

Poway High School Technology Use Plan

2001-2004

Poway Unified School District

15550 Espola Road

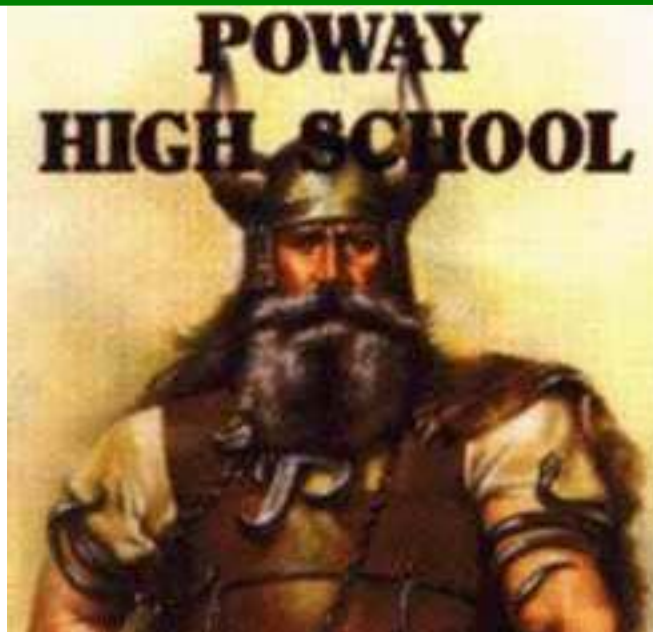
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The Direction for Poway High School

Our Mission and Vision Statement

The Poway High School Community . . .

- Staff, students, and parents of the learning community will support, and have a personal connection to, the Poway High School Mission and Vision.
- Communication among staff, students and parents will be coordinated and clear, and will strengthen the connection between home and school.
- The school community will partner with the greater Poway Community and its businesses to promote interaction, and community members will have a supporting role on and off our campus.

Will ensure a safe, respectful . . .

- All members of the learning community will maintain a clean, safe and secure environment that requires respectful speech and behavior and instills pride in our school.
- All members of the learning community will give and receive common courtesy, inside and outside of classrooms, and for and among members of diverse groups.
- Staff will exemplify professionalism and model the speech and behavior expected of students.

Challenging learning environment that requires all students to meet high expectations .

- Students at all grade levels will meet or exceed academic standards and will demonstrate personal, social and career skills expected of all Poway High School graduates.
- Students will make connections between subject areas and the real world -- with staff assisting, and community partners providing opportunities for real-life experience.
- Staff will provide rigorous and relevant curriculum and daily lessons driven by academic standards and student performance.
- Teachers in all subject areas will support the basic skills of reading, speaking, writing, using technology and problem-solving in their curriculum.
- Staff will participate in professional development activities that result in measurable improvement in student learning.

And pursue their goals.

- All students will graduate prepared for many options after high school.
- Students at all grade levels will set, and make progress towards, academic, personal, and future goals.
- Staff will assist students in goal-setting and achievement and help them to follow a plan for their future.

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Technology History

Poway High School opened in 1961 and has a distinguished history and academic record. Located in north San Diego County, **Poway High School** is a comprehensive high school with a current enrollment of 3,140 students in grades 9-12. The objective of the Instructional Technology Plan is to provide a framework for technology installation and implementation in order to enrich the learning experience of students and increase the efficiency and effectiveness of teachers and staff.

Only seven years ago, **Poway High School** had relatively few computers on campus and no campus computer network. Since then, the number of computers has grown to over 800 and the entire campus has been networked for high-speed Internet access. Teachers are able to send and receive email and post grades on the Internet for parents. Portable LCD computer projection carts are available on campus for use in class presentations. Students are able to demonstrate what they have learned through the construction of PowerPoint presentations and the use of the Internet WebQuests. Our Instructional Technology Plan extends the work accomplished thus far and supports established goals.

Demographics

Poway High School is a fully accredited, comprehensive 4-year high school located approximately 35 miles north of the urban center of San Diego. **Poway High School** is one of four comprehensive high schools in the Poway Unified School District (PUSD). **Poway High School** currently has an enrollment of 3140 students made up of the following ethnic groups: Caucasian 79.7%, Hispanic 8.3%, Asian 5.8%, Filipino 3.1%, African American 1.9%,

American Indian .6%, Pacific Islander .5%. **Poway High School** has a small but comprehensive ELL (English Language Learner) Department of 133 students comprising 3.5% of the total population. The Special Education Department is responsible for 175 students, 7.8% of the population. Other programs which are an integral part of **Poway High School** include the Teen-Parent Program for pregnant girls and new parents, and AVID (Advancement Via Individual Determination), ROP (Regional Occupation Program), and Work Experience. In addition, **Poway High School** offers assistance to eighth graders making the transition to high school through Link Crew. **Poway High School** has 125 classrooms, a staff resource center, a large Library Media Center (LMC), and a Performing Arts Center with a full compliment of music rehearsal and practice rooms. The **Poway High School** campus has seven technology centers, a career/college information center, a television studio, an agriculture facility, a photography lab, auto and wood shops. **Poway High School** has 150 teachers, a classified staff of 113, and 6 administrators, and 1 Career/College Counselor.

