MANHATTAN BEACH
UNIFIED SCHOOL DISTRICT

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EDUCATION TECHNOLOGY USE PLAN

4 YEAR PLAN
JULY 2008 - JUNE 2012

Revised and Board Approved – June 2009
Revised and Board Approved – June 2006
Revised and Approved by Board - January 15, 2003
Original 3 Year Plan Approved by Board - June 6, 2001

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Background

Manhattan Beach Unified School District provides pre-kindergarten through twelfth grade education for students in the city of Manhattan Beach. The District operates five elementary schools, one middle school, and one high school, as well as pre-school and after-school programs. High school students from neighboring Hermosa Beach, Redondo Beach, and other local areas may also attend Mira Costa High School. Total enrollment in the District in 2008-2009 is 6,454 students.

Mission

The mission of the Manhattan Beach Unified School District is to prepare each of our students to meet the challenges of a rapidly changing, highly complex, technology-rich, global society. We will continually strive for excellence in all aspects of the educational process. We will teach our students to understand and appreciate human and cultural diversity. We will embrace the resources of the entire community, including students, parents, teachers, staff, administrators, college and business leaders, and others. We will empower students to demonstrate high achievement and to develop the skills and characteristics needed to ensure successful lives.

To this end, the District encourages the creation of a technology-rich environment, based on the existing District strategic plan, in which:

- Adults and children cooperate as part of a learning community.
- All students and staff pursue a positive personal vision of excellence for their future, incorporating technology.
- The educational program in content and methodology prepares students to be successful in the world of work.
- Students and adults are provided with safe and attractive surroundings.
- Students and employees are valued.
- All learners participate in decision-making and accountability.
- The District supports employee excellence.
- The District monitors external and internal events that pose opportunities and threats and adjusts programs and plans accordingly.

Vision

The Manhattan Beach Unified School District will prepare students for life in the information age. Through effective and creative use of multi-media, telecommunication, computer, and other related technologies to facilitate learning, students will build a working foundation of knowledge and skills that will prepare them for future success.

All students and staff need to be able to use a wide variety of technological tools to enhance their future success as students and employees.

- It is imperative for all students and staff to have access to information via technology as a basis for lifelong learning and preparation for a technologically advanced future.
- It is beneficial for all learners, including educators, to process and manage information through the skillful use of technology.
- Skillful use of technology supports the development of process skills such as flexibility, adaptability, critical thinking, problem solving, and collaboration, which are essential to success in our rapidly changing information age.
- Networked technology systems support efficient and effective communications both within and outside the District.
- Technology allows us to better serve the diverse learning styles of our students.
- Technology maximizes productivity and efficiency.

1. Plan Duration and Scope

This plan is a living document that will guide the Manhattan Beach Unified School District from July 1, 2008, through June 30, 2012, and it will be updated as needed to reflect the continually updated technology tools and proficiencies employed within the District. Technology as defined by this plan includes:

1) desktop, laptop, and hand held computing devices;
2) peripherals such as scanners and printers;
3) display devices such as Smartboards, document cameras, projectors, and televisions;
4) telecommunications overseen by district staff;
5) network components including servers;
6) all software.

This plan was developed during the 2008-2009 school year, during an extraordinary fiscal crisis in the State of California, and therefore, within the District.

2. Stakeholders

The Technology Advisory Committee, initially developing the curricular portion of this plan during Fall 2008, is composed of members of the teacher, administrator, and parent subgroups with in the stakeholder community. Additional stakeholder members will be added to the group as needed or requested. Meetings are open to all members of the school community.

