



Library/Media/Technology Plan



2011-2016

PACIFICA SCHOOL DISTRICT VISION FOR LIBRARIES/MEDIA/TECHNOLOGY

We envision a community that supports students in their curiosity-driven use of library, media, and technology resources in order that students acquire, evaluate, demonstrate, and communicate knowledge and 21st Century capacities. In the process, our students develop into successful, adaptive, global citizens.





PRINCIPLES FOR LIBRARIES/MEDIA/TECHNOLOGY

- **Libraries, Media, and Technology Are Interrelated**

Libraries, Media, and Technology in the 21st Century are highly inter-related and can no longer be thought of as separate entities. Libraries/media centers are no longer merely houses of print media but rather are portals for obtaining information that is no longer confined by the walls of a building. *Media*, the means of communication, are increasingly involving technology. So we best serve our children when technology is as well integrated into the learning process as it is integrated into the rest of their world.

- **Technology Is a Powerful Tool for Learning Academic Content and 21st Century Capacities**

The purpose of technology in education is to engage students and staff in rich learning experiences that both enhance the learning of academic content and build 21st Century capacities. (See Appendix C: Pacifica School District's 21st Century Education Framework).

- **Our Children and Staff Need Abundant Access**

In order to develop the capacities listed in Pacifica School District's 21st Century Education Framework, students and educators need to be ensured abundant access to information, media resources, and appropriate, supportive technology.

- **The Most Important Technology Skill We Can Teach Is *Adaptation***

Technology is developing at such a rapid pace that it will no longer serve our students to merely teach isolated technology skills that will soon become obsolete. Rather, as we embed technology into the process of learning academic content, we foster in our students and staff a familiarity of current technologies and nurture an enthusiasm for learning new and evolving technologies.

- **Libraries Are *Learning Commons***

The way people learn and work is quickly evolving in the Age of Connectedness, and libraries/media centers are no longer functioning as places where individuals independently gather information in silence. Rather, libraries/media centers are becoming "learning commons" (See, for example, the library websites for University of Illinois, University of Massachusetts, and York University) where members of virtual communities gather in the real world to enhance learning by exchanging ideas, engaging in dialogue, and sharing resources.

- **We Emphasize *Digital Citizenship***

The digital community is merely an extension of the global community in which we live. To the extent that we teach our children to become responsible, conscientious, and analytical digital citizens, we also teach them to become concerned, adaptive global citizens. (See Appendix A: National Education Technology Standards- Students, Standard 5; Teachers, Standard 4; Administrators, Standard 5).



PACIFICA SCHOOL DISTRICT LIBRARY/MEDIA/TECHNOLOGY PLAN 2011-2016

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INTRODUCTION

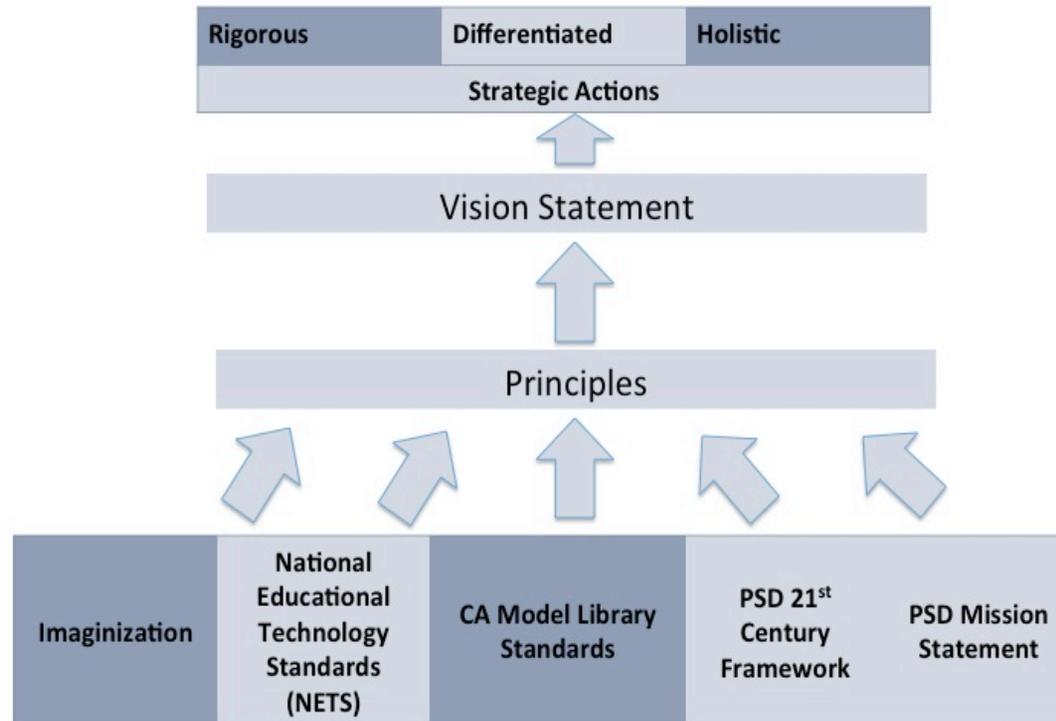
Our work in public education is highly challenging. We are preparing students for careers that do not yet exist, which will rely on technologies that have not yet been invented. Meanwhile, several of the remarkable opportunities of the Digital Age have yet to make their way into many American classrooms. A recent international survey of teachers in 23 countries in North America, Europe, Asia, Latin America, and Africa (Law, Pelgrum, & Plomp, 2008) found that the three most common pedagogical practices were having students fill out worksheets, work at the same pace and sequence, and answer tests. Information communication technology (ICT) was rarely used, and the applications used most often were general office software, followed by tutorial or drill and practice software. At the same time, there are new models of technology-rich learning environments and formative assessments that engage students in collaborative problem solving and the production of creative works. Yet the use of these new models is still rare in the United States, in part because traditional assessments are inadequate to measure the outcomes of these processes.

In other words, now more than ever, our students need us to be intentional, innovative, and resourceful, and this Plan is a product of such an awareness. Through this Plan, we will bring technology more seamlessly into the learning process in Pacifica School District, and use it to leverage problem solving, critical thinking, communication, and collaboration, as well as instruction that is better-tailored to the individual needs of our students.

We live in an era when libraries have been undergoing a renaissance, yet the strains on school districts' budgets have often caused school libraries/media centers to focus on survival rather than growth. With an emphasis on fresh thinking and leveraging resources, this plan will reinvigorate our school libraries/media centers.

Our process began with an “imaginization” activity, where we answered two questions: “Imagine that libraries, media, and technology are being used optimally by educators and students in our district. What would that look like? What would we need to do to get there?” We also consulted several guiding documents, including the 2011-2016 Pacifica School District Strategic Plan, National Educational Technology Standards for Teachers and Students, the California Model School Library Standards, readings about information communication technology (ICT), the previous Pacifica School District strategic action plans for Library Media and for Information Technology, and the state-approved Pacifica Technology Plan for 2011-2014. The plan's development was also informed by the strategic plans of other school districts. The diagram on the following page summarizes the development process.

L/M/T Plan Process





STRATEGIC AREAS OF FOCUS FOR LIBRARIES/MEDIA/TECHNOLOGY:

The table below provides a summary of nine strategic areas of focus identified by the Library/Media/Technology (L/M/T) Committee as essential for equipping students acquire, evaluate, demonstrate, and communicate knowledge and 21st Century capacities. These areas of focus engage libraries, media, and technology in promoting rigorous, differentiated and holistic learning. Inspired by the National Education Technology Standards and the California Model School Library Standards, they emphasize using libraries, media, and technology to support content learning and character development. Finally, for increased coherence, these focus areas reflect collaboration with the Strategic Planning Committee and the other PSD curriculum and support plan committees.

I. LEARNING THAT IS RIGOROUS					
I.A. – Promote the effective use of technology in the learning process.	I.B. - Library/media centers support the learning of academic content .	I.C. – Human resources support the L/M/T programs.	I.D. - Ensure universal access to a robust technological infrastructure.	I.E. – Students develop information literacy.	I.F. - Technology enhances formative and summative assessment.
II. LEARNING THAT IS DIFFERENTIATED					
II.A. - Response to instruction and intervention/learner-oriented instruction.			II.B. - Self-directed, collaborative learning.		
III. LEARNING THAT IS HOLISTIC					
III.A. - Digital citizenship and community well being.					



I. Strategic Area of Focus – Libraries/Media/Technology: Learning that Is Rigorous

If students are to use technology as a tool for learning, they need to have a common, grade-appropriate baseline of technology skills, so the first activity is to develop and implement a K-8 technology scope and sequence of technology. The integration of technology into the learning of content is modeled with a common set of 21st Century Education Experiences, and it is supported with professional development and coaching. The District website is transformed into a portal of valuable teaching and learning resources. Finally, after providing a baseline of technology skills for students, professional development and coaching for teachers, and a wealth of Internet resources, students begin to store a few samples of technology rich content learning in electronic portfolios. When the time comes for a new textbook adoption, the option of electronic textbooks is investigated. To ensure that students are using technology to develop 21st Century capacities, a few key capacities are added to report cards, and a project-based learning pilot is developed. And to ensure that the work of this plan and the work of the District library staff are aligned, the Library/Media/Technology Committee and the School Library Coordinators' Team send representatives to each other's meetings. Likewise, members of these committees continue to collaborate with Pacifica Public Library leadership

STRATEGIC ACTION: I.A. – Promote the effective use of technology in the learning process

AIM: Rigorous learning incorporates opportunities to use technology and information from a variety of sources to create, innovate, and participate in the co-construction of knowledge that is consistent with the Common Core State Standards.