Technology Plan Mission Statement

Facilitate the integration of effective, existing, and emerging technologies, throughout all aspect of our educational community, in order to enhance learning opportunities for all students, to promote life-long learning for all members of the **Poway High School** community, and to support the effective use of resources.

Poway High School recognizes that technology plays an important role in supporting student learning and is used as a tool to support the learning process

Technology will support curriculum by:

- Improving the quality and delivery of instruction
- Providing new opportunities for students to master basic and advanced technical, academic, and job-related skills
- Teaching students to work individually and collaboratively.

- Reinforcing and supporting instruction
- Developing flexibility in instruction
- Increasing student academic performance
- Providing students increased opportunities for presenting school and job-related assignments.
- Motivating students to participate in their own academic growth
- Enhancing the presentation of curriculum
- Providing innovative methods to utilize higher thinking and problem solving skills
- Enhancing the ability to research
- Practicing basic computer proficiency

Technology Plan Vision Statement

The ability to process and manipulate information has already become the single most important determiner of economic success for individuals as well as states and nations. Students graduating from **Poway High School** possess the knowledge, skills, and attitudes necessary to succeed in this increasingly complex global information based society. They are comfortable with, and proficient in, selecting and using appropriate technologies as information resources and possess the skills to interact with individuals or organizations and agencies through computer telecommunications.

Goals and Objectives

Goal 1 Powerful teaching: Utilize technology for teaching and learning in content areas, to build awareness and understanding of varied teaching methodologies, and to publish best

practices and student and staff accomplishments. Teachers will acquire technology skills that meet Levels I-III of the CTAP proficiency standards.

Goal 2 Student learning: Students will enrich their educational experience at by using technology as a tool for effective communication, personal productivity, and lifelong learning. Students will acquire technology skills that meet Levels I-II as defined in the CTAP proficiency standards.

Goal 3 School-to-Home connections: Teachers and staff will utilize technology to increase communication between school and home via online posting of grades, teacher web pages, and email communication.

Goal 4 Technology Training: Develop and implement an ongoing technology-training program on campus for all administrative, clerical and teaching staff members that will increase productivity, efficiency and communication.

Equipment

Poway High School has a wide variety of technology learning resources. To ensure mastery of information literacy skills for all students, the following technology-based learning resources have been purchased and placed in the classrooms for use with the Standard's Based Subject Curriculum.

- State of the Art Internet capable, multimedia computers with SVGA monitor, printer, projection devices and subject appropriate software
- Audio visual and computer check-out items for classroom use: Projecting devices, digital cameras, camcorders, scanners, and other computer peripherals
- Closed-circuit television broadcasting equipment for the LMC provides videoconferencing within its own facility and broadcasting to classrooms for

information literacy skill development, curricular video transmission across campus, and staff development

- Individual teacher stations are provided for curriculum development and e-mail receipt

Hardware

Poway High School hardware supports student learning, teaching, enhancement of curriculum, and improvement of administrative duties. Hardware purchases meet the following equipment needs-assessment list.

1. What are the equipment specifications and all pertinent details?
 - Description
 - Specifics (Size of drive, processor, RAM, Peripherals, Monitor, etc.)
2. What are the budgetary considerations?
3. How will the equipment be used to support or enhance the curriculum?
4. Does this equipment meet or exceed District Guidelines?
5. Have the specifications for the equipment been reviewed and meet minimum standards?

Software

Software will provide the vehicle necessary to further enhance students' learning, taking into consideration levels of performance, and students with special needs and learning styles. Software will be used to strengthen curriculum, prepare students for continuing education and employment, as well as, support administrative services. Software will be evaluated in an on-going manner.

The staff and students use Newsbank (an Internet, CD-ROM, and microfiche service) for research information from newspapers, newswires, business journals and periodicals, as well as historical and scholarly documents. These resources support classroom instruction in virtually every subject area and are used by researchers to delve into contemporary issues and events, and provide academics with rare historical documentation.

The **Poway High School** Library Media Center (LMC) is an integral part in the learning process. The LMC will use technology to expand the students' access to information needed in the classroom. It will use technology to ensure that appropriate learning resources are available in all subject areas throughout the instructional day, including access to the Internet and will help support reading and writing goals. These resources are available before school, at lunch, and after school. The library staff collaborates with classroom teachers about current assignments and research projects allowing them to assist and direct students in the choice of viable resource materials, including the Internet and Newsbank®, for use in projects.