Technology Advisory Committee Members, 2008-2012

Carolyn Seaton, *Chairperson*	Executive Director, Educational Services
Eric Sangalang	Coordinator of Technology Services
Paula Spence	Vice Principal, MCHS
Sharon Witzansky	Elementary Support Specialist, Grand View
Alan Zeoli	Teacher, MCHS
James Locke	Teacher, MBMS
Debbie Dreiling	Teacher, Robinson
Karin Buckner	Teacher, Pacific
Mitch Williams	Teacher, MCHS SoCal ROC
Kathy Long	Elementary Computer Lab Specialist
David Henderson	Librarian, MCHS
Debby Kalenik	Library Media Specialist, MBMS
Edie Babbe	President, MB Council of PTAs
Tami Brothers	Technology Chairperson, MB Council of PTAs
Gretchen Renshaw	Parent, Consultant

3. Curriculum

3a. Teachers' and Students' Current Access to Technology

The Manhattan Beach Unified School District has over 1,300 computers, the majority dedicated to teacher and student use. These computers are licensed with Microsoft Windows XP, Internet Explorer, Microsoft Office and email as well as administrative tools. Each classroom has at least one computer attached to the District network with connectivity to the Internet. All desktop computing (hardware and software) is funded primarily by site PTAs or grants.

Elementary Schools

At the elementary school level, all five schools have at least one computer lab on campus with an average of thirty desktops and a large screen or projection device. Students in first through fifth grade have classroom instruction once a week in the lab with additional time available before school, during

nutrition, during lunch and after school based on the supervision available at each site. There is limited use of laptop carts. Some school sites offer clubs or fee-based after school programs that use lab technology. Some schools have additional labs for reading and science and additional computers available in the library with access to library catalog software and the Internet.

Each classroom has a networked teacher computer and printer, a varied number of student computers (networked or not dependent on configuration), a television and usually a VCR and/or DVD player. Many school sites have implemented LCD projectors connected to teacher computers, document cameras, digital cameras, as well as voice amplification systems. There is limited use of interactive whiteboards, such as Smartboards.

Middle School

At the middle school, all computers have access to the Internet and can be accessed by either students or teachers. Each classroom has at least one computer, and many have multiple computers available. All classrooms have ceiling mounted LCD projectors connected to the teacher computer. Classrooms also have voice amplification systems for teacher use. The library has sixteen student computers available before, during, and after school, with access to the District's library catalog and several licensed databases (World Book Online, Infotrack, United Streaming). Students and parents can access many of the teacher lessons and notes after school through Edline, a web based school information system. The library has three laptop carts that teachers can check out for assignments and research in the classroom.

High School

At the high school level, students have access to technology in twelve different lab settings. The Library PC Lab has forty-one computers and is the primary lab for student use throughout the day. Each computer has Microsoft Office, Microsoft Publisher, scanner software, Internet, email capabilities, and access to the library catalog and subscription based electronic databases. Other labs include another general use computer lab (33 PCs), Math & Science lab (41 PCs), Foreign Language (41 PCs), LaVista Newspaper Lab (12 PCs), Yearbook Lab (14 PCs), Media Arts iMac lab (18 iMacs), Art Mac lab, (6 iMacs), Music Theory iMac lab, (6 iMacs), ASB/PACE lab, (5 PCs), the College and Career Center (CCC) Lab (10 PCs) and the Southern California Regional Occupation Center Lab (SoCal ROC) lab (32 PCs). These labs are open outside of class time dependent on supervision.

Students have access to personal email at school and can utilize school computers to open and print documents. Based on security issues there is limited use of portable devices. Students and parents can communicate with teachers and administrative staff via email. Students and parents can access students' grades via Gradebook Wizard and attendance records via the InTouch website.

Each teacher has a networked PC and printer in the classroom as well as access to PC/printer stations and labs throughout campus. Teachers also have access to scanners and Scantrons. Teachers have the standardized Microsoft Office Suite and email to communicate with staff, parents, and students and are connected to the Internet. Teachers can input student daily grades with Gradebook Wizard. They can also access the MCHS Library catalog online.

Many teachers have implemented additional technology in their classrooms to assist in teaching: digital LCD projectors, document cameras, TI graphic calculator presentation equipment, digital tablets, wireless presentation devices, as well as televisions connected to VCR/DVD players.

