards for elementary were addressed for completion by Grades 3 and 5.*)

Computer and technology education is integrated within all grade level curriculum (K-5). All teachers share this responsibility for student success.

Early learning experiences build the foundations for later learning. Integrating computer skills and technology concepts provides tremendous opportunity for students to apply knowledge through the design and use of materials and processes, to systematically solve real problems, and to gain new knowledge. Critical thinking, teamwork, research and development, experimentation, and testing help deliver the goals of the elementary curriculum and enrich the entire learning and teaching process.

COMPUTER CONTENT AND INTEGRATION CURRICULUM
Grades 6-8
(VIRGINIA CITY MIDDLE SCHOOL)

Standards for grades 6-8 are addressed by the State of Nevada at Grade 8.

Computer and technology education is integrated within all grade level curriculum (grades 6-8). A computer teacher is responsible for computer education curriculum at grades 6 and 7. No Computer class is taught during the 8th grade year – 8th grade students are responsible for demonstrating skills learned at previous grade levels. All teachers share this responsibility for student success.

Early learning experiences build the foundations for later learning. Integrating computer skills and technology concepts provides tremendous opportunity for students to apply knowledge through the design and use of materials and processes, to systematically solve real problems, and to gain new knowledge. Critical thinking, teamwork, research and development, experimentation, and testing help deliver the goals of the middle school curriculum and enrich the entire learning and teaching process.

COMPUTER CONTENT AND INTEGRATION CURRICULUM
Grades 9-12
VIRGINIA CITY HIGH SCHOOL

STANDARDS and course requirements for graduation from high school.

Computer and technology education is integrated within all grade level curriculum (grades 9-12). A computer teacher is responsible for computer education curriculum needed to meet state/district graduation requirements. Computers IA is the computer education class which meets graduation requirements and is used to show documentation of completion of requirements. All teachers have responsibility for supporting student integration of technology into each curriculum area.

Early learning experiences build the foundations for later learning. Integrating computer skills and technology concepts provides tremendous opportunity for students to apply knowledge through the design and use of materials and processes, to systematically solve real problems, and to gain new knowledge. Critical thinking, teamwork, research and development, experimentation, and testing help deliver the goals of the high school curriculum and enrich the entire learning and teaching process.

ARTICULATION AGREEMENTS with 2+2 institutions:

In addition to combining/coordinating with K-12 district and state curriculum, VCHS has articulated computer education classes with WNC (Western NV College) for several years. In current progress are courses

This has allowed junior and senior grade level students the possibility of receiving post secondary credit for some of the work done at high school level in a Tech Prep environment. *NOTE: Freshmen and Sophomore students who have taken the classes listed below – if taking additional courses as juniors or seniors in the same subject area, may use courses from their freshman and sophomore years to count toward Tech Prep credit.*

Courses in the computer education curriculum which have previously been accepted/ articulated between the community college and VCHS have included:

- Computers IA – Computer Literacy
- Computers IIA/IIB
- Graphics
- Word Processing/Desktop Publishing I and II

At the present time, communication is in progress for revising some of the Tech Prep classes in the above areas for current Tech Prep credit.

Area	National Indicator	Standard	K	1 st	2 nd
1. Creativity and Innovation: <i>Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</i>	A. Apply existing knowledge to generate new ideas, products or processes.	1.2.A.1 Use digital tools to brainstorm and organize new ideas.	<i>Use of interactive whiteboards, and/or organizational software such as Inspiration or other graphic organizer.</i>	<i>Use of interactive whiteboards, and/or organizational software such as Inspiration or other graphic organizer.</i>	<i>Use of interactive whiteboards, and/or organizational software such as Inspiration or other graphic organizer.</i>
	B. Create original works as a means of personal or group expression	1.2.B.1 Create an original work using a variety of digital tools as a means of personal or group expression.	<i>Use of graphic design software and word processing.</i>	<i>Use of graphic design software and word processing.</i>	<i>Use of graphic design software and word processing.</i>
	C. Use models and simulations to explore complex systems and issues.	1.2.C.1 Use digital models and simulations with teacher assistance.	<i>Use of resources such as Foss Web and virtual manipulatives</i>	<i>Use of resources such as Foss Web and virtual manipulatives</i>	<i>Use of resources such as Foss Web and virtual manipulatives</i>

	D. Identify trends and forecast possibilities.	1.2.D.1 Identify patterns and predict possibilities with classroom data using digital tools.	<i>Use of interactive whiteboard tools, digital cameras, and Web resources as needed.</i>	<i>Use of interactive whiteboard tools, digital cameras, and Web resources as needed.</i>	<i>Use of interactive whiteboard tools, digital cameras, and Web resources as needed.</i>
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Area	National Indicator	Standard	3rd	4th	5th
1. Creativity and Innovation: <i>Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</i>	A. Apply existing knowledge to generate new ideas, products or processes.	1.5.A.1 Process new ideas based on existing knowledge to brainstorm solutions to an authentic problem using digital tools	Use of interactive whiteboards, and/or organizational software such as Inspiration or other graphic organizer.	Use of interactive whiteboards, and/or organizational software such as Inspiration or other graphic organizer.	Use of interactive whiteboards, and/or organizational software such as Inspiration or other graphic organizer.
	B. Create original works as a means of personal or group expression	1.5.B.1 Create an original, digital work as a form of personal or group expression with minimal teacher support.	Use of graphic design software, word processing, spreadsheet, and presentation software.	Use of graphic design software, word processing, spreadsheet, and presentation software.	Use of graphic design software, word processing, spreadsheet, and presentation software.
	C. Use models and simulations to explore complex systems and issues.	1.5.C.1 Use digital models and simulations to explore complex systems and issues.	Use of resources such as Foss Web, virtual manipulatives, and Web resources as needed.	Use of resources such as Foss Web, virtual manipulatives, and Web resources as needed.	Use of resources such as Foss Web, virtual manipulatives, and Web resources as needed.
	D. Identify trends and forecast possibilities.	1.5.D.1 Identify and represent trends and make predictions using classroom data.	Use of interactive whiteboard tools, digital cameras, graphing software, and Web resources as needed.	Use of interactive whiteboard tools, digital cameras, graphing software, and Web resources as needed.	Use of interactive whiteboard tools, digital cameras, graphing software, and Web resources as needed.

Area	National Indicator	Standard	K	1st	2nd
2. Communication and Collaboration: <i>Students 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.</i>	A. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.	2.A.2.1 Work in classroom groups to create and publish digital products.	Students and teacher can collaborate to create class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc.	Students and teacher can collaborate to create class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc.	Students and teacher can collaborate to create class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc.
	B. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.	2.B.2.1 Communicate information and ideas to peers and parents using digital text and illustrations.	Students and teacher can collaborate to create and publish class projects such as: class web page, online newsletter, presentations, etc.	Students and teacher can collaborate to create and publish class projects such as: class web page, online newsletter, presentations, etc.	Students and teacher can collaborate to create and publish class projects such as: class web page, online newsletter, presentations, etc.
	C. Develop cultural understanding and global awareness by engaging with learners of other cultures.	2.C.2.1 Use digital resources to learn about places, people, celebrations, and maps.	Use of supplemental digital materials from textbook companies and Internet resources.	Use of supplemental digital materials from textbook companies and Internet resources.	Use of supplemental digital materials from textbook companies and Internet resources.

	D. Contribute to project teams to produce original works or solve problems.	2.D.2.1 Work in a team to solve problems using digital tools.	Teacher will use available digital tools and resources to demonstrate problem solving strategies in a variety of situations.	Teacher will use available digital tools and resources to demonstrate problem solving strategies in a variety of situations.	Teacher will use available digital tools and resources to demonstrate problem solving strategies in a variety of situations.
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Area	National Indicator	Standard	3rd	4th	5th
2. Communication and Collaboration: Students use digital media and environments to communicate and	A. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.	2.A.5.1 Collaborate to create and publish digital products to share beyond the classroom.	Students and teacher can collaborate to create class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc.	Students and teacher can collaborate to create class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc.	Students and teacher can collaborate to create class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc.
	B. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.	2.B.5.1 Communicate information and ideas using digital text, images, and sound. 2.B.5.2 Describe appropriate media and formats for specific audiences.	Students and teacher can collaborate to create and publish class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc. Students determine appropriateness of format.	Students and teacher can collaborate to create and publish class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc. Students determine appropriateness of format.	Students and teacher can collaborate to create and publish class projects such as: digital movies, photos, class web page, online newsletter, presentations, digital recordings, etc. Students determine appropriateness of format.
	C. Develop cultural understanding and global awareness by engaging with learners of other cultures.	2.C.5.1 Use digital resources to research about places, people, and world cultures.	Use of supplemental digital materials from textbook companies, Internet resources, and online databases.	Use of supplemental digital materials from textbook companies, Internet resources, and online databases	Use of supplemental digital materials from textbook companies, Internet resources, and online databases

	<p>D. Contribute to project teams to produce original works or solve problems.</p>	<p>2.D.5.1 Contribute to a group production of an original digital work. 2.D.5.2 Describe a variety of ways to interact and contribute to a digital product.</p>	<p>Students will use available digital tools and resources to contribute to a group product.</p> <p>Students can describe various ways of working together to create a digital product.</p>	<p>Students will use available digital tools and resources to contribute to a group product.</p> <p>Students can describe various ways of working together to create a digital product.</p>	<p>Students will use available digital tools and resources to contribute to a group product.</p> <p>Students can describe various ways of working together to create a digital product.</p>
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Area	National Indicator	Standard	K	1 st	2 nd
3. Research and Information Fluency. <i>Students apply digital tools to gather, evaluate, and use information</i>	A. Plan strategies to guide inquiry.	3.A.2.1 Determine steps to answer a question using digital tools.	Teacher-driven discussion to guide students in questioning strategies on an interactive whiteboard.	Teacher-driven discussion to guide students in questioning strategies on an interactive whiteboard.	Teacher-driven discussion to guide students in questioning strategies on an interactive whiteboard.
	B. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.	3.B.2.1 Identify and organize keywords and use multiple sources to answer an essential question.	Teacher-driven discussion to guide students in appropriate search methods, and use of keywords to search digital databases or online search engines.	Teacher-driven discussion to guide students in appropriate search methods, and use of keywords to search digital databases or online search engines.	Teacher-driven discussion to guide students in appropriate search methods, and use of keywords to search digital databases or online search engines.
	C. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.	3.C.2.1 Recognize that different information sources and digital tools are appropriate for different tasks	Teacher will demonstrate the appropriate use of various software applications and digital resources. ie: students will know to use a word processing program to type a story.	Teacher will demonstrate the appropriate use of various software applications and digital resources. ie: students will know to use a word processing program to type a story.	Teacher will demonstrate the appropriate use of various software applications and digital resources. ie: students will know to use a word processing program to type a story.