CONNECTION TO VISION AND PRINCIPLES: If students are provided with a baseline of technology skills and experiences, and if teachers are supported in the process of incorporating those skills into classroom culture with professional development and coaching, then students are able to use technology to learn both academic content and 21st Century capacities.



I. – Libraries/Media/Technology: Learning that is Rigorous

A. – Promote the Effective Use of Technology in the Learning Process			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> ▪ Develop and vet a K-8 Technology Scope and Sequence; articulate with the high school district during development; ensure teachers have access; revise, as needed, during the Spring of 2013. ▪ Provide 21st Century Education Experiences. ▪ Facilitate the Integration of technology into classroom culture through professional development and coaching. ▪ Identify a few key 21st Century capacities for the next generation of report cards. ▪ Identify and provide electronic resources for staff and students on the District website. ▪ Beginning with Grade 5, the district supports teachers and students with the use of vetted, teacher-controlled, electronic discussion forums (blogs, wikis, etc.) to support learning. (If this action step is to be taken, applicable Board Policies prohibiting the use of social media may need to be reviewed and revised, following customary protocols). ▪ Develop a student e-portfolio pilot (Spring of 2012) for implementation in Year 2. ▪ The School Library Coordinators’ Group Collaborates with the Technology/Media/Library Committee. 	<ul style="list-style-type: none"> ▪ Technology, Media and Library Committee review of the Technology Scope and Sequence during the springs of 2014-2015. The committee seeks input from stakeholders, and recommends revisions to the Strategic Plan Committee. ▪ Develop a project-based learning pilot (Year 3) for implementation in Year 4. ▪ Investigate the use of electronic textbooks. <p>2013-14 PD Activities</p> <ul style="list-style-type: none"> ▪ Professional development and coaching, as identified by teacher need, for technologies specified in the Technology Scope and Sequence and for the 21st Century Education Experiences. ▪ Appropriate PD and coaching for the project-based learning pilot. 	<p>2015-16 PD Activities</p> <ul style="list-style-type: none"> ▪ Professional Development continues to be offered on technologies specified in the Technology Scope and Sequence and the 21st Century Education Experiences, as identified by teacher need.



I. – Libraries/Media/Technology: Learning that is Rigorous

A. – Promote the Effective Use of Technology in the Learning Process			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES (Continued)	<p>2011-12 PD Activities</p> <ul style="list-style-type: none"> Coaching and grade-level support provided, as requested, beginning the spring of 2012 for the Technology Scope and Sequence. Professional development and coaching for the 21st Century Education Experiences Voluntary opportunities for teachers to engage in Professional Development on technologies specified in the Scope and Sequence. 		
MEASURES & INDICATORS OF IMPACT	<ul style="list-style-type: none"> An electronic forum (wiki group) will be created to enable teachers to give input to the Technology Scope and Sequence, with supporting lessons, while it is being taught. Traffic volume reports for the district website. <p>Student Assessment:</p> <ul style="list-style-type: none"> Students begin to demonstrate grade-level proficiency in technology skills in their piloted electronic portfolios by the end of the 2012-2013 Academic Year (See “Electronic Portfolios,” below). 	<ul style="list-style-type: none"> The 21st Century Education Facilitator collaborates with PEF about the possibility of continuing to fund the Learning Experiences. Traffic volume reports for the district website. <p>Student Assessment:</p> <ul style="list-style-type: none"> Students begin to demonstrate grade-level proficiency in technology skills in their electronic portfolios, and in the project-based learning pilot. 	<p>Student Assessment:</p> <ul style="list-style-type: none"> Students demonstrate grade-level proficiency in technology skills in their electronic portfolios.
REQUIRED RESOURCES & KEY PEOPLE	<ul style="list-style-type: none"> Stipend for the Technology Scope and Sequence Working Group (Summer 2011) to select and adapt materials and for employees involved in the Library/Media/Technology Committee. Printing costs for the Technology Scope and Sequence and supporting lessons. Teacher professional development, if conducted during release time or after-duty hours, for the skills in the Technology Scope and Sequence, for the 21st Century Education Experiences, and for the project-based learning pilot. Materials and other expenses for the 21st Century Education Experiences (reimbursed by Pacifica Education Foundation). 		



I. – Libraries/Media/Technology: Learning that is Rigorous

A. – Promote the Effective Use of Technology in the Learning Process

**REQUIRED
RESOURCES
& KEY
PEOPLE
(Continued)**

- The development and implementation of the Technology Scope and Sequence are coordinated by the 21st Century Education Facilitator.
- The District seeks financial underwriting for the 21st Century Education Experiences with Pacifica Education Foundation (PEF) during Spring 2011. This initiative is coordinated by the 21st Century Education Facilitator.
- The 21st Century Education Facilitator periodically works with PEF to evaluate, refine, and/or redesign the 21st Century Education Experiences, to align them to the Technology Scope and Sequence and to make recommendations about continuing the experiences beyond Spring 2013.



STRATEGIC ACTION: I.B. – Library/media centers support the learning of academic content

AIM: The action steps and activities, below, mobilize additional resources and tools to support academic learning.

CONNECTION TO VISION AND PRINCIPLES: This strategic action supports the principle of libraries evolving into a “learning commons.”

I. – Libraries/Media/Technology: Learning that is Rigorous

B. – Library/Media Centers Support the Learning of Academic Content			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> ▪ Mobilize and re-tool library, media, and technology resources to support the English Language Arts Balanced Literacy initiative. ▪ To support Balanced Literacy, school libraries may choose to add level-of-difficulty information to books, using an organizing system determined by the site. ▪ Ensure that the acquisition of books supports Reading/ Writing Workshop. ▪ As library book orders are being placed, principals and school library staff encourage staff to consider units of study, including books for older students that are classified as “high interest, low readability.” ▪ The District website includes a blog where students and teachers can make recommendations about books, based on units of study. A structure for vetting books and managing the blog will need to be set up. Libraries include a physical space for book recommendations by staff and students. 	<ul style="list-style-type: none"> ▪ The action steps from Year 1, including PD activities, are continued throughout the life of this plan. 	<ul style="list-style-type: none"> ▪ The action steps from Year 1, including PD activities, are continued throughout the life of this plan action steps from Years 1 & 2 are continued throughout the life of this plan.



I. – Libraries/Media/Technology: Learning that is Rigorous

B. – Library/Media Centers Support the Learning of Academic Content			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES (Continued)	<ul style="list-style-type: none"> ▪ Recruit Resident Readers for all school libraries, in collaboration with Pacifica School Volunteers. ▪ Maintain on-site professional libraries for staff <i>at</i> each school maintains a library (or a section of its main library) of professional resources to support teaching. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Professional learning facilitators/ coaches integrate the use of these tools into professional development and into the work of professional learning communities (PLCs). 		
MEASURES & INDICATORS OF IMPACT	<ul style="list-style-type: none"> ▪ The library staff at each school updates the School Library Coordinators’ Group on the status of applicable action steps at the beginning, middle, and end of each school year, and the School Library Coordinators’ Group shares this information with the ELA/Literacy Strategic Plan Committee. <p>Student Assessment:</p> <ul style="list-style-type: none"> ▪ As students utilize “just-right” books from their libraries, they will show growth in their Balanced Literacy reading levels. 	<ul style="list-style-type: none"> ▪ The measures & indicators from Year 1, including Student Assessment, are continued throughout the life of this plan. 	<ul style="list-style-type: none"> ▪ Measures & indicators from Year 1, including Student Assessment, are continued throughout the life of this plan. ▪ During the second half of Year 5, the School Library Coordinators’ Group evaluates this strategic action and makes recommendations for the next strategic plan.
REQUIRED RESOURCES & KEY PEOPLE	<ul style="list-style-type: none"> ▪ The School Library Coordinators’ Group and the ELA Professional Learning Facilitator/Coach collaborate to facilitate these action steps. ▪ The process of adding level-of-difficulty information to books will include minimal expenses for labeling books. Labor costs will vary depending on how school sites choose to implement. For example, if sites rely on parents, students and volunteers, or if sites utilize existing library staff, there will be minimal cost. If sites choose to pay staff for additional hours, the cost will be considerably more. ▪ The creation of staff libraries could include expenses for sites, if existing furniture is not used. 		



I. – Libraries/Media/Technology: Learning that is Rigorous

B. – Library/Media Centers Support the Learning of Academic Content

**REQUIRED
RESOURCES
& KEY
PEOPLE
(Continued)**

- Acquiring software to support the writing process could involve expenses that would need to be included in the budgetary process. Software would be free to PSD if it is open source or if it is acquired by grant or donation. Professional development for such software could be offered at no additional cost using existing PD mechanisms (staff meetings, SIP days, etc.); it could be offered after hours with stipend, in accordance with labor union contracts; or it could be offered during release time at the cost of providing substitute teachers.



STRATEGIC ACTION: I.C. - Human resources support Library/Media/Technology programs

AIM: A strong human infrastructure is the foundation of strong Libraries/Media/Technology programs. The following strategic actions address the increased human support that will be needed by a district whose students and teachers will increasingly be relying on technology and library/media resources.

CONNECTION TO VISION AND PRINCIPLES: Ensuring a strong human infrastructure across the district, including staffing for media centers after school, ensures abundant, equitable access to library, media, and technology resources for all our students. Such access is critical for developing the capacities needed to thrive in the Twenty-First Century.