Outside of school hours teachers can access District administrative systems such as Gradebook Wizard from their homes as well as the library website and database services and links, the MCHS School website, the PTSA website, and District email.

3b. Current Use of Hardware and Software

Elementary Schools

At the elementary school level, student use of hardware and software to support learning is grade specific and sometimes dependent on the teacher, whether in a lab setting or in the classroom. In the lower grades, most student use occurs during the weekly computer lab session with some additional use possible in the classroom. In the upper grades, students use technology in the computer lab and at home. Typical student use can be divided into two categories, to support learning of core curriculum and to learn to use the computer as a tool. Students use the computer as a word processor or to create graphics in support of a core curricular project, or they may use specialized software to help learn skills and content in such subjects as reading, social studies, or math. The second category, to learn to use the computer as a tool, begins at a basic level in the early grades. In third grade, students start using the Internet for basic research and may choose to turn in typed projects. In fourth grade, students continue to learn to type, to research on the Internet, and are required to have some projects typed. In fifth grade, typing instruction continues, project final drafts must be typed, and Internet research is expected. Laptop carts may be used for writing assignments in class. Interactive technology is introduced in classrooms and labs. At the conclusion of students' elementary school experience, they will have used technology for word processing, creating tables, accessing information, and reinforcing learning.

All teachers rely on hardware and software for communication, grade recording, record keeping, material creation, research, and organization. Many teachers utilize Presentation software to create instructional materials and present those materials electronically in class.

Middle School

At the middle school, many teachers use their LCD projectors for class lectures and notes. Teachers may use multimedia materials such as Internet websites, streaming video, web-based applications, and others as part of their instructional repertoire. Some teachers use handheld classroom responders to receive immediate feedback on students' mastery of skills and concepts. Many of the teachers at the middle school post homework, class notes, and enrichment materials on Edline. Remediation and acceleration software is used to facilitate student mastery of concepts and skills in math and English language arts. The middle school has a computer class in the elective wheel that addresses many areas of computer usage such as the Internet, word processing, spreadsheets, presentations, and document design.

High School

The high school currently offers teachers and students access to Microsoft based PCs and Apple Macintosh computers in twelve different computer labs during school. Students also have access to the library computer lab and its Internet access before, during, and after school as well as at lunchtime.

The library PC lab is available during the school day to teachers and students for skills-based support, conducting research, and completing projects related to particular content areas. Scanners and printers are available to students and teachers. The high school library is equipped with over forty computer stations which can be used to search the library collection and the Internet. Students and staff have access to their work folders from any workstation on campus.

The high school teachers utilize a variety of labs and technologies to support teaching and learning. Math and science students create spreadsheets to analyze statistical data and observe virtual science experiments in the math and science computer lab. Students in foreign language classes visit the foreign language lab to practice their newly learned French and Spanish skills with PCs and personal headsets.

Students in Creative Writing, Music, Art, Video Production, Web Design, and Video Game Design classes are creating award winning newspapers and yearbooks, a live news broadcast, and artwork using the technology available in the classroom and lab settings.

The Mac lab for Media Arts is used primarily for video editing, as well as for graphic design, motion graphics, DVD authoring, web design, and word processing. Students in Broadcast Journalism use computers to research news stories, and acquire images, videos, and sound bites. Students employ the Internet to market school programs, publications, and performances on social networking sites. Students in Video Production utilize computers to create short films, documentaries, music videos, experimental videos, film trailers, news packages, and original music for use in student projects. Advanced students create and maintain the program's own custom websites. The students also create animations, DVDs, logos, and title sequences. Students collaborate with one another using web based tools such as Google Docs.

The music department has a Mac-based lab to support its Music Theory/Composition classes. Students compose music through the use of electronic keyboards connected to the computers and are able to mix and share their projects with other students. The Art department plans to add more Mac computers to its lab to facilitate student production of digital portfolios and teacher incorporation of advanced graphic design skills.

