



JACKSON GRAMMAR SCHOOL

JACKSON SCHOOL DISTRICT

SAU#9

Technology Plan

Covering Years 2008-11

Adopted by Jackson School Board on June 16, 2008

JGS Technology Plan

Technology Planning Committee

Anne Kebler	Principal, LEIP Committee Member
Margot Robert	Teacher, Grades 4
Steve Piotrow	Parent, Technology consultant
Ann Bennett	Administrative Assistant, JGS Technology Coordinator
Joel Clement	Owner/Freedom Computers—JGS Contracted Technology Support

The Technology Committee will meet to review the JGS technology plan and assess its efficacy as needed, and at least quarterly. An annual assessment review will also be conducted, and we will also communicate via email throughout the year.

The Jackson Grammar School Mission Statement:

The Jackson Grammar School is committed to learning by fostering the intellectual, social, and physical growth of children, promoting responsibility and respect, while encouraging pride in community.

We seek to:

1. Foster creativity, risk-taking, discovery, humor and energy in learning
2. Support sustained, independent, interest-based inquiry
3. Provide meaningful and experiential multi-age learning opportunities
4. Inspire students to become creative problem solvers, articulate communicators, and thoughtful collaborators
5. Promote a “Jackson School Campus”
6. Provide quality instruction grounded in a focused and integrated curriculum
7. Insure the responsible and meaningful use of current technology
8. Value a concerned, global outlook in our everyday lives

Demographic Description

The Jackson Grammar School is a focal point of the small village of Jackson, one of nine Mt. Washington Valley communities, in the heart of the White Mountains. The town’s total acreage is 42,532.96 acres, of which 32,177.45 or 76% are controlled by the United States Forest Service and are part of the White Mountain National Forest.

The town itself owns 577.78 acres. Residential land comprises 3627.74 acres, while commercial land comprises 294.14 acres. Overall, 6,433.63 acres are in current use representing 180 parcels and 75 owners.

Jackson’s population of full-time residents has remained remarkably stable, despite heavy development pressure, rising from 678 in 1990 to 883 in 2006. At the same time, the

number of non-resident second homeowners continues to climb. There are 377 year-round households and 428 seasonal homes. The average household size is 2.18 people. Once a community sustained by agriculture and forest industries, Jackson is now home to successful restaurants, inns and other tourist facilities. To some extent the town is also a “bedroom community,” with many residents working in Conway, Bartlett and other Mt. Washington Valley communities. There is a core group of active retirees as well, many of them professionals from away, who settled here to enjoy life in the mountains, with its many recreational opportunities. The median age of residents is 48, compared to the NH median of 37.1, and median income is \$53,519. 97.5 percent have a high school diploma or better, 53.1 hold a bachelor degree or higher.

Over the years, Jackson voters have demonstrated strong commitment to the Grammar School and educational issues. The school board has ensured that sufficient funding is available to support the educational program. A building addition and renovation project was passed at school meeting in March 2008 which will provide additional educational space and bring the original 1886 component of the structure up to life safety code.

Parents form an integral piece of the educational community. The size of the school lends itself to parental participation, and they are actively involved as parents, mentors, teachers, advisors and fundraisers. In addition, other community members serve in the same roles as the parents, even though their children no longer attend the school, demonstrating their belief in the importance of education and their commitment to the children of Jackson.

The school’s population has varied widely over the past half century, from the high 60s to as low as 17 in 1984. More recently it has remained more consistent, ranging from 50-60 over the past 15 years—51 students were enrolled in 2007-08. It is also noteworthy that many students attend JGS for their entire elementary experience, K-6, as did some of their parents and grandparents. Jackson offers a full day kindergarten program, and at the conclusion of 6th grade, students are tuitioned to the Josiah Bartlett School for grades seven and eight. Jackson is a sending district to the recently constructed Kennett High School in Conway for grades 9-12.

The Jackson Grammar School recognizes that community support is critical to effective public education, and strives to involve and inform its constituency in the evolving role played by technology. We will continue to seek to build partnerships with families, community, and educational resources that can improve our program and practices. We will also continue to strengthen our current partnerships with organizations like Tin Mountain Environmental Education (which provides contracted environmental education programming at JGS) by exploring ways to integrate technology into our joint projects. Jackson also works with the local School to Career program. Through this partnership, we are currently working on exposing our elementary students to more uses of technology in local businesses and at the high school.

The JGS Technology Vision Links Directly to Our Mission Statement

Foster creativity, risk-taking, discovery, humor and energy in learning

Jackson Grammar School is a small school. The small classes offer the opportunity to tailor learning to each individual student group as well as each grade level. Our weekly school community meetings (led by our 5th and 6th graders) allow children as young as five to take risks and develop strong public speaking skills. These meetings, attended by all students and staff, and many parents, offer an opportunity for students to share their work. Having LCD projectors has allowed students to share projects including creative stories and yearbooks they created using Moviemaker, interactive PowerPoint presentations showcasing their class or independent research, and sharing world music and cultures with each other using the Internet. Our K-3 students are currently tracking a parent on-line who is a merchant marine, and communicating with him via email as he makes his way through the Persian Gulf. We are a school of avid writers. Every year we celebrate students who enter and win local writing contests. Each student has access to computers every day in the classroom to edit writing with teachers, collaborate with peers, and create purposeful writing.

The creative Art and Music programs are excellent examples of technology integration enriching successful programs. In addition to classroom instruction, the JGS music teacher leads a K-6 all-school chorus, and most students in the upper school play a musical instrument and perform with the band, including all of the 5-6 class.

Within the music curriculum in recent years, a number of units have integrated technology in an authentic fashion. Students have collaborated on Internet research and PowerPoint presentations on Music History, as well as researching and writing historical profiles of notable composers.

The work of all of our 51 students is showcased in the annual Art Show. The art teacher, whose educational background includes website and graphic design, has introduced upper grade students to the power of Adobe Photoshop software.

Support sustained, independent, interest-based inquiry

We endeavor to teach our students the navigation, reading, and analysis skills related to being proficient users of the Internet. This opens doors for students to pursue their interests through research and email. This year the 5th and 6th graders each took on an independent research project of their choosing. These students learned to use the internet for research, and communicated with outside experts via email. Questions to these experts enhanced their semester long studies.

We also believe in teaching our students to use software that helps them organize their learning, and sustain their independent inquiries (Inspiration, PowerPoint, and Web design). Jackson Grammar School teachers endeavor to teach our students, beginning in grades 2-4, skills related to using spreadsheets and data bases as another tool to organize and share their information. As a staff, we are beginning to learn about using peripherals: GPS, probes, handhelds and the like with the goal of strengthening teaching practice and enhancing the manner in which children learn about the environment and world around them. A recent collaboration with foresters has made more official a local historical farm as our “outdoor classroom.” It is one of our goals to have our oldest students begin on-

going research about these forestry plots. We have access to GPS units from local partners, and look forward to learning more about using these to do on-going inquiry with students.

Provide meaningful and experiential multi-age learning opportunities

All classes at the Jackson School are multi-age, and while some years' classroom configurations change based on student populations, they are predominantly multi-grade. The success of this model is predicated on teachers committed to using strategies and teaching practices that best meet the needs of all students. These include: flexible grouping, ability grouping, differentiated instruction, experiential and service learning opportunities. Our increased understanding in the use of NWEA scores to group students has extended outside the classrooms to create multiage reading groups throughout the school. This year we have learned to use Performance Pathways to improve these grouping strategies, and look at the effectiveness of our curriculum.

Our school community values our multiage "Project Blocks." These happen at least once a year, and offer our students opportunities to choose topics of interest to explore. The faculty plans each session with the goal of incorporating technology. This year's offerings include an Excel component to exploring the Jackson cemetery, the opportunity to make movies using family pictures, and a project that exposes young students to the technology local engineers in designing bridges.

In the spring of 2008, the Jackson School Board hired a Teaching Principal whose primary teaching role will be bringing enrichment opportunities to each of our classrooms. We are hopeful that this new opportunity, combined with our plans to improve the technology skills of our teaching staff and aides, will enhance the achievement of all students.

Inspire students to become creative problem solvers, articulate communicators, and thoughtful collaborators

In our current use of technology, the internet and software enrich our curriculum and help students acquire organizational skills, or assist in learning to read. Our 5th and 6th grade students use the internet seamlessly in their daily curriculum. A recent example of collaboration and communication was during the New Hampshire Primary season. Our oldest students used the internet to research positions of each of the candidates and then presented these views to the rest of the school community.

We use software like Inspiration and PowerPoint to engage students in collaborative thinking and presenting. In the past we have used Web design to help our 5th and 6th graders better organize and articulate their thinking. We have also been learning together about how to use Excel and data bases to develop critical thinking skills. This year for example, our third graders used databases of world temperature and rainfall to pose questions about crops in their study of African countries. Fourth graders began to use Excel to graph their results of inquiry science projects. These graphs allowed them to extend their scientific questions. As a staff, we continue to seek ways to build on these uses of technology by learning, using and integrating tools that help students improve their critical thinking and problem solving skills.

Promote a "Jackson School Campus"

The school's website is an important link to both our immediate community and a wider audience. The JGS art teacher, with her background in web and graphic design, has restructured it this past year, giving the site a bright, energetic new presence.

The school's site posts the JGS weekly newsletter, along with news about special events. The weekly newsletters are distributed via a community list serve "Enews," and jacksongrammar.org is also linked to the Jackson, NH Community website. In addition, the email link on the school website has proven a valuable conduit of inquiries and comments from former students, educators, as well as prospective parents.

Individual class pages are updated inconsistently. It is our hope that these class web pages will be used more actively by parents as we make the attempt to help our community "go paperless," and receive their news on-line as an *alternative* to weekly paper newsletters.

Another way we strive to make our website more interactive for families is to provide links to homework help on our class pages. Our school has recently adopted the Everyday Math program, and it is our hope that links on our website to Everyday Math homework help will improve parent and teacher use of our site.

Located in the heart of Mount Washington Valley, the school has access to a variety of unique resources. A case in point is the Tin Mountain Environmental program, and we are fortunate to collaborate with Tin Mountain teachers. Our students have always engaged in in-depth studies of our local environment. We are working now to enrich this partnership with Tin Mountain Environmental Education by integrating technology with this hands-on learning. Our goal is that when it is developmentally appropriate, on a study of the river, we will take probes and return to enter our data into databases. When appropriate, on a hike in the mountains, we will take GPS equipment. Technology will enrich the environmental study, and using the environment to learn to use the technology will give the skills meaning. Tin Mountain teachers and Jackson Grammar School staff are committed to learning together how to integrate this technology in a meaningful way. We also seek to use our local business, like visiting the local radio station to "see" sound waves. Resources like the School to Career partnership provide the opportunity to connect with mentors and technology resources.

Provide quality instruction grounded in a focused and integrated curriculum

The JGS staff is comprised of reflective, deliberate educators. We constantly strive to find opportunities to improve student learning (as measured by annual state assessments and NWEA testing, and ongoing class assessments), and to meet the needs of at risk learners. We share together as a staff about our current uses of technology across grade levels, and will make this work more systematic with curriculum work that ties our use of technology to new Science Frameworks in the summer of 2008.

Over the past three years our teaching staff has taken part in workshops on digital portfolios and imbedding technology in our curriculum. Last year our 6th graders took digital portfolios, in which they reflected on their work, with them as they transitioned to the Bartlett Middle School. This year the teaching staff outlined what each grade level will save for students' digital portfolios. We feel that this teacher learning process, and student reflection process, is helping us to look critically at how we use technology in our curriculum, and helping students to actively reflect on their use of technology.

Insure the responsible and meaningful use of current technology

Students are taught to respect equipment, and agree that the consequence of misusing equipment will be the loss of privileges. As early as primary grades, students are taught the difficult distinction between "using" information and photographs from the web, and plagiarism. The school's subscription to United Steaming is a rich resource, offering a legitimate source of images for student use in a variety of formats. Beginning in 3rd grade, students are taught to cite sources. Teachers are committed to integrating technology in a meaningful way.

Value a concerned, global outlook in our daily lives

Currently our students use email to communicate with people in our community about their areas of expertise. Classes and individuals use the web to learn about global issues. A recent example is the cyclone in Myanmar and a recent earthquake in China. As soon as the disaster happened, students had immediate information about what it was like in that part of the world. The JGS community is committed to teaching children to care for others in the world around them. Students undertake annual fund raising efforts to help people in need, and our older students use the web to research relief organizations.

Teachers actively use the Internet to connect students to the world around them. Our 2nd and 3rd graders are currently getting email updates from a college student in Tanzania. Our K-3 students communicate with parents in the Middle East and in Antarctica. We also bring the news of the world around us closer to students' understanding with technology like Google Earth.

JGS Technology Plan
Goals Section

Access:

- 1) We will continue to improve wireless connectivity, and make it accessible to all areas within the school environment.
- 2) Jackson School District will provide consistent funding to ensure that student and staff have access to technologies to support teaching, learning and instructional management.
- 3) Jackson School District will provide sufficient support personnel and resources to fully support technology integration to scaffold instructional goals.
- 4) Continued professional development to build technology skills/expertise and support classroom instruction will be a priority for all JGS faculty and support staff. At the same time, JGS will contract with additional consultants or other alternatives to provide teachers the support they need to fully integrate technology into lesson planning and the classroom learning environment.
- 5) Continued efforts to explore technologies that provide equal access to students with diverse learning styles and needs, typified by the voice activated software the JGS Special Ed team has implemented.

Literacy:

Computer literacy in the age of information is fundamentally different than 20 or even 10 years ago, when it was largely defined by proficiency with PCs, software and peripherals. Today, technology literacy still hinges on those proficiencies, but encompasses the far broader issues of appropriate use, ethics, in addition to instructional strategies that support problem solving, collaborative learning, and the accurate, efficient and effective use of information.

The Jackson School District embraces the *Information Literacy Standards for Student Learning*, and supports the *NH ICT Literacy Standards* (Ed 306.42) as follows:

Creativity and Innovation

As teachers continue to build technology integration skills, students will increasingly be involved in activities that provide opportunities for creativity and productivity. Using a variety of software and specific teacher generated guidelines, students will create projects that demonstrate their understanding and processing of information in a format that engages and/or interacts with the targeted audience. The resulting student products will be incorporated into the electronic portfolio.

Communication and Collaboration

Students use technology systems and a variety of media and strategies to collaborate with peers and experts. They communicate information and ideas effectively to multiple audiences.

Students collaborate on research projects across the curriculum, and share their projects in forums like all-school meeting in MovieMaker. Second and third graders have daily email communication with a merchant sea captain as he navigates the world's oceans. Every student has daily access to a computer, and students in each class follow the writing process and use a word processing or another productivity program to publish selected pieces of writing. These pieces are then shared among peers and in larger groups throughout the school community.

Web Quests provide students opportunities to work together on a theme based project utilizing their skills in research and web page design. Students will participate in a Web Quest, post it for the school and web community and receive feedback through email opportunities.

Research and Information Fluency

Teaching students to competently navigate the Internet is a priority, allowing them to become independent learners through research and email. Students use technology to locate, evaluate and collect information from a variety of sources, and an integrated approach to instruction is evident in all core subject areas.

JGS does not have an isolated computer lab; they are sited in each of the K-4 classrooms, and a mobile cart allows for every 5th and 6th grader to be assigned a laptop. Every student grades 4-6 has computer access during most of the school day.

JGS staff does not isolate technology instruction to a particular time of day, and teacher convey a global perspective by connecting students to the world via the Internet. In the primary grades, students are taught to navigate the Internet using specific sites to enrich their studies of Africa, frogs, or author studies as examples. In the upper grades, students use the Internet to access information for daily social studies and science lessons, and for independent studies. Both teachers and students rely on on-line resources like United Streaming to enhance their research with videos, maps, or images.

Critical Thinking and Data Analysis

Students use technology resources for solving problems and making informed decisions. Students employ technology in the development of strategies for solving problems in the real world.

Primary classes use email to communicate with scientists and people around the world. In the upper grades, 5th and 6th grade students use email to pose questions to scientists or other experts. Students learn to use software like PowerPoint and Publisher in the context of these studies, and for the purpose of organizing and displaying their learning. Graphing software is taught in the context of science lessons on rainfall and temperature, or to support science understanding. Our staff is currently working on improving our use of technology to develop problem solving and critical thinking skills.

Digital Citizenship

Students understand the ethical, cultural and societal issues related to technology. The JGS staff models and teaches the understanding that the accurate use of information is critical to effective decision making. Students practice responsible use of systems, information and software.

Technology Operations and Concepts

Students demonstrate a sound understanding of technology systems, their impact and operations. Students will acquire grade-appropriate skills, as defined by the *JGS Technology Benchmarks*.

Students have a fluid, working knowledge of communication software, and demonstrate the ability to organize and analyze information. They use technology tools to enhance learning, increase productivity and promote creativity. Students use productivity tools to collaborate, prepare publications, presentations and other creative models.

Digital Portfolios

The Jackson Grammar School has adopted a process that allows each student to create a digital portfolio that demonstrates students' Information and Technology Communication proficiency. A cumulative collection of student projects that demonstrates the NET-S standards will follow students as they transition to the Bartlett Middle School in 7th grade, or move to another district.

Last year sixth graders used a template to organize a digital portfolio of their work and photographs throughout their years at JGS, with the goal of including work that documented achievement of the K-6 benchmarks. This year the staff has begun to delineate what each grade level will save for the digital portfolio, with the idea that when a student reaches 6th grade, he or she has a representation of their work at each grade level, and has reflected on his/her work as it is added to the portfolio.

The teaching staff meets in a weekly collaborative, and as part of their agenda will review the classroom activities and projects and to identify the ICT Standards embedded in each. This ongoing discussion, sharing and reflection, will allow teachers a greater understanding of the use of technology across the school and will help shape future classroom activities. As this process develops, JGS staff will provide more challenging opportunities for students to use technology and create portfolio artifacts.

Professional Development

The Jackson School staff is committed to an integrated approach to the use of 21st century educational tools. The appropriate use of technology is a core belief, and that is reflected in professional goals. A current shared goal, for instance is "To Improve student learning through increasing understanding of strategies and best practice to meet the needs of diverse learners; to include but not limited to 1) science inquiry, 2) technology, 3) Unity Project." It is sustained, integrated initiatives of this sort that will help prepare students for the world they will inherit.

1) The Jackson Grammar School is committed to developing an environment where technology is integrated into all aspects of student learning.

- Teachers will learn and apply software that supports critical thinking and investigate emerging technologies that support student learning...
- Teachers will develop competencies in using and applying a broad range of technologies to support student learning.
- Teachers will improve their ability to interpret and use NWEA, Performance Tracker and other data to guide and inform their instruction.
- Jackson School District will provide staff with both on-site resources and access to a variety of other professional development in the use of technology to improve student achievement.

JGS Technology Plan

Jackson School District Technology Action Plan

Access to Resources:

To keep pace with onsite technology mobility, reliable wireless is essential. Every classroom will be linked to the school's wireless broadband network, allowing for universal access to the network from all areas and work stations.

Maintain current student computer 1:1 ratio grade 4-6. Acquire additional N-Computing systems, multi-user expansion hardware that maximizes efficient utilization of high-end desktop PCs. In conjunction with this initiative, continue to upgrade to flat screen monitors to best utilize finite space at JGS.

Each networked computer will be equipped with current management, productivity, communications, presentation and application software.

Continue subscriptions to electronically delivered learning materials, such as *United Streaming*, the Math Forum's *Problem of the Week*, and *Everyday Math Games*. Explore other similar learning resources.

Technological Literacy:

The Jackson teaching staff will be versed and proficient in the use and integration of 21st century Educational tools. They will support the *NH ICT Literacy Standards* and *ISTE NET-S*.

Teachers and staff will demonstrate and model digital citizenship, and an understanding of the ethical and legal issues relating to the use of technology.

Teachers and staff will use educational technologies for data collection, information management, problem solving, decision making, communication, and presentation within the curriculum. Site-based professional development or other training opportunities will be developed to provide personnel with the appropriate level of skill to achieve this task.

There will be a sustained program of contracted support provided by Technology Integrator Paula Churchill, via NCES, or similar resource. The emphasis will be on a systems-based approach, supporting teachers and modeling lessons, building skills and understanding of authentic embedding of technology across the curriculum.

Students will acquire grade-level “Benchmarks.” This will support their ability to use on-site electronic resources (encyclopedias, catalogs, indexes, hand-held tools), and to use technology to enhance their productivity, develop strategies for problem solving, critical and creative thinking.

6th Grade Students will acquire a level of technological competence that demonstrates their readiness to transition smoothly to middle school. It will include the ability to communicate through applications software, create well written documents, spreadsheets and databases and use computer-assisted design tools. They will be able to use a variety of technology, including computers, projection devices, scanners, and digital cameras.

Professional Development:

As part of ongoing Teacher Collaborative, the staff will review curriculum map, and their related projects and activities, to identify the embedded ICT Standards. There will be systematic support by a Technology Integrator or other contracted service provider in this process.

In the summer of 2008, SAU 9 teachers will meet to align science curriculum with new GLEs. Subsequently, the JGS staff will map the science curriculum to ensure integration of appropriate technology tools.

School personnel will coach peers in the proficient use of software and peripherals, and demonstrate the integration of technology in the classroom.

Teachers will develop a personal goal around technology learning for the year, linked to professional goals and the JGS School Improvement Plan.

Efforts to formalize the digital portfolio process will be ongoing. By the end of the 2008-09 academic year, the faculty will develop a document, complete with grade appropriate projects and reflections.

Every year, all staff and administrators will take the online Level of Technology Integration (LoTi) survey located at <http://nheon.org/oet/index.htm>.

We will spend a portion of our teacher workshop time together during the summer 2008 assessing our progress with technology goals, and setting new strategies for 2008-2009, and follow the same model in subsequent years.

Data Collection and Community collaboration:

- 1) JGS will strive to promote parental involvement and continue to improve communication within the school and wider community through *Enews* listserv, its web presence and weekly all school meetings.
- 2) A survey tool will be developed by the fall of 2008 to assess the role technology plays for members of the Jackson School community. A parents' survey will assess how often and for what reasons the school website is accessed. Based on the results, the tech team will convene to develop an action plan to make the site a more interactive, useful resource.
- 3) Jacksongrammar.org website will become a more dynamic, interactive forum for the school and the wider community, through news, curriculum and homework support and other aspects of communication.
- 4) Electronic communication, and a "go paperless" policy, will be a priority.

Jackson Grammar School Technology Benchmarks

The following *Jackson Grammar School Technology Benchmarks* were developed by the JGS classroom teachers and the Technology Committee. To guide us, we used the Bartlett School Technology Curriculum (with the intent of preparing our students for a fluid transition to Bartlett in 7th grade). We also used the NH Frameworks, and the own knowledge of students at each grade level. We consider the benchmarks to be skills that students should be able to use independently. At each level, we have also listed skills that students should be introduced to, but not expected to master.

It was our intent that each of the *Benchmarks* be assessable, and we are currently working as a staff to develop assessments at each stage to help us document that students have met these benchmarks.

K-2 Technology Curriculum

The primary level (K-2) technology curriculum will focus on age appropriate instructional software. Teachers will use reading and math software to augment the classroom instruction. Students will identify basic components of a computer using introductory computer terminology, perform basic operations and applications in order to use the age appropriate software.

K-2 Benchmarks:

By the end of 2nd grade students will:

- Identify computer components i.e. mouse
- Correctly use a mouse and keyboard
- Know how to open, save, and close programs
- Print a document with minimal assistance
- Use basic word processing tools i.e. space bar, return key, highlight to change font
- Be able to navigate instructional software

K-2 Topics to be covered (students will do these with assistance):

- Be introduced to desktop publishing
- Be introduced to internet use with extensive guidance

3-6 Technology Curriculum

At the 3rd through 6th grade level, in addition to instructional software, students will develop fluency with applications like Word, Excel, PowerPoint, Inspirations, search engines, and other tools that they can use to communicate, collaborate, and organize their thinking.

3rd Grade Benchmarks

By the end of 3rd grade students will:

- Correctly place fingers on "home row" keys
- Use the shift key to make an upper case letter
- Place cursor appropriately to correct using backspace or delete
- Use the "cut, copy, and paste" icons on the Toolbar
- Save a document
- Open a document
- Check print preview before printing
- Use the left and center align tools
- Use the bold, italic, and underline tools to change text
- Use the search function in research software to find information

3rd Grade Topics to be covered (students will do these with assistance):

- Print a document with minimal assistance
- Use spell check to correct spelling with minimal assistance
- Use the internet to conduct a search with extensive guidance
- Fill in a URL to go to a specific site on the internet with extensive guidance

4th Grade Benchmarks

By the end of 4th grade students will:

- Correctly use home row keys
- Correctly change page setup to portrait or landscape
- Create a story and make revisions using a word processing document
- Use the back key on Internet software independently
- Use an independent typing program to increase typing speed and accuracy

4th Grade topics to be covered (students will do these with assistance):

- Create a spreadsheet with guidance
- Create a chart with assistance
- Cite references with guidance
- Use the correct print function in research software to print a whole article or a selected portion of an article
- Use the internet to do research with minimal guidance
- Fill in a URL on the internet with minimal guidance

5th Grade Benchmarks

By the end of 5th grade students will:

- Use all tools on the toolbar
- Change page set up from portrait to landscape
- Sort slides in PowerPoint
- Present a PowerPoint presentation with minimal help from slides
- Resize an image or graphic
- Utilize the Internet as part of research projects
- Create and design a newsletter or newspaper using a publishing program

5th Grade topics to be covered (students will do these with assistance):

- Evaluate sources found on the Internet
- Create a spreadsheet from scratch with minimal assistance
- Create a chart from spreadsheet data with minimal assistance
- Save documents as older versions of a program with extensive guidance
- Save documents with different extensions (.gif, jpeg, and doc) with extensive guidance
- Save images from Web to folder with assistance

6th Grade Benchmarks

By the end of 6th Grade, in addition to all skills learned in K-5, students will:

- Use the Internet for extensive research
- Create a spreadsheet with no assistance
- Create a desktop publishing document with no assistance
- Create a multimedia presentation
- Evaluate sources found on the Internet
- Create a spreadsheet from scratch
- Create a chart from spreadsheet data
- Cite references correctly
- Hyperlink in multimedia presentation
- Save images from Web to folder
- Explain what a URL is
- Input scanned images into projects

6th Grade topics to be covered (students will do these with assistance):

- Save documents as older versions of a program with assistance
- Save documents with different extensions (.gif,.jpeg,.doc) with assistance
- Create an in house web page with guidance

JGS Technology Plan
BUDGET

Technology acquisition will occur primarily through the school budget. There is also a Technology Trust Fund, established by the school board in the 1990s for major acquisitions and upgrades. In addition, within the school activities account there is a technology sub-account, which can be used for purchases through fundraising, grants and gifts. In the past, the Jackson PTO has been an effective fundraising group as well, and could be a resource for equipment purchase.

REAP and other grant opportunities have also provided funding for major acquisitions, including a mobile lab with six laptops. The SAU 9 grant coordinator monitors, communicates and facilitates grant opportunities effectively.

All acquisition strategies will include ongoing staff training, evaluation, review, reassessment and revision. Our district recognizes the need for supplemental funding and resources, and will solicit funds through the operating budget, federal and state grants, in-kind donations from local businesses, as well as collaboration with the SAU to purchase additional hardware.

In regards to curriculum and professional development, the Jackson School Board has been highly supportive, and there is ordinarily sufficient funding for consultants, on-site professional development and other activities (the 2007-08 combined totals for line items for curriculum and professional development was to be is \$12,500, although \$5000 has been diverted to a salary line for 2008-09).

Professional development support is provided primarily through North Country Education Services, and Technology integrator Paula Churchill. Two days of support will be purchased in 2008-09, those hours to be used over the course of the year. The technology coordinator attends the state conference, and other off site and on-line opportunities are made available to staff.

Regular Operating Budget for 2007-08 (and projected through 09-10):

Account Number	Description	Amount Year 2007-08	Amount Year 2008-09	Amount Year 2009-10
2210-120-138	Tech Coordinator Stipend	5,000	5000	5,250
1100-430-138 Cont. Services	(repairs/network maintenance)	3500	3500	3500
2120-330-120	NWEA Testing	1500	1500	1500
2210-320-120	Professional Dev	1250	1500	1500
1100-610-138	Supplies	1,200	1,200	1,500
1100-642-138	Software	2,500	2,500	3000
1100-734-138	New Equipment	4000	4000	5000
2410-642-83	Admin Software	800	800	1000
2410-430-138	MMS software	1500	1700	1750
1100-739-83	Furniture	500	400	500
2410-330-138	Contracted tech service	500	500	500
		22250	22600	24,000

JGS Technology Plan
Hardware Inventory

The Jackson School currently has 24 classroom computers (current enrollment—51). One of those has N-Computing technology to extend its use to four workstations. There are two office desktop computers, and two administrative laptops. There is a 1:1 student to computer ratio grades 4-6. The number of desktops grades K-3 is defined by teacher request. Currently there are three desktops in the 2-3 grades, and four in the K-1

All student computers at JGS are classroom-based. The mobile cart, which can accommodate ten laptops and a LCD projector, lends great flexibility for instruction across grade levels, and allows for NWEA testing in classrooms.

In addition to the computers, the school owns 2 LCD projector, 4 overheads, Davis weather station units, 3 digital cameras and a camcorder, and 3 scanners. There are a variety of printers and a color scanner printer, which have network cards, allowing access from any work station in the building. The same is true of the BizHub 500 copier in the office, which is networked to act as a building-wide printer, and has scanning capacity which allows for paperless transmittal of documents.

JGS Technology Plan
Connectivity

JGS acquired a new server with tape back-up in the spring of 2004 which supports our local area network. It continues to serve the needs of the school network efficiently. The wiring infrastructure was upgraded for the entire building during the summer of 2003, including the installation of switches to replace hubs, and CAT5 wire to all classrooms. A building addition and renovation project will begin during the summer of 2008, which will involve further updates to the wiring infrastructure. The addition will also include a conference room that will serve as a school library/media center as well.

Time Warner provides 256K-modem connection to the school at no charge. Our UPS protector was replaced spring 2005, and all classroom computers have surge protection as well.

In addition, a new wireless access point was installed in the 5/6 classroom, where the mobile cart resides, in the fall of 2007. Consistency of function during periods of high traffic continues to be an issue, and the school's tech contractor is researching alternative systems to improve service.

We are not a member of a WAN, but do link to the SAU9 office's system for budgeting and requisitions. The MMS Generations software has proven a powerful tool to merge attendance data to produce the reports necessary to meet NHDOE state i4See data reporting.

Support

Network administration:

The part-time technology coordinator troubleshoots network and computer problems, and does scheduled system maintenance. The operating budget funds contracted maintenance and repair as well.

In addition, there is contracted technical support to provide software and maintenance for our use of the SAU9 report card and MMS data systems.

Security Policy

Time Warner Communications provides internet service to JGS through a cable modem. There is a Sonic Wall broadband internet firewall/router in place, with subscriptions for anti-virus and internet content filters that comply with CIPA guidelines. Computers are also regularly scanned monthly with MacAfee software.

Email is provided through a web-based SAU 9 server with accounts for all teachers. Staff and student access to the LAN requires a signed network usage agreement. Usernames and passwords are then issued for access to the server and specified folders.

Evaluation and Assessment

The JGS Technology team will meet quarterly to review technology needs, and will review the technology plan each fall to assess progress on stated goals and the school's action plan.

Professional development plays a critical role in the JGS Technology Plan. In turn, the building principal holds a pivotal role in assuring that staff member's professional development goals regarding technology are documented and met.

As a sending district to the Bartlett School for grades 7 and 8, it is important that we hold mutual and equivalent expectations for students at the end of grade 6, to assure their readiness for middle school. A schedule of transition activities occurs each year to integrate 6th grade students into the Bartlett program, and the teaching teams meet as well. Technology is included in this conversation, and the Bartlett Technology Coordinator is consulted regarding our students' readiness as they enter 7th grade there. In turn that input has been considered and included in the planning and review process for the JGS Student Technology Benchmarks and overall plan.

The JGS staff meets weekly to discuss scheduling, student matters and other school issues, and twice each month for professional development activities, to discuss curriculum and improving student achievement. The four classroom teachers also meet for an hour a week for collaborative work, and these common times provide the forum for moving the technology plan forward.

Collaborative has focused this year on formalizing the JGS digital portfolio process, and embedding technology in the curriculum. Formal documentation supporting the digital portfolio will be a goal in 2008-09.

Additional Documents/Jackson School District Policies

Student Internet and Network Access Policy

We are pleased to offer students of the Jackson School District access to the district computer network and the Internet. To gain access to the network and the Internet, all students under the age of 18 must obtain parental permission and must sign and return this form to the classroom teacher.

Access to the computer system and the Internet will enable students to explore and access a wide range of informational resources. Families should be warned that some material accessible via the Internet may contain items that are illegal, defamatory, inaccurate or potentially offensive to some people. The District employs a CIPA (Child Internet Protection Act) approved web filter (Internet filtering policy available upon request). While our intent is to make Internet access available to further educational goals and objectives, students may find ways to circumvent the filter and access objectionable materials as well. We believe that the benefits to students from access to the Internet, in the form of information resources and opportunities for collaboration, exceed any disadvantages. But ultimately, parents and guardians of minors are responsible for setting and conveying the standards that their children should follow when using media and information sources. To that end, the Jackson School District supports and respects each family's right to decide whether or not to apply for access.

District Internet and Computer Acceptable Use Policy

Access to network services is given to students who agree to act in a considerate and responsible manner. Parent permission is required. Access is a privilege - not a right. Access entails responsibility.

Students are responsible for good behavior on school computer networks just as they are in a classroom or a school hallway. Communications on the network are often public in nature. General school rules for behavior and communications apply.

The network is provided for students to conduct research for educational purposes. Individual users of the district computer networks are responsible for their behavior and communications over those networks. It is presumed that users will comply with district standards and will honor the agreements they have signed. Beyond the clarification of such standards, the district is not responsible for restricting, monitoring or controlling the communications of individuals utilizing the network.

Network storage areas may be treated like school lockers. Network administrators may review files and communications to maintain system integrity and insure that users are using the system responsibly. Users should not expect that files stored on district servers will always be private.

During school, teachers of younger students will guide them toward appropriate materials. Outside of school, families bear the same responsibility for such guidance as

they exercise with information sources such as television, telephones, movies, radio and other potentially offensive media.

As outlined in Board policy and procedures on access to electronic resources, the following are not permitted:

- Sending or displaying offensive messages or pictures
- Using obscene language
- Harassing, insulting or attacking others
- Damaging computers, computer systems or computer networks
- Downloading or installing any program from the Internet or other source
- Violating copyright laws
- Using another's password or allowing another user to use your password
- Trespassing in, deleting or moving another's folders, work or files
- Intentionally wasting limited resources
- Employing the network for commercial purposes

Violations may result in a loss of access as well as other disciplinary or legal action.

Jackson School District

Internet Filtering Rules in Effect as of July 1, 2001

Blocked Categories

- **ADULT:** Material labeled by its author or publisher as being strictly for adults. (Examples: "Adults only", "You must be 18 to visit this site", "Registration is allowed only for people 18 or older", "You must be of legal drinking age to visit this site").
- **ALCOHOL:** Advocating or promoting recreational use of alcohol. (See also "Adults Only.")
- **CHAT:** Chat sites, services that allow short messages to be sent to others immediately in real time. Downloadable chat software. (See also Moderated)
- **DISCRIM:** Advocating discrimination against others based on race, religion, gender, nationality, or sexual orientation.
- **DRUGS:** Advocating or promoting recreational use of any controlled substance. (Also see Illegal)
- **FREEMAIL:** Sites that offer e-mail accounts over the Web for free. Such sites can expose users to harmful content delivered via e-mail file attachments. Blocking such sites also helps to enforce local acceptable-use policies when e-mail is already provided locally to users.
- **FREEPAGES:** Sites where home page space is offered for free. These sites historically have done nothing to prevent capricious abuse of their services by users who post offensive content under multiple pseudonyms, making them difficult to track. Individual pages that have been reviewed by N2H2 on such sites are removed from this category, but filed under other categories as necessary.
- **GAMBLING:** Gambling services, or information relevant primarily to gambling.
- **GROSS:** Bodily functions. Tasteless humor. Graphic medical photos. Some extreme forms of body modification (cutting, branding, genital piercing).
- **ILLEGAL:** Advocating, promoting, or giving advice on carrying out acts widely considered illegal. This includes lock-picking, bomb-making, fraud, breaching computer security ("hacking"), phone service theft ("phreaking"), pirated software archives, or evading law enforcement.
- **LANGUAGE:** Crude, vulgar, or obscene language or gestures.
- **LINGERIE:** Models in lingerie (except those that qualify for Nudity).
- **NUDITY:** Bare or visible genitalia, pubic hair, buttocks, female breasts, etc. (See also Swimsuits, Lingerie, Sex, Pornography)
- **PERSONAL INFO:** Sites that gather personal information. (name, address, phone number, etc.)
- **PERSONALS:** Personal advertisements, including "mail-order brides." (See also "Adults Only.")

- **PORN:** Material intended to be sexually arousing or erotic. (See also Sex and Nudity)
- **SCHOOLCHEAT:** Any site that promotes plagiarism or similar cheating among students. (such as by offering term papers, exam keys, etc.)
- **SEX:** Images or descriptions of sexual activity. Any sexual merchandise. Sexual fetishism. (See also Pornography and Nudity)
- **SUIDER:** Information on committing murder or suicide.
- **TOBACCO:** Advocating or promoting recreational use of tobacco. (See also "Adults Only.")
- **VIOLENCE:** Graphic images or written descriptions of wanton violence or grave injury (mutilation, maiming, dismemberment, etc.) Includes graphically violent games.
- **WEAPONS:** Information on use of weapons, weapon collecting, or weapon making.

Exception Categories

- **EDUCATION:** Material under another category (such as Sex, Nudity, Violence) that has educational value (such as classic literature, sex education, etc.)
- **FORKIDS:** Sites that are designed specifically for kids.

Special Categories

- Block search engine results based on key words.
- Block URLs based on key words.

Retention of Proxy Logs:

- Proxy logs which allow us to pinpoint computer, user, and website will be kept for a minimum of fifteen (15) days before deletion.

Jackson School District COPYRIGHT COMPLIANCE

The board recognizes that federal law makes it illegal to duplicate copyrighted materials without authorization of the holder of the copyright, except for certain exempt purposes. Severe penalties may be imposed for unauthorized copying or using of audio visual or printed materials and computer software, unless the copying or using conforms to the "fair use" doctrine.

Under the "fair use" doctrine, unauthorized reproduction of copyrighted materials is permissible for such purposes as criticism, comment, news reporting, teaching, scholarship or research. If duplicating or changing a product is to fall within the bounds of fair use, these four standards must be met for any of the foregoing purposes:

- A. **THE PURPOSE AND CHARACTER OF THE USE.** The use must be for such purposes as teaching or scholarship and must be nonprofit.
- B. **THE NATURE OF THE COPYRIGHTED WORK.** Staff may make single copies of the following for use in research, instruction or preparation for teaching: book chapters; articles from periodicals or newspapers; short stories, essays or poems; and charts, graphs, diagrams, drawings, cartoons or pictures from books, periodicals, or newspapers in accordance with these guidelines.
- C. **THE AMOUNT AND SUBSTANTIALITY OF THE PORTION USED.** In most circumstances, copying the whole of a work cannot be considered fair use; copying a small portion may be if these guidelines are followed.
- D. **THE EFFECT OF THE USE UPON THE POTENTIAL MARKET FOR OR VALUE OF THE COPYRIGHTED WORK.** If resulting economic loss to the copyright holder can be shown, even making a single copy of certain materials may be an infringement, and making multiple copies presents the danger of greater penalties.

While the district encourages its staff to enrich the learning programs by making proper use of supplementary materials, it is the responsibility of district staff to abide by the district's copying procedures and obey the requirements of the law. In no circumstances shall it be necessary for district staff to violate copyright requirements in order to perform their duties properly. The district cannot be responsible for any violations of the copyright law by its staff.

Any staff member who is uncertain as to whether reproducing or using copyrighted material complies with the district's procedures or is permissible under the law should contact the superintendent or the person designated as the copyright compliance officer. The latter will also assist staff in obtaining proper authorization to copy or use protected material when such authorization is required.

Legal References: P.L. 94-553 Federal Copyright Law of 1976
(U.S. Code, Title 17)

PROGRAM DEVELOPMENT/STAFF RESPONSIBILITIES FOR STUDENT INTERNET ACCESS

In order to match electronic resources as closely as possible to the approved district curriculum, district personnel will review and evaluate resources in order to offer "favorites" and menus of hyperlinked materials which comply with curriculum guidelines governing the selection of instructional materials. In this manner, staff will provide developmentally appropriate guidance to students as they make use of telecommunications and electronic information resources to conduct research and other studies related to the district curriculum. All students will be informed by staff of their rights and responsibilities as users of the district network in the prior to gaining access to that network, either as an individual user or as a member of a class or group.

As much as possible, access to district information resources will be designed in ways that point students to those which have been reviewed and evaluated prior to use. While students may be able to move beyond those resources to others that have not been evaluated by staff, they shall be provided with guidelines and lists of resources particularly suited to the learning objectives. Students may pursue electronic research independent of staff supervision only if they have been granted parental permission and have submitted all required forms. Permission is not transferable and may not be shared.

COMPUTER SECURITY, E-MAIL AND INTERNET COMMUNICATIONS

ACCEPTABLE USE POLICY FOR JACKSON SCHOOL DISTRICT STAFF

The School District has established this policy with regard to access and disclosure of electronic data composed, stored, sent, or received by employees using the District computer system. This policy is designed to protect the safety and security of the District's computer systems including E-mail and Internet use.

Staff will employ electronic mail on a daily basis at work as a primary tool for communications. The district may rely upon this medium to communicate information, and all staff will be responsible for checking and reading messages daily.

The network is provided for staff and students to conduct research and communicate with others. Communications over the network are often public in nature therefore general rules and standards for professional behavior and communications will apply.

The School District intends to enforce the rules set forth below and reserves the right to change these rules at any time.

1. The computer hardware system, software and E-mail system are owned by the District, and all messages or data composed, stored; sent, or received using the system are and remain the private property of the District. They are not the property of the employee.

2. The computer and E-mail system is to be used for business purposes only. Personal business is unauthorized and should not be conducted on the system.
3. The electronic mail system may not be used to solicit or proselytize for commercial ventures, religious or political causes, outside organizations, or other non-job-related solicitations.
4. The School District prohibits discriminatory, harassing, or offensive materials in any form of media. Among those which are considered offensive are any messages which contain sexual implications, racial slurs, gender-specific comments, or any other comments that offensively address someone's age, sexual orientation, religious or political beliefs, national origin, or disability.
5. The electronic mail system shall not be used to send (upload) or receive (download) copyrighted materials, trade secrets, proprietary financial information, or similar materials without prior authorization.
6. The School District reserves, and intends to exercise without prior notice, the right to read, review, audit, intercept, access or disclose any and all information on an employee's computer system or messages created, received or sent over the electronic mail system for any purpose, even if coded or password protected.
7. The confidentiality of any message or data should not be assumed. Even when a message is erased, it is still possible to retrieve and read that message. The use of passwords for security does not guarantee confidentiality, or that the District will not retrieve it. All passwords must be disclosed to the computer administrator.
8. Any communications created, sent, or retrieved using E-mail may be read by individuals other than the intended recipient.
9. Notwithstanding the District's right to retrieve and monitor any E-mail messages, such messages should be treated as confidential by other employees and accessed only by the intended recipient. Employees are not authorized to retrieve or read any E-mail that is not sent to them. Any exception to this policy must receive prior approval by the Superintendent.
10. Employees are not to use others' passwords or allow others to use their password. Sharing passwords or leaving a unattended computer logged on constitutes a security breach and is a violation of this policy.
11. Any employee who violates this policy or uses the computer system or electronic mail system for improper purposes shall be subject to discipline up to and including discharge.
12. The District has the authority to terminate or limit access to any program at any time.

The Network Supervisor will report inappropriate behaviors to the employee's supervisor who will take appropriate disciplinary action. Any other reports of inappropriate behavior, violations, or complaints will be routed to the employee's supervisor for appropriate action.

Each year employee will be given copies of this policy and procedures and will sign an acceptable use agreement and network information form before establishing an account or continuing their use.