I. – Libraries/Media/Technology: Learning that is Rigorous

C. - Human Resources Support Library/Media/Technology Programs			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> ▪ Identify and/or seek funding for a four-hour (daily) library paraprofessional at each school, who will partner with teachers to support reading, writing, and research, enhancing— not replacing— the library staffing that school sites have been providing. ▪ Seek funding for at least two librarians, who will provide professional development and support to teachers and library staff at schools, in order to help integrate the Model Library Standards for California Schools into school culture. Priority would be given to hiring certificated teachers. 	<ul style="list-style-type: none"> ▪ Once funded, the positions described to the left are retained throughout the life of the plan. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ The School Library Coordinators’ Group continues to utilize its relationship with SMCOE to provide ongoing professional development, as needed. 	<ul style="list-style-type: none"> ▪ Once funded, the positions described to the left are retained throughout the life of the plan. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ The School Library Coordinators’ Group continues to utilize its relationship with SMCOE to provide ongoing professional development, as needed.



I. – Libraries/Media/Technology: Learning that is Rigorous

C. - Human Resources Support Library/Media/Technology Programs			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES (Continued)	<ul style="list-style-type: none"> ▪ Identify and/or seek funding for classroom teachers to staff library/media centers beyond the school day, for at least three hours a week to provide support to students through access to computers for homework and research. ▪ Seek partnership with Pacifica Public Libraries when searching for funding and staffing for homework clubs. ▪ Identify and/or seek funding to hire a technician who will assist the Network Administrator with supporting the technological infrastructure of school sites. ▪ Support the establishment of a Mouse Squad at each school site. (For more information on Mouse Squad, see www.ca.mousesquad.org). ▪ Maintain a Library/Media/Technology Committee that meet at least three times annually to monitor and help facilitate the plan’s implementation, as well as to make recommendations about technology (including purchases and priorities), media, and libraries as appropriate. The Committee will include a representative from Pacifica Education Foundation and Pacifica Public Libraries. 		



I. – Libraries/Media/Technology: Learning that is Rigorous

C. - Human Resources Support Library/Media/Technology Programs			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES (Continued)	<p>PD Activities</p> <ul style="list-style-type: none"> ▪ The School Library Coordinators’ Group utilizes its relationship with San Mateo County Office of Education to provide professional development to the new library staff at School Library Coordinators’ Group meetings. ▪ Library staff receives professional development around the CA Model School Library Standards and around ways to support Balanced Literacy and core content learning. ▪ Library staff presents at school staff meetings, to increase awareness of ways teachers can support Balanced Literacy and core content learning, using library resources. <p>Mouse Squad leaders at each site receive the PD provided by the program.</p>		
MEASURES & INDICATORS OF IMPACT	<ul style="list-style-type: none"> • Efforts to seek funding will be documented (emails, grant inquiries and applications, etc.). If success in obtaining funding is achieved, two further measures will be the number of four-hours-per-day library staff at each site, in addition to pre-existing library staff, as well as the amount of after-school library staffing at each site. <p>Student Assessment:</p> <ul style="list-style-type: none"> ▪ Success is ultimately determined by the increase in student use of libraries (hours of operation, number of visits, increased book circulation as measured by the electronic cataloguing system); by the increased appearance of library resources in samplings of student portfolio work over 	<ul style="list-style-type: none"> ▪ Measures and indicators are continued throughout the life of the plan. <p>Student Assessment:</p> <ul style="list-style-type: none"> ▪ Student use of libraries continues to be monitored as described. 	<ul style="list-style-type: none"> ▪ Measures and indicators are continued throughout the life of the plan. <p>Student Assessment:</p> <ul style="list-style-type: none"> ▪ Student use of libraries continues to be monitored as described.



I. – Libraries/Media/Technology: Learning that is Rigorous

C. - Human Resources Support Library/Media/Technology Programs			
	time; and by the number of students participating in Mouse Squad.		
REQUIRED RESOURCES & KEY PEOPLE	<ul style="list-style-type: none"> ▪ District Administration facilitates the process of identifying or seeking funding for the positions described in this section, including monitoring changes in the restrictions on categorical funding. ▪ District Administration works with the School Library Coordinators’ Group to initiate, carry out, and support the creation of the new library paraprofessional positions. ▪ The Network Administrator helps develop the job description for an instructional technology technician. ▪ SMCOE School Library Services Coordinator and District coaches/professional learning facilitators work with library staff to increase library support of content area learning and to promote the CA Model Library Standards. ▪ Funding will need to be secured for new staff according to labor union contracts. 		



STRATEGIC ACTION: I.D. – Ensure universal access to a robust technological infrastructure

AIM: In order for the effective use of libraries, media, and technology to become integrated into the culture of teaching and learning, all staff and students must be guaranteed continual access to a robust technological infrastructure.

CONNECTION TO VISION AND PRINCIPLES: This action quantifies the qualitative principle of “students and educators need to be ensured abundant access to information, media resources, and technology.”

I. – Libraries/Media/Technology: Learning that is Rigorous

D. - Ensure Universal Access to a Robust Technology Infrastructure			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> ▪ Maintain and replace, as needed, district-wide software, such as Synergy and Follett library software. Pilot/implement new software, as appropriate. ▪ Library/Media/Technology Committee develops an ongoing technology review forum to keep abreast of current educational technology and makes recommendations about future purchases and purchasing priorities. ▪ Ensure robust Internet access, especially Wi-Fi, in every learning and workspace. ▪ Support the transition to laptop computers for all teachers. ▪ Identify and/or seek funding for and/or donations of additional technology tools (laptops, tablets, electronic readers, mobile labs, etc.) for students to use. 	<ul style="list-style-type: none"> ▪ The action steps from Years 1 & 2 are continued throughout the life of this plan. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Professional development and support are provided, as appropriate, when new software is piloted or implemented. 	<ul style="list-style-type: none"> ▪ The action steps from Years 1 & 2 are continued throughout the life of this plan. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Professional development and support are provided, as appropriate, when new software is piloted or implemented.



I. – Libraries/Media/Technology: Learning that is Rigorous

D. - Ensure Universal Access to a Robust Technology Infrastructure			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
	<p>PD Activities</p> <p>Professional development and support are provided as appropriate when new software is piloted or implemented.</p>		
<p>MEASURES & INDICATORS OF IMPACT</p>	<ul style="list-style-type: none"> Key people (described below) report annually to the Superintendent about the current-status of district software and make recommendations about software purchases. <p>Student Assessment:</p> <ul style="list-style-type: none"> Student work, including e-portfolios, and staff/student routines reflect the use of greater access to technology. 	<ul style="list-style-type: none"> The measures & indicators from Year 1 are continued throughout the life of this plan. <p>Student Assessment:</p> <ul style="list-style-type: none"> Student use of libraries continues to be monitored as described. 	<ul style="list-style-type: none"> The measures & indicators from Year 1 are continued throughout the life of this plan. During the second half of Year 5, key people (described below) make recommendations about software for the next strategic plan. <p>Student Assessment:</p> <ul style="list-style-type: none"> Student use of libraries continues to be monitored as described.
<p>REQUIRED RESOURCES & KEY PEOPLE</p>	<ul style="list-style-type: none"> The Network Administrator is the key person for facilitating the technology-related aspects of these activities. The Network Administrator and the 21st Century Education Facilitator co-facilitate the Library/Media/Technology Committee. The Network Administrator collaborates with the Library/Media/Technology Committee to monitor the technology inventory or the district—including the student assessment measures—and to report progress to the Superintendent at the beginning, middle, and end of each academic year. The Network Administrator takes these activities into account in the annual budgetary process. 		



STRATEGIC ACTION: I.E. - Students develop information literacy

AIM: Using technology, media, and library resources, students demonstrate the ability to locate, organize, evaluate, synthesize information and communicate what has been learned.

CONNECTION TO VISION AND PRINCIPLES: As students learn to analyze and evaluate library and Internet resources, they realize key aspects of the Plan’s vision; they “acquire, evaluate, demonstrate, and communicate knowledge.”

I. – Libraries/Media/Technology: Learning that is Rigorous

E. - Students Develop Information Literacy			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> ▪ Promote utilization of electronic library resources to support student learning, and continue to develop the ability to find materials in the school library using the available electronic library cataloging system. ▪ Partner with public library staff and SMCOE to provide students and educators with access to and training on public library resources, in order to support reading, writing, and research. ▪ Promote effective use of the Internet for research beginning in third grade. ▪ Support the implementation of the California Model School Library Standards. ▪ School Library Coordinators’ Group continues its work examining the California Model Library Standards and determines how they are/can be addressed at each site. 	<ul style="list-style-type: none"> ▪ The action steps from Years 1 & 2 are continued throughout the life of this plan for new staff and, as needed, for returning staff. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Follow-up professional development is provided to staff during the 2013-2014 Academic Year and initial professional development is provided to new staff as needed. 	<ul style="list-style-type: none"> ▪ The action steps from Years 1 & 2 are continued throughout the life of this plan for new staff and, as needed, for returning staff. ▪ The School Library Coordinators’ Group makes recommendations about the implementation of the CA Model Library Standards for the upcoming strategic plan. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Follow-up professional development is provided to staff during the 2013-2014 Academic Year and initial professional development is provided to new staff as needed.