Special education classrooms have pods of two to three computers for students to receive additional skills-based support and complete projects related to particular specialized content areas.

Many teachers present their daily lectures through the use of their classroom computer and LCD projectors. In addition teachers may utilize specialized hardware including document cameras and TI graphing calculator presenters. One of the art classrooms is equipped with scanners, digital cameras, color printers, and Apple Macintosh computers. The video production lab houses eighteen Apple Macintosh computers, video editing equipment, DVD players, and TV broadcast equipment. A live TV newscast is produced and viewed by students several times per week.

The District provides an email account to every teacher. Many teachers use email as an effective tool for home/school communication. Teachers also use Gradebook Wizard website to post daily homework, long-term project instructions, and classroom newsletters. Parents can communicate with teachers directly from these sites, as well as through e-mail. All staff members have web access to email when off campus.

3c. Summary of Curricular Goals

This plan reflects the desired outcomes for the integration of technology in the Manhattan Beach schools. Technology is used as a vehicle to help teachers deliver a variety of learning opportunities to students in many disciplines or subject areas. In addition, students will gain the necessary skills in the use of technology to enable them to be functional and productive citizens. MBUSD expects graduates to be:

1) Knowledgeable individuals
2) Quality producers
3) Effective communicators
4) Competent thinkers
5) Effective collaborators
6) Responsible citizens
7) Life-long learners

As such, within the technology realm, MBUSD graduates will:

1) Take responsibility for their own learning
2) Access and process information skillfully and critically
3) Use technological tools confidently and proficiently
4) Solve complex problems alone and collaboratively
5) Demonstrate creativity and innovation
6) Communicate locally, nationally, and internationally

At the State level, educators have identified content area standards and benchmarks for all students that include technology. The Manhattan Beach Unified School District has adopted and implemented the California State standards. In addition, this technology plan includes benchmarks for elementary students to ensure they are ready to use a variety of computer tools by the time they reach middle school.

3d. Improving Teaching and Learning Using Technology

Using the International Society for Technology in Education (ISTE) National Education Technology Standards and Performance Indicators for Students (NETS'S), the MBUSD has developed the following student objectives across the District.

E = ENTRY R = REINFORCE I = INDEPENDENT USER

#		K	1	2	3	4	5	6	7	8	9	10	11	12
Technology Operations and Concepts														
1	Basic use of audio and audio/visual equipment (e.g., DVD player, voice amplification system, LCD projector, microphone, CD player, cassette player, headphones)	E	E	E	R	R	I	I	I	I	I	I	I	I
2	Use basic calculator for class use					E	R	I	I	I	I	I	I	I
3	Use graphing, scientific calculator for class use										E	E	R	R
4	Use basic computer operations (on/off/restart, opening an application, file extension, and also locating, opening, editing, & saving a file)		E	E	R	R	R	I	I	I	I	I	I	I
5	Operate peripheral devices, e.g., printers.		E	R	I	I	I	I	I	I	I	I	I	I
6	Basic use of storage devices.		E	R	I	I	I	I	I	I	I	I	I	I
7	Use basic technology vocabulary, progressively, vocabulary expands relative to skill level	E	R	R	R	R	R	R	R	R	R	R	R	R
8	Develop basic keyboarding skills	E	E	E	R	R	R	I	I	I	I	I	I	I
Digital Citizenship														
9	Practice ethical use of computers, expands with skill level (i.e., plagiarism, cyber bullying, privacy, copyright, etiquette)	E	E	E	E	E	E	E	E	E	E	R	R	R
10	Exhibit a positive attitude embracing the possibilities of technology	E	R	R	R	R	R	R	R	R	R	R	R	R
Creativity and Innovation														
11	Create documents using word processing applications (e.g., Word) and tools (e.g., spell-check)		E	E	R	R	R	I	I	I	I	I	I	I
12	Create, access and manipulate graphics	E	E	R	R	R	R	I	I	I	I	I	I	I