Poway High School's Servers software is supported and maintained by ETIS, the PUSD Educational Technology and Information Services (ETIS) Department that currently uses Novell Zenworks® as its primary file server software, with Norton® Antivirus.

Inventory

Poway High School schools has purchased multimedia capable computers along with peripherals such as multimedia projectors, scanners, digital cameras, and color printers which are widely available to teachers and students. It has also purchased additional 32" color TVs and computer-compatible furniture to hold the new equipment. A variety of software has been procured to support and enhance the existing and new curriculum. Computer manuals are available and housed in the LMC. Acknowledging the special needs of some of our Special Education students, interactive peripherals and software for special education has also been purchased.

Inventory	
Desktop computers	762
Laptop computers	50
Older PCs	58
Video Projectors	23
Scanners	30
Digital Cameras	7
Color Inkjet Printers	141
Laser Printers	51
Other Printers	9
TVs and VCRs	80

Because the new acquisitions are state-of-the art, they promote innovative uses of technology by staff and students, allowing for new curriculum design involving the use of technology and enforcing the use of technology in the completion of assignments by the students. PHS has integrated new resources into the current complement of existing technology in consideration of classroom goals and needs. Compliance has been met with the current network compatibility and infrastructure as upgrades are added.

Networking/Telecommunications

PHS has been wired to provide at least six Internet drops in every classroom. **Poway High School** currently has a Local Area Network (LAN) with a fiber optic backbone that enables all classrooms to connect with the Wide Area Network (WAN), and the Internet. Internet connectivity is through a T1 that connects the PUSD WAN. Funds from the Digital High School Grant allowed **Poway High School** to expand the LAN allowing for more Internet connectivity in specific classrooms. Depending on the amount of computers in each classroom building **Poway High School** will have to invest in additional switches and pull existing fiber to

certain drops for additional throughput to accommodate the additional computers. **Poway High School** has upgraded its the current server during the 2000-2001 year by adding three additional 18GB hard drives. The installation of three ISDN lines donated by PacBell allows for video teleconferencing learning activities. All classrooms and work areas have been wired with CAT5 for data, telephone, and video and coaxial for TV, and telephone. **Poway High School** recognizes that it needs to upgrade its infrastructure on a continual basis to meet existing and projected needs as can be referenced in the Proposed Technology Needs section

Proposed Technology Needs

Poway High School will need to purchase additional items to expand the existing network and support technology in the classrooms.

<i>Location</i>	<i>Description</i>	<i>Status</i>
2000-2001		
D16	<i>Complete wiring with 2-port drop</i>	<i>Summer, 2001</i>
	<i>Jet Direct Card for network printing</i>	<i>Complete</i>
Library	<i>30 Computers</i>	<i>Summer, 2001</i>
	<i>Furniture – Counters, chairs</i>	
	<i>Electrical</i>	
	<i>Cabling</i>	
	<i>Networked Laser Printer</i>	
	<i>2 Switches</i>	
Science	<i>30 Workstations</i>	<i>Summer, 2001</i>
	<i>Wall mounts</i>	
	<i>Drops</i>	
	<i>Electrical</i>	
F50	<i>Smart Board Relocation to Portable Carts</i>	<i>Summer, 2001</i>

<i>Site Technician</i>	<i>Workstations</i>	<i>Fall, 2001</i>
<i>MDF</i>	<i>Jukebox</i>	<i>Summer, 2001</i>
	<i>Environmental Cooling System</i>	
<i>IDF – D Building</i>	<i>4 Switches</i>	<i>Summer, 2001</i>
<i>IDF – Library</i>	<i>2 Switches</i>	<i>Summer, 2001</i>
<i>IDF – F Building</i>	<i>1 Switch</i>	<i>To Be Determined</i>
<i>IDF – J Mech Building</i>	<i>2 Switches</i>	<i>Summer, 2001</i>
<i>J Building</i>	<i>Fiber to replace Cat 5</i>	<i>To Be Determined</i>
<i>IDF – J Building</i>	<i>3 Switches</i>	<i>To Be Determined</i>
<i>IDF – Admin</i>	<i>2 Switches</i>	<i>To Be Determined</i>
<i>Performing Arts Center – off campus</i>	<i>Networkable?</i>	<i>To Be Determined</i>
<i>Misc Infrastructure</i>		
<i>2001 - 2002</i>		
	<i>Rewiring of campus</i>	<i>Summer</i>
	<i>Replacement Parts</i>	
	<i>Replacement of Old Technology</i>	
	<i>Additional “SOWs” (Stuff on Wheels)</i>	
	<i>Mobile Wireless Lab</i>	
<i>IDF – E Bulding</i>	<i>Fiber light amplifier replacement</i>	
<i>IDF – S2 Building</i>	<i>Fiber light amplifier replacement</i>	
	<i>Replacement Printers</i>	
<i>Additional Drops</i>	<i>J3</i>	
<i>Beyond 2002</i>		
	<i>Replacement of Old Technology</i>	
	<i>Upgrade of Network Infrastructure</i>	
	<i>Computer Centers</i>	
	<i>“SOWs”</i>	