I. – Libraries/Media/Technology: Learning that is Rigorous

E. - Students Develop Information Literacy			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES (Continued)	<p>PD Activities</p> <ul style="list-style-type: none"> ▪ Educators receive professional development on teaching library/ research. PSD library staff receives professional development (PD) from SMCOE and public library staff at School Library Coordinators' Group meetings. ▪ Teacher PD for this Action Step is embedded in PD for writing and is addressed explicitly in staff-wide PD (such as SIP days, staff meetings, etc.). 		
MEASURES & INDICATORS OF IMPACT	<ul style="list-style-type: none"> ▪ The professional development for these action steps can be monitored through agendas and sign-ins where staff-wide PD occurs (SIP days, staff meetings, etc.) <p>Student Assessment:</p> <ul style="list-style-type: none"> ▪ Ultimate success of this action will be determined quantitatively by the increases in Internet traffic to library sites (log-in data, server reports, etc.) and qualitatively by the increased reliance on library resources in student work. ▪ Success of this Action will be evidenced in the increased, more effective use of Internet sources/citations in student research. ▪ As part of English Language Arts PD, teachers are asked to collect work from a 	<ul style="list-style-type: none"> ▪ Measures and indicators of impact from Years 1 & 2, including student assessment, are continued throughout the life of this plan. 	<ul style="list-style-type: none"> ▪ Measures and indicators of impact from Years 1 & 2, including student assessment, are continued throughout the life of this plan. ▪ During the second half of Year 5, the School Library Coordinators' Group evaluates this strategic action and makes recommendations for the next strategic plan.



I. – Libraries/Media/Technology: Learning that is Rigorous

E. - Students Develop Information Literacy			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
MEASURES & INDICATORS OF IMPACT (Continued)	representative sampling of students before the professional development and then from the same students at the end of the 2012-2013 Academic Year. Teachers compare the student work for evidence of growth regarding the Model Library Standards.		
REQUIRED RESOURCES & KEY PEOPLE	<ul style="list-style-type: none"> ▪ There are no foreseeable additional financial resources required for this strategic action. ▪ The School Library Coordinators’ Group facilitates this strategic action in collaboration with the Literacy Facilitator, the 21st Century Education Facilitator, the English Language Arts/Literacy Committee, and the History/ Social Studies Committee. ▪ There are no foreseeable additional financial resources required for this strategic action. 		



STRATEGIC ACTION: I.F. - Technology enhances formative and summative assessment

AIM: Teachers embed assessment into technology-rich learning experiences, in order to continuously increase the effectiveness of the teaching and enhance learning. Various technology tools help teachers and students collect, analyze, organize, and communicate formative and summative information about student progress.

CONNECTION TO VISION AND PRINCIPLES: When used strategically, formative assessment data enables teachers to make more powerful instructional decisions and can be an effective tool for communicating student progress to parents and students.

I. – Libraries/Media/Technology: Learning that is Rigorous

F. - Technology enhances formative and summative assessment			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> Continue to promote effective, systemic use of cloud-based assessment tools, such as Synergy/Gradebook and DataDirector. <p>PD Activities</p> <ul style="list-style-type: none"> Explicit PD is provided for software upgrades and to new staff, as needed. Use of these tools is embedded into content area PD provided by the district and school sites. 	<ul style="list-style-type: none"> The action steps from Year 1, including PD, are continued throughout the life of this plan. 	<ul style="list-style-type: none"> The action steps from Year 1, including PD, are continued throughout the life of this plan.
MEASURES & INDICATORS OF IMPACT	<ul style="list-style-type: none"> Professional development is monitored through agendas, sign-ins, and staff evaluations. Teacher and family use of the tools is monitored through log-in data and can be monitored through the agendas of PLCs. 	<ul style="list-style-type: none"> The measures & indicators from Year 1, including student assessment, are continued throughout the life of this plan. 	<ul style="list-style-type: none"> The measures & indicators from Year 1, including student assessment, are continued throughout the life of this plan.



I. – Libraries/Media/Technology: Learning that is Rigorous

F. - Technology enhances formative and summative assessment			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
MEASURES & INDICATORS OF IMPACT (Continued)	<p>Student Assessment:</p> <ul style="list-style-type: none"> By nature, these tools assess students. Professional learning facilitators/coaches aid teachers in using them effectively in their instructional planning. 		<ul style="list-style-type: none"> During Year 5, the Technology/Media/Libraries Committee solicits evaluations and recommendations for the upcoming strategic plan from the English Language Arts/Literacy Committee, the Math Committee, and the Network Administrator.
REQUIRED RESOURCES & KEY PEOPLE	<ul style="list-style-type: none"> The Network Administrator oversees the maintenance and functionality of the software. The 21st Century Education Facilitator oversees initial professional development for staff and collaborates with the other facilitators/coaches to promote deeper, more effective use of the tools. Principals collaborate with PTOs/PTAs to ensure that parents know how to utilize Synergy ParentVue. Each of these software licenses include an annual fee, usually based on the number of students. Professional development is provided during district professional development times (staff meetings, SIP days, etc.), to eliminate added professional development expenses. 		



II. Libraries/Media/Technology: Learning that is Differentiated

Response to Instruction and Intervention (RTI²) is based on the premise that students learn best when instruction is learner-oriented—and particularly when students are learning at or just above their ability levels. Tailoring instruction to the ability levels, learning styles, interests, and backgrounds of students is called *differentiation*. In many cases, differentiation involves teaching small groups of students who are learning at a similar level. Certain technology-based programs can customize the learning experience even further, because they continually assess individuals during the learning process. Thus, each student is able to learn at one's own level and progress at one's own rate.

Technology offers additional opportunities for differentiation. As students learn a variety of software, they have multiple ways to gather, organize, and present information. One student may best communicate their research using presentation software, such as PowerPoint, while another student may choose to make a video documentary. This strategic area of focus promotes the practice of, at least from time to time, having students work together to choose and utilize the technology they feel would best present their work. When this occurs, students are building the 21st Century capacities of *self-direction* and *teaming/collaboration*.

STRATEGIC ACTION: II.A. – Use technology as part of response to instruction and intervention/learner-oriented instruction

AIM: Use of technology and media provides every student with tiered learning experiences. Each student has the opportunity for rigorous learning, through customized, technology-based differentiated instruction that addresses individual learning styles, needs, interests, and backgrounds.

CONNECTION TO VISION AND PRINCIPLES: This high-leverage use of technology is consistent with the principle that technology is used effectively in the learning process when it both engages students in learning academic content and builds 21st Century capacities.



II. – Libraries/Media/Technology: Learning that is Differentiated

A. – Use technology as part of response to instruction and intervention/learner-oriented instruction			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> ▪ During the 2011-2012 Academic Year, the Library/Media/Technology (L/M/T) Committee collaborates with the English Language Arts/Literacy, Math, Science, and Special Education Committees and the facilitators/coaches to identify, select, and, as needed, seek funding for electronic resources that support differentiated learning. Examples include: Fast Forward Reading; Lexia; ALEKS, EPGY math; Kahn Academy; We Teach Science (algebra tutoring), etc. ▪ Implementation begins by the 2012-2013 Academic Year. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ All staff receive professional development for these programs, as applicable. 	<ul style="list-style-type: none"> • Implementation and, as needed, professional development continue throughout the life of this plan. ▪ The L/M/T Committee collaborates at least annually with the other, mentioned committees and personnel in order to evaluate program effectiveness, investigate new programs, and make recommendations. 	<ul style="list-style-type: none"> ▪ Implementation and, as needed, professional development continue throughout the life of this plan. ▪ During Year 5, the L/M/T Committee collaborates at least annually with the other, mentioned committees and personnel in order to evaluate program effectiveness, investigate new programs, and make recommendations for the upcoming strategic plan.
MEASURES & INDICATORS OF IMPACT	<p>Student Assessment:</p> <ul style="list-style-type: none"> ▪ One measure is the number of students regularly using these programs. ▪ Another measure is the progress made by students using the programs compared to those students not yet using them. 	<ul style="list-style-type: none"> ▪ The measures & indicators from Year 1 are continued throughout the life of the plan. 	<ul style="list-style-type: none"> ▪ The measures & indicators from Year 1 are continued throughout the life of the plan. ▪ During Year 5, the L/M/T committee evaluates the programs, especially in light of student growth, and makes recommendations for the upcoming strategic plan.



II. – Libraries/Media/Technology: Learning that is Differentiated

A. – Use technology as part of response to instruction and intervention/learner-oriented instruction	
REQUIRED RESOURCES & KEY PEOPLE	<ul style="list-style-type: none">▪ The Network Administrator oversees the maintenance and functionality of the software.▪ The 21st Century Education Facilitator oversees initial professional development for staff and collaborates with the other facilitators/coaches to promote deeper, more effective use of the tools.▪ Principals collaborate with PTOs/PTAs to ensure that parents know how to utilize Synergy ParentVue.▪ The Literacy and Math Facilitators and Committees work with the L/M/T committee to evaluate the effectiveness of these software programs.▪ Each of these software licenses include an annual fee, usually based on the number of students.▪ Professional development is provided during district professional development times (staff meetings, SIP days, etc.), to eliminate nearly all professional development expenses.



STRATEGIC ACION: II.B. – Utilize technology to encourage self-directed, collaborative learning

AIM - Technology, media, and library resources support collaborative, self-directed learning that reflects the *learning styles, needs, interests, and backgrounds* of students.

CONNECTION TO VISION AND PRINCIPLES: This action promotes the capacities of *creativity, self-direction*, which are part of the PSD 21st Century Education Framework.

II. – Libraries/Media/Technology: Learning that is Differentiated

B. – Self-Directed, Collaborative Learning			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> ▪ During the 2011-2012 Academic Year, students in all grades begin to expand their software repertoire as teachers begin to utilize the Technology Scope and Sequence. (See Strategic Action /A. of this plan) and as writing software begins to be used as part of Balanced Literacy (See Strategic Action /E.) ▪ By the 2012-2013 Academic Year, students begin to have enough technological versatility that they start to make choices about the tools they will use for at least some of their assignments. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ As described in Strategic Actions /A and /E, teachers are offered professional development, as needed, to support the Technology Scope and Sequence. 	<ul style="list-style-type: none"> ▪ As the Technology Scope and Sequence becomes more fully implemented, students continue to have more options for conducting and presenting their work. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Professional development continues to be offered, as needed, to support the Technology Scope and Sequence and Balanced Literacy. 	<ul style="list-style-type: none"> ▪ The activities from Year 1, including professional development, as needed, continue to be supported.