13	Create, access and manipulate spreadsheets (e.g., Excel)						E	R	R	I	I	I	I	I
14	Create, access and manipulate presentations (e.g., Presentation software)			E	E	R	R	I	I	I	I	I	I	I
15	Provide access to advanced learning opportunities that allow students to pursue specific technological interests and skills (e.g., software, electives, after-school)					E	E	E	E	E	E	E	E	E
16	Use software and/or web-based tools that enhances curriculum standards, may include applications for models and simulations (e.g., Oregon Trail, Math Blaster, Interactive Physics, House Series, Word Champ)	E	E	E	E	E	E	E	E	E	E	E	E	E
Communication and Collaboration														
17	Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media, expand with grade level	E	E	E	E	E	E	E	E	E	E	E	E	E
18	Communicate information and ideas effectively to multiple audiences using a variety of media and formats (e.g., email, WIKI, social network systems), expand with grade level							E	E	E	E	E	E	E
Research, Information Literacy and Critical Thinking														
19	Plan strategies to guide inquiry, expand by grade level			E	E	E	E	R	R	R	R	I	I	I
20	Determine appropriateness and validity of information from electronic sources (find sources of information)			E	E	E	E	R	R	R	R	I	I	I
21	Develop information literacy skills to locate, evaluate and ethically use information and cite information sources, expand by grade level (find data)			E	E	E	E	R	R	R	R	I	I	I
22	Use electronic resources and applications to organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media, expand by grade level (use the information)			E	E	E	E	R	R	I	I	I	I	I

3e. Acquiring Technology Skills and information Literacy

California state content standards in English Language Arts, Social Science, and Mathematics include technology use standards for grades four and above. The following table combines those content standards with MBUSD objectives listed in section 3d of this plan to create grade level benchmarks. These benchmarks prepare students to become independent users of technology tools by the time they reach high school, and go beyond those explicitly stated in the current state content standards for these grade levels, but are implied in the content standards of the upper grades. Sample activities employed within the District at the time of this writing are included below; teachers may implement other activities to accomplish these benchmarks.

In kindergarten through fifth grade, the general education classroom teacher is responsible for meeting the benchmarks listed in the table in section 3d above. As of this writing, many computers for student use are located in computer labs at each elementary school. Unfortunately budget limitations have resulted in the elimination of specialists to oversee these labs. Therefore, classroom teachers will either have additional computers for student use in their classrooms, or they will take their students to the lab and be responsible for students' safe use of computers. During the first two years of this plan, this arrangement will be reexamined and the plan may be revised as needed.

In sixth through eighth grades, technology benchmarks are met as part of the content standards in each discipline, under the supervision of the classroom teacher. For example, using word-processing and spreadsheet software is one of the seventh grade content standards in English/Language Arts, Writing standard 1.6, so the seventh grade English teachers have incorporated these tools in their lessons. At Manhattan Beach Middle School, computers are available for student use in the library and on laptop carts that teachers can bring to the classroom.

In grades nine through twelve, students need to be independent users of technology tools. Technology benchmarks are part of the content standards in each discipline, and classroom teachers provide support for the use of technology tools. At Mira Costa High School, students have access to computers in several labs and in the library.

In addition to the California state content standards, students are also instructed in Internet safety and ethical use, as appropriate for each grade level. More information about this education is in sections 3f and 3g of this document.

The following table lists grade level benchmarks and sample implementation ideas.