	D. Process data and report results.	3.D.2.1 Collect and display data using a variety of technology resources and report results.	Teacher and students will use an interactive whiteboard and/or appropriate software to display the results of classroom data collection.	Teacher and students will use an interactive whiteboard and/or appropriate software to display the results of classroom data collection.	Teacher and students will use an interactive whiteboard and/or appropriate software to display the results of classroom data collection.
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Area	National Indicator	Standard	3rd	4th	5th
3. Research and Information Fluency: <i>Students apply digital tools to gather, evaluate, and use information.</i>	A. Plan strategies to guide	3.A.5.2 Use digital tools to plan a timeline and track progress for a research project.	Students, with teacher guidance, will use organizational software to plan progress for a project.	Students, with teacher guidance, will use organizational software to plan progress for a project.	Students, with teacher guidance, will use organizational software to plan progress for a project.
	B. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.	3.B.5.1 Use keywords to search, organize, locate, and synthesize information in multiple sources to create an original product. 3.B.5.2 Explain the importance of using more than one source and recognize possible bias in digital resources.	With teacher guidance, students will use appropriate search methods and keywords to search multiple digital databases and/or online search engines to compile, organize, and synthesize information to create an original product. Students will demonstrate an understanding that not all digital resources are reliable sources of information. Students will use multiple sources to verify facts.	With teacher guidance, students will use appropriate search methods and keywords to search multiple digital databases and/or online search engines to compile, organize, and synthesize information to create an original product. Students will demonstrate an understanding that not all digital resources are reliable sources of information. Students will use multiple sources to verify facts.	With teacher guidance, students will use appropriate search methods and keywords to search multiple digital databases and/or online search engines to compile, organize, and synthesize information to create an original product. Students will demonstrate an understanding that not all digital resources are reliable sources of information. Students will use multiple sources to verify facts.

	<p>C. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.</p>	<p>3.C.5.1 Discern between facts and opinions in digital content.</p> <p>3.C.5.2 Select and use a digital tool appropriate to a task.</p>	<p>Students will apply an understanding of fact and opinion to evaluating the reliability of digital resources.</p> <p>Students will select and use an appropriate digital tool to complete a task.</p>	<p>Students will apply an understanding of fact and opinion to evaluating the reliability of digital resources.</p> <p>Students will select and use an appropriate digital tool to complete a task.</p>	<p>Students will apply an understanding of fact and opinion to evaluating the reliability of digital resources.</p> <p>Students will select and use an appropriate digital tool to complete a task.</p>
	<p>D. Process data and report results.</p>	<p>3.D.5.1 Collect, organize, analyze and manipulate data using digital tools and report results in a format appropriate to the task.</p>	<p>Students will demonstrate the ability to choose appropriate digital tools to manage and report data for any given task.</p>	<p>Students will demonstrate the ability to choose appropriate digital tools to manage and report data for any given task.</p>	<p>Students will demonstrate the ability to choose appropriate digital tools to manage and report data for any given task.</p>

Area	National Indicator	Standard	K	1 st	2 nd
4. Critical Thinking, Problem Solving, and Decision Making: <i>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</i>	A. Identify and define authentic problems and significant questions for investigation.	4.A.2.1 Investigate an authentic problem using digital resources.	Teacher will model how to use digital resources to investigate answers to everyday questions/problems that students generate.	Teacher will model how to use digital resources to investigate answers to everyday questions/problems that students generate.	Teacher will model how to use digital resources to investigate answers to everyday questions/problems that students generate.
	B. Plan and manage activities to develop a solution or complete a project.	4.B.2.1 Use a digital planning tool.	Teacher will model the use of digital planning tools to manage long term classroom projects.	Teacher will model the use of digital planning tools to manage long term classroom projects.	Teacher will model the use of digital planning tools to manage long term classroom projects.
	C. Collect and analyze data to identify solutions and/or make informed decisions.	4.C.2.1 Use data to answer an authentic problem using digital tools.	Teacher will guide students in collecting and using data to digitally display answers to authentic problems.	Teacher will guide students in collecting and using data to digitally display answers to authentic problems.	Teacher will guide students in collecting and using data to digitally display answers to authentic problems.
	D. Use multiple processes and diverse perspectives to explore alternative solutions.	4.D.2.1 Explore alternative solutions to and diverse perspectives on authentic problems using digital tools.	Teacher will model, using digital tools, that there is more than one way to evaluate a problem.	Teacher will model, using digital tools, that there is more than one way to evaluate a problem.	Teacher will model, using digital tools, that there is more than one way to evaluate a problem.

Area	National Indicator	Standard	3rd	4th	5th
4. Critical Thinking, Problem Solving, and Decision Making. <i>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</i>	A. Identify and define authentic problems and significant questions for investigation.	4.A.5.1 Create essential questions to guide investigation of an authentic problem using digital resources.	Students will use digital resources to investigate answers to everyday questions/problems that arise.	Students will use digital resources to investigate answers to everyday questions/problems that arise.	Students will use digital resources to investigate answers to everyday questions/problems that arise.
	B. Plan and manage activities to develop a solution or complete a project.	4.B.5.1 Plan and manage projects using a digital planning tool.	Students will demonstrate a basic knowledge of digital planning software to track the progress of a project.	Students will demonstrate a basic knowledge of digital planning software to track the progress of a project.	Students will demonstrate a basic knowledge of digital planning software to track the progress of a project.
	C. Collect and analyze data to identify solutions and/or make informed decisions.	4.C.5.1 Propose a solution to an authentic problem using collected data and digital tools and.	Students will demonstrate the ability to propose solutions to real-world problems using collected data and digital tools.	Students will demonstrate the ability to propose solutions to real-world problems using collected data and digital tools.	Students will demonstrate the ability to propose solutions to real-world problems using collected data and digital tools.
	D. Use multiple processes and diverse perspectives to explore alternative solutions.	4.D.5.1 Explore alternative solutions to and diverse perspectives on authentic problems and propose a solution using digital tools.	Students will use digital tools to demonstrate that problems can have multiple perspectives and/or solutions.	Students will use digital tools to demonstrate that problems can have multiple perspectives and/or solutions.	Students will use digital tools to demonstrate that problems can have multiple perspectives and/or solutions.

Area	National Indicator	Standard	K	1st	2nd
5. Digital Citizenship: <i>Students understand human, cultural, and societal issues related to technology</i>	A. Advocate and practice safe, legal, and responsible use of information and technology.	5.A.2.1 List classroom rules of safe technology use. 5.A.2.2 List potential dangers in digital environments and how to report potentially unsafe situations.	Students will be able to locate and refer to classroom rules for safe internet use. Students will demonstrate knowledge of age-appropriate potential threats in digital environments, and know to report unsafe situations.	Students will be able to locate and refer to classroom rules for safe internet use. Students will demonstrate knowledge of age-appropriate potential threats in digital environments, and know to report unsafe situations.	Students will be able to locate and refer to classroom rules for safe internet use. Students will demonstrate knowledge of age-appropriate potential threats in digital environments, and know to report unsafe situations.
	B. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.	5.B.2.1 Use technologies in learning activities.	Teachers will guide students in using technologies in all learning activities, where appropriate.	Teachers will guide students in using technologies in all learning activities, where appropriate.	Teachers will guide students in using technologies in all learning activities, where appropriate.
	C. Demonstrate personal responsibility for lifelong learning.	5.C.2.1 Describe how technology can enhance learning.	Teachers will guide students to explain how technology can enhance learning.	Teachers will guide students to explain how technology can enhance learning.	Teachers will guide students to explain how technology can enhance learning.

	D. Exhibit leadership for digital citizenship.	5.D.2.1 Describe the meaning and responsibilities of digital citizenship.	Students will be able to explain, age-appropriately, the concept of digital citizenship and how it applies to their personal use of technology.	Students will be able to explain, age-appropriately, the concept of digital citizenship and how it applies to their personal use of technology.	Students will be able to explain, age-appropriately, the concept of digital citizenship and how it applies to their personal use of technology.
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Area	National Indicator	Standard	3rd	4th	5th
<p>5. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior</p>	<p>A. Advocate and practice safe, legal, and responsible use of information and technology.</p>	<p>5.A.5.1 Describe codes of conduct for using technology at school and the consequences for breaking those rules. 5.A.5.2 Describe unacceptable and unsafe behaviors in digital environments such as cyber-bullying, divulging personal information, and plagiarism.</p>	<p>Students will be able to describe and adhere to appropriate conduct regarding the use of technology at school, and accept subsequent consequences for breaking those rules.</p> <p>Students will demonstrate knowledge of age-appropriate potential threats and unsafe behaviors in digital environments, such as such as cyber-bullying, divulging personal information, and plagiarism. Students will know to report unsafe situations.</p>	<p>Students will be able to describe and adhere to appropriate conduct regarding the use of technology at school, and accept subsequent consequences for breaking those rules.</p> <p>Students will demonstrate knowledge of age-appropriate potential threats and unsafe behaviors in digital environments, such as such as cyber-bullying, divulging personal information, and plagiarism. Students will know to report unsafe situations.</p>	<p>Students will be able to describe and adhere to appropriate conduct regarding the use of technology at school, and accept subsequent consequences for breaking those rules.</p> <p>Students will demonstrate knowledge of age-appropriate potential threats and unsafe behaviors in digital environments, such as such as cyber-bullying, divulging personal information, and plagiarism. Students will know to report unsafe situations.</p>

	B. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.	5.B.5.1 Use technology resources for problem solving, self-directed learning, collaboration, and extended learning activities.	Students will use technologies in all learning activities, where appropriate.	Students will use technologies in all learning activities, where appropriate.	Students will use technologies in all learning activities, where appropriate.
	C. Demonstrate personal responsibility for lifelong learning.	5.C.2.1 Describe how technology can enhance learning tasks.	Students can explain how technology can enhance learning.	Students can explain how technology can enhance learning.	Students can explain how technology can enhance learning.
	D. Exhibit leadership for digital citizenship.	5.D.5.1 Explain the concepts of digital etiquette, access, and literacy and the personal and societal responsibilities attached to each.	Students will be able to explain, age-appropriately, the concept of digital etiquette, access, and literacy and the personal and societal responsibilities attached to each.	Students will be able to explain, age-appropriately, the concept of digital etiquette, access, and literacy and the personal and societal responsibilities attached to each.	Students will be able to explain, age-appropriately, the concept of digital etiquette, access, and literacy and the personal and societal responsibilities attached to each.