II. – Libraries/Media/Technology: Learning that is Differentiated

B. – Self-Directed, Collaborative Learning			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
MEASURES & INDICATORS OF IMPACT	<p>Student Assessment:</p> <ul style="list-style-type: none"> By 2012-2013, a variety of formats and software products begins to emerge in student work, including work selected for e-portfolios. 	<p>Student Assessment:</p> <ul style="list-style-type: none"> The variety of formats and software products evident in student work continues to expand, as evident in student e-portfolios. 	<p>Student Assessment:</p> <ul style="list-style-type: none"> During Year 5, the Library/Media/Technology Committee and the English Language Arts/Literacy Committee evaluate the current student use of software and make recommendations for the upcoming strategic plan.
REQUIRED RESOURCES & KEY PEOPLE	<ul style="list-style-type: none"> Relying on the annual District Technology Survey, the 21st Century Education Facilitator/Coach and the Literacy Facilitator/Coach ensure that professional development is offered for relevant software as needed. They help the Library/Media/Technology and the English Language Arts/Literacy Committees with monitoring the progress of this strategic action. Costs for professional development are already accounted for in Sections /A. and /E. of this plan. 		



III. Libraries/Media/Technology: Learning that Is Holistic

The Pacifica School District Mission focuses on teaching the whole person and engaging the community of which they are a part. When students feel safe, encouraged and supported, they are set up for successful learning of academic content, and they are poised to develop into productive global citizens. This is why the National Education Technology Standards, or NETS, (Appendix A) encourages schools to focus on developing *digital citizenship*.

As digital citizens in a global community, students are taught to use library, media, and technology resources to foster responsible exploration of information, communication, collaboration and concern for the well-being of members of their school communities. Students expand this concern for well-being to include communities beyond the limits of their schools' walls and ecosystems that struggle to survive in a world that does not have limitless resources. Students learn to analyze and evaluate the information they encounter online. They learn to use the Internet safely, ethically, and, with respect to copyright laws, legally as well.

STRATEGIC ACTION: III.A. - Promote responsible digital citizenship and community well-being.

AIM: The District facilitates a safe, responsible digital community by developing and implementing appropriate policies and procedures; by providing instructional materials and professional development; and by providing parent education.

CONNECTION TO VISION AND PRINCIPLES: The digital, or virtual, community is simply an extension of the real community— and the world— to which our students and our district belong. In order to realize the PSD's mission of promoting *joy, confidence, and achievement* in our students and this plan's vision of students developing into *successful global citizens*, we do everything in our power to ensure a safe, respectful digital community.



III. – Libraries/Media/Technology: Learning that is Holistic

A. - Promote Responsible Digital Citizenship and Community Well-Being			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES	<ul style="list-style-type: none"> ▪ During the summer of 2011, a Digital Citizenship Working Group, comprised of a cross-section of stakeholders in the District and community, convenes to select and adapt the various components of a digital citizenship initiative, with policies, materials and professional development that emphasize the following: <ul style="list-style-type: none"> ○ Building a nurturing, respectful, safe digital community (including social media). ○ Internet safety and prevention of cyber-bullying. ○ Legal, ethical and responsible use of technology. ○ Consent/release of video, audio, and student work. ○ The materials are then vetted, modified as needed, and distributed to teachers by the spring of 2012. ○ Beginning with the 2012-2013 year, the Library/Media/Technology Committee takes over the responsibility for monitoring, evaluating, and making recommendations about modifying the digital citizenship initiative. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Staff is introduced to the policies and materials during staff meetings or other 	<ul style="list-style-type: none"> ▪ The Digital Citizenship initiative is supported throughout the life of this plan. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Digital citizenship policies and materials are reviewed with staff, students, and parents, and agreement/consent forms are signed at the beginning of every academic year of this strategic plan. 	<ul style="list-style-type: none"> ▪ The Digital Citizenship initiative is supported throughout the life of this plan. <p>PD Activities</p> <ul style="list-style-type: none"> ▪ Digital citizenship policies and materials are reviewed with staff, students, and parents, and agreement/consent forms are signed at the beginning of every academic year of this strategic plan.



III. – Libraries/Media/Technology: Learning that is Holistic

A. - Promote Responsible Digital Citizenship and Community Well-Being			
	Year 1 Emerging/Understanding	Year 3 Developing/Integrating	Year 5 Innovating/Renewal
ACTION STEPS AND ACTIVITIES (Continued)	<p>professional development times, including during the fall of 2012.</p> <ul style="list-style-type: none"> Staff, students, and parents sign appropriate policy agreement/consent forms. Digital citizenship policies and materials are reviewed with staff, students, and parents, and agreement/consent forms are signed at the beginning of the 2012-2013 year. 		
MEASURES & INDICATORS OF IMPACT	<ul style="list-style-type: none"> The Digital Citizenship Working Group seeks feedback and re-convenes at least once during the 2011-2012 Academic Year to make recommendations about modifying policies and materials. Principals ensure that teachers and students sign appropriate policy agreement/ consent forms. The 21st Century Education Facilitator and the Network Administrator monitor program effectiveness on an ongoing basis and update the Superintendent periodically during each school year. <p>Student Assessment:</p> <ul style="list-style-type: none"> As teachers teach lessons/use digital citizenship materials with their students, they include formative assessment to ensure students understand and support key aspects of digital citizenship that are appropriate to their grade-levels. 	<ul style="list-style-type: none"> The Technology/Media/ Library Committee continues to monitor, evaluate, and make recommendations about modifying the digital citizenship initiative throughout the life of this plan. <p>Student Assessment:</p> <ul style="list-style-type: none"> Student assessment from Year 1 is continued throughout the life of this plan. 	<ul style="list-style-type: none"> The Technology/Media/ Library Committee makes recommendations about the digital citizenship initiative for the upcoming strategic plan. <p>Student Assessment:</p> <ul style="list-style-type: none"> Student assessment from Year 1 is continued throughout the life of this plan.



III. – Libraries/Media/Technology: Learning that is Holistic

A. - Promote Responsible Digital Citizenship and Community Well-Being

REQUIRED RESOURCES & KEY PEOPLE	<ul style="list-style-type: none">▪ Key people, as described above, are the Digital Citizenship Working Group (2011-2012 only), the Library/Media/Technology Committee (2012-2016), the Network Administrator, the 21st Century Education Facilitator, and principals.▪ Staff members who participate in the Digital Citizenship Working Group will be compensated according to labor union contracts.▪ There will be a small amount costs associated with printing and distributing instructional materials.
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APPENDICES



APPENDIX A

NATIONAL EDUCATION TECHNOLOGY STANDARDS – STUDENTS MATCHED WITH 21ST CENTURY CAPACITIES

IST NETS Standard <small>NETS FOR STUDENTS 2007</small> 	21st Century Capacities*
<p>1. Creativity and Innovation Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:</p> <ol style="list-style-type: none"> apply existing knowledge to generate new ideas, products, or processes. create original works as a means of personal or group expression. use models and simulations to explore complex systems and issues. identify trends and forecast possibilities. 	<ul style="list-style-type: none"> • Creativity • Risk-taking • Curiosity • Higher-order thinking and sound reasoning
<p>2. Communication and Collaboration Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:</p> <ol style="list-style-type: none"> interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media. communicate information and ideas effectively to multiple audiences using a variety of media and formats. develop cultural understanding and global awareness by engaging with learners of other cultures. contribute to project teams to produce original works or solve problems. 	<ul style="list-style-type: none"> • Interactive communication • Social skills • Social and civic responsibility • Multicultural literacy • Global awareness
<p>3. Research and Information Fluency Students apply digital tools to gather, evaluate, and use information. Students:</p> <ol style="list-style-type: none"> plan strategies to guide inquiry. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. evaluate and select information sources and digital tools based on the appropriateness to specific tasks. 	<ul style="list-style-type: none"> • Information literacy • Integration • Traditional literacy • Various content literacies (scientific financial, environmental, etc.) • Technological literacy • Interactive communication



IST NETS Standard <small>NETS FOR STUDENTS 2007</small> 	21st Century Capacities*
d. process data and report results.	
<p>4. Critical Thinking, Problem Solving, and Decision Making Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:</p> <ol style="list-style-type: none"> identify and define authentic problems and significant questions for investigation. plan and manage activities to develop a solution or complete a project. collect and analyze data to identify solutions and/or make informed decisions. use multiple processes and diverse perspectives to explore alternative solutions. 	<ul style="list-style-type: none"> Higher-order thinking and sound reasoning Adaptability/managing complexity Integration
<p>5. Digital Citizenship Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:</p> <ol style="list-style-type: none"> advocate and practice safe, legal, and responsible use of information and technology. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity. demonstrate personal responsibility for lifelong learning. exhibit leadership for digital citizenship. 	<ul style="list-style-type: none"> Information literacy Personal responsibility Social and civic responsibility Global awareness Multicultural literacy
<p>6. Technology Operations and Concepts Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:</p> <ol style="list-style-type: none"> understand and use technology systems. select and use applications effectively and productively. troubleshoot systems and applications. transfer current knowledge to learning of new technologies. 	<ul style="list-style-type: none"> Technological literacy Higher-order thinking and sound reasoning Creativity Risk-taking Adaptability/managing complexity
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*The PSD 21st Century Framework gratefully acknowledges the contributions enGauge, from the metiri group (www.metiri.com)



NETS FOR STUDENTS 2007



NATIONAL EDUCATION TECHNOLOGY STANDARDS - TEACHERS

1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

Teachers:

- a. promote, support, and model creative and innovative thinking and inventiveness.
- b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources.
- c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes.
- d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments.

2. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S.

Teachers:

- a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity.
- b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress.
- c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources.
- d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching.

3. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

Teachers:

- a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations.
- b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation.
- c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats.



- d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning.

4. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

Teachers:

- a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources.
- b. address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources.
- c. promote and model digital etiquette and responsible social interactions related to the use of technology and information.
- d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools.

5. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

Teachers:

- a. participate in local and global learning communities to explore creative applications of technology to improve student learning.
- b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others.
- c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning.
- d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community.

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NATIONAL EDUCATION TECHNOLOGY STANDARDS - ADMINISTRATORS



1. Visionary Leadership

Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization.

Educational Administrators:

- a. inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders.
- b. engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision.
- c. advocate on local, state and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan.

2. Digital Age Learning Culture

Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students.

Educational Administrators:

- a. ensure instructional innovation focused on continuous improvement of digital-age learning.
- b. model and promote the frequent and effective use of technology for learning.
- c. provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners.
- d. ensure effective practice in the study of technology and its infusion across the curriculum.
- e. promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration.

3. Excellence in Professional Practice

Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources.

Educational Administrators:

- a. allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration.
- b. facilitate and participate in learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology.
- c. promote and model effective communication and collaboration among stakeholders using digital-age tools.
- d. stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning.



4. Systemic Improvement

Educational Administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources.

Educational Administrators:

- a. lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources.
- b. collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning.
- c. recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals.
- d. establish and leverage strategic partnerships to support systemic improvement.
- e. establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning.

5. Digital Citizenship

Educational Administrators model and facilitate understanding of social, ethical and legal issues and responsibilities related to an evolving digital culture.

Educational Administrators:

- a. ensure equitable access to appropriate digital tools and resources to meet the needs of all learners.
- b. promote, model and establish policies for safe, legal, and ethical use of digital information and technology.
- c. promote and model responsible social interactions related to the use of technology and information.
- d. model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools.

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APPENDIX B

MODEL SCHOOL LIBRARY STANDARDS FOR CALIFORNIA PUBLIC SCHOOLS KINDERGARTEN THROUGH GRADE TWELVE <http://www.cde.ca.gov/ci/cr/lb/>

Adopted by the State Board of Education, September 16, 2010

The State Board of Education (SBE) adopted *the Model School Library Standards for California Public Schools, Kindergarten Through Grade Twelve (Library Standards)* under the authority of California Education Code Section 18101, which requires the SBE to “adopt standards, rules and regulations for school library services.” The *Library Standards* include two types of standards:

- “School Library Standards for Students” that delineate what students should know and be able to do at each grade level or grade span to enable students to succeed in school, higher education, and the workforce.
- “School Library Program Standards” that describe base-level staffing, resources and infrastructure, including technology, required for school library programs to be effective and help students to meet the school library standards.

The *Library Standards* recognize that school libraries have evolved from simply providing print materials to offering rich selections of print, media, and digital resources; from teaching students how to search a card catalog to teaching students strategies for searching a variety of print, media and digital resources; from teaching basic reading literacy to teaching information literacy (the ability to access, evaluate, use, and integrate information and ideas effectively). The student standards also include the legal, ethical and safe use of information both in print and online, other aspects of cyber safety, and use of technology.

The “School Library Standards for Students” are organized around four concepts:

1. Students access information
2. Students evaluate information
3. Students use information
4. Students integrate information literacy skills into all areas of learning

Each concept is followed by three to four overarching standards that continue across all grade levels and form the basis for detailed standards at each grade level or grade span. The detailed standards increase in complexity through the grades. For example: Overarching standard 3.1 states that the student will “demonstrate ethical, legal and safe use of information in print, media and online resources.” Here are examples of detailed grade level standards:

Grade 1 3.1.b Understand that the Internet connects the user to the rest of the world.



- | | | |
|------------|-------|---|
| Grade 2 | 3.1.c | Demonstrate basic knowledge of the district or school's acceptable use policy. |
| Grade 3 | 3.1.a | Define cyberbullying and its effects. |
| Grade 5 | 3.1.a | Record bibliographic information in an acceptable format. |
| Grade 7-8 | 3.1.a | Explain ethical and legal issues related to the use of intellectual property including print, visual, audio, and online materials (e.g., fair use, file sharing). |
| Grade 9-12 | 3.1.b | Understand the differences between quoting, summarizing, and paraphrasing and apply these skills to own work. |

The *Library Standards* are not stand-alone standards taught in isolation but are meant to be taught collaboratively by the classroom teacher and the teacher librarian in the context of the curriculum.

Organization of the Standards

This is an overview including the overarching standards under the four concepts.

1. Students access information

The student will access information by applying knowledge of the organization of libraries, print materials, digital media, and other sources.

- 1.1 Recognize the need for information.
- 1.2 Formulate appropriate questions.
- 1.3 Identify and locate a variety of resources online and in other formats by using effective search strategies.
- 1.4 Retrieve information in a timely, safe, and responsible manner.

2. Students evaluate information

The student will evaluate and analyze information to determine what is appropriate to address the scope of inquiry.

- 2.1 Determine the relevance of the information.
- 2.2 Assess the comprehensiveness, currency, credibility, authority, and accuracy of resources.
- 2.3 Consider the need for additional information.

3. Students use information

The student will organize, synthesize, create, and communicate information.

- 3.1 Demonstrate ethical, legal, and safe use of information in print, media, and digital resources.
- 3.2 Draw conclusions and make informed decisions.
- 3.3 Use information and technology creatively to answer a question, solve a problem, or enrich understanding.



4. Students integrate information literacy skills into all areas of learning

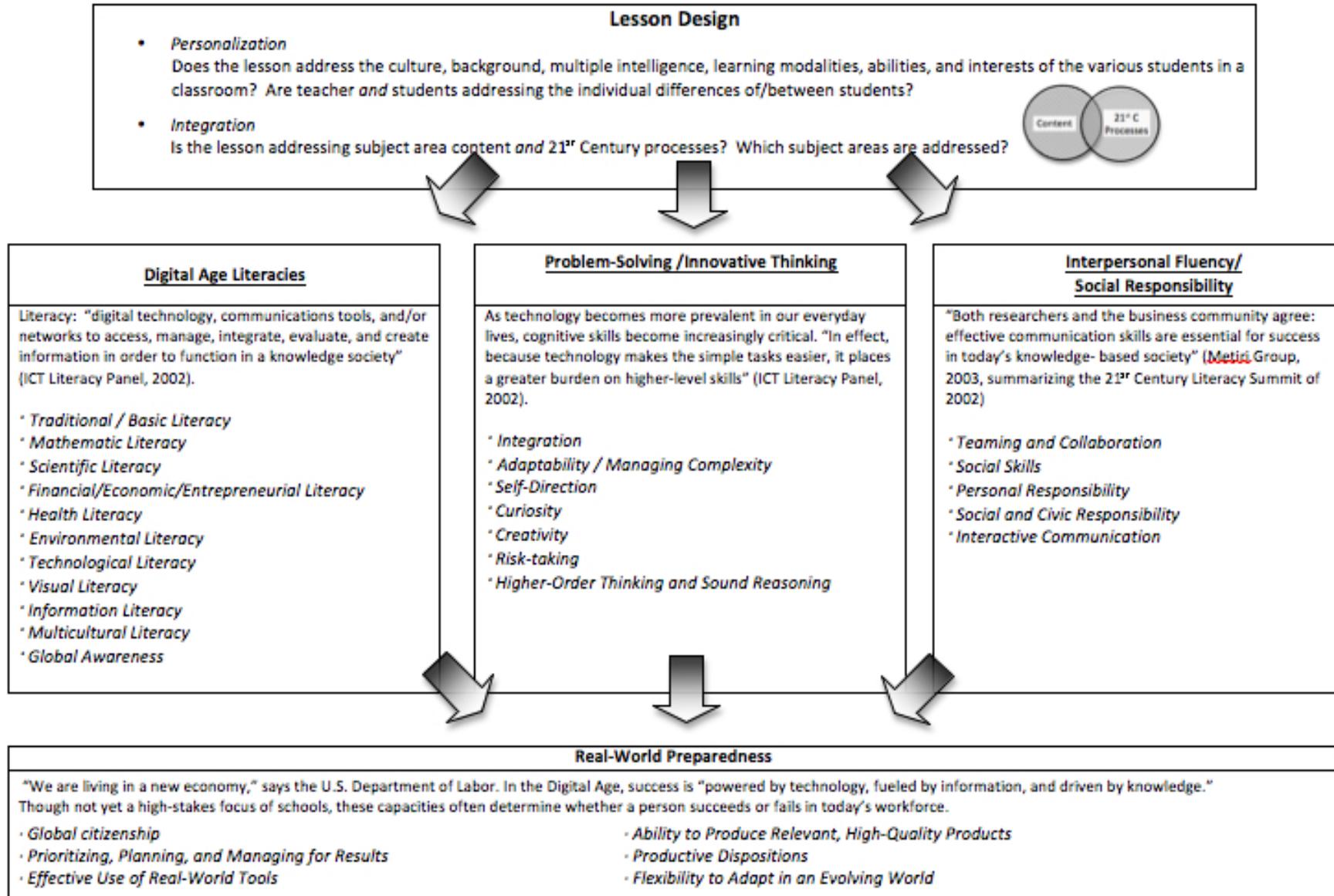
The student will independently pursue information to become a lifelong learner.

