

Grant Elementary School Technology Plan 2009-2012



*Fostering the leaders and stewards of tomorrow:
"I am a promise, I am a possibility."*

Technology Plan

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Grant Elementary School – Technology Plan – 2009 to 2012

Student learning is at the heart of all we do at Grant Elementary School. It is our belief that student learning is improved with the use of computer and computer-related technologies. This plan begins with a vision for student learning, a mission statement with a statement of beliefs, and a rationale for creating and continuing to build networked learning environments. It continues with Technology Learning Standards for all students, including performance indicators by grade level. Professional development strategies and philosophy are described in support of the standards as well as goals for implementing an infrastructure, leaving no teacher behind and increasing student achievement.

In January 2003, at an Open Forum meeting, educators and community members created a plan to implement the use of computer technologies at Grant Elementary School, based on increasing student skills in communication, information processing, and productivity. Since then, considerable work has been accomplished (See Appendix A: Grant Technology Timeline 2003-2009). Students and staff work within a networked environment in which all classrooms and work areas are equipped with networked computers. All computers are equipped with a suite of applications used by all members of the learning community. From any computer in the school, members of the network access files from their own dedicated space on servers and from shared drives in addition to Internet application use. Access from anywhere on campus provides our students and teachers with flexibility, reliability and consistency in the use of the computers for student learning and teacher productivity. Another goal of Grant's technology implementation is to use tools consistent with home use to help support students with similar features and functions. As a result, most tools are generic "business" tools rather than tools specifically designed for students.

In addition to the library and administrative district supported systems, Grant currently supports 97 systems: 18 teacher-configured systems, 48 shared classroom student configured systems (PCs and thin clients), 30 computer lab student configured systems, 1 computer cart for classroom demonstrations by teachers or students, and 18 networked printers.

This plan conveys next steps in using technology more productively and in weaving it more thoroughly into daily learning and teaching.

VISION

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

MISSION STATEMENT

The Grant Elementary School Staff provides an exceptional standards-based instructional program that motivates students towards becoming independent critical thinkers and life-long learners. Our school fosters the importance of the school-home partnership that values commitment to learning. Our staff and community share the goals of preparing students to become productive and responsible participants in a complex, **technology** based society in their academic endeavors.

Grant Elementary School is part of Petaluma City School District, which is committed to the ongoing development of infrastructure, and the implementation of hardware, software, and quality professional development related to learning environments of our children. The staff guides students to effectively and efficiently communicate, problem solve, and function in the 21st century. We are fostering the leaders and stewards of tomorrow.

BELIEFS

- Skillful use of technology supports the development of process skills such as flexibility, adaptability, critical thinking, problem solving and collaboration, which are essential to success in our rapidly changing information age.
- Technology allows us to better serve the diverse learning needs of our students.
- Our schools must prepare students to be lifelong learners who are responsible for their own learning, skilled in accessing and processing information, confident in using technological tools, able to solve complex problems alone or collaboratively, capable of being creative and innovative, and able to communicate locally, nationally, and world-wide.

RATIONALE

To accomplish our vision for increased student learning with the use of technologies, our plan enables the following:

EQUAL ACCESS FOR THE LEARNING COMMUNITY

- Establishes basic technological networking capabilities provided in all classrooms.
- Assures that all students and staff will be provided with and have equal access to minimum standards of hardware and software.
- Implements grade level technology goals identified to ensure equity of delivery to all students.
- Provides the learning community with greater opportunity for interaction, collaboration and information exchange.
- Promotes equitable access to learning technology as a community investment and encourages an active partnership among schools, businesses, homes and the community.

DEVELOPMENT OF LIFELONG LEARNERS

- Assures skillful use of technology to support the development of lifelong learning skills and process skills such as: flexibility, adaptability, critical thinking, problem solving, and collaboration, which are essential to success in our rapidly changing information age.

INTEGRATION OF TECHNOLOGY IN THE CLASSROOM

- Expands classroom tools for teaching and learning.
- Provides for the integration of multiple resources for existing and emerging curriculum.
- Enables the learning community to communicate more effectively, access and process information, and work productively.
- Links the classroom with educational resources within the building, community and worldwide.
- Creates a collaborative environment for project-oriented activities.
- Increases the productivity of students as they work toward attaining learning outcomes.
- Encourages the use of multimedia tools enabling students to become active and experiential learners.
- Enables learning to involve partnerships within the school, among schools, and with other organizations.

BUILD A CULTURE OF CONTINUOUS LEARNING FOR STAFF

- Develops school-based technology planning and learning.
- Builds online learning opportunities.
- Facilitates access to collegial support and best practice information from a wide variety of resources.
- Expands the variety of teaching tools to differentiate and support diverse learners.
- Supports productive and efficient management of student assessment and student data.
- Increases support for emerging instructional strategies: inter-disciplinary, collaborative, and active learning options.
- Enables curriculum, instruction and assessment to be developed and aligned with each other.
- Provides a system that helps students, parents and teachers work together to support educational outcomes.
- Pilots new teaching strategies, technologies, and instructional resources.

TECHNOLOGY STANDARDS FOR ALL STUDENTS

In order to achieve our current goals, and to meet state standards, our school created technology standards (See Appendix D: Technology Skills Benchmark Continuum). The standards were derived from previous technology goals and the *National Educational Technology Standards for Students* from the International Society for Technology in Education (ISTE). The *Grant Elementary School Technology Standards for All Students* cover five areas for all students in grades K-6:

- basic technology operations and concepts
- responsible and ethical use
- effective and creative communication
- thinking, learning, and producing
- research, problem-solving, and decision-making

Goal 1: Technology-Rich Learning Environment

The educational infrastructure at Grant Elementary School will include appropriate technology and staff training, which will enhance teacher effectiveness, student achievement, and instructional management.

Objectives (What)	Action Plan (How)	Stakeholders (Who)
Grant School will provide access to computers and technological equipment (i.e. calculators, overhead projectors, digital cameras, LCD projectors, TV/VCR/DVDs) in every classroom for students.	Maintain and reassess yearly our existing classroom deployment standards. <ul style="list-style-type: none"> • <i>Identify and document exiting list of equipment and "deployment" standard by grade</i> • <i>Identify a plan for expansion, replacement and classroom maintenance with prioritization and budgetary recommendations</i> 	Administration, Staff, Technology Committee, PTA and Site Council
Petaluma City School District will provide a computer for every teacher.	Communicate needs to the District (i.e. equipment maintenance and/or replacement, training needs).	District Office, Administration, Staff, Technology Committee

Objectives (What)	Action Plan (How)	Stakeholders (Who)
	<ul style="list-style-type: none"> <i>Standards-based report card printing needs are still in flux, but need to be resolved for easy use for teachers.</i> 	
<p>Grant School will provide access to a computer lab for all students.</p>	<p>Create a yearly plan of integrated curriculum by grade level to support Technology Benchmark Standards, and standards-based curriculum.</p> <ul style="list-style-type: none"> <i>Implement strategy for applying alignment pages.</i> <p>On-going needs assessment of yearly equipment maintenance and/or replacement.</p> <ul style="list-style-type: none"> <i>Memory purchased for lab computers to extend them for another 3 years with existing software and increased used of multimedia/graphics rich applications</i> <p>Continuous evaluation of tools (i.e. hardware, software, peripheral).</p> <ul style="list-style-type: none"> <i>SCC report by computer lab coordinator written and delivered yearly</i> 	<p>Administration, Technology Committee, Computer Lab Coordinator, PTA and Site Council</p>
<p>Grant School will provide software, web-based resources and Internet access that can be used to enhance instruction and practice in mastering state standards and technology benchmarks.</p>	<p>Leverage existing content provided by textbook publishers.</p> <ul style="list-style-type: none"> <i>Align online textbook activities with curriculum</i> <p>Create an evaluation sub-committee for evaluating/implementing new software and/or web-based resources.</p> <ul style="list-style-type: none"> <i>Campus lacks "writing" tools and standard curriculum for primary grades using technology</i> <p>Preview and/or purchase technological resource materials that promote improvement in student performance.</p> <ul style="list-style-type: none"> <i>Identify additional online supporting materials for curriculum alignment</i> <i>Identify and evaluate tools/programs for supporting</i> 	<p>Administration, Technology Committee, Staff</p>