Area	National Indicator	Standard	K	1st	2nd
6. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems, and operations.</i>	A. Understand and use technology systems.	6.A.2.1 List examples of technology tools.	Students will be able to list technology tools relevant to their scope of learning.	Students will be able to list technology tools relevant to their scope of learning.	Students will be able to list technology tools relevant to their scope of learning.
	B. Select and use applications effectively and productively	6.B.2.1 Navigate age-appropriate software.	Students will be able to independently navigate age-appropriate software.	Students will be able to independently navigate age-appropriate software.	Students will be able to independently navigate age-appropriate software.
	C. Troubleshoot systems and applications.	6.C.2.1 Demonstrate proper care of equipment.	Students will understand that food and water do not complement electronic equipment.	Students will understand that food and water do not complement electronic equipment.	Students will understand that food and water do not complement electronic equipment.
	D. Transfer current knowledge to learning of new technologies	6.D.2.1 Use routine procedures with classroom technology tools.	Students will understand and demonstrate that there are specific procedures required in order to properly utilize classroom technology tools.	Students will understand and demonstrate that there are specific procedures required in order to properly utilize classroom technology tools.	Students will understand and demonstrate that there are specific procedures required in order to properly utilize classroom technology tools.

Area	National Indicator	Standard	3rd	4th	5th
6. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems, and operations.</i>	A. Understand and use technology systems.	6.A.5.1 Give examples of technology systems.	Students will be able to list technology systems such as the Internet, cell phones, and computer networks relevant to their scope of learning.	Students will be able to list technology systems such as the Internet, cell phones, and computer networks relevant to their scope of learning.	Students will be able to list technology systems such as the Internet, cell phones, and computer networks relevant to their scope of learning.
	B. Select and use applications effectively and productively .	6.B.5.1 Select appropriate digital tools for learning activities.	Students will be able to select and use the appropriate digital tools for any given task.	Students will be able to select and use the appropriate digital tools for any given task.	Students will be able to select and use the appropriate digital tools for any given task.
	C. Troubleshoot systems and applications.	6.C.5.1 Analyze and apply given strategies for solving routine hardware and software problems.	Students will be able to demonstrate problem-solving strategies for routine hardware and software problems.	Students will be able to demonstrate problem-solving strategies for routine hardware and software problems.	Students will be able to demonstrate problem-solving strategies for routine hardware and software problems.
	D. Transfer current knowledge to learning of new technologies .	6.D.5.1 Generalize routine procedures across a variety of technologies.	Students will understand and demonstrate that there are specific procedures required in order to properly utilize a variety of classroom technology tools.	Students will understand and demonstrate that there are specific procedures required in order to properly utilize a variety of classroom technology tools.	Students will understand and demonstrate that there are specific procedures required in order to properly utilize a variety of classroom technology tools.

Nevada Computer and Technology Standards

1. **Creativity and Innovation:** *Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.*

National Indicator	By End of →	6TH GRADE	7TH GRADE	8TH GRADE	By End of →	12TH GRADE
A. Apply existing knowledge to generate new ideas, products or processes	1.8.A.1 Apply existing knowledge to independently generate – new ideas, products, or processes with digital tools	<i>Use of interactive whiteboard, and/or organizational software such as Inspiration8</i>	<i>Use of interactive whiteboard, and/or organizational software such as Inspiration8</i>	<i>No Computer class taught during the 8th grade year – 8th grade students are responsible for demonstrating skills learned at previous grade levels.</i>	1.12.A.1 Apply new and existing knowledge to independently, or in collaboration with others, generate new ideas, products, or processes with digital tools.	<ul style="list-style-type: none"> • <i>Student use of interactive whiteboards in presentation an/or creation of info</i> • <i>Creation/editing of webpage(s)</i> • <i>GIS</i> • <i>Google Earth KHTML and creation of product</i>
B. Create original works – as a means of personal or group expression	1.8.B.1 Create an original, digital work as a form of personal or group expression	<i>Use of graphic design software, word processing, spreadsheet, data base and presentation software.</i>	<i>Use of graphic design software, word processing, spreadsheet, and presentation software.</i>		1.12.B.1 Create an original work using digital tools, including planning, research, editing, and production	<ul style="list-style-type: none"> • <i>Creation of PDFs</i> • <i>Creation/ editing of forms in professional format (PDFs, Word, etc.)</i> • <i>Electronic portfolios</i>

1. Creativity and Innovation: *Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. (continued)*

National Indicator	By End of →	6TH GRADE	7TH GRADE	8TH GRADE	By End of →	12TH GRADE
C. Use models and simulations to explore complex systems and issues	1.8.C.1 Use digital models and simulations to answer questions or to solve problems.	<i>Use of resources such as Foss Web, virtual manipulatives, and Web resources as needed.</i>	<i>Use of resources such as Foss Web, virtual manipulatives, and Web resources as needed.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end of the 7th grade.</i>	1.12.C.1 Develop digital models or simulations to answer questions or to solve problems.	<i>Use of resources such as: SAScurriculumpath ways.com , virtual manipulations, educational simulations</i>
D. Identify trends and forecast possibilities	1.8.D.1 Use technology to track trends and predict possibilities using evidence, experiments and collaboration to justify their predictions	<i>Input data (sports, science, social studies) into <u>Excel</u>, graph/chart and make predictions based on the graph/chart.</i>	<i>Input data (sports, science, social studies) into <u>Excel</u> and <u>Access</u>, graph/chart and make predictions based on the graph/chart.</i>		1.12.D.1 Use technology to research, conduct, and report experimental data, to determine trends and possibilities using evidence to justify their predictions.	<ul style="list-style-type: none"> • <i>Use of spreadsheet to create formulas for use in calculations/ forecasting, as well as use of graphs/charts to display such predictions</i> • <i>Use of free/ open source software/ other software for predictions of other events (i.e. weather, tides, etc.)</i> • <i>ESRI</i> • <i>GIS</i>

2. Communication and Collaboration: *Students 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.*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
A. Interact. collaborate and publish with peers, experts, or others employing a variety of digital environments and media	2.A.8.1 Collaborate to create and publish digital products for authentic audiences in a variety of digital environments.	<i>Create and publish digital products for English, Social Studies and Science.</i>	<i>Create and publish digital products for English, Social Studies and Science.</i> <i>Create at least one school newsletter to be sent to school trustees, parents and community supporters.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end of the 7th grade.</i>	2. A. 12.1 Collaborate electronically with peers, experts and others to create and publish products for authentic audiences.	<ul style="list-style-type: none"> • <i>Online yearbook publication using graphics software and online DTP (desktop publishing) programs</i> • <i>Offline yearbook publication using graphics software (such as <u>Photoshop Elements</u>) and DTP software (such as <u>InDesign</u>).</i> • <i>Cookbooks, poetry books, and other publications from class/ school activities</i>

2. **Communication and Collaboration:** *Students 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. (continued)*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
B. Communicate information and ideas effectively to multiple audiences using a variety of media and formats	2.B.8.1 Communicate using digital text, images, sound, and video	<i><u>PowerPoint</u> presentation incorporating digital text, images, sound and video.</i>	<i><u>PowerPoint</u> presentation incorporating digital text, images, sound and video.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end of the 7th grade.</i>	2.B.12.A Create digital text, images, sound, and video for use in communication.	<ul style="list-style-type: none"> • <i>Media production class</i> • <i>Podcasting</i> • <i><u>Powerpoints</u></i> • <i><u>Moviemaker</u></i> • <i><u>Animoto</u></i> • <i>Electronic portfolios</i>
	----- 2.B.8.2 Create digital products in formats appropriately targeted to specific audiences or purposes.	<i>Create worksheets in <u>Excel</u> using digital text, values, formulas and graphs.</i>	<i>Create worksheets in <u>Excel</u> using digital text, values, formulas and graphs.</i> <i>Create database using forms, queries and reports.</i>		2.B.12.2 Critique appropriateness of digital formats for audiences and purposes.	
C. Develop cultural understanding and global awareness by engaging with learners of other cultures.	2.C.8.1 Use digital resources to communicate with peers and others from a variety of cultures and places.	<i>Use of supplemental digital materials from textbook companies, Internet resources, and online databases.</i>	<i>Use of supplemental digital materials from textbook companies, Internet resources, and online databases.</i>		2.C.12.1 Interact electronically with culturally diverse groups for specific purposes.	<i>Online collaboration through use of following type programs: publishing (dtp and online), global studies and research</i>

2. Communication and Collaboration: *Students 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. (continued)*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
D. Contribute to project teams to produce original works or solve problems.	2.D.8.1 Contribute to project teams to produce original works or solve problems.	<i>Create brochures, power point presentations, and movies through science and computer classes</i>	<i>Create brochures, power point presentations, and movies through science and computer classes.</i>	No Computer class taught during the 8 th grade year – students complete the work required of 8 th grade standards by end of the 7 th grade	2.D.12.1 Contribute electronically to a group project that identifies a problem, presents solutions, and evaluates the solutions.	<i>Intra-highschool Inter-highschool</i>
	2.D.8.2 Choose a method of electronically interacting for a specific goal or purpose.	<i>Correctly choose a method of electronically interacting for a specific goal or purpose: <u>I Can Learn Math</u>, <u>My Access</u>, <u>Skate Kids</u>, <u>Foss Web</u>, <u>Inspiration8</u>, <u>Brain Pop</u>, <u>Microsoft Office</u>, etc.</i>	<i>Correctly choose a method of electronically interacting for a specific goal or purpose: <u>I Can Learn Math</u>, <u>My Access</u>, <u>Skate Kids</u>, <u>Foss Web</u>, <u>Inspiration8</u>, <u>Brain Pop</u>, <u>Microsoft Office</u>, etc.</i>		2.D.12.2 Justify method of electronically interacting for a specific goal or purpose.	