- 4.1 Read widely and use various media for information, personal interest, and lifelong learning.
- 4.2 Seek, produce, and share information.
- 4.3 Appreciate and respond to creative expressions of information.

APPENDIX C

Pacifica School District 21 Century Education Framework

A Framework for 21st Century Education*



*We gratefully acknowledge the contributions of the [Metiri Group](http://www.metiri.com/21/Metiri-NC-RE-12-St-116.pdf) (<http://www.metiri.com/21/Metiri-NC-RE-12-St-116.pdf>)

APPENDIX D

Pacifica School District Technology Scope & Sequence • WORKING DRAFT (01-17-2012) • Will be replaced by final document

Learning with Technology in PACIFICA SCHOOL DISTRICT

Technology Scope & Sequence • Based on the National Educational Technology Standards (NETS)

Grade	Computer Skills Focus	Digital Citizenship Focus
Grade 1	Mouse/navigation/parts of computer	[To be developed]
Grade 2	Safety/OS/applications/keyboard	[To be developed]
Grade 3	Graphics/saving/printing	[To be developed]
Grade 4	Keyboarding/word processing	[To be developed]
Grade 5	Presentations	[To be developed]
Grade 6	Spreadsheets/Email	[To be developed]
Grade 7	Integration of software	[To be developed]
Grade 8	Networks/new technology	[To be developed]

Standard 1 - Basic Operations and Concepts	K	1	2	3	4	5	6	7	8
Using the Computer K									
Use correct posture at the computer.	E*	P	p*	I*					
Use the keyboard (Enter, Spacebar, arrow keys, Esc, Tab).	E	P	I						
Touch type on the keyboard.			E	E	EP	P	P	P	I

* E = Emerging P=Practicing I=Independent

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Standard 1 - Basic Operations and Concepts	K	1	2	3	4	5	6	7	8
Using the Computer K									
Interpret hourglass/ watch; wait without clicking.	EI								
Use the mouse(Point and click, Double-click, Right-click and Drag).	EI								
Use a printer.			E	P	I				
Use and properly care for USB's and CD-ROMs.			E	P	P	I			
Answer questions relating to safety online.	E	EP	P	P	P	I	I		
Demonstrate an understanding of the concepts relating to computers and networks (local v. network storage).			E	E	P	I			
Content Connections <i>PSD Tech Readiness Content Website (K-2)</i> https://sites.google.com/site/vtechreadiness/home A link to the Pacifica School District Web page under Student Tab for grade level appropriate computer and content skills. <i>Teacher Resource - links to various mouse use skills in connection with language arts and math.</i> http://www.internet4classrooms.com/month2month.htm <i>STAR Preparation</i> http://www.eduplace.com/kids/hmcam/prep/prep_2.html San Mateo County Library: http://kids.smcl.org/en/homework									

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Standard 1 - Basic Operations and Concepts	K	1	2	3	4	5	6	7	8
Using the Computer K									
<p><i>Changing the name of your USB:</i> Place your USB into the USB port of your computer. Go to "MY COMPUTER" and click on USB flash drive. Right click on USB information. Scroll down and click on RENAME. Type new name. Hit ENTER and there is your newly named USB Flash Drive.</p> <p><i>PBS Kids (K-2)</i> http://pbskids.org/ These games are very appropriate kindergarten through first grade, some programs also appeal to second graders.</p> <p><i>Starfall (k-1)</i> http://www.starfall.com/ Beginning literacy skills.</p> <p>San Mateo County Library site: http://kids.smcl.org/en/homework</p> <p><i>Sheppard Software</i> http://www.sheppardsoftware.com/ Includes science and math related games.</p> <p>Primary Games http://www.primarygames.com/</p> <p><i>Site Words</i> http://www.dolchword.net/</p> <p>These games require headphones. <i>Kaboose/Funschool</i> http://funschool.kaboose.com/arcade/index.html Great typing game here</p>									

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Standard 1 - Basic Operations and Concepts	K	1	2	3	4	5	6	7	8
Using the Computer K									
<p>Bob the Builder http://www.bobthebuilder.com/usa/games.asp Multiple games for students to choose from.</p> <p>Mazes (1st grade up) http://www.mathsisfun.com/games/mazes.html Good for practicing mouse clicking and arrow keys.</p> <p>Playground (1st grade up) http://www.funbrain.com/brain/SweepsBrain/sweepsbrain.html Good site for practicing computer skills. Students need to be able to independently choose the game they want to play.</p> <p>Art Pad (2nd grade up) http://artpad.art.com/artpad/painter/ Painting website which is great for practicing mousing skills.</p>									
Using the Computer's Operating System GRADE THREE									
Recognize desktop icons and their functions.	E	P	I						
Identify and use the OS menu (E.g.- "Start" button on Windows).				E	P	I			
Open applications and documents.	E	P	P	I					
Find or search for files and folders.			E	P	I				
Multitask by opening and using two or more applications at once.				E	P	I			

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Pacifica School District Technology Scope & Sequence • WORKING DRAFT (01-17-2012) • Will be replaced by final document

Standard 1 - Basic Operations and Concepts	K	1	2	3	4	5	6	7	8
Using the Computer's Operating System GRADE THREE									
Open, close, minimize, maximize, and restore windows.		E	P	I					
Use the taskbar (menu across the top of a program).			E	P	I				
Create and use a structure of files and folders.				E	P	I			
Content Connections <i>PSD Tech Readiness Content Website (3-8)</i> http://www.vallemarschoolcomputerlab.blogspot.com/ A link to the Pacifica School District Web page under Student Tab for grade level appropriate computer and content skills.									
Supporting Resources <i>Teacherclick.com</i> www.teacherclick.com/winxp/index.htm Includes several tutorials for teachers learning how to use Windows.									
Using Applications GRADE THREE									
Start an application (Start menu, desktop icon) and exit and application.	E	EP	P	I					
Create, name, save, and delete files. Use "save as" function.		E	E	P	I				
Open, modify and save existing documents, worksheets and presentations.		E	P	I					

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Pacifica School District Technology Scope & Sequence • WORKING DRAFT (01-17-2012) • Will be replaced by final document

Standard 1 - Basic Operations and Concepts	K	1	2	3	4	5	6	7	8
Using Applications GRADE THREE									
Use the vertical and horizontal scroll bars.		E	P	I					
Use online Help				E	P	I			
Perform tasks using menus, buttons, and keyboard shortcuts	5			E	P	I			
Integrate data between word processing, worksheet, and presentation applications.				E	P	I			
Content Connections									
Supporting Resources									
Standard 2 - Digital Citizenship									
ALL GRADES									
Content Connections									
Supporting Resources									
Standard 3 - Technology Productivity Tools									
Keyboarding GRADE FOUR									
Demonstrate proper hand, finger, & body position.		E	E	P	I				

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Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Keyboarding GRADE FOUR									
Content Connections How to Perfrom Basic Tasks in Microsoft Word 2010 http://office.microsoft.com/en-us/word-help/basic-tasks-in-word-2010-HA101830016.aspx Hot to troubleshoot problems that occur when you open Word 2010, 2007, 2003, 2002.									
http://support.microsoft.com/kb/921541 Simple formulas in Microsoft Excel http://www.teachertube.com/viewVideo.php?video_id=23447									
Supporting Resources <i>DANCEMAT: Finger placement (k-8)</i> http://www.bbc.co.uk/schools/typing/ KEYBR: great practice typing site for 5-8. Allows custom script from teacher or download website to practice typing directly from website. track speed and errors. http://keybr.com/ Typing lessons http://www.freetypinggame.net/free-typing-lesson.asp <i>Beginning Typing Games (2nd grade up)</i> http://www.abcya.com/keyboard.htm Good first introduction to the keyboard http://www.freetypinggame.net/play.asp http://www.typingmaster.com/games/typing-games.asp http://resources.kaboose.com/games/super-hyper-spider-typer.html http://www.abcya.com/kids_typing_game.htm http://www.abcya.com/cup_stack_typing_game.htm									

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Pacifica School District Technology Scope & Sequence • WORKING DRAFT (01-17-2012) • Will be replaced by final document

Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Word Processing GRADE FOUR									
Choose appropriate application (e.g. Word, PowerPoint) for a task.				E	P	I			
Transfer handwritten text into word processing document.			E	P	I				
Perform desktop publishing (integrate text, graphics, etc.) into a document.				E	P	I			
Understand word wrap.				E	P	I			
Switch between different editing views (Normal and Print Layout).			E	P	I				
Identify the insertion point and reposition it with the cursor, Arrow keys, Keyboard shortcuts (Ctrl+Home, Ctrl+End, Page Up and Down).		E	E	P	I				
Change page setup including margins and orientation.				E	P	I			
Insert page breaks and section breaks.					E	P	I		
Format paragraphs including line spacing and indents.			E	P	I				
Set tabs using: left, right, center, clear tabs.				E	E	P	I		
Show/hide Formatting Marks.							E	P	I
Select, insert, and delete text.			E	P	I				
Format characters including font type, style, size and color.			E	P	I				
Change Case.				E	P	I			
Use proofing tools including Check spelling and grammar.			E	P	I				