Objectives (What)	Action Plan (How)	Stakeholders (Who)
	<i>writing in primary grades using technology</i>	
<p>Grant School staff will use the technology planning form <i>wiki pages to schedule and communicate planned activities and content for use in the computer lab.</i></p> <ul style="list-style-type: none"> <i>Form was identified as too cumbersome.</i> 	<p>Access and submission of the form using the Wiki in a timely manner.</p> <ul style="list-style-type: none"> <i>Design “wiki” pages that contain re-usable activities aligned to curriculum for lab, home and back of classroom use.</i> <p>Documentation of lesson plans using technology and curriculum standards for enhanced student learning.</p> <ul style="list-style-type: none"> <i>Alignment wiki pages are self-documenting</i> 	Staff, Computer Lab Coordinator
<p>Improve and increase awareness for parents to engage in the education of their children, to improve home-school communications and to enable parents to become more involved in school decision-making.</p>	<p>Offer Technology Sessions for parents to learn how to access, support and assist students in using the Wiki for student learning.</p> <ul style="list-style-type: none"> <i>Schedule Parent Information nights</i> <i>Increase promotion and use of wiki tools for home use by increasing staff awareness.</i> <p>Offer regular classroom communication options for parents to learn more about school and classroom events, happenings and curriculum (i.e., email, wiki postings, online newsletters, etc.)</p> <ul style="list-style-type: none"> <i>Begin implementation of “Classroom newsletters” for student work and communications.</i> 	Administration, Staff

PROFESSIONAL DEVELOPMENT STRATEGIES

WHY PROFESSIONAL DEVELOPMENT?

A thriving learning community focuses on improving learning for all of its youth and adult members. In order for staff members to create powerful learning experiences for students, they need to be engaged in the same. *The Petaluma City Schools District Board Policy for Instructional Professional Development* describes a system which “promotes continuous inquiry and improvement embedded in the daily life of schools” and which focuses on “individual, collegial, and organizational improvement.” The professional development strategies for improving learning and teaching with technology are a part of numerous district and school-based strategic plans and curriculum initiatives.

Grant School strongly believes a technically skilled, proficient faculty is both the foundation and most crucial success factor to the integration of technology in the educational program. Providing that on-going training must be the first stage and priority of implementation. Therefore, the Grant School technology plan must emphasize, prioritize, and support financially, the continual professional development of all faculty and staff.

To achieve this goal, Grant School endorses the Eight Essential Elements of a Professional Development Plan outlined below:

1. A committed school leader.
2. A pilot group of volunteer teachers.
3. An articulated pedagogic framework.
4. A sustained learning time and practice for teachers resulting in action plans.
5. An attention to practical elements of time management, scheduling, lab availability, and student to computer ratio.
6. The sustained support and follow up from internal and external resources.
7. The recognition of teacher achievements and growth in newsletters and meetings.
8. An expectation that the professional development plan will continue for three to five years with a new group of teachers joining every year.

Goal 2: Professional Development

Grant Elementary School educators will have on-site training in the use of technologies to help improve student achievement.

Objectives (What)	Action Plan (How)	Stakeholders (Who)
Site-based professional development training programs will be developed to provide personnel with the appropriate level of skill required for successfully completing assigned tasks.	Create a technology skills benchmark self assessment tool for all staff and administrators. <ul style="list-style-type: none"> • <i>Survey created.</i> Develop a schedule of offered skills training. <ul style="list-style-type: none"> • <i>Based on survey, initial schedule created; updated survey created 12/09; 2nd session scheduled</i> Provide training and support for teacher competency in technology for improved student learning. <ul style="list-style-type: none"> • <i>Tech buddies assigned to help</i> 	Administration, Staff, Computer Lab Coordinator, Site Council

Objectives (What)	Action Plan (How)	Stakeholders (Who)
	<i>staff</i>	
School personnel will train peers in basic computer skills and demonstrate the integration of technology in the classroom.	<p>Cultivate leadership within school to guide the integration of technology and curricula.</p> <p>Discussion of technology topics within grade a-like meetings.</p> <p>Share best practices in technology within cluster meetings.</p> <p>Continue to create and post resources for each other.</p> <ul style="list-style-type: none"> • <i>Began curriculum alignment pages on wiki to facilitate online and lesson plans using technology tools.</i> 	Staff
School personnel will be trained in technology areas that can be used for individualized instruction, developing assessment tools, and managing assessment results.	<p>Provide outside trainings for staff (i.e. Edusoft, Standardized Report Committee, LCD projector training)</p> <ul style="list-style-type: none"> • <i>On-site trainings provided as part of teacher "just in time" training for productivity and tracking tools.</i> 	District Office, Administration, Staff

INSTRUCTIONAL SUPPORT FOR STUDENT ACHIEVEMENT

Several initiatives to align our curriculum to state and national standards, support technology, and ensure that our staff is trained in the latest content and methodologies have been an ongoing commitment and a successful accomplishment in our school district. Our educational program is built upon a foundation of best practices. Emphasis is placed upon teaching essential skills to prepare our students for the future.

Goal 3: Student Achievement

Grant School will continue to focus on high academic achievement for all students and continually raising the overall school performance.

Objectives (What)	Action Plan (How)	Stakeholders (Who)
Staff will use a variety of multi-media materials to more effectively differentiate instruction to reach students with diverse learning styles.	<p>Plan individualized learning programs based on assessment data.</p> <ul style="list-style-type: none"> • <i>Individual keyboarding goals established in grades 3-6</i> <p>Increase student motivation with expanded multi-media resources for class work and</p>	Administration, Staff, Computer Lab Coordinator

	<p>assignments.</p> <ul style="list-style-type: none"> • <i>Features applications and extensions identified</i> <p>Provide opportunities for students to work collaboratively and actively with technology.</p> <p>Guide student use of the Internet by creating and using curriculum pages on the school Wiki.</p> <ul style="list-style-type: none"> • <i>Student Wiki Scavenger Hunt</i> • <i>Exploration days for tools</i> 	
<p>Age-appropriate use of technology will be integrated throughout the state adopted curriculum, with innovative resources, reliable systems and materials, and with knowledgeable staff.</p>	<p>Challenge students with an intriguing question which engages them, working in collaborative groups, to seek information, display it, process it, and produce a presentation of their solution.</p> <p>Staff will guide students to deeper investigations by engaging them in research using online research modules created by teacher and computer lab coordinator that guide students through investigations using the resources of the World Wide Web, and productivity software such as Microsoft Word, PowerPoint, and Excel.</p> <p>Staff will guide students on using creativity in visual and written expressions by combining painting and drawing programs, images/photos and text in multimedia presentation tools such as Tux Paint, Microsoft Publisher, Microsoft PowerPoint and Microsoft PhotoStory 3.</p> <p>Staff will continue to use, evaluate, and investigate the state adopted material in all subject areas.</p>	<p>Staff, Computer Lab Coordinator</p>
<p>Staff will seamlessly integrate technology use within Language Arts content area.</p>	<p>Staff will continue to use Accelerated Reader.</p> <p>Staff will continue to investigate and implement Accelerated Reader best practices for individualized student achievement.</p> <p>Student achievement will continue to be shared out in BEST assemblies.</p> <p>Accelerated Reader data will be used to inform and guide instruction.</p> <p>Design and implement a "Summer Reading" program to promote continuous reading for</p>	<p>Staff, Reading Specialist, Resource Specialists, Computer Lab Coordinator, Library Coordinator, PTA and Site Council</p>