3. **Research and Information Fluency:** *Students apply digital tools to gather, evaluate, and use information.*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
A. Plan strategies to guide inquiry.	3.A.8.1 Use digital tools to plan and organize research-based inquiry.	<i>Proper use of Inspiration 8 – Science/Animal Report Create an outline Use 5 day timeline</i>	<i>Proper use of Inspiration 8 – Geography/State Report Create an outline Use 5 day timeline</i>	No Computer class taught during the 8 th grade year – students complete the work required of 8 th grade standards by end of the 7 th grade.	3.A.12.1 Use digital tools to plan, organize, and critique research-based inquiry.	<ul style="list-style-type: none"> ○ Clustering tools ○ Tables ○ Charts
	3.A.8.2 Use digital tools to plan a timeline, track progress, and cite sources for a research project.	<i>Use of MyAccess online writing program, which includes a timeline, tracks progress and suggests sources for research.</i>	<i>Use of MyAccess online writing program, which includes a timeline, tracks progress and suggests sources for research.</i>		3.A.12.2 Use digital tools to plan a complex timeline, track progress, cite sources, and organize information for a research project.	<ul style="list-style-type: none"> ○ Database (relational) ○ Simulation to track progress ○ Tables, etc.
B. Locate, organize, analyze, evaluate, synthesize and ethically use information for a variety of sources and media	3.B.8.1 Use advanced search techniques to locate, access, synthesize, and evaluate information in multiple sources to create an original product.	<i>With teacher guidance, students will use appropriate search methods and keywords to search multiple digital databases and/or online search engines to compile, organize and synthesize information to create an original product.</i>	<i>With teacher guidance, students will use appropriate search methods and keywords to search multiple digital databases and/or online search engines to compile, organize and synthesize information to create an original product.</i>		3.B.12.1 Use advanced search techniques to locate, access, synthesize, and evaluate information in multiple sources to create an original product for an authentic audience.	<ul style="list-style-type: none"> ○ Online research for product presentation ○ Learn/ update advanced search techniques ○ Learn new/ all databases available through local library
	3.B.8.2 Use digital tools to organize information with main ideas and supporting documentation.	<i>Correctly use Inspiration 8 to organize with main ideas and supporting documentation.</i>	<i>Correctly use Inspiration 8 to organize with main ideas and supporting documentation.</i>		3.B.12.2 Use digital tools to organize and compare information with main ideas and supporting documentation.	Tables/ graphs/ charts

3. **Research and Information Fluency:** *Students apply digital tools to gather, evaluate, and use information (continued)*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
C. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.	3.C.8.1 Evaluate and compare facts and opinions in digital content sources and describe the point of view.	<i>Students will apply an understanding of fact and opinion to evaluate the reliability of digital resources.</i>	<i>Students will apply an understanding of fact and opinion to evaluate the reliability of digital resources.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end of the 7th grade.</i>	3.C.12.1 Use digital resources to assemble and evaluate facts, opinions and points of view appropriate to the task.	○ <i>Critical thinking in collaboration with knowledge of digital tools available and job to be accomplished</i>
	3.C.8.2 Select and justify using appropriate digital resources to accomplish a variety of tasks.	<i>Students will select and use an appropriate digital tool to complete a task.</i>	<i>Students will select and use an appropriate digital tool to complete a task.</i>		3.C.12.2 Evaluate peers' use of resources appropriate to a task.	○ <i>Use of rubric and/or score sheet to evaluate peer work</i>

3. **Research and Information Fluency:** *Students apply digital tools to gather, evaluate, and use information (continued)*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
D. Process data and report results.	3.D.8.1 Use multiple digital tools to collect and process data to test theories and hypotheses.	<i>Use of <u>Excel</u> to create a worksheet with a chart.</i>	<i>Use of <u>Excel</u> to create a multi-sheet workbook with more than one chart.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end of the 7th grade.</i>	3.D.12.1 Use multiple digital tools to analyze data and critique theories and hypotheses.	<ul style="list-style-type: none"> ○ <i>Knowledge of audience for presentation of information and use of various tools with which to present data to the various learning styles of these audiences</i>
	----- 3.D.8.2 Use a variety of formats to report results and evaluate the strengths and weaknesses of different reporting formats.	----- <i>Use of <u>Excel</u> graphs and charts, <u>PowerPoint</u>, word processing and <u>Publisher</u> to report results of research/tasks assigned.</i>	----- <i>Use of <u>Excel</u> graphs and charts, <u>Access</u> queries and reports, word processing, <u>PowerPoint</u>, and <u>Publisher</u> to report results of research/tasks assigned.</i>		----- 3.D.12.2 Evaluate and justify the formats for reporting results to a variety of audiences.	----- <ul style="list-style-type: none"> ○ <i>Justify use of particular analysis tool for job at hand – compared to other available tools.</i>

4. **Critical Thinking, Problem Solving, and Decision Making:** *Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
A. Identify and define authentic problems and significant questions for investigation.	4.A.8.1 Identify a problem and create essential questions that guide investigation of an authentic problem using digital resources.	<i>Students will use digital resources to research an identified problem with essential question.</i>	<i>Students will use digital resources to research an identified problem with essential question.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end of the 7th grade.</i>	4.A.12.1 Identify a complex issue, develop a systematic plan of investigation, and present innovative solutions using digital resources.	<ul style="list-style-type: none"> ○ <i>FACS – development of weekly menu for various dietary needs</i> ○ <i>Science investigations</i> ○ <i>Industrial problem solving</i> ○ <i>Business math challenges</i>
B. Plan and manage activities to develop a solution or complete a project	4.B.8.1 Select and use appropriate digital planning tools to complete a project.	<i>Students will demonstrate a basic knowledge of digital planning tools to complete a project.</i>	<i>Students will demonstrate the ability to select and use the correct digital planning tools to complete a project.</i>		4.B.12.1 Analyze the capabilities and limitations of several different digital planning tools for developing solutions or for completing a project.	<ul style="list-style-type: none"> ● <i>FACS – compare software that deals with dietary needs / nutrients per serving/</i> ● <i>Computers – compare</i>
C. Collect and analyze data to identify solutions and/or make informed decisions	4.C.8.1 Use data, examine patterns, and research an authentic problem using digital tools and present a solution.	<i>Input data (sports, science, social studies) into Excel, graph/chart and make predictions based on the graph/chart.</i>	<i>Input data (sports, science, social studies) into Excel, graph/chart and make predictions based on the graph/chart.</i>		4.C.12.1 Select and apply digital tools to collect, organize and analyze data to evaluate theories or test hypotheses.	<ul style="list-style-type: none"> ○ <i>Select tools to obtain data</i> ○ <i>Database</i> ○ <i>Analysis of database information</i>

4. Critical Thinking, Problem Solving, and Decision Making: *Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.*

National Indicator	By End of →	6TH GRADE	7TH GRADE	8TH GRADE	By End of →	12TH GRADE
D. Use multiple processes and diverse perspectives to explore alternative solutions.	4.D.8.1 Use multiple processes to explore alternative solutions and diverse perspectives on authentic problems and present a solution using digital tools.	<i>Students will use digital tools to demonstrate that problems can have multiple perspectives and/or solutions.</i>	<i>Students will use digital tools to demonstrate that problems can have multiple perspectives and/or solutions.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade</i>	4.D.12.1 Use multiple processes and consider diverse perspectives to derive original solutions to authentic problems using digital resources and assess their potential to address social, lifelong learning, and career needs.	<ul style="list-style-type: none"> • <i>NVCIS</i> • <i>Simulations</i> • <i>Online classes</i> • <i>Podcasts</i> • <i>videos</i>

5. **Digital Citizenship:** *Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
A. advocate and practice safe, legal, and responsible use of information and technology.	5.A.8.1 Model legal and ethical behaviors when using information and technology including properly selecting, acquiring, and citing resources.	<i>Students will participate in iSAFE presentations and then model legal and ethical behaviors when using information and technology.</i>	<i>Students will participate in iSAFE presentations and then model legal and ethical behaviors when using information and technology.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end of the 7th grade.</i>	5.A.12.1 Articulate the concepts and issues revolving around intellectual and digital property rights.	<i>Participate in a manner that indicates mastery of knowledge</i> <ul style="list-style-type: none"> • <i>iSAFE</i> • <i>Cyber ethics critical thinking / discussion module</i>
	5.A.8.2 Develop an argument for using technology resource safely, legally, and responsibly.	<i>Choose a future use of technology and show how it could be used safely, legally and responsibly.</i>	<i>Choose a future use of technology and show how it could be used safely, legally and responsibly.</i>		5.A.12.2 Compare the similarities and differences between acceptable use of technology resources in school and work environments.	<ul style="list-style-type: none"> • <i>Interview / compare a minimum of 3 technology resources between school and work environments and their acceptable use in these situations</i>
B. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.	5.B.8.1 Explain the value of existing and emerging technologies on individuals, society, and the global community.	<i>Students will discuss the pros and cons of emerging technology and the affect on individuals, society, and the global community.</i>	<i>Students will discuss the pros and cons of emerging technology and the affect on individuals, society, and the global community.</i>		5.B.12.1 Extrapolate how technology will impact collaboration, learning, and productivity of post-secondary life and career.	<ul style="list-style-type: none"> •

5. Digital Citizenship: *Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.*
(continued)

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
C. Demonstrate personal responsibility for lifelong learning.	5.C.8.1 Assess the potential of current and emerging technologies to address personal, social, lifelong learning, and career needs.	<i>Students will discuss the pros and cons of emerging technology and the affect on individuals, society, and the global community</i>	<i>Students will discuss the pros and cons of emerging technology and the affect on individuals, society, and the global community</i>	No Computer class taught during the 8 th grade year – students complete the work required of 8 th grade standards by end of the 7 th grade.	5.C.12.1 Analyze the capabilities and limitations of current and emerging technologies and assess their potential to address personal, social, lifelong learning, and career needs.	<ul style="list-style-type: none"> • <i>Term paper or other presentation comparing a minimum one current and one emerging technology including but not limited to addressing needs in the areas of personal, social, lifelong learning, and careers.</i>
D. Exhibit leadership for digital citizenship.	5.D.8.1 Describe principles of leadership and ways to responsibly use current and emerging technologies to foster leadership skills.	<i>Determine principles/ skills of leadership. Describe how current and emerging technologies foster these leadership skills.</i>	<i>Determine principles/ skills of leadership. Describe how current and emerging technologies foster these leadership skills.</i>		5.D.12.1 Model digital citizenship while leading a group of peers through a collaborative project using current and emerging technologies.	iSAFE module