Technology Integration

Current Departmental Use Status

Past & Current Technology Use	Projected Technology Use
<p>ENGLISH LANGUAGE ARTS & LITERATURE:</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • Word Processing - resumes, essays, reports, business letters • Multi-media - slide presentations • Desktop Publishing - newsletters, brochures, timelines, posters, poetry booklets, web pages, graphics manipulation • World Wide Web - Internet research, WebQuests • Digital camera & scanner for importing images • TV/VCR – viewing/analyzing films 	<p>Expand present use to include all English classes. Collaborate with Math teachers to incorporate spreadsheets (tables, graphs and charts) into projects.</p> <ul style="list-style-type: none"> • All classrooms - Internet accessible multi-media computer work station(s) • Large screen TV doubles as classroom projection system • Writing lab(s) to be shared within English Dept. for word processing and Internet research; • CDs for read-along literature • Internet for Multi-media projects with graphics, text, sound and video • Electronic portfolios added to assessment. • Multimedia carts with LCD projection available.
<p>MATHEMATICS:</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • Math skills programs • Internet research • Spreadsheets graphing survey results • Programming C++ • Graphing calculators 	<ul style="list-style-type: none"> • All classrooms - Internet accessible multi-media computer work station(s) • Large screen TV doubles as classroom projection system • Multimedia carts with LCD projection available. • Access to Computer Lab for practice with simulation software to enhance test-taking skills. • Computer applications: Spreadsheets used for problem solving, graphing programs for

<ul style="list-style-type: none"> • PowerPoint lessons to prepare for Sat-9 and other math tests. 	<p>visualization. Word processing with math symbols and statistics software added for instruction and practice. Students program probabilities, use software to reinforce basic skills, and learn pre-calculus applications.</p> <ul style="list-style-type: none"> • Graphing calculators • Teachers and students present problems using multimedia. • Multimedia carts with LCD projection available. • Electronic portfolios added to assessment.
<p>SOCIAL SCIENCE</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • Internet research • WebQuests • Travel brochures • Digital camera & scanner for importing images • TV/VCR – viewing/analyzing films 	<ul style="list-style-type: none"> • All classrooms - Internet accessible multi-media computer work station(s) • Large screen TV doubles as classroom projection system • Multimedia carts with LCD projection available. • Students will define research questions, locate, evaluate and synthesize information from a variety of sources, and generate reports to be published electronically. • Electronic portfolios added to assessment.
<p>SCIENCE:</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • World Wide Web - Internet research • Digital camera & scanner for importing images • FlexCam – for projecting images • TV/VCR – viewing films 	<ul style="list-style-type: none"> • All classrooms - Internet accessible multi-media computer work station(s) • Large screen TV doubles as classroom projection system • Access to Computer Lab where students gather data, do research using CD-ROMs and the Internet. • Use portable laptops to use during lab exercises and to record data on field trips. • Other activities: e-mail to experts with specific questions; collect data using computer and/or calculator probe-ware; share data and results with other classes via e-mail and video conference; access information from news groups; observations and reports using digital camera and video.

	<ul style="list-style-type: none"> • All students organize data using spreadsheets and databases, graph data electronically, present results in class and to parents using word processing, and multimedia presentations. • Multimedia carts with LCD projection available. • Electronic portfolios added to assessment.
<p>ESL & FOREIGN LANGUAGE</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • Programmed Courseware for language development • Tape recorders – language development • CD Textbooks • LAUSDnet – email communication with students in other countries 	<ul style="list-style-type: none"> • All classrooms - multi-media Internet accessible computer work station with headphones • Large screen TV doubles as classroom projection system • Multimedia carts with LCD projection available. • Multi-media CD Courseware to enrich language experience • Computer Lab available on a signup basis for whole class programmed language learning and individualized instruction. • Students use Internet to research foreign language cultures and correspond with experts and peers in foreign countries, Word processing software with special characters and English and foreign language dictionaries to prepare reports, Project lab for curriculum projects and multi-media presentations • Electronic portfolios added to assessment.
<p>PHYSICAL EDUCATION</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum 	<ul style="list-style-type: none"> • Internet accessible multi-media computer workstation and one printer for PE Dept. • Students' progress on physical fitness, percentage of body fat, performance in training, and other areas documented and tracked. • Students use Internet to research topics related to physical fitness, locate scholarships, and recruiting opportunities. Students use databases and spreadsheets to maintain sports records and statistics. Project lab to create multimedia