	<p>overall achievement.</p> <ul style="list-style-type: none"> • <i>Defined “school-wide” reading goal of 100 million words</i> • <i>Established regular reports at BEST assemblies by Librarian of goals</i> • <i>Scheduled teacher trainings to implement and define reading goals, using tools to find books and other implementation strategies.</i> • <i>Added “widgets” to grade and classroom pages to bring awareness to students of reading goals.</i> 	
<p>Staff will seamlessly integrate technology use within Math content area.</p>	<p>Staff will investigate and implement enVision Math program as teaching and learning resource.</p> <p>Staff will continue to investigate and implement Accelerated Math best practices for individualized student achievement.</p> <p>Staff will investigate adoption of Accelerated Math in additional grades and for intervention purposes.</p> <p>Staff will assess use of Math Facts In A Flash for more automatic recall in grades 1-6 including home use using Home Connect.</p> <p>Accelerated Math data will be used to inform and guide instruction.</p> <ul style="list-style-type: none"> • <i>Accelerated Math training began with grade 3 teachers</i> • <i>Installed scanners in Grade 3 classrooms</i> • <i>Scheduled teacher trainings for STAR Math results combined with enVision Benchmarks.</i> 	<p>Staff, Resource Specialists, Computer Lab Coordinator, PTA and Site Council</p>
<p>Staff will assist students to acquire technology skills appropriate to their grade level and according to the technology skills continuum to engage and extend learning opportunities.</p>	<p>Staff will plan computer lab and classroom activities using the Technology Planning Form/Alignment pages</p> <p>Staff will use the Technology Skills Continuum as a framework for acquiring and scaffolding skills in their planning.</p> <p>Staff will begin to use, record and assess skills introduction and mastery using the Technology Skills Continuum each trimester.</p> <p>Staff will discuss progress and assessment at Grade Alike meetings and share findings</p>	<p>Staff, Resource Specialists, Computer Lab Coordinator, Library Coordinator, PTA and Site Council</p>

	<p>at staff meetings.</p> <ul style="list-style-type: none">• <i>Created classroom binders for teachers to help organize technology trainings, notes, plans and benchmark skills.</i>	
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APPENDIX A: Grant Technology Timeline 2003-2009

Timeframe	Action
Jan 2003	<ul style="list-style-type: none"> Open Forum Topic to update technology equipment on campus
May 2003	<ul style="list-style-type: none"> Grant School Website launched
Sep 2003	<ul style="list-style-type: none"> Technology Committee presentation to PTA to fund a three phase technology program at Grant.
Oct 2003 - June 2004	<ul style="list-style-type: none"> Vendor and purchase plan for Phase 1 of the Plan
Summer 2004	<ul style="list-style-type: none"> Campus gets wired for internet access in classrooms
Sep 2004	<ul style="list-style-type: none"> Lab Opens with Phase 1 of the Plan (Terminal Servers, Domain Controller + Remote Desktop access to servers in lab)
Oct 2004	<ul style="list-style-type: none"> 7 Thin Client terminals purchased as test bed for Intermediate grades
Spring 2005	<ul style="list-style-type: none"> New Administrator PC purchased for Lab Coordinator
Aug 2005	<ul style="list-style-type: none"> 30 new computers are purchased for the lab and 28 of the old lab computers are deployed to classrooms around campus 11 Network printers purchased and installed Donated laser printer installed in Staff Room
Jan 2006	<ul style="list-style-type: none"> 12 Thin Clients are purchased for replacement of older failing computers in classrooms
Spring 2006	<ul style="list-style-type: none"> 12 donated PCs configured for use in classrooms and staff room
Fall 2007	<ul style="list-style-type: none"> 10 Additional Thin Clients are purchased for replacement of old failing computers Grant Technology Website launched for student and teacher use (grantlab.pbwiki.com)
Spring 2008	<ul style="list-style-type: none"> Receive donated machines from SCOE (some teacher systems configured) Equipment redeployed based on standard configurations for grade levels Classroom computer tables purchased Multimedia Cart purchased for "traveling" presentation center
Fall 2008 – Winter 2009	<ul style="list-style-type: none"> 2 Additional Network laser printers purchased Multimedia Cart configured and deployed Deployment of remaining teacher configured machines to all classrooms Deployment of student SCOE configured machines for classrooms – all Windows 95/98 systems completely removed from campus. 3 ceiling mounted Projectors/classroom amplification/VCR/DVD systems installed and configured with wireless mouse and keyboard 5 laptops configured for Kindergarten centers MP3 players and cassette conversion software installed for Kindergarten "Listening Centers" 2 Wireless networks installed to support Special Education laptops and K2 laptops
Spring 2009	<ul style="list-style-type: none"> "Teacher" Technology Snippets Workshops started Grant Technology Plan formalized

Fall 2009

- Staff Development Schedule planned based on technology skills survey
 - Textbook and online re-usable activities alignments began for documenting and expanding existing use of tools for student academics and technology skills
 - Completion of “roll-out” based on last plan
-

Winter 2010

- Updated Tech Plan to align with current Staff Development offerings, curriculum updates and technology skills for students.

APPENDIX B: Implemented Skills Examples

Area	Tool/Project
ASSESSMENT	
Evaluate individual work and class progress with reporting options available in software programs.	STAR Reading STAR Math Accelerated Reading Accelerated Math enVision Math Edusoft Standards Testing
Report student achievement to parents.	TOPS Reports Home Connect
Review folders/portfolios of student work and writing saved on the network.	Picasa and Microsoft Office
Prepare written assessments of student progress with report card programs.	GradePro
Use resources created on shared drives to store and share assessment data.	
INSTRUCTION	
Use a variety of multi-media materials to more effectively differentiate instruction to reach students with diverse learning styles.	Geometry Lesson: Rooftop Architecture PowerPoint Wiki Teaching Pages
Plan individualized learning programs based on assessment data.	Accelerated Math
Increase student motivation with expanded multi-media resources for class work and assignments.	PowerPoint as a Memory Book PowerPoint for State Report Presentations Technology Tracks: Digital Storytelling, Choose Your Own Adventure Stories, Get Smart Google Earth Missions
Provide opportunities for students to work collaboratively and actively.	Student Wiki ThinkQuest Enrichment Rotation – Technology Track
Guide student use of the Internet by creating and using curriculum pages on school websites.	Grant Technology Website (Wiki) Student Wiki
Continue to create resources for each other.	
Guide students to deeper investigations by engaging them in research using online research modules created by teacher/computer lab coordinator that guide students through investigations using the resources of the World Wide Web, and productivity software such as <i>Word</i> , <i>PowerPoint</i> , and <i>Excel</i> .	21 st Century Literacy Search Strategies Webquests Google Lit Trips
Guide students on using creativity in visual and written expressions by combining painting/drawing programs, images/photos and text in multimedia presentation tools such as TuxPaint, Microsoft Publisher, Microsoft PowerPoint and PhotoStory 3	2/3 Grade Book Summaries using Word/TuxPaint 6 Grade Student Wiki: GrantBook Online Safety, Walker Creek Project 2nd Grade Lifecycle of Parsley
Challenge students with an intriguing question which prods them, working in collaborative groups, to seek information, display it, process it, and produce a presentation of their solution.	Google Earth Mission Trip
Teacher teams write the research modules to support the district-adopted curriculum.	