6. Technology Operations and Concepts: *Students demonstrate a sound understanding of technology concepts, systems, and operations.*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
A. Understand and use technology systems.	6.A.8.1 Explain uses for and advantages of technology systems.	<i>Students will be able to identify the uses for and advantages of technology systems.</i>	<i>Students will be able to identify the uses for and advantages of technology systems.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end of the 7th grade.</i>	6.A.12.1 Describe the components of technology systems and how they interact.	<ul style="list-style-type: none"> ○ <i>Module on operating systems</i> ○ <i>Demonstration of how at least one component of an operating system works.</i>
B. Select and use applications effectively and productively.	6.B.8.1 Select and justify the use of digital tools and resources to accomplish a variety of tasks.	<i>Students will be able to justify their choice and use of particular digital tools and resources to accomplish a given task.</i>	<i>Students will be able to justify their choice and use of particular digital tools and resources to accomplish a given task.</i>		6.B.12.1 Critique the selection of digital tools, based on efficiency and effectiveness.	<i>Based on knowledge of the uses and pros/cons of various digital tools, evaluate a minimum of four in the use of six various products.</i>
C. Troubleshoot systems and applications.	6.C.8.1 Develop and apply strategies for solving common hardware and software problems.	<i>Students will develop and use a checklist of “common causes” and “solutions” for frequent hardware and software problems.</i>	<i>Students will develop and use a checklist of “common causes” and “solutions” for frequent hardware and software problems.</i>		6.C.12.1 Analyze and troubleshoot common hardware and software issues to optimize learning and productivity.	<ul style="list-style-type: none"> ○ <i>Module on troubleshooting to include info from CISCO, A+, basic troubleshooting</i>

6. Technology Operations and Concepts: *Students demonstrate a sound understanding of technology concepts, systems, and operations (continued)*

National Indicator	By End of →	6 TH GRADE	7 TH GRADE	8 TH GRADE	By End of →	12 TH GRADE
D. Transfer current knowledge to learning of new technologies.	6.D.8.1 Apply existing knowledge of technology to a current or emerging technology to answer an authentic question.	<i>Students will be able to apply Word skills to activities in <u>Publisher</u> and <u>Power Point</u>.</i>	<i>Students will be able to apply Word skills to activities in <u>Publisher</u> and <u>Power Point</u>.</i> <i>Students will be able to apply <u>Excel</u> skills and data to <u>Access</u>.</i>	<i>No Computer class taught during the 8th grade year – students complete the work required of 8th grade standards by end</i>	6.D.12.1 Analyze the capabilities and limitations of current and emerging technologies based on their potential to address personal learning and career needs, as well as societal issues.	<i>Term paper or other presentation comparing a minimum one current and one emerging technology including but not limited to addressing needs in the areas of personal, social, lifelong learning, and careers.</i>

Goal 1 - Communication

Need: Teacher surveys indicate that teachers, administrators & support staff need to communicate technological needs and issues in a timely manner to the appropriate building representative.

Goal: Site staff are proactive in contacting the building representative with a request to address their tech problem.

Objective: Supply the site staff with the appropriate procedure and/or training to solve the tech issue.

Activities or Resources: Prepare site procedure and communicate it to district tech coordinator

Person/Team Responsible: Technology Committees, site technology coordinators.

Timeline Start-Finish:

- Year 1 - 3 --> At monthly meeting of Tech committee, the site log of tech problems and resolutions will be given to the district tech coordinator

Budget: Expenditure & Source: Time during onsite staff meeting will be set aside for training. No budget amount required (\$0.00)

Success Indicators: Use of procedure/ site log and success with improved communication and resolution of tech problems.

Goal 2 – School Site Repairs & Supplies

Need: Teacher surveys indicate that there is a shortage of allocated funds to support their technological needs e.g.: printer cartridges; computer peripherals; LCD projector bulbs and repairs.

Goal: Schools in SCSD are sufficiently funded so all the technology is functioning properly.

Objective: Schools in SCSD have adequate funds to support the repairs and needed supplies for their technological equipment

Activities or Resources: Reviewing inventory to determine consumables.

Person/Team Responsible: Site administrator & Building Technology Coordinators.

Timeline Start-Finish:

- Annually re-assess needs for budgeting procedure

Budget: Expenditure & Source:

- Expenditure: \$30,000 over 3-year period (\$10,000 each year) for equipment and materials – approximately \$2000-\$2500 per school site
- Source(s): District funds and/or Technology grant

Success Indicators: Were requirements for daily supplies and repairs met?

Goal 3 – Training

Need: In order to extend the life of SCSD's technological equipment, teachers must be knowledgeable in the proper use and maintenance of the equipment.

Goal: Training for teachers in the proper methodology of computer & technology maintenance.

Objective: Teachers are knowledgeable in the proper operational procedures of technology & computer maintenance.

Activities or Resources: In-service or staff meeting training.

Person/Team Responsible: Tech committee

Timeline Start-Finish:

- Year 1-3 – after initial training and presentation proper procedures will be in place. However, ongoing training for new staff and/or equipment.

Budget: Expenditure & Source:

- Time will be set aside for staff development training.
- Cost: N/A

Success Indicators: Fewer maintenance requests.

Goal 4 – Scheduling

Need: Teacher surveys indicate a need for a set of guidelines addressing student usage of computers/labs when they are sent from non-technology classes to complete research or assignments.

Goal: School staff will be aware of the need for student supervision and assistance when completing classroom assignments, and not regularly depend on the technology and/or library staff to supervise and assist students.

Objective: A site-specific set of guidelines that teachers would follow when sending students to use computers outside of the primary teacher’s room. Addressed issues would be supervision, student needs (assistance), and respect scheduled classes using the same facilities.

Activities or Resources: Site specific guidelines will be established.

Person/Team Responsible: Site staffs with considerable input from technology teachers and site administrators.

Timeline Start-Finish:

- Year 1 – establish guidelines and implementation.
- Years 2 & 3 – fine-tune guidelines and continue implementation.

Budget: Expenditure & Source: None.

Success Indicators: Technology and library staff indicate evidence of compliance.

Goal 5 – Cyclic Replacement of Staff Computers

Need: The acquisition of new peripheral technology (interactive whiteboards, AccelScan scanners, etc.), and the increased use of technology for online professional development, communications with parents and staff, and lesson plan preparation and presentation, has created a need for updated computers.

Goal: Teachers will have computers that will efficiently run the peripheral equipment that the district has supplied, and more effectively teach students.

Objective: All hardware components will complement each other. Develop a replacement cycle for the District's computer inventory.

Activities or Resources: Review inventory to determine what upgrades are needed. Develop the inventory rotation schedule.

Person/Team Responsible: District Technology Coordinator

Timeline Start-Finish:

- Annually replace 25% of staff computers in the district.

Budget: Expenditure & Source:

- Expenditure: \$25,000.00
- Source(s): District funds and/or Technology grant

Success Indicators: Greater use of computers by the staff with less frustration from out-of-date technology

Goal 6 – Upgrades of Classroom Student Computers

Need: In order to continue to meet the needs of NCLB, students in SCSD need to have available to them the best possible technological tools for learning. To benefit fully, students need to have up-to-date computers in the classrooms that can be used by individuals/partners when learning, communicating, and/or performing (i.e. tests, projects, reports) in all curricular areas.

Goal: Students will have use of computers that offer the benefits of newer and more technologically advanced equipment.

Objective: Develop a replacement cycle for the District's Student computer inventory.

Activities or Resources: Develop the replacement cycle.

Person/Team Responsible: District Technology Coordinator

Timeline Start-Finish:

Years 1: Develop replacement cycle for use

Budget: Expenditure & Source:

- Expenditure: \$72,000
- Source(s): District funds and/or Technology grant

Success Indicators: Because of the availability of updated computers, students have more programs and digital tools available to them to help increase performance on daily work, proficiency exams, and to transition from the classroom world to the world of work.

Goal 7 – Cyclic Replacement of Libraries and Computer Classroom Labs

Need: In order to continue to meet the needs of NCLB, students in SCSD need to have available to them the best possible technological tools for learning. To benefit fully, students need to have up-to-date computers in the libraries and computer classroom labs, which can be used by individuals/partners/small and large groups to learn to communicate, research, perform, and succeed using computers and other technologies, in all areas of the curriculum.

Goal: Students will have use of computers that offer the benefits of newer and more technologically advanced equipment.

Objective: Develop a replacement cycle for the District’s library and lab computer inventory.

Activities or Resources: Develop the replacement cycle.

Person/Team Responsible: District Technology Coordinator

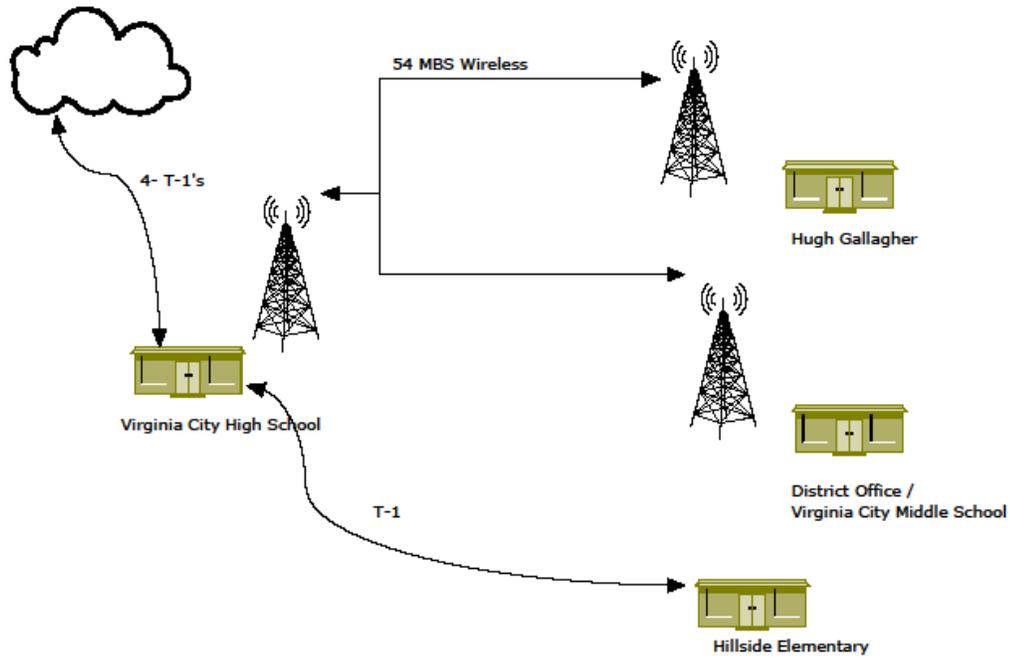
Timeline Start-Finish:

Annually replace 20% of computers for a five-year replacement cycle

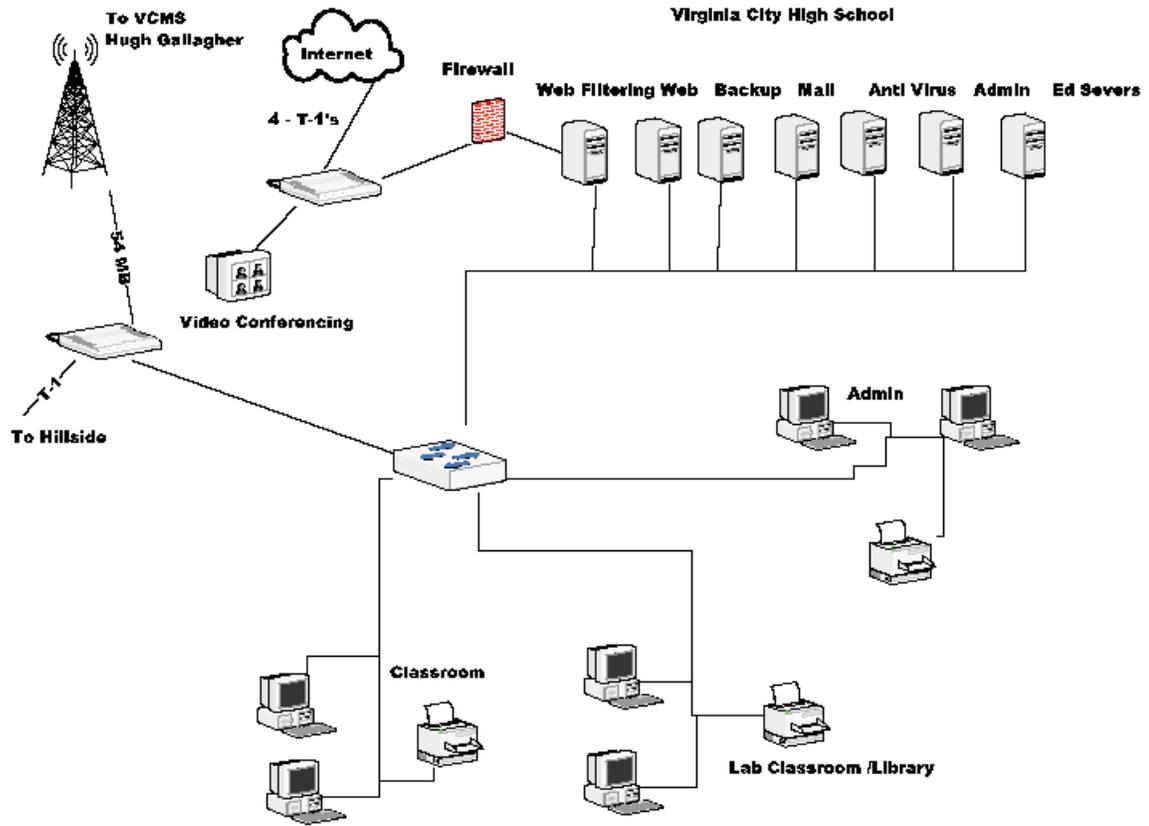
Budget: Expenditure & Source: \$ 34,000.00

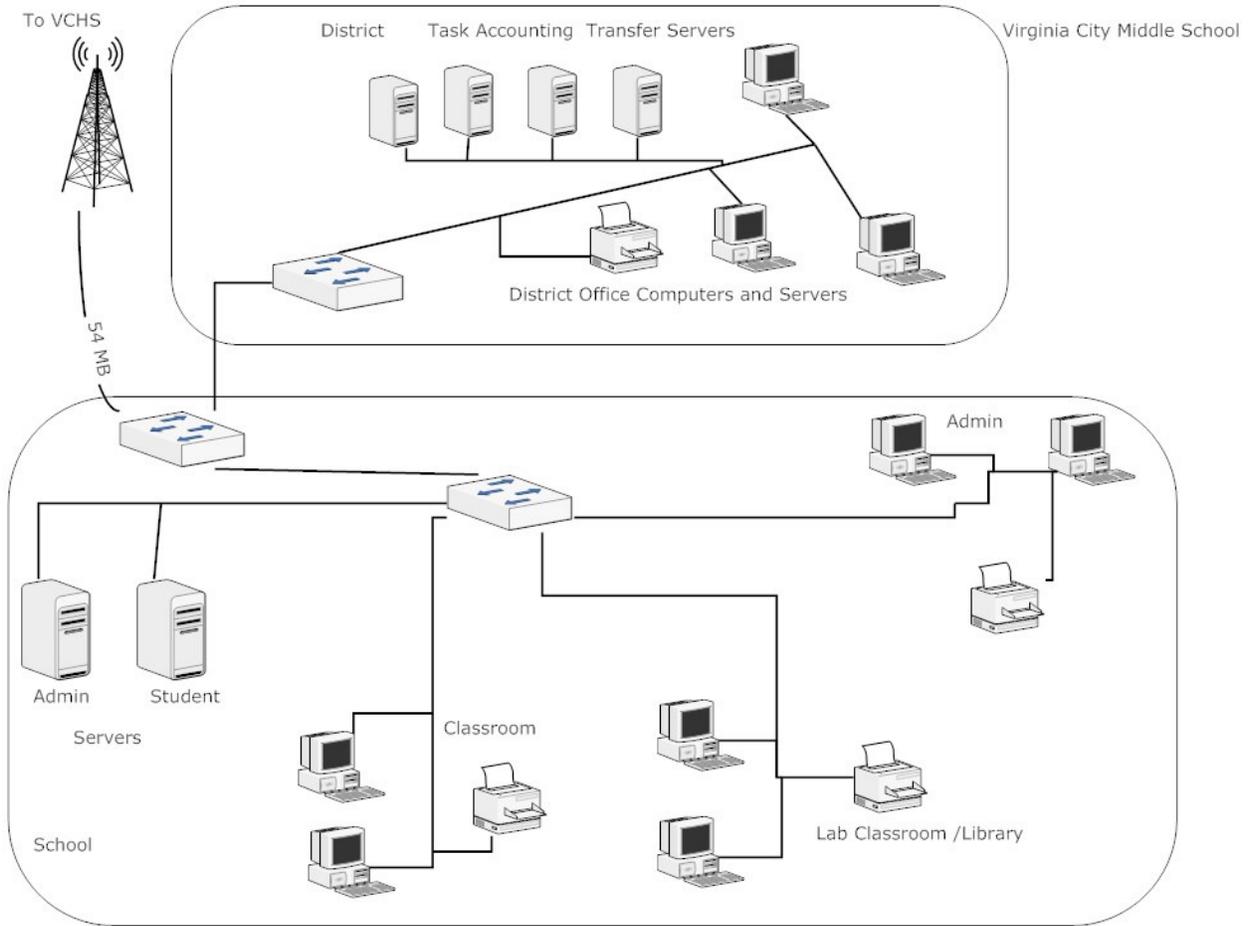
Success Indicators: Because of the availability of updated computers, students have more programs and digital tools available to them to help increase performance on daily work, proficiency exams, and to transition from the classroom world to the world of work.

FUNDING REQUESTS			
Category	Quantity	Reasoning	Requested Funding
School lab and library computers 20% replacement per year	34	To keep machines current and minimize 1 shot requirements	\$34,000.00
Staff computers 20% replacement per year	24	To keep machines current and minimize 1 shot requirements	\$24,000.00
Student Computers 20% replacement per year	84	Update student computers many are P II-350's	\$84000.00
Servers	4	To keep machines current and minimize 1 shot requirements	\$6,000.00
On Going Programs	Annual Maintenance on Classroom Programs	To Maintain current Programs	17,000 Per Year
Tech Support	Service contracts & ongoing support costs	To maintain current support	24,000 per year
Communication Costs	Annual Cost for District Connectivity	To maintain current connectivity	24,000
Professional Development	40 Teachers	Staff Training	\$10,000.00 per year
Technical Education	VCHS	Maintain/ update	\$20,000.00 per year
Ongoing maintenance (computers and peripherals)	All school sites	Keeping equipment in working order	\$10,000.00 per year
Site Technology Supplies and Repair	All school sites	To aid in maintaining equipment and keeping equipment up-to-date on supplies	\$10,000.00 per year