	<p>presentations.</p> <ul style="list-style-type: none"> • Multimedia carts with LCD projection available.
<p>HEALTH:</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • Internet research of health topics 	<ul style="list-style-type: none"> • Internet accessible multi-media computer work station(s) • Students use Internet to research topics and issues related to health & health professions, locate scholarships. • Create reports and presentations on research topics. • Multimedia carts with LCD projection available. • Electronic portfolios added to assessment.
<p>BUSINESS:</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • Introduction to computers (all 9th graders) Identify parts of computer and peripherals and their functions, general computer operations, Keyboard, word processing, web pages, database, spreadsheet, e-mail, desktop publishing • Multi-media presentations • Computer Graphics • Web page design • Computer programming • Electronic portfolios 	<ul style="list-style-type: none"> • Computer classrooms equipped with 25-30 multi-media computers with Internet access. • Students will be trained in accord with the CTAP Level I and Level II proficiencies. • LCD projection installed in all business classes. • Electronic portfolios included in assessment. • Networking technology class
<p>SPECIAL EDUCATION:</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • Word Processing - Journals, essays, poems • World Wide Web - Internet research • Desktop Publishing – Book 	<ul style="list-style-type: none"> • All classrooms - Internet accessible multi-media computer work station(s) • Large screen TV doubles as classroom projection system • IEP data electronically maintained. • Student use of remediation software. • Teachers and aides trained to assist students in labs, Library/Media Center, Project Room.

<p>ART</p> <ul style="list-style-type: none"> • World Wide Web - Internet posting of grades and curriculum • Student galleries online • Animation lab • Light table 	<ul style="list-style-type: none"> • All classrooms - Internet accessible multi-media computer work station(s). • Students use Internet for virtual museum tours and researching Master artist and art history • Digital Cameras, image editing and publishing software for learning graphic layout and preparing school yearbook • Ceramics classes use software for determining glaze formulas • Multimedia carts with LCD projection available.
<p>LIBRARY/MEDIA CENTER</p> <ul style="list-style-type: none"> • 36 networked multimedia computer stations for student • Internet access for research • MS Office Suite • Reference materials online • Computerized cataloging 	<ul style="list-style-type: none"> • 35 networked multimedia computers • LCD projection available. • Encyclopedia resources available online • Specialized indexes for poetry, etc. • Student access to online reference services at home
<p>SHARED RESOURCES</p> <ul style="list-style-type: none"> • Library/Media Center • Digital Cameras • TVs/VCRs • Multimedia carts with LCD projection 	<p>Shared resources will continue to be used on a teacher signup or checkout basis with the addition of</p> <ul style="list-style-type: none"> • Portable wireless laptop labs • Additional Multimedia carts with LCD projection

Examples of Current Technology Implementation

Department Use

Science: Al Torretto arranges up to 18 laptops around the room loaded with the Human body CD-ROM. Students use the CD to get familiar with the topic, then do a lab exercise at the same table. Al then uses a Flex-cam connected to three TV monitors around the room to show

students exactly what to do as he demonstrates the procedure live. He also shows brief snips of videos to illustrate science concepts on the big TV monitors and can switch quickly from a video to the Internet to a PowerPoint with the flip of a switch. Paulette Sienicki, Dennis Lin, Sharon Lessard, Juli Cheskaty, and Arno Chrispeels have created and used PowerPoint presentations on the big screen with a portable LCD projector. Bob Whitney has developed Internet lessons using real-time data collection web sites for Geoscience and Oceanography. Paulette and Sharon have taken digital photos of their field trips and posted them to the Internet on their web sites.

English: Divona Roy has created and maintained an online Shakespeare web assignment that has students investigating the similarities between the Hatfield-McCoy feud and the family feud in *Romeo and Juliet*. Matt Hannan uses the computers with students in D-16 regularly in his writing assignments. Room D-16 is now open as the campus “Writing Workshop” where students can come after school to access help from teacher-mentors and use the computers to type up their papers. Dennis Wymbs has developed an extensive web site for his AP English class. Dennis also has used technology in his literacy training with the Web-based reading and literacy materials he uses. Erika Webb and Debra Surber have had their students create and present Powerpoint presentations to their classes. Amy Lehrer uses computers regularly with her students for Internet research and writing assignments. Pat Bowers has used the portable multimedia projector to project class lessons on the big screen. Juan Vasquez has impacted student culture on campus by creating his M.E.C.H.A. web site to promote pride and cultural exchange.

Health: Dale Hanover has used the digital camera to take still photos for his class. Students use the Internet to research and gather information for assignments and projects.