APPENDIX C: Computer Lab Planning Form

Computer Lab Planning Form

Name _____ Grade _____ Date _____

Curricular Area/Topics (Check all that apply) <ul style="list-style-type: none"><input type="checkbox"/> Language Arts<input type="checkbox"/> Mathematics<input type="checkbox"/> Social Studies<input type="checkbox"/> Science<input type="checkbox"/> Art<input type="checkbox"/> Health<input type="checkbox"/> Other _____	Current Classroom Themes (List any themes currently covered in class.)
Learning Skills (Check all that apply) <ul style="list-style-type: none"><input type="checkbox"/> Basic Technology operations and concepts<input type="checkbox"/> Responsible and ethical use<input type="checkbox"/> Effective and creative communication<input type="checkbox"/> Thinking, learning, producing<input type="checkbox"/> Research, problem-solving and decision-making<input type="checkbox"/> Practice, re-teach, memorization<input type="checkbox"/> Evaluation	Activity/Project Description (What are you thinking you'd like to do?)
Technology Benchmark Skills (List the student skills you expect students to learn/introduce during this project)	Extensions (Early Finishers/Technical Difficulties – see Ideas page)
Project Name _____ Number of Sessions _____	

APPENDIX D: Technology Skills Benchmark Continuum



Grant Elementary School Technology Skills Benchmark Continuum

Petaluma City Schools
Proposed and Piloted 2007-2008

Technology Skills Benchmark Continuum

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Introduction

Grant Elementary School has operated a computer lab for 10 years. During that time, the educational use of the lab has extended beyond grades 4-6 to primary grades and even to Kindergarten. During this tenure, the national view of educational technology use has changed from “edutainment” applications to fully integrated standards-based curriculum with technology skills learning. The focus is less on drill and practice and more on critical thinking, problem solving and decision-making. The evolution of educational beliefs, along with the Petaluma City Schools adoption of the ISTE National Educational Technology Standards for Students (NETS.S), has precipitated a more specific, trackable and grade leveled functional skill set. Like all learning opportunities, skills are mastered over time. A steady, scaffolded and directed set of skills is required for success. At Grant, we believe that teaching integrated technology-based curriculum prepares students for success at the secondary schools where individual or small group attention and consistent access to technology are still not guaranteed. This document:

- Identifies and documents the skills needed for each grade level
- Provides a framework from which teachers can create integrated curriculum with an understanding of previously developed skills and new skills required for a project
- Aligns skills with the newly adopted district NETS.S standards

These skill sets were based on and adjusted to fit our access and profile at Grant School from the Kent School District (http://www.kent.k12.wa.us/ksd/it/inst_tech/index.html), an experienced and accomplished leader in identifying and integrating technology into curriculum. Skills were introduced in the 2007-2008 school year to students as a pilot and have been adjusted based on actual use, time allotted and project assignments. The current skill set reflects this first year’s pilot adjustments.

Summary of Year 1

We began teaching the skill sets for each grade at the beginning of the second trimester. This initial year has been an introductory year for a defined set of skills as well asking students to be responsible for learning those skills. While not at the “independent” use level for all skills in grades 1-6 as defined in the continuum, we have made significant progress. As a result, several recommendations are made for Year 2.

- Adoption of ethics curricula (CyberSmart, Quick, 21st Century Information Fluency Project, etc.) for ethics with introduction and follow-up in the classroom outside of lab time; lab time will be used to work through “online” examples and assignments.
- Keyboarding begins formally in third grade, but it should be done more often for less time with initial “kick start” sessions for grades 4, 5 and 6 since typing is foundational to writing skills using technology.
- Perhaps have some contest or other method for cementing the necessary computer and technology we can all communicate more easily.
- Determining which skills are necessary for classroom management so they can be taught and emphasized to allow independent working in classrooms using technology.
- Continue to identify and refine skills in one grade for use in projects in the next grade.

Summary of Year 2

Based on the recommendations of the previous year, we

- Implemented an Online Safety/Net etiquette program for 6th graders

- Started staff development with mini training sessions called Technology Snippets 101 to help bring staff skills and knowledge in line with curriculum benchmarks
- Published a technology plan (benchmark is now part of that document)
- Introduced a technology planning form

Based these achievements our recommendation for this next year is:

- Continue to refine the benchmarks based on observation, student achievement and technology trends for our 21st century learners
- Establish and deliver a regular staff development plan for reaching student benchmarks
- Establish “short”/regular keyboarding sessions for 3rd graders

* All Skills are introduced in Kindergarten, and assistance is expected for each skill although some Kindergarten students may be able to achieve a skill independently.

Students Will...

1. Use hardware and software to support learning and productivity	Trimester Taught		
With Assistance...	1	2	3
1.1. Turn on the computer correctly			
1.2. Shutdown the computer correctly			
1.3. Wake up computers correctly from various sleep states			
1.4. Use the mouse			
1.5. Type First and Last Name into application			
1.6. Utilize basic paint, text and graphic tools			
1.7. Print			
1.8. Understand basic use of the keyboard			

2. Apply vocabulary and strategies for using technology in a networked system	Trimester Taught		
With Assistance...	1	2	3
2.1. Log in/off to a networked computer			
2.2. Log in/out of web-based applications using student individual username/password			
2.3. Login/out using auto or easy login (“magic”) logins			
2.4. Know basic parts of the computer by name			
2.5. Recognize and use desktop/toolbar icons and menus			

3. Use electronic resources to communicate, collaborate & retrieve information	Trimester Taught		
With Assistance...	1	2	3
3.1. Use bookmarks and/or hyperlinks to access the Internet			

4. Use technology to create and deliver presentations	Trimester Taught		
With Assistance...	1	2	3
4.1. Orally present completed work (published) using slideshow or other posted methods. (Examples of published pieces include a slide show with voice, printed documented/drawing for class book or bulletin board, and/or posted work on the Internet.)			

5. Demonstrate ethical behavior	Trimester Taught		
With Assistance...	1	2	3
5.1. Demonstrate appropriate behavior for technology use and show respect for technology equipment			
5.2. Understand consequences for misuse of technology			
5.3. Understand and abide by the Grant/PCS Acceptable Use Policy			

*Bold items are those new to this grade level or those moved from "With assistance" to "Independently" at this level.

Students Will...

1. Use hardware and software to support learning and productivity	Trimester Taught		
	1	2	3
Independently...			
1.1. Turn on the computer correctly			
1.2. Shutdown the computer correctly			
1.3. Wake up computers correctly from various sleep states			
1.4. Use the mouse			
1.5. Type First and Last Name into application			
1.6. Utilize basic paint, text and graphic tools			
1.7. Print			
1.8. Understand basic use of the keyboard			
With Assistance...			
1.9. Type text into a word processing document			
1.10. Insert graphics into word-processed documents			
1.11. Insert information into a template (Word, PowerPoint, etc.)			
1.12. Use formatting features purposefully (text styles, colors, fonts and size)			

2. Apply vocabulary and strategies for using technology in a networked system	Trimester Taught		
	1	2	3
Independently...			
2.1. Log in/off to a networked computer			
2.2. Log in/out of web-based applications using student individual username/password			
2.3. Login/out using auto or easy login ("magic") logins			
2.4. Know basic parts of the computer by name			
2.5. Recognize and use desktop/toolbar icons and menus			
With Assistance...			
2.6. Open files or applications correctly			
2.7. Save files to a specified folder on the server correctly			

3. Use electronic resources to communicate, collaborate & retrieve information	Trimester Taught		
	1	2	3
Independently...			
3.1. Use bookmarks and/or hyperlinks to access the Internet			
With Assistance...			
3.2. Use search skills to retrieve information within an application.			

4. Use technology to create and deliver presentations	Trimester Taught		
	1	2	3
With Assistance...			
4.1. Orally present completed work (published) using slideshow or other posted methods. (Examples of published pieces include a slide show with voice, printed documented/drawing for class book or bulletin board, and/or posted work on the Internet.)			

5. Demonstrate ethical behavior	Trimester Taught		
	1	2	3
Independently...			
5.1. Demonstrate appropriate behavior for technology use and show respect for technology equipment			
5.2. Understand consequences for misuse of technology			
With Assistance...			
5.3. Understand and abide by the Grant/PCS Acceptable Use Policy			
5.4. Discuss copyright issues of electronic media			

*Bold items are those new to this grade level or those moved from “With assistance” to “Independently” at this level.

Students Will...