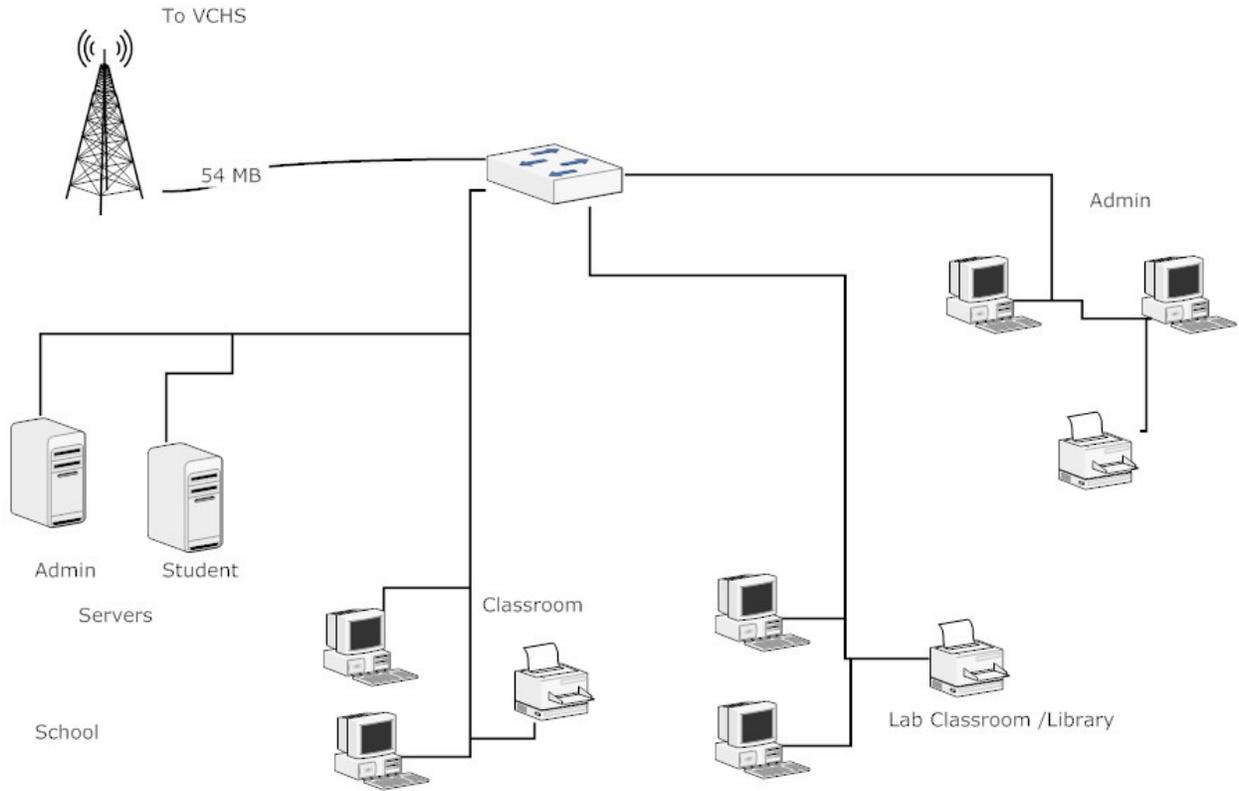


Storey County School District WAN Configuration

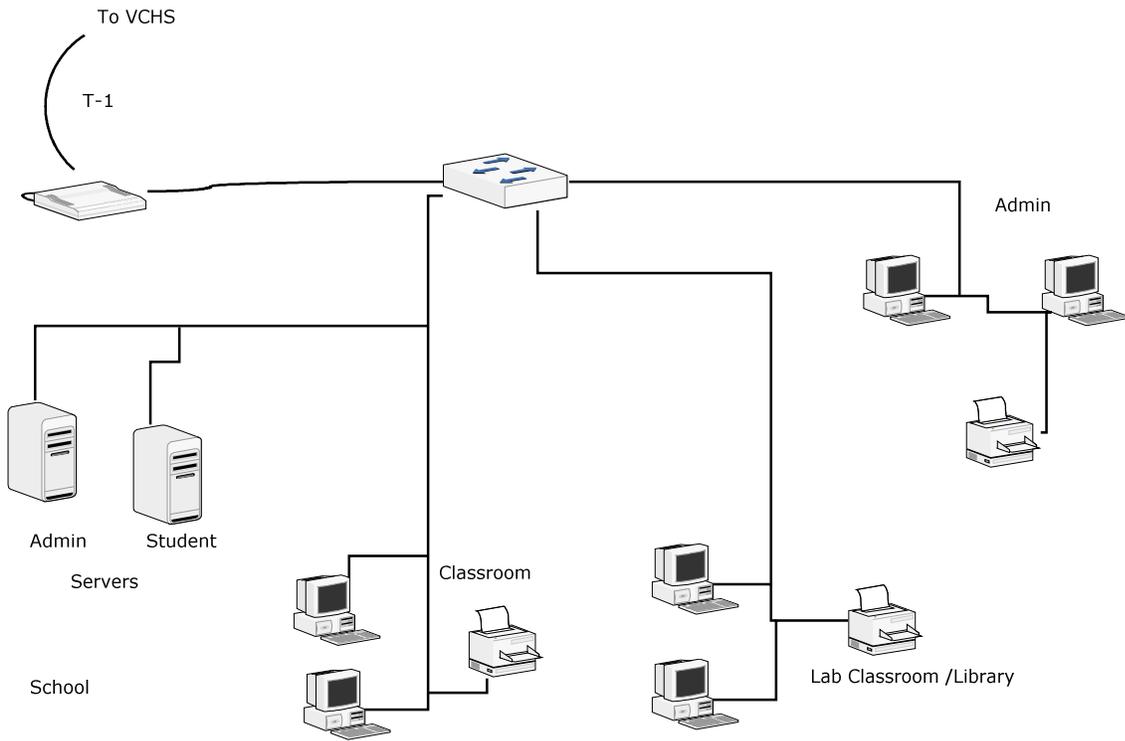




Hugh Gallagher Elementary



Hillside Elementary



**STOREY COUNTY SCHOOL DISTRICT
And
Nevada School Network (NSN)**

First Board Hearing 20 December 1995

**Approved 10 January 1996
(Revised – 2/13/2002)
(Revised – 7/13/2006)**

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Storey County School District
APPROPRIATE USE POLICIES for use of TELECOMMUNICATIONS

PHILOSOPHY

Internet/telecommunication access is now available to students and educational staff in the Storey County School District. The goal in providing this service is to promote educational excellence in schools by facilitating resource sharing, innovation, and communication.

INTERNET

The Internet is an electronic highway connecting thousands of computers all over the world and millions of individual subscribers. Students and staff have access to:

1. Electronic mail (e-mail) communications
2. Information and news from a variety of news sources, as well as the opportunity to correspond with professionals at a variety of research institutions
3. Public domain software and shareware
4. Discussion groups on a variety of topics of interest to students and teachers
5. Access to many library catalogs, including but not limited to: university library catalogs, the Library of Congress, and ERIC research clearinghouse.

With access to computers and people also comes the global availability of material that may not be considered to be of educational value in the context of the school setting. Storey County School District has taken precautions to restrict access to controversial materials. However, on a global network, it is impossible to control all materials, and an industrious user may discover controversial information. SCSD believes that the valuable information and interaction available on this worldwide network far outweighs the possibility that users may procure material that is not consistent with the educational goals of Storey County School District.

Internet access is coordinated through a complex association of government agencies and regional and state networks. In addition, the smooth operation of the network relies upon the proper conduct of the end users who must adhere to strict guidelines. These guidelines are provided in this document so that you are aware of the responsibilities that you will acquire upon use of a telecommunications account in the educational setting of Storey County.

DISTRICT USE

IN GENERAL, this requires efficient, ethical and legal utilization of the network resources. If a Storey County School District user violates any of these provisions, his or her account will be suspended/frozen and the account may be terminated with future access through the school district denied. The signature(s) on IHAJ-1 Computer Use Authorization Grades K-12 or IHAJ-2 Computer Use Authorization Staff are legally binding and indicate the parties who signed have indicated that they have read the terms and conditions and understand their significance.

THEREFORE:

In keeping with these policies, and in accordance with curriculum policies to include the use of telecommunications in the educational setting, Storey County School District agrees to the use of the following:

- Nevada School Network (NSN) or any other such network provided through the State Department of Education for use in the educational setting
- Commercial servers to make use of graphics and other materials for educational and research purposes.

Use of the above networks also indicates agreement to the AUPs of these providers.

**STOREY COUNTY SCHOOL DISTRICT and NEVADA SCHOOL NETWORK (NSN)
ACCEPTABLE USE POLICIES and RELATED GUIDELINES**

INTENT:

- 1. The use of any Internet/telecommunications network is intended to aid in education and research.
- 2. ALL USERS must sign an AUP Statement of Understanding as part of their application for an account on networks used during educational activities

WHO TO USE:

Storey County School District users of telecommunications will adhere to the following:
 Rules/guidelines of the SCSD policy
 Rules/guidelines of other networks agreed to through this policy

The use of the Internet (and other telecommunications sources) is a privilege, not a right, and inappropriate use will result in a cancellation of these privileges through the school district.

INTRODUCTION:

- 1. It is a general policy that the telecommunications/Internet facilities are to be used in a responsible, efficient, ethical, and legal manner, Users signing their statement of understanding accept these general guidelines as a condition for receiving (and using) an account.
- 2. Users must be aware of the finite capacity of the network and must cooperate with the Network Administrator to conserve resources and ensure equitable access for all. The network has a limited number of locations throughout the state to serve a growing number of users.

APPROPRIATE USE OF NETWORK

"Etiquette" means "ticket" in French. "netiquette" is your ticket to travel. The use of an account requires that you abide by accepted rules of network etiquette. These include, but are not limited to, the following:

Users are expected to:

- 1. Be polite. Do not get abusive in your messages to others.
- 2. Use appropriate language. Do not swear, use vulgarities or any other inappropriate language. Illegal activities are strictly forbidden.
- 3. Observe a self-imposed limit of one hour on line during a given six-hour period except in special circumstances.
- 4. Cite your source (in using material from telecommunication sources). If you are using the ideas of others, give them credit.
- 5. Prepare text files for uploading before logging on.
- 6. Log off before editing and printing downloaded files.
- 7. Delete email files as soon as possible.
- 8. Do NOT invade the privacy of others.

When using email:

- 1. Make subject headings as descriptive as possible.
- 2. Begin messages with a salutation.
- 3. Restate the question or issue being addressed in a response, but do not retransmit the entire message.
- 4. Choose words carefully to avoid misunderstandings and avoid sarcasm.
- 5. End your message with a 'signature' and your location.

*(parts of this document were extracted from An Incomplete Guide to the Internet and Other Telecommunications Opportunities. Especially for Teachers and Students K-12, Compiled by the NCSA Education Group, July, 1993)

INAPPROPRIATE USE OF SYSTEM

- 1. The user agrees to not publish on or over the system any information which violates or infringes upon the rights of any other person or any information which would be abusive, profane or sexually offensive to an

average person, or which, without the approval of the system administrators, contains any advertising or any solicitation of other members to use goods or services.

2. The user agrees not to use the facilities and capabilities of the system to:

- a. conduct any business or activity or solicit the performance of any activity which is prohibited by law
- b. use for commercial activities by for-profit institutions
- c. use for product advertisement or political lobbying
- d. use the network for financial gain or for any commercial or illegal activity.
- e. transmit/receive any material in violation of any USA or state regulation

(1) This includes, but is not limited to: copyrighted materials, threatening or obscene materials, or material protected by trade secret.