Business: All business teachers use computers daily with every class. Lynn Olps uses student PowerPoint presentations, Excel spreadsheets and graphing, word processor assignments, Access for maintaining the campus inventory, the Internet for classroom resources, and CD-based software. In addition, she conducts an online Virtual Health class that is used by Abraxas HS. She has also used technology to create a “How To Use MS

Publisher” video presentation. Keith Jain uses computer applications extensively in his Introduction to Computers classes and has developed an online class for his Internet Publishing. In addition to the Computer Applications classes (MOUS training) that Janet Molen teaches, she is designing a Networking class that will begin next fall. Todd Parr and Keith Jain have published student work via the Internet for the Internet Publishing and digital art classes. Perry Minamide makes his Computer Programming assignments available via LearningPoint. He also uses online discussion boards in LearningPoint to enhance the course.

Art: Todd Parr has a digital photo gallery of ceramic projects online.

Math: Scott Parker has made a math web site complete with an online statistics glossary and tips for using the graphing calculators. Cherie Nydam has published her PowerPoint presentations and extra credit projects via her Internet web site. Lee Carson has created a web site for her math classes that includes detailed information on her year’s assignment schedule.

Consumer and Family Studies: Ann Gemmill makes a weekly Titan Terrace menu available via the Internet and email to all staff. Ann and Marty Parker’s web sites are complete with menus and recipes.

Industrial Technology: Ken Faverty has used technology to publish digital photos of what his students are doing in Automotive Technology. His web site features links to competitions and helps. In the Automotive classes, assignments incorporate on-line web search projects as a part of the curriculum. Interactive software called CDX is also used in the automotive classes Gene Tallon has used the digital camera to create PowerPoint tutorials on the use of woodworking tools. Dennis Wood has a photo gallery showcasing photography from his classes. Lynn Olps uses technology to create PowerPoint presentations, e-mail students and parents, the Internet for research, and Access for Computer Repair equipment inventory. Students use technology for parts inventory, PowerPoint presentations, Internet research, and e-mail for access to assignment information. In Bonnie Kristell’s Television and Film Production class, students use digital camcorders to shoot scripts, operate linear and non-

linear editing consoles, narrate, and place music into television programming. Mike Roche teaches computer Design and Virtual Reality where students create storyboards for animation and cell sequencing on the computer. They also research on the Internet, use video equipment to cut and paste video into computer animation and use the Internet as a research tool.

Campus

Throughout the campus Administrators, Classified and Certificated staff is using technology to enhance curriculum and job performance. Computer software that is being used:

- SASIxp
- Bridge
- Novell ZENworks
- Norton Antivirus
- Newsbank
- MS Office Suite
- LearningPoint
- Making the Grade
- Classroom Manager
- Windows NT, Windows 2000, Windows 98, Windows 95
- STAR Testing Software
- Exchange e-mail on the LAN
- Encarta
- Maya
- Adobe Products
- Mavis Beacon

Staff Training

The assistant principal in charge of technology will be responsible for managing staff development in conjunction with the Staff Development TOSA (teacher on special assignment). The Staff Development TOSA and Peer Technology Trainer (PTT) will be responsible for designing and implementing curricular-based technology learning activities, designing staff development and training technology.

Training Plan

Teacher/Staff Classroom/Site Technology Management Tools	Teacher/Staff Classroom Technology Learning Tools
<ol style="list-style-type: none"> 1. SASIxp – Attendance, grades, phone numbers, email, schedules, etc. emphasizing communication with the learning community. 2. Making the Grade – Grade book and possible attendance management emphasizing communication with the learning community. 3. Learning Point – emphasizing grades on line, assignments, class syllabus, and communication with the learning community. 4. Outlook email - emphasizing communication with the learning 	<ol style="list-style-type: none"> 1. How to use 1-4 computers as student learning tools in the classroom. <ul style="list-style-type: none"> • Word Processing - Word • Presentation – PowerPoint • Internet Research – Internet Explore • Spreadsheets – Excel • E-mail – web mail • Courseware – LearningPoint, etc. 2. LearningPoint activities that help students learn. 3. Web based activities in the classroom 4. Developing LearningPoint web sites for subject area standards and curriculum

<p>communication with the learning community.</p> <p>5. File management – emphasizing Novell, My Computer, and Windows Explore</p> <p>6. Shared Novell network folders – sharing curriculum, standards, classroom activities, etc. for curricular departments, cross-curricular teams, and other groups who share.</p>	<p>(i.e. Using the RBHS model).</p> <p>5. Developing PowerPoint lessons</p> <p>6. Integrating technology into curricular assignments for students i.e. the Digital High School (Basic Six)</p>
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** The order of the above could be changed to emphasize the importance of an item or a natural learning progression of *Management* and *Learning* tools.

** *Management Tools* should be taught after school, lunch or prep.

** *Learning Tools* should be taught during Staff Development and prep.

** Our technicians, DHS Level III teachers and the “Computer Buddies” along with the Business Department teach *Management Tools*.