1. Use hardware and software to support learning and productivity	Trimester Taught		
Independently...	1	2	3
1.1. Turn on the computer correctly			
1.2. Shutdown the computer correctly			
1.3. Wake up computers correctly from various sleep states			
1.4. Use the mouse			
1.5. Type First and Last Name into application			
1.6. Utilize basic paint, text and graphic tools			
1.7. Print			
1.8. Understand basic use of the keyboard			
1.9. Type text into a word processing document			
With Assistance...			
1.10. Insert graphics into word-processed documents			
1.11. Insert information into a template (Word, PowerPoint, etc.)			
1.12. Use formatting features purposefully (text styles, colors, fonts and size)			
1.13. Begin basic keyboarding awareness			
1.14. Spell-check a document			
1.15. Toggle between two or more applications			
1.16. Use formatting features purposefully (text styles, colors, fonts and size)			

2. Apply vocabulary and strategies for using technology in a networked system	Trimester Taught		
Independently...	1	2	3
2.1. Log in/off to a networked computer			
2.2. Log in/out of web-based applications using student individual username/password			
2.3. Login/out using auto or easy login (“magic”) logins			
2.4. Know basic parts of the computer by name			
2.5. Recognize and use desktop/toolbar icons and menus			
With Assistance...			
2.6. Open files or applications correctly			
2.7. Save files to a specified folder on the server correctly			

3. Use electronic resources to communicate, collaborate & retrieve information	Trimester Taught		

Independently...	1	2	3
3.1. Use bookmarks, and/or hyperlinks to access the Internet			
With Assistance...			
3.2. Use search skills to retrieve information within an application.			
3.3. Understand and use website navigational tools and methods			

4. Use technology to create and deliver presentations	Trimester Taught		
With Assistance...	1	2	3
4.1. Orally present completed work (published) using slideshow or other posted methods. (Examples of published pieces include a slide show with voice, printed documented/drawing for class book or bulletin board, and/or posted work on the Internet.)			

5. Demonstrate ethical behavior	Trimester Taught		
Independently...	1	2	3
5.1. Demonstrate appropriate behavior for technology use and show respect for technology equipment			
5.2. Understand consequences for misuse of technology			
With Assistance...			
5.3. Discuss copyright issues of electronic media			
5.4. Understand and abide by the Grant/PCS Acceptable Use Policy			

Technology Benchmark Continuum

Third Grade

*Bold items are those new to this grade level or those moved from "With assistance" to "Independently" at this level.

Students Will...

1. Use hardware and software to support learning and productivity	Trimester Taught		
	1	2	3
Independently...			
1.1. Turn on the computer correctly			
1.2. Shutdown the computer correctly			
1.3. Wake up computers correctly from various sleep states			
1.4. Use the mouse			
1.5. Utilize basic paint, text and graphic tools			
1.6. Print			
1.7. Type text into a word processing document			
1.8. Begin formal keyboarding training			
1.9. Use formatting features purposefully (text styles, colors, fonts and size)			
1.10. Spell-check a document			
1.11. Use left, center and right justification modes			
With Assistance...			
1.12. Insert graphics into word-processed documents			
1.13. Toggle between two or more applications			
1.14. Insert information into a template (Word, PowerPoint, etc.)			
1.15. Copy, cut, and paste text and graphics			

2. Apply vocabulary and strategies for using technology in a networked system	Trimester Taught		
	1	2	3
Independently...			
2.1. Log in/off to a networked computer			
2.2. Log in/out of web-based applications using individual username/password combinations, group username/passwords or auto/easy ("magic") logins (First Grade skills 2.2 and 2.3)			
2.3. Know basic parts of the computer by name			
2.4. Recognize and use desktop/toolbar icons and menus			

Student Assessment Scores

1	2	3	4
Below Basic	Basic	Proficient	Advanced
Demonstrates less than half the benchmarks as defined.	Demonstrates all assisted and at least half the independent benchmarks.	Demonstrates all benchmarks as defined.	Demonstrates independently the majority of benchmarks designed to be accomplished with assistance.

* 1st and 2nd trimester scores will be based on the benchmarks taught for each of the five standards

With Assistance...			
2.5. Open files or applications correctly			
2.6. Save files to a specified folder on the server correctly			
2.7. Use “find file” features			
2.8. Use help tools (examples: menus, balloons, assistants, toolbars)			
2.9. Understand editing and word processing terminology (cut, copy, paste, tab, graphic, etc.)			

3. Use electronic resources to communicate, collaborate & retrieve information	Trimester Taught		
Independently...	1	2	3
3.1. Use URLs, bookmarks, and/or links to access the Internet			
3.2. Use search skills to retrieve information within an application.			
With Assistance...			
3.3. Use application to retrieve information about progress, goals and achievements			
3.4. Understand and use website navigational tools and methods			

4. Use technology to create and deliver presentations	Trimester Taught		
With Assistance...	1	2	3
4.1. Orally present completed work (published) using slideshow or other posted methods. (Examples of published pieces include a slide show with voice, printed documented/drawing for class book or bulletin board, and/or posted work on the Internet.)			

5. Demonstrate ethical behavior	Trimester Taught		
Independently...	1	2	3
5.1. Demonstrate appropriate behavior for technology use and show respect for technology equipment			
5.2. Understand consequences for misuse of technology			
With Assistance...			
5.3. Discuss copyright issues of electronic media			
5.4. Understand and abide by the Grant/PCS Acceptable Use Policy			

Student Assessment Scores

1	2	3	4
Below Basic	Basic	Proficient	Advanced
Demonstrates less than half the benchmarks as defined.	Demonstrates all assisted and at least half the independent benchmarks.	Demonstrates all benchmarks as defined.	Demonstrates independently the majority of benchmarks designed to be accomplished with assistance.

* 1st and 2nd trimester scores will be based on the benchmarks taught for each of the five standards

*Bold items are those new to this grade level or those moved from “With assistance” to “Independently” at this level.

Students Will...

1. Use hardware and software to support learning and productivity	Trimester Taught		
	1	2	3
Independently...			
1.1. All 3 rd grade skills in sections (1.1, 1.2, 1.3, 1.4, 1.5, 1.6)			
1.2. Type text into a word processing document			
1.3. Utilize basic paint, text and graphic tools			
1.4. Use formatting features purposefully (text styles, colors, fonts and size)			
1.5. Spell-check a document			
1.6. Continue to develop formal keyboarding skills			
1.7. Use left, center and right justification modes			
1.8. Insert information into a template (Word, PowerPoint, etc.)			
1.9. Use left, center and right justification modes			
1.10. Insert graphics into a word processed document			
1.11. Copy, cut and paste text and graphics			
With Assistance...			
1.12. Enter and manipulate data in spreadsheets			
1.13. Produce graphs and/or charts based on spreadsheet data			
1.14. Select, crop, move and resize images			
1.15. Copy and paste text and/or graphics from one application to another			
1.16. Use bullets and numbering			
1.17. Toggle between two or more applications			

2. Apply vocabulary and strategies for using technology in a networked system	Trimester Taught		
	1	2	3
Independently...			
2.1. Log in/off to a networked computer			
2.2. Log in/out of web-based applications using individual username/password combinations, group username/passwords or auto/easy (“magic”) logins (First Grade skills 2.2 and 2.3)			
2.3. Know basic parts of the computer by name			
2.4. Recognize and use desktop/toolbar icons and menus			
2.5. Open files or applications correctly			
2.6. Save files to a specified folder on the server correctly			
With Assistance...			
2.7. Use “find file” features			
2.8. Use help tools (examples: menus, balloons, assistants, toolbars)			
2.9. Understand editing and word processing terminology (cut, copy, paste, tab, graphic, etc.)			
2.10. Print to different locations			

Student Assessment Scores

1	2	3	4
Below Basic	Basic	Proficient	Advanced
Demonstrates less than half the benchmarks as defined.	Demonstrates all assisted and at least half the independent benchmarks.	Demonstrates all benchmarks as defined.	Demonstrates independently the majority of benchmarks designed to be accomplished with assistance.