Grade	Benchmark	Benchmark Summary	Standards Based Implementation Ideas	CA Content Standard
K	3d. 1, 4, 5, 7, 8, 9, 10, 12, 16, 17, 18	The student will use mouse skills to open and operate a program or educational game and insert a CD (computer or audio). The student will understand responsible use of computers and audio/visual equipment.	•Visit the computer lab and library at school. Demonstrate skills in the classroom. (Example: Use *Paint* to create a self-portrait.) •Use classroom computers in creative play. Use computer programs to begin creative thinking.	N/A
1	All above + 3d. 11	The student will create a word processing document, manipulate a file, and print a document.	Visit the computer lab and library at school. Practice skills in a program deemed appropriate by teacher. Navigate a program (for example, KidPix) to learn and reinforce skills.	N/A
2	+ 3d. 14, 19, 20, 21, 22	The student will create a slide using presentation software, importing a graphic, and using research to create text.	Students create a page about a marine animal using presentation software (for example, PowerPoint) that will be combined with other students' work to create a presentation. Limited research resources are used.	N/A
3	All above	Using an online catalog, students will locate print sources in the library.	Students use the online library catalog to locate print resources for use in researching an endangered species. Students synthesize this information and create an electronic presentation on the endangered species, including slides on the species in general, the habitat in which it is found, and details on how young are reared.	N/A

		Begin learning touch typing.	Plagiarism issues are discussed as part of the project. Use tutorial software to learn touch typing.	
4	+ 3d. 2, 15	The student will utilize electronic resources such as encyclopedias, almanacs, dictionaries, other databases, and Internet and online catalogs and use it as a resource in a research project, writing assignment, electronic presentation, or oral report. The student will correctly keyboard at a minimum rate of 12 w.p.m. The student will use a standard calculator to perform a variety of calculations.	Use electronic and print resources to prepare a report or presentation on their assigned California Mission. Plagiarism and evaluating Internet resources are discussed as part of the project. Use tutorial software to learn touch-typing. Students begin to learn how to use calculators.	Writing 1.7, 1.9
5	+ 3d. 13	Using spreadsheet software, students will create a chart, graph, or table inserted into a typed document with manipulated graphics. Students will utilize a portable storage device to save, store, and manipulate files.	Students will create a spreadsheet documenting the books that they have read during the course of the year, organizing the reference data and information for each book into the spreadsheet. Students save their work on a USB Flash Drive.	Writing 1.4
6		The student will search for information using a keyword search and create a report using word processing software. The student can format the document to meet the assignment requirements.	Students use an electronic keyword search to locate information on a significant person from ancient Greek or ancient Roman history. They locate both online and library print resources. Students use this information to create a typed written report, including a biography on this historical person. Citing sources and proper bibliographic format are taught as part of this project.	Writing 1.4
7		Students use spreadsheet software to analyze statistical data and use various types of graphic representations of the data.	Comprehensive statistics about the March Madness Basketball tournament are collected, analyzed, and graphed using spreadsheet software.	Math 1.0, 1.1, 1.2, 1.3
8		Students use technology resources to conduct a multi-step information search.	Students conduct a multi-step information search to look at the social and historical context of the 1930s in conjunction with reading To Kill a Mockingbird. This Internet scavenger hunt requires students to locate specific answers, accurately document URLs, and demonstrate the answers to questions in a summary or	Writing 1.4

			graphic form on a composite poster that organizes answers either chronologically or by genre.	
9 & 10	+3d 3	Students research, analyze, and synthesize primary and secondary sources to create meaningful products including presentations using presentation software to share their work effectively with others. Students use graphing calculator	Develop a research question about a particular aspect of Elizabethan life or culture. Using Internet-based databases of journals, primary and secondary documents, articles, etc., students research the answer to their question. Students prepare an outline, using presentation software, that will incorporate visual components to enhance viewer understanding. All textual sources and images will be cited according to MLA guidelines. As part of the math sequence, students in Algebra 3-4 utilize graphing calculators. Graphing calculators are also used in Chemistry and Physics classes.	Writing 1.3, 1.8 Listening and Speaking 1.7
11 & 12		Develop and deliver multimedia presentations using clear research questions and creative and critical research strategies.	Develop a research question about a particular aspect of twentieth-century existentialism or its historical antecedents and prepare a presentation, using presentation software, to teach the rest of the class. Students use Internet-based databases of journals, primary and secondary documents, articles, etc., to research the answer to that question. Students prepare an outline, using presentation software, that will incorporate visual components to enhance viewer understanding. All textual sources and images will be cited according to MLA guidelines	Writing 1.6, 2.6 Listening and Speaking 2.4