Training Applications

- MS Office Suite and Internet research
- LearningPoint and Making the Grade
- Outlook e-mail training
- Full Day Staff Development– devoted to writing lesson plans integrating technology into student assignments and using the DHS Basic Six Software
- Making the Grade
- Staff Development devoted to student *Learning Tools*. (*Students using 1 – 4 computers as a learning tool in the classroom*)

Student Preparation

PHS will insure fair and appropriate access to technology for all students in all classrooms. There are Internet connections in every classroom with each teacher instructing students on methods and appropriate applications for use of the Internet as related to specific and general classroom use. The Library Media Center (LMC) has computers that are linked to the LAN for use before, during, and after school and is currently upgrading the number of Internet ready computers.

With fair and appropriate access to these learning resources, students are engaged in instructional activities designed to master literacy skills. In English, social science, business, and math, students will create documents, analyze data, research information, correspond via e-mail, and create documents able to be published electronically. They will regularly use e-mail and the Internet to retrieve information relevant to course work. Assignments requiring the use of these technology-based learning resources will be embedded into the curriculum plan in each department.

By graduation, students will have participated in a number of Internet based learning activities and explorations of complex problems that stimulate curiosity and logical thinking, build a recognition of relationships and connections between subject areas, require students to synthesize information, produce a variety of report formats, and excite an interest in life long learning.

Special Needs Students

All special needs students are currently placed in the least restrictive environment i.e. are fully included in programs and curriculum. All parts of the school including the LMC are accessible to students with physical disabilities. The Internet-accessible computers in the LMC are also easily accessible by all students including those with physical disabilities. Special hardware and software has been purchased to support and assist students with physical disabilities.

Some Individualized Education Plans (IEPs) require student proficiency testing and writing to be done on the computer. Collaboration will continue between Resource Specialist teachers and contact class teachers to ensure that “mainstreamed” students with special needs are included in the acquisition and development of computer literacy skills. IEPs for mainstreamed students receiving services will be written to include the same technology skills and access to Internet and technology resources integrated into the curriculum of the core academic contact classes.

Impact on Student Learning

Technology has made it possible for teachers to present content areas to students in ways previously unavailable and create learning environments where students can learn by doing, receive immediate responses, clarify their understanding, and use the tools that technology provides to enhance their personal learning. Students have been able to enhance their inquiry-based learning and become active and independent learners. Many students have engaged in learning activities which may not resemble standard methods of teaching and learning, however, with the use of technology, they have become a transparent part of the curriculum being taught and learned.

Access to technology in the classroom has not been sufficient enough to make a difference in educational outcomes. Teacher training, integration of technology into student assignments, peer mentoring by both staff and students, and computer technical support have been provided at **Poway High School**. If the ratio of computers were one to one, technology could change the face of the classroom of today, however, budgeting does not allow for this luxury.

The Internet has provided primary sources and infinite research capabilities, while allowing students to interact with poets, scientists, and other professionals in a real-time environment. Teachers hold large group discussions with students through a controlled chat area in LearningPoint. This has allowed for an increase in the amount of reading and writing that a student has to participate in. Virtual on-line classes are provided at **Poway High School**

Distance learning meeting individual needs and schedules. As referenced previously, many teachers are using technology as a tool to enhance the learning structure and environment within the classroom, with the result being a more engaged and active learning environment.

Impact on Teaching Practices

With the assistance of the Digital High School Grant, PHS has been allowed to train staff in the implementation of technology for their personal use and integrate the use of technology into student lesson plans, thereby allowing students the opportunity to engage in the use of technology while completing assignments for specific subject areas. This also has given PHS the opportunity to improve teaching methods and practices while affording teachers the opportunity to write new and innovative lesson plans, access new materials on the Internet and utilize innovative ideas from fellow teachers.

The use of technology at PHS has allowed teachers the opportunity to take students to higher orders of thinking, collaboration and cooperation among peers, broader comprehension of topics, and the ability to problem solve different types of situations. With the use of technology, teachers can be the “Guide on the side”; directing student learning and assessing learned objectives and standards through student projects.

Some content areas have allowed for faster integration of technology into the curriculum. The staggered planning and implementation of training with the Digital High Grant has allowed for a more efficient and timely learning curve by staff and students and integration of technology into the classroom

Integrating technology into the curriculum is difficult for some staff members, due to a shortage of funds to purchase equipment and have access to more than three computers per classroom.

Technical Support

PHS and Poway Unified School District are committed to sustaining technology resources. PUSD currently provides technical support and training by the Educational, Technology and Information Systems (ETIS) department. Support by the ETIS department is available beyond regular school hours, and remotely through the WAN. **Poway High School** currently has three on-site technicians. The support of technology is also enhanced by the involvement of the Computer Repair Technology students who help troubleshoot hardware and software problems in classrooms.

Technology standards have been developed for grades K-12, and assist PHS in its future planning and assessment of student achievement. As the staffs' technical expertise expands with the implementation of the Digital High School Grant, a lot of basic technical problem solving will occur immediately in the classroom.