* 1st and 2nd trimester scores will be based on the benchmarks taught for each of the five standards

2.11. Apply strategies for identifying and solving routine hardware and software problems (examples: CTRL + ALT + DELETE, checking cable connections, etc.)			
2.12. Create folders for saving and organizing work in user/home folders			
2.13. Know basic network terms (server, account, login terms, etc)			
2.14. Recognize basic file name extensions (.ppt, .doc, .xls, .pub, etc.)			

3. Use electronic resources to communicate, collaborate & retrieve information	Trimester Taught		
Independently...	1	2	3
3.1. Use URLs, bookmarks, and/or links to access the Internet			
3.2. Use search skills to retrieve information within an application.			
3.3. Understand and use website navigational tools and methods			
With Assistance...			
3.4. Use application to retrieve information about progress, goals and achievements			
3.5. Use appropriate search strategies to locate information on the Internet and in electronic media			

4. Use technology to create and deliver presentations	Trimester Taught		
With Assistance...	1	2	3
4.1. Create one or more curriculum-related multimedia projects			
4.2. Present one or more curriculum-related multimedia projects			

5. Demonstrate ethical behavior	Trimester Taught		
Independently...	1	2	3
5.1. Demonstrate appropriate behavior for technology use and show respect for technology equipment			
5.2. Understand consequences for misuse of technology			
With Assistance...			
5.3. Understand and abide by copyright issues of electronic media			
5.4. Identify and cite Internet and electronic references in a bibliography			
5.5. Understand and abide by the Grant/PCS Acceptable Use Policy			
5.6. Apply the concept and understand the consequences of plagiarism and copyright infringement			

Student Assessment Scores

1	2	3	4
Below Basic	Basic	Proficient	Advanced
Demonstrates less than half the benchmarks as defined.	Demonstrates all assisted and at least half the independent benchmarks.	Demonstrates all benchmarks as defined.	Demonstrates independently the majority of benchmarks designed to be accomplished with assistance.

* 1st and 2nd trimester scores will be based on the benchmarks taught for each of the five standards

*Bold items are those new to this grade level or those moved from “With assistance” to “Independently” at this level.

Students Will...

1. Use hardware and software to support learning and productivity	Trimester Taught		
	1	2	3
Independently...			
1.1. All 3 rd grade skills in sections (1.1, 1.2, 1.3, 1.4, 1.5, 1.6)			
1.2. Continue to develop formal keyboarding skills			
1.3. Insert information into a template (Word, PowerPoint, etc.)			
1.4. Use formatting features purposefully (text styles, colors, fonts and size)			
1.5. Spell-check a document			
1.6. Use left, center and right justification modes			
1.7. Insert graphics into a word processed document			
1.8. Copy, cut and paste text and graphics			
1.9. Utilize basic paint, text and graphic tools			
1.10. Toggle between two or more applications			
With Assistance...			
1.11. Use bullets and numbering			
1.12. Create tables			
1.13. Enter and manipulate data in spreadsheets			
1.14. Produce graphs and/or charts based on spreadsheet data			
1.15. Copy and paste text and/or graphics from one application to another			
1.16. Use peripheral devices such as digital cameras and scanners			
1.17. Select, crop, move and resize images			

2. Apply vocabulary and strategies for using technology in a networked system	Trimester Taught		
	1	2	3
Independently...			
2.1. Log in/out of network and web-based applications using appropriate username/passwords (Fourth Grade skills 2.1 and 2.2) web-based applications using individual username/password combinations, group username/passwords or auto/easy (“magic”) logins			
2.2. Recognize and use desktop/toolbar icons and menus			
2.3. Understand editing and word processing terminology (cut, copy, paste, tab, graphic, etc.)			
2.4. Open files or applications correctly			
2.5. Save files to a specified folder on the server correctly			
2.6. Create folders for saving and organizing work in user/home folders			
2.7. Print to different locations			
With Assistance...			
2.8. Use “find file” features			
2.9. Use help tools (examples: menus, balloons, assistants, toolbars)			

Student Assessment Scores

1	2	3	4
Below Basic	Basic	Proficient	Advanced
Demonstrates less than half the benchmarks as defined.	Demonstrates all assisted and at least half the independent benchmarks.	Demonstrates all benchmarks as defined.	Demonstrates independently the majority of benchmarks designed to be accomplished with assistance.

* 1st and 2nd trimester scores will be based on the benchmarks taught for each of the five standards

2.10. Know basic network terms (server, account, login terms, etc)			
2.11. Recognize basic file name extensions (.ppt, .doc, .xls, .pub, etc.)			
2.12. Apply strategies for identifying and solving routine hardware and software problems (examples: CTRL + ALT + DELETE, checking cable connections, etc.)			

3. Use electronic resources to communicate, collaborate & retrieve information	Trimester Taught		
Independently...	1	2	3
3.1. Use URLs, bookmarks, and/or links to access the Internet			
3.2. Use search skills to retrieve information within an application.			
3.3. Understand and use website navigational tools and methods			
With Assistance...			
3.4. Use application to retrieve information about progress, goals and achievements			
3.5. Use appropriate search strategies to locate information on the Internet and in electronic media			
3.6. Access available electronic databases			
3.7. Evaluate and critique the quality and credibility of electronic information			

4. Use technology to create and deliver presentations	Trimester Taught		
With Assistance...	1	2	3
4.1. Create one or more curriculum-related multimedia projects			
4.2. Present one or more curriculum-related multimedia projects			

5. Demonstrate ethical behavior	Trimester Taught		
Independently...	1	2	3
5.1. Demonstrate appropriate behavior for technology use and show respect for technology equipment			
5.2. Understand consequences for misuse of technology			
5.3. Understand and abide by the Grant/PCS Acceptable Use Policy			
With Assistance...			
5.4. Identify and cite Internet and electronic references in a bibliography			
5.5. Apply the concept and understand the consequences of plagiarism and copyright infringement			
5.6. Understand and abide by copyright issues of electronic media			

Student Assessment Scores

1	2	3	4
Below Basic	Basic	Proficient	Advanced
Demonstrates less than half the benchmarks as defined.	Demonstrates all assisted and at least half the independent benchmarks.	Demonstrates all benchmarks as defined.	Demonstrates independently the majority of benchmarks designed to be accomplished with assistance.

* 1st and 2nd trimester scores will be based on the benchmarks taught for each of the five standards

*Bold items are those new to this grade level or those moved from “With assistance” to “Independently” at this level.

Students Will...

1. Use hardware and software to support learning and productivity	Trimester Taught		
	1	2	3
Independently...			
1.1. All 3 rd grade skills in sections (1.1, 1.2, 1.3, 1.4, 1.5, 1.6)			
1.2. Continue to develop formal keyboarding skills			
1.3. Insert information into a template (Word, PowerPoint, etc.)			
1.4. Use formatting features purposefully (text styles, colors, fonts and size)			
1.5. Spell-check a document			
1.6. Use left, center and right justification modes			
1.7. Insert graphics into a word processed document			
1.8. Copy, cut and paste text and graphics			
1.9. Utilize basic paint, text and graphic tools			
1.10. Toggle between two or more applications			
1.11. Copy and paste text and/or graphics from one application to another			
1.12. Select, crop, move and resize images			
1.13. Use bullets and numbering			
With Assistance...			
1.14. Create tables			
1.15. Enter and manipulate data in spreadsheets			
1.16. Produce graphs and charts based on spreadsheet data			
1.17. Use peripheral devices such as digital cameras and scanners			

2. Apply vocabulary and strategies for using technology in a networked system	Trimester Taught		
	1	2	3
Independently...			
2.1. Log in/out of network and web-based applications using appropriate username/passwords (Grade 3 skills 2.1 and 2.2) web-based applications using individual username/password combinations, group username/passwords or auto/easy (“magic”) logins			
2.2. Know basic parts of the computer by name			
2.3. Know basic network terms (server, login terms, etc.).			
2.4. Recognize and use desktop/toolbar icons and menus			
2.5. Recognize basic file name extensions (.ppt, .doc, .xls, .pub, etc.)			
2.6. Open files or applications correctly			
2.7. Save files to a specified folder on the server correctly			
2.8. Create folders for saving and organizing work in user/home folders			
2.9. Print to different locations			

Student Assessment Scores

1	2	3	4
Below Basic	Basic	Proficient	Advanced
Demonstrates less than half the benchmarks as defined.	Demonstrates all assisted and at least half the independent benchmarks.	Demonstrates all benchmarks as defined.	Demonstrates independently the majority of benchmarks designed to be accomplished with assistance.