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Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Word Processing GRADE FOUR									
Use the thesaurus.				E	P	I			
Move and copy text including cut, copy, paste and drag.				E	P	I			
Enhance document appearance:									
Create bulleted or numbered lists.				E	P	I			
Insert clip art and wrap text.				E	P	I			
Use the drawing tools.					E	P	I		
Insert dates and page numbers.							E	P	I
Insert headers and footers.							E	P	I
Create and format tables.							E	P	I
Create columns.							E	P	I
Apply borders and shading.							E	P	I
Find and replace text.					E	P	I		
Save a document as a Web page.								E	P
Undo/Redo actions.		E	P	I					
Change document view.			E	P	I				
Content Connections									

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Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Word Processing GRADE FOUR									
<p>Supporting Resources:</p> <p><i>Word 2007 Tutorial</i> http://www.schooltube.com/video/7bc8ac8fb5e0823448d1/Word-Basics-2007. Schooltube has several, similar videos to choose from.</p> <p><i>Dragon Naturally Speaking (GREAT :PROGRAM BUT NEED TO PURCHASE should be stated in description here)ah</i> A speech to text software for reluctant writers and special needs students: http://www.nuance.com/for-business/by-industry/education/index.htm</p> <p><i>Word processing can be lots of font! (3-8)</i> http://www.educationworld.com/a_lesson/02/lp285-03.shtml A fun poem activity helps reinforce basic word processing skills.</p>									
Presentations and Multimedia GRADE FIVE									
Describe how slideshows are used to assist in the presentation of ideas and facts to an audience either electronically or in printed form.					E	P	P	I	
Create a slide show:					E	P	P	I	
Use a design template.					E	P	P	I	
Use the AutoContent Wizard.							E	P	I
Insert slides using different slide layouts.						E	P	P	I
Add and edit text on slides.						E	P	P	I

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Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Presentations and Multimedia GRADE FIVE									
Incorporate hyperlinks.						E	P	P	I
Add graphics, sounds and video.							E	P	I
Incorporate transitions with timing.							E	P	I
Insert headers and footers.							E	P	I
Run a slide show.							E	P	I
Set up a slide show.							E	P	I
Print Preview slides.							E	P	I
Print slides and audience handouts.							E	P	I
Switch between different views.						E	E	P	I
Develop multimedia presentation with sources cited.							E	P	I
Save a presentation as a Web page.								E	P
Content Connections									
Supporting Resources NOTE: Below is the powerpoint audio instruction I found: POWER POINT AUDIO instructions: very user friendly http://office.microsoft.com/en-us/powerpoint-help/slides-text-and-notes-RZ001129842.aspx?section=2									

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Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Spreadsheets GRADE SIX									
Identify intended use: describe how worksheets are used to analyze data and solve problems.						E	E	P	I
Identify cells, columns, and rows, and ranges, values, data and formula.						E	E	P	I
Navigate in a worksheet using the mouse pointer and the keyboard.						E	E	P	I
Add and edit data in cells.						E	E	P	I
Insert and delete columns and rows.						E	E	P	I
Select cells, columns, rows, ranges, and the entire worksheet.						E	E	P	I
Format a worksheet including fonts, alignment, borders, shading.						E	E	P	I
Apply the Currency, Percent, and Comma styles to numbers.						E	E	P	I
Insert and format dates.						E	E	P	I
Change column width and row height.						E	E	P	I
Create simple formulas to add, subtract, multiply, and divide.						E	E	P	I
Cut, copy, and paste worksheet data.						E	E	P	I
Create worksheet headers and footers.						E	E	P	I
Preview and print worksheets.						E	E	P	I
Set margins.						E	E	P	I

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Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Spreadsheets GRADE SIX									
Change page orientation.						E	E	P	I
Print gridlines and column headings.						E	E	P	I
Create and format a chart on its own chart sheet.						E	E	P	I
Use menus to Sort data, AutoFill and Filter data.						E	E	P	I
Content Connections									
<p>Supporting Resources Create a Graph http://nces.ed.gov/nceskids/createagraph/</p> <p>A Basic Tutorial of Excel (I would put this under content connections or teacher resources. Too hard for student to follow)ah</p> <p>http://people.usd.edu/~bwjames/tut/excel/index.html Specific examples may refer to Excel but they may be applied to other spreadsheets.</p> <p>Excel Formula Overview (I do not think this is clear enough to recommend here)ah http://spreadsheets.about.com/od/excelformulas/ss/2011-01-16-excel-formulas-overview.htm Formulas are one of the most commonly used features of Excel. They can be used to carry out simple addition and subtraction or far more complex mathematical calculations.</p> <p>Excel Line Graph Tutorial http://spreadsheets.about.com/b/2011/08/15/excel-2007-line-graph-tutorial-7.htm (ok to show what different kinds of spreadsheets look like but not for explanation. Could be for teacher to show class illustrations) ah Graphs, in general, can make it much easier to interpret important data in a spreadsheet.</p>									

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Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Database GRADE SEVEN & EIGHT									
Identify intended use.							E P	I	
Describe how it is used to store, manipulate, and report data.							E P	I	
Content Connections									
Supporting Resources									
Graphics GRADE SEVEN & EIGHT									
Create and save images.	E	P	P	I					
Manipulate images using appropriate software.						E	P	I	
Integrate graphics into other applications.					E	P	I		
Understand copyright issues in relation to graphics.				E	P	I			
Content Connections									
Supporting Resources <i>How to Insert Graphics into MS Word</i> http://www.youtube.com/watch?v=cwn-31UCPGo . Youtube tutorial. (Note: Youtube only plays on teacher computers) PIXLR: Free photo editing website: pixlr.com									

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Standard 3 - Technology Productivity Tools	K	1	2	3	4	5	6	7	8
Graphics GRADE SEVEN & EIGHT									
PARTNERS IN RHYME: Free sound effects: do not use royalty sounds, those have a fee attached. partnersinrhyme.com									
Peripherals GRADE SEVEN & EIGHT									
Scan and save images and text.					E	P	P	I	
Operate a Digital Camera to take and transfer images.						E	P	I	
Content Connections									
Supporting Resources									
Free photo editing website: http://pixlr.com/									
Free sound effects: do not use royalty sounds, those have a fee attached. http://www.partnersinrhyme.com/									
Standard 4 - Technology Communication Tools									
Internet GRADE SEVEN & EIGHT									
Describe the Internet and discuss how it is used.	E	P	P	I					
Demonstrate appropriate behavior for Internet use.	E	E	P	I					

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Standard 4 - Technology Communication Tools	K	1	2	3	4	5	6	7	8
Internet GRADE SEVEN & EIGHT									
Use a Web browser including entering a URL, Use the toolbar to navigate between Websites, Create and use favorites.			E	P	P	I			
Use hyperlinks to navigate between Web pages.				E	P	I			
Acquire information such as text, audio, and graphics.				E	P	P	I		
Content Connections									
Supporting Resources BRAINPOP JR: grades K-3 http://www.brainpopjr.com/artsandtechnology/technology/ BRAINPOP: grades 4-8 http://www.brainpop.com/ http://www.educationworld.com/a_lesson/02/lp285-04.shtml A fun grouping activity teaches about databases. Then students test kid-friendly search engines to find the best one. Teen Learning 2.0 http://teenlearning.csla.net/ Self-paced lessons for teens about web 2.0 communication and research tools, digital citizenship and ethical use of information.									
E-Mail (Theory) GRADE SEVEN & EIGHT									

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Standard 4 - Technology Communication Tools	K	1	2	3	4	5	6	7	8
E-Mail (Theory) GRADE SEVEN & EIGHT									
Identify the parts of an e-mail message.						E P	I		
Demonstrate appropriate behavior for e-mail use.						E P	I		
Send and receive e-mail.							E P	I	
Reply to an e-mail message.							E P	I	
Add attachments to email.							E P	I	
Content Connections									
Supporting Resources									
<p>There's a monster in my email http://www.educationworld.com/a_lesson/02/lp285-05.shtml Students participate in a collaborative e-mail project</p> <p>BRAINPOP: Technology grades 4-8 http://www.brainpop.com/technology/digitalcitizenship/</p> <p>BRAINPOP JR: Technology grades K-3 http://www.brainpopjr.com/artsandtechnology/technology/</p>									
On-line Discussion (Theory) GRADE SEVEN & EIGHT									
Participate in online discussion groups (?) Use for classroom access only?						E	P	I	

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Standard 4 - Technology Communication Tools	K	1	2	3	4	5	6	7	8
On-line Discussion (Theory) GRADE SEVEN & EIGHT									
Collaborate to problem solve.					E	P	I		
Content Connections									
Supporting Resources									
Standard 5 - Technology Research Tools									
Use electronic reference tools (CD-ROMs and Internet).			E	P	I				
Cite Web sources.			E	P	I				
Perform simple searches to acquire information.			E	P	I				
Content Connections									
Supporting Resources									
Standard 6 - Technology Problem-Solving and Decision-Making Tools									
Students use Technology to make informed decisions.				E	P	P	P	I	
Use technology for self directed learning.				E	P	P	P	I	
Select the most suitable form of technology to use for a given task.				E	P	P	P	I	
Evaluate the accuracy, relevance and bias of electronic information sources.			E	E P	P	P	P	I	

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Standard 6 - Technology Problem-Solving and Decision-Making Tools	K	1	2	3	4	5	6	7	8
Develop effective problem solving strategies for software and hardware problems.				E	P	P	P	I	
Content Connections									
Supporting Resources Many lessons using power point (math, writing, weather etc.) k-8 http://presentationsoft.about.com/od/classrooms/a/lesson_plans.htm PowerPoint and Windows Movie Maker are easy to use multimedia tools to enhance your lesson plans.									

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