Digital High School Grant Recipient

Digital High School Grant

Copy of DHS Grant provided by the State of California 1999 – 2000.

Technology Support and Staff Training Recipient (TSST)

TSST portion of grant is in effect 2000-2001, and ensuing years

Information about the DHS Grant and TSST portion - <http://www.cde.ca.gov/digitalhigh/>

Technology Coordinator

- Chairperson of the Technology Committee
- Have business and technical expertise necessary for project management, data collection and assessment
- Have a wide range of knowledge of computers and applications
- Seek input and participation from the staff, parents, students, Technology Committee and other community members to assure that the implementation of the DHS plan reflects the consensus of the DHS Installation Project and the technology needs school-wide
- Be responsible for facilitating the technology committee meetings
- Share the responsibility for data collection through surveys with the DHS Committee
- Evaluate and recommend hardware and software to the technology committee
- Present recommended purchases for upgrades and the on-going needs of technology to the Principal, Assistant Principal in Charge of Technology, and DHS Committee
- Assist in the ordering of hardware and software
- Assist in the training of staff in the integration of technology into curriculum
- Assist training of staff in use of new hardware and software
- Help organize software training for staff
- Assess and evaluate teacher involvement and use of hardware and software
- Assess and evaluate student involvement, use and success of hardware and software.
- Assist in the development, implementation, and refinement of the **Poway High School** Technology Plan.

Peer Technology Trainers

The PTT (Peer Technology Teacher) acts as a Peer Tutor to fellow teachers, instructs teachers on how to use application software, e-mail, the Internet, Grades on-line, and add activities and materials to the LAN or WAN. The PTT also researches and provides for teachers uses of technology curriculum, assists teachers in integrating the use of application software and the Internet into their curriculum, and team-teaches using and modeling technology integration. The PTT also encourages and initiates cross-curricular activities.

The PTTs work closely with the Staff Development committee and WASC Team to provide, technology training on Monday morning Staff Development days, after school trainings, summer training, and private preparatory training for all certificated staff.

DHS Committee

The Technology Committee will meet as needed and is primarily responsible for troubleshooting technology related issues, the planning and modification of technology, planning staff development and updates to the school technology plan. The Project Manager is responsible for facilitating these technology committee meetings. Members of the committee are: the Project Manager, Peer Technology Trainers, the Site Technicians, and the Assistant Principal in Charge of Technology.

During the Fall Semester of 2001, the Tech Coordinator will work very closely with the Site Technicians, therefore making the necessity for technology related information meetings less in demand.

Staff and Administrative Involvement

1. Evaluate, update, and revise the Technology Plan.
2. Seek and utilize community resources as business partners.
3. Assist in integrating of technology into the classroom curriculum.
4. Act as mentor for all staff and students in integrating and solving technology related issues.
5. Participate in training programs.
6. Assist the staff in becoming proficient in the use of existing technology.
7. Provide ongoing support and training to use the existing technology.
8. Seek advice from technical support teams, on-site, District, Business, Higher Education, and Parents.
9. Assist in the full integration of the Internet and technology into all current and future curriculums.

Parents and Business Partners

Parents with specific technology training are consulted about issues relating to equipment, training, and security. Parents will be encouraged to be involved in technology by requesting that they contact their own businesses to become a part of the technology design and implementation at PHS. Through newsletters and school site web pages, parents will be invited to become involved with the various aspects of technology integration, as in participation on the Site Council Committee.

Our community offers sustained support in the area of parent volunteers, PTSA, the Endowment Foundation and SITE Council.

Assessment Procedure

Poway High School will assess current technology and the use of technology by the staff and students on a continual basis. An annual survey of teacher software knowledge and use is given to the certificated staff at the end of each school year. This survey will be tallied and training topics will be centered on the software applications that need to be enhanced by further training.

Staff Development projects are available on-line or on the PHS network server in a "Shared" Folder for access by other staff members.

Conclusions and Recommendations

Poway High School will continue to support its growth in the use of technology on the campus by:

- Continuing to upgrade and enhance its hardware, software and network capabilities
- Offering and assisting teachers in the use and integration of technology into the classroom curriculum
- Providing students opportunities to enhance their educational career through the use of application software in the completion of assignments as mandated in the business environment.

Technology Committee Members

Scott Fisher	Principal
Bill Adams	Assistant Principal, In Charge of Technology
Lynn Olps	Tech Coordinator / Computer Technology Instructor
Dennis Moore	Social Science Instructor / Peer Technology Trainer
Perry Minamide	Science Instructor / Peer Technology Trainer
Ken Faverty	Industrial Technology Instructor
Larry Foster	Math Instructor
Chris Greenwood	Site Technician
Keith Jain	Computer Technology Instructor
Jim Keeley	Site Technician
Todd Parr	Computer Graphic Arts Instructor
Charles Powell	Site Technician