Beginning with the 2009-9010 school year, MBUSD will use the Ed Tech Profile, including the school level supplements, to provide information to aid in planning teacher training and support for full implementation of the above benchmarks. Professional development is covered in section 4 of this plan. In addition, samples of lessons and student work at each grade level will be shared at grade level meetings among the elementary teachers, and at department meetings at the middle and high school levels. As teachers develop proficiency in web delivered content ("web 2.0") tools, they will share content with peers both within and outside of the District.

Because some of the benchmarks for the elementary students fall outside the explicitly stated California State Content Standards, it is the responsibility of each of the five elementary principals to support their faculty in fulfilling these requirements.

3f. Appropriate and Ethical Use of Technology

The Manhattan Beach Unified School District Board of Education has a Board Policy and Administrative Regulation 6163.4 in place, which provides standards and definitions for student use throughout the District.

Each year, every student and parent within the Manhattan Beach Unified School District signs the Student Technology Use Agreement. This agreement defines appropriate use, prohibited use, and security precautions. The Technology Advisory Committee is in the process of updating the agreement for the 2009-2010 school year. Following is the agreement signed for the 2008-2009 school year:

Prohibited Use:

- Unauthorized use or distribution of copyrighted material.
- Use of threatening or obscene material.
- Use for commercial activities.
- Use for product advertisement or political lobbying.
- Use of home computer products at school.
- Vandalism which is defined as using any malicious attempt to harm or destroy technological hardware, networks, Internet access, documents or programs is prohibited. This includes, but is not limited to, creating or uploading/downloading inappropriate programs, virus', or information.
- Harassment which is defined as annoying other users or interfering in other users' work is prohibited. This includes, but is not limited to, the sending of unwanted mail, improper telephone usage, and inappropriate electronic materials.

Appropriate Usage:

- Minimum competency must be demonstrated to use technologies.
- Be polite and do not use vulgar or other offensive language.
- Use caution when revealing personal information. Electronic communications are not guaranteed private.
- Do not intentionally disrupt the network or other users.
- Abide by accepted rules of network etiquette.

Security Precautions:

- If a student/user identifies a security problem, notify an instructor immediately.
- Using another user's ID, log-in, account, e-mail, web address, or phone code is prohibited.
- Tampering with settings, moving, reconfiguring or deliberately damaging/defacing any technology equipment is prohibited.
- Collecting, reading, copying or destroying products/data other than own work is prohibited.
- Creating, demonstrating or identifying a security problem to other students is prohibited.
- Revealing your account/password or allowing another person to use your account is prohibited.

Any user violating these provisions, applicable state and federal laws or classroom, school and District rules is subject to loss of privileges and disciplinary options, including criminal prosecution. School and District administrators will make the final determinations on any computer violations and their decisions will be final.

3g. Internet Safety and Privacy

Two different types of Internet safety and privacy are addressed by this plan: 1) protection of students and 2) protection of confidential and proprietary data and systems. In the past, MBUSD has focused on protection of data and systems and on establishing Internet filters for student protection.

Beginning with the 2009-2010 school year, the District will pilot the use of iSafe, the Internet safety education provider, to educate our students, our staff, and our community about issues in Internet safety, as well as intellectual property rights.

As a first step in educating our parents about issues in Internet safety, we will notify them of the availability of iSafe free online training for parents and community members, beginning in with parents of Kindergarten students and continuing through high school. This will be done by