(2) Copyrighted material or material protected by trade secret must not be placed on any system connected to NSN without the author's permission. Users may download copyrighted material for their own use. Any user may also non-commercially redistribute a copyrighted program with the expressed permission of the owner or authorized person. Permission must be specified in the document, on the System, or must be obtained directly from the author.

f. Use for product advertisement

3. A user found accessing non-education sites (including online games, BBSS, and chat forums) for extended periods of time (more than 30 minutes) will be reported to the administration and possibly subject to removal of account privileges.

4. Individual users are representative of their county and/or school district while using the educational network activities. However, the user will be punished as an individual should their actions warrant it.

THIRD PARTY SERVICES

- o All matters concerning the merchandise and services ordered from a Seller or Sellers, including but not limited to purchase terms, payment terms, warranties, guarantees, maintenance and delivery, are solely between the Seller and the User.
- o Storey County School District makes no warranties or representations whatsoever with regard to any goods or services provided by Sellers.

WARRANTIES:

Storey County School District makes no warranties of any kind, whether expressed or implied, for the service it is providing. SCSD will not be responsible for any damages the user suffers, including loss of data resulting from delays, non-deliveries, mis-deliveries, or service interruptions caused by negligence by error or omission. Use of any information obtained by use of the telecommunications is at the user's own risk. SCSD denies any responsibility for the accuracy or quality of information obtained through the telecommunication services.

VANDALISM:

Vandalism is defined as any malicious attempt to harm or destroy data of another user, or any agency or their networks that are connected to the Internet 'backbone.' This includes, but is not limited to, the uploading or creating of computer viruses.

Vandalism will result in cancellation of privileges and other consequences listed in district/ school policy.

TECHNOLOGY SYSTEMS ANALYST:

Although the account may be an ongoing account, the Site Coordinators will check all accounts on at least an annual basis and inform the Technology Systems Analyst of any corrections to the account(s) through the district.

CONSEQUENCES OF MISUSE OF ACCOUNT (REVOCAION OF ACCOUNT):

1. Suspension or revocation of account

- a. Storey County School District Technology Committee (SCSTC) or Systems Technology Analyst has the right to temporarily suspend a student account for any perceived violations of this acceptable use policy.

The district-designated liaison, staff member, parent/student (if appropriate) will be informed of the suspension and impending revocation of account.

b. Any user who violates the AUP shall be subject to revocation of account.

c. If any user allows another person to use his/her account, the accounts of both will be revoked. If a person is using another user's account and they do not have an AUP on file their application will be denied and the user account they were using will be revoked.

2. Due process:

Acceptable use standards fall within the jurisdiction of a network's and the network's Storey County School District Technology Committee both in design and enforcement.

The Systems Technology Analyst and/or Storey County School District Technology Committee reserve the right to suspend or terminate user's access upon any breach of the terms and conditions.

(1) Prior to a suspension or termination, the suspending administrator will inform the user of the alleged breach and give the member an opportunity to present an explanation.

(2) The user may request a review hearing with the system executive within 7 days of suspension. Account is suspended until a decision is made.

Report any system misuse immediately to the Systems Technology Analyst or the chair of the Storey County School District Technology Committee.

STOREY COUNTY SCHOOL DISTRICT
ACCEPTABLE USE AUTHORIZATION
GRADES K THROUGH 12

Please be advised that Storey County School District students in grades K through 12 may have access to the Internet during the course of their studies. With access to other networks and people around the world, Storey County School District students might have access to information that may not be appropriate. Storey County School District has taken measures to prevent access to inappropriate information. The district is not responsible for the quality and content of information available through this service. We expect our students to exhibit acceptable and appropriate use of the computers at school.

The following guidelines are intended to help students use the network appropriately.

[] I give permission

[] I do not give permission

for my child to access, produce, video conference and/or communicate information on Storey County School District's computer network resources for the current school year.

o (Please refer to publication authorization signature page)

o Students who do not have parent/guardian permission to use the District's computer network resources will be given alternative educational activities.

Student's Full Name (Please Print):
First Name: Last Name:
Grade (Circle one):
K 1 2 3 4 5 6 7 8 9 10 11 12
Home Address:
Street Address:
City: State: Zip:
Home Phone: Parent's Work Phone
Student Agreement:
I understand and will abide by the Acceptable Use Policies of Storey County School District. I understand that violating the Acceptable Use Policies may result in loss of network privileges and/or disciplinary measures.
Student's Signature: Date:
Parent's or Guardian's Name (Please Print):
Parent's or Guardian's Signature: Date:

IHAJ-1

USER AGREEMENT

Use of school and district networks must be in support of education, research, and the educational goals and objectives of the Storey County School District. Students are personally responsible for this provision at all times when using building and district networks and other computers.

- o Students will need to be in compliance with the guidelines outlined in the Acceptable Use Policy (Policy IHAJ) provided by the Storey County School District Policy. This includes, but is not limited to, copyrighted material, threatening or obscene material or material protected by trade secret.
- o The use of another organization's networks or computing resources must comply with rules appropriate to that network (i.e. e-mail services, Internet download facilities, etc.)
- o Students will be working on assigned tasks at all times. Any unauthorized "web-surfing" or using areas of district network that are not assigned for student use will result in disciplinary action according to the Storey County School District Acceptable Use Policy.

Students should be familiar with these rules and how to use the Internet and appropriate use of the computer network before getting on-line. If they have any questions about these rules, they should ask their teacher. Be aware that the inappropriate use of electronic information resources can be a violation of school rules, local, state, and federal laws and that students can be prosecuted for violating those laws.

If any unauthorized files are found on the computer by any student, he/she must inform the instructor immediately or it will be assumed by the school's staff that he/she put it there. **Under no circumstances are students to use unauthorized files, add icons, or alter the standard icons on their computers.**

NETWORK ETIQUETTE AND PRIVACY

Students are expected to abide by the generally accepted rules of network etiquette. These rules include but are not limited to:

- o **BE POLITE.** Never send, or encourage others to send, abusive messages.
- o **USE APPROPRIATE LANGUAGE:** You are a representative of your school and your school district on a public system. Never swear, use vulgarities, or any other inappropriate language.
- o **PRIVACY:** Do not reveal your home address, phone number, names or addresses of family members, or the addresses or phone numbers of other students or colleagues.
- o **DISRUPTIONS:** Do not use the network in any way that would disrupt the use of the network by others.
- o **REPRESENTATION:** Do not send anonymous messages or represent a message as to have been written by another. The original of all correspondence must be clearly identifiable.

SECURITY AND VANDALISM

If students identify a security problem in the building or school district networks, they must notify their teacher or the system administrator immediately. Students should never demonstrate the problem to another user, use another individual's account, or tell /indicate to anyone else their password. Any user identified as a security risk will be denied access to the network and may be liable for disciplinary action or prosecution.

Vandalism is defined as any malicious attempt to physically deface, disable, or destroy computers, peripherals, or other network hardware or to harm or destroy data of another user or any other agencies or networks that are connected to the system. This includes, but is not limited to, the creation or transmission of computer viruses. Any vandalism will result in loss of network privileges, disciplinary action, or possible legal referral.

Acceptable Use Policy (Grades K-12) Page 2 of 2 (IHAJ-1)

STOREY COUNTY SCHOOL DISTRICT
ACCEPTABLE USE AUTHORIZATION
STAFF

Please be advised that Storey County School District staff may have access to the Internet during the course of their work. With access to other networks and people around the world, Storey County School District staff might have access to information that may not be appropriate. Storey County School District has taken measures to prevent access to inappropriate information. The district is not responsible for the quality and content of information available through this service. We expect our staff to exhibit acceptable and appropriate use of the computers in the District.

The following guidelines are intended to help staff use the network appropriately. If staff members do not follow the policies listed on the reverse side, their privilege of using the network will be withdrawn according to the Storey County School District's Acceptable Use Policy.

=====

Staff Member's Full Name (Please Print):

First Name: _____

Last Name: _____

Home Address: Street Address:

City: _____

State: _____ **Zip:** _____

Home Phone: () _____

Staff Agreement:

I understand and will abide by the Acceptable Use Policies of Storey County School District. I understand that violating the Acceptable Use Policies may result in loss of network privileges and/or disciplinary measures.

Staff Signature: _____ **Date:** ____/____/____

USER AGREEMENT

Use of school and district networks must be in support of education, research, and the educational goals and objectives of the Storey County School District. Students are personally responsible for this provision at all times when using building and district networks and other computers.

- o Students will need to be in compliance with the guidelines outlined in the *Acceptable Use Policy (Policy IHAJ)* provided by the Storey County School District Policy. This includes, but is not limited to, copyrighted material, threatening or obscene material or material protected by trade secret.
- o The use of another organization's networks or computing resources must comply with rules appropriate to that network (i.e. e-mail services, Internet download facilities, etc.)
- o Students will be working on assigned tasks at all times. Any unauthorized "web-surfing" or using areas of district network that are not assigned for student use will result in disciplinary action according to the Storey County School District Acceptable Use Policy.

Students should be familiar with these rules and how to use the Internet line and appropriate use of the computer network before getting on-line. If they have any questions about these rules, they should ask their teacher. Be aware that the inappropriate use of electronic information resources can be a violation of school rules, local, state, and federal laws and that students can be prosecuted for violating those laws.

If any unauthorized files are found on the computer by any student, he/she must inform the instructor immediately or it will be assumed by the school's staff that he/she put it there. ***Under no circumstances are students to use unauthorized files, add icons, or alter the standard icons on their computers.***

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Students are expected to abide by the generally accepted rules of network etiquette. These rules include but are not limited to:

- o BE POLITE. Never send, or encourage others to send, abusive messages.
- o USE APPROPRIATE LANGUAGE: You are a representative of your school and your school district on a public system. Never swear, use vulgarities, or any other inappropriate language.
- o PRIVACY: Do not reveal your home address, phone number, names or addresses of family members, or the addresses or phone numbers of other students or colleagues.
- o DISRUPTIONS: Do not use the network in any way that would disrupt the use of the network by others.
- o REPRESENTATION: Do not send anonymous messages or represent a message as to have been written by another. The original of all correspondence must be clearly identifiable.

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Vandalism is defined as any malicious attempt to physically deface, disable, or destroy computers, peripherals, or other network hardware or to harm or destroy data of another user or any other agencies or networks that are connected to the system. This includes, but is not limited to, the creation or transmission of computer viruses. Any vandalism will result in loss of network privileges, disciplinary action, or possible legal referral.

(Acceptable Use Policy - Staff) Page 2 of 2 – IHAJ-2