* 1st and 2nd trimester scores will be based on the benchmarks taught for each of the five standards

2.10. Use “find file” features			
With Assistance			
2.11. Use help tools (examples: menus, balloons, assistants, toolbars)			
2.12. Apply strategies for identifying and solving routine hardware and software problems (examples: CTRL + ALT + DELETE, checking cable connections, etc.)			

3. Use electronic resources to communicate, collaborate & retrieve information	Trimester Taught		
Independently...	1	2	3
3.1. Use URLs, bookmarks, and/or links to access the Internet			
3.2. Use search skills to retrieve information within an application.			
3.3. Use application to retrieve information about progress, goals and achievements			
3.4. Use appropriate search strategies to locate information on the Internet and in electronic media			
3.5. Understand and use website navigational tools and methods			
With Assistance...			
3.6. Access available electronic databases			
3.7. Use appropriate search strategies to locate information on the Internet and in electronic media			
3.8. Evaluate and critique the quality and credibility of electronic information			

4. Use technology to create and deliver presentations	Trimester Taught		
With Assistance...	1	2	3
4.1. Create one or more curriculum-related multimedia projects			
4.2. Present one or more curriculum-related multimedia projects			

5. Demonstrate ethical behavior	Trimester Taught		
Independently...	1	2	3
5.1. Demonstrate appropriate behavior for technology use and show respect for technology equipment			
5.2. Understand consequences for misuse of technology			
5.3. Understand and abide by the Grant/PCS Acceptable Use Policy			
5.4. Identify and cite Internet and electronic references in a bibliography			
With Assistance...			
5.5. Understand and abide by copyright issues of electronic media			
5.6. Apply the concept and understand the consequences of plagiarism and copyright infringement			
5.7. Understand the need for protection against software and hardware vandalism (examples: altering or deleting software, having an awareness of viruses, etc.)			

Student Assessment Scores

1	2	3	4
Below Basic	Basic	Proficient	Advanced
Demonstrates less than half the benchmarks as defined.	Demonstrates all assisted and at least half the independent benchmarks.	Demonstrates all benchmarks as defined.	Demonstrates independently the majority of benchmarks designed to be accomplished with assistance.

* 1st and 2nd trimester scores will be based on the benchmarks taught for each of the five standards

APPENDIX E: Classroom Technology Equipment Standards

Equipment/Grade	K	1 - 2	3	4 - 6
Audio Visual (TVs, DVD, VCR)	1 TV + either a DVD/VCR combo or a separate DVD and VCR	1 TV + either a DVD/VCR combo or a separate DVD and VCR	1 TV + either a DVD/VCR combo or a separate DVD and VCR	1 TV + either a DVD/VCR combo or a separate DVD and VCR (TVs are replaced with installed projectors)
Overhead Projector	1 per classroom	1 per classroom	1 per classroom	1 per classroom
Teacher Computer	1 per classroom Computer + speakers + Microsoft Office + laser printer on a computer rolling table (K1 has a terminal per request)	1 per classroom Computer + speakers + Microsoft Office + laser printer on a computer rolling table (A5 requested no teacher computer)	1 per classroom Computer + speakers + Microsoft Office + laser printer on a computer rolling table (A4 requested no teacher computer)	1 per classroom Computer + speakers + Microsoft Office + laser printer on a computer rolling table
Student Computers	None (K2 has 4 working donated laptops)	2 Thin Clients (A3 has an additional thin client)	2 Thin Clients + 1 student PC to host the AM Scanner	4+ systems (mix of thin clients and PCs operating as thin clients with 1 hosting AM Scanner)
Projectors	None	None	None	None (B3, D1, D2 - Pilot has 1 Projector connected to teacher pc w/wireless keyboard and mouse, and DVD/VCR combo and classroom amplification)
Classroom Amplification	None	None (A2 has one portable system; A3 has borrowed portable system)	None (A4 and B4 have installed RF-based systems)	None (B3, D1, D2 - classroom amplification connected for Pilot Projector project)
Accelerated Math Scanners connected to student PC			1 per classroom (B1's scanner is connected to the	1 per classroom

			teacher computer due to request.)	
Digital Camera	None	None	None	None (C1 has one camera for 6 th grade science projects acquired through PEF grant)
NEOs + Alphasmarts	None	None	None	None (D1 has two NEO2s purchased with classroom funds.)
Media Cart	The media cart is designed to be wheeled to a classroom or the multi. It contains: <ul style="list-style-type: none"> • Laptop computer with wireless mouse and keyboard • Projector • Wireless classroom amplification + speakers 			

APPENDIX F: Technology Curriculum Alignment

Grant's Technology Curriculum Alignment is provided online on the Grant Technology Website (the student curriculum portal). It was established in response to teachers using the same "online" activities to help supplement student learning in math, language arts, science and social studies. You can find them online at: <http://grantlab.pbworks.com/Curriculum-Alignment-Pages>

NOTE: Online pages are updated regularly. The example information is from the page as of the latest update of the Technology Plan. Please check the Grant Technology Website for the most recent activity.

Alignment Page Listing

The following pages are used to capture curriculum alignment with online (or offline) activities. This page is organized by Grade Levels and Subjects. Pages usually align to a particular subject area with multiple grades so that teachers can see activities above and below their current grade. The multi-grade page also helps support combo classes in "one quick look".

Grade Level	Subject/Curriculum Area	Page
K - 3	Math	Online Math Curriculum - Grades K - 3
1	Language Arts	Starfall-HM Alignment - Grade 1
4 - 6	Math	Online Math Curriculum Alignment - Grades 4-6
4 - 6	Multiple	Installed Applications - Grades 4-6
K - 1	Language Arts	PM Story Books Software Alignment - Grade K - 1

Online Curriculum Alignment Page Example


gmason@pet.k12.ca.us
account sign out

VIEW EDIT

☆ Online Math Curriculum Alignment - Grades 4-6

last edited by  Ginny Mason 2 wks ago Page history

Math

$2+1=3$
 $9-1=8$
 $2 \times 3=6$
 $5+5=10$

Below is a repository of specific tools/assignments aligned to the current enVision Math Curriculum for grades 4-6. This is a shared resource with responsibility for all to help align tools activities to our current math program.

Instructions for adding content and posting to your page are provided at the bottom of this page.

Click on the little arrow in the upper right corner above the whitespace to expand this page to full width. Sort the table by clicking on the column heading.

Envision Math Topic#

Topic # Grade 4	Topic # Grade 5	Topic # Grade 6	Activity Name/Link 1	Website/Tool Name 2	Description	Comment/Recommendation
	9	8	Factor Tree Prime Factorization GCF LCM	NLVM 3	Factor numbers using a tree diagram. Double Trees ask for both GCF and LCM. Teacher Resource page	Single Tree: "Computer" (Do 10) Single Tree: "User" (Do 10) - Have students create their own or you provide a specific set. Double Tree: "Computer" (Do 5) Double Tree: "User" (Do 5) - Have students create their own or you provide a specific set.

Installed Applications Curriculum Example


gmason@pet.k12.ca.us
account sign out

VIEW EDIT

☆ Installed Applications - Grades 4-6

last edited by  Ginny Mason 0 mins ago Page history

The following applications are installed at Grant. Each application identifies where it is available for use by student or teacher along with the "intended grade" where students can be successful at using the tool independently. (See the Technology Curriculum Benchmarks for specific skills.)

Classroom Installation: T = Teacher Only, S = Student Systems (Terminal Servers)

Application	Grades	Subject	Student	Teacher	Lab	Classroom
Mini-Sebran	K	Language Arts, Math	X		X	
Sebran	K, 1	Language Arts, Math	X		X	
PM Readers	K, 1	Language Arts	X		X	S
TuxPaint	K, 1, 2, 3, 4, 5, 6,	Language Arts, Math	X	X	X	T
Microsoft Word	2, 3, 4,5, 6,	Writing (Language Arts, Social Studies, Science)	X	X	X	S, T
Mlcrosoft Excel	5, 6,	Math	X	X	X	S, T
Microsoft PowerP9oint	2, 3,4,, 5, 6	Multimedia, Writing/Presenting (Language Arts, Science, Social Studies)	X	X	X	S, T
Microsoft Publisher	4, 5, 6	Writing (Language Arts, Social Studies)	X	X	X	S, T
PhotoStory	4,	Enrichment, Multimedia/Writing (Language Arts, Science, Social Studies)	X	X	X	

APPENDIX G: Staff Training Schedule 2009-2010

Grant Elementary NCLB Technology Snippets 2009-2010

“Investing in the today’s teachers for tomorrow”

September – December 2008

Date	Title	Grades/Time	Content/Coverage
Sept 16	Accelerated Math	3-6 1 hour 1-2pm	<ul style="list-style-type: none"> ▪ Logging in ▪ Setting Objectives ▪ Assigning exercises, practices, tests ▪ Keyboard scoring
Sept 23	enVision Math	All 1 hour 1-2pm	<ul style="list-style-type: none"> ▪ Logging in ▪ Adding/delete grades ▪ Setting up class ▪ Assigning lessons ▪ Seeing what a student sees ▪ Easy login
Sept 30	Email	All 30 minutes 1:15-1:45pm	<ul style="list-style-type: none"> ▪ Using groups ▪ Changing password/setting other options ▪ Using categories and automatic response (not covered) ▪ Sending/receiving attachments (not covered)
Oct 7	The “wiki” and other computer lab resources	Primary – Grades K-3	
		40 minutes 1:00-1:40pm	<ul style="list-style-type: none"> ▪ Website tools for students ▪ Installed tools/software for students ▪ Resources for teachers
		Intermediate – Grades 3-6	
		20 minutes 1:40-2:00pm	<ul style="list-style-type: none"> ▪ Website tools for students ▪ Installed tools/software for students ▪ Resources for teachers
Oct 14	enVision Math: Now What	All 45 minutes 1:15-2:00pm	<ul style="list-style-type: none"> ▪ Creating a lesson ▪ Information for home access/rules/permission slips ▪ Sharing of tips/techniques ▪ Discussion of where it works/doesn’t work ▪ Tests and results

			<ul style="list-style-type: none"> ▪ Buddies
Oct 21	Classroom Newsletters (Wiki, v. email v. print)	All 1:15-2:00pm 45 minutes	<ul style="list-style-type: none"> ▪ Learn different formats of newsletters and their benefits/limitations
Oct 28	Accelerated Reader Revisited	All 60 minutes	<ul style="list-style-type: none"> ▪ Using data to generate reports ▪ Classroom management tips ▪ Exploring the resources
Nov 11	NO CLASSES		
Nov 18	Survey/feedback on training	All 15 minutes	<ul style="list-style-type: none"> ▪ Short survey/feedback on training; additional subjects, revisited subjects, etc.
Dec 2	TuxPaint for Curriculum	All 30 minutes	<ul style="list-style-type: none"> ▪ As illustration ▪ Writing and drawing ▪ Art
Dec 9	TuxPaint for Fun	All 40 minutes	<ul style="list-style-type: none"> ▪ Come join us in creating a “thank you” card for your buddy
Dec 16	Tech Buddies	All	<ul style="list-style-type: none"> ▪ Celebrate your successes

January - May 2010
Please be on time for trainings!

Date	Title	Grades/Time 1:15-2:00pm (45 minutes)	Content/Coverage
Jan 13	Training Session 2 Kick-off	Grades K-6	<ul style="list-style-type: none"> ▪ New schedule/format ▪ Notebooks ▪ Ideas
Jan 20	No Class / Work with Buddy		<ul style="list-style-type: none"> ▪ Work with your buddy on alignment
Jan 27	Wiki	Grades K-6	<ul style="list-style-type: none"> ▪
Feb 3	No Class / Work with Buddy		<ul style="list-style-type: none"> ▪ Work with your buddy on alignment
Feb 10	Edusoft (continued)	Grades K-6	<ul style="list-style-type: none"> ▪ Revisit the three reports ▪ What are they good for? ▪ What does the data tell you?
Mar 3	No Class / Work with Buddy		<ul style="list-style-type: none"> ▪ Check in with buddy. Do you have any questions about Edusoft?
Mar 10	Wiki – Posting Alignments on pages	Grades K-6	<ul style="list-style-type: none"> ▪
Mar 17	No Class / Work with Buddy		<ul style="list-style-type: none"> ▪ Check in with buddy. Work on creating your own page with activities.
Mar 24	AR/AM	Grades 1-6	<ul style="list-style-type: none"> ▪
Mar 31	Lab for Kindergarteners	K	<ul style="list-style-type: none"> ▪ Skills review ▪ Expectations ▪ Differentiation
	No Class / Work with Buddy	Grades 1-6	<ul style="list-style-type: none"> ▪ Check in with buddy on AR/AM
Apr 7	NO Class – Spring Break		
Apr 14	AR/AM	Grades 1-6	<ul style="list-style-type: none"> ▪ Short survey/feedback on training; additional subjects, revisited subjects, etc.
Apr 21	Prepping K for Summer Programs	K	<ul style="list-style-type: none"> ▪ Programs ▪ Skills review and scheduling
	No Class / Work with Buddy	Grades 1-6	<ul style="list-style-type: none"> ▪ Check in with buddy on AR/AM
Apr 28	Curriculum Needs /Options Review /Evaluation Plan	Grades K-3	
May 5	No Class / Work with Buddy		<ul style="list-style-type: none"> • Setup assignments using evaluation software

Date	Title	Grades/Time 1:15-2:00pm (45 minutes)	Content/Coverage
May 12	Software Evaluation Follow-up	Grades K-3	<ul style="list-style-type: none"> • Results • Thoughts • Budget • Next Steps
May 19	Last Class		<ul style="list-style-type: none"> ▪ Survey ▪ Next Year Discussion

APPENDIX H: Tech Plan Revision History

Date	Section	Revision/Comment
January 2010	Benchmark Continuum	<ul style="list-style-type: none"> • Sleep states • Scaffolding from Grade 3 to grades 4-6 • Summery of Year 2 w/recommendations
	Classroom Technology Equipment Standards Appendix	<ul style="list-style-type: none"> • Documented the “equipment” rollout for classrooms per 2006/2007 plan with 2007/08 deployment
	Applications and Grade Alignment Appendix	<ul style="list-style-type: none"> • Added information on where to find alignments and screenshot of examples
	Goal 1: Technology Rich Learning Environment Action Plan	<ul style="list-style-type: none"> • Removed planning form – too cumbersome (however the planning form is left as an Appendix for “full” lesson planning • Added textbook/activities alignment forms • Added software evaluation plan and product evaluation/recommendation
	Goal 2: Staff Development	<ul style="list-style-type: none"> • Added current actions of staff development plans
	Goal 3: Student Achievement	<ul style="list-style-type: none"> • Added reading goals information and staff trainings to more effectively use existing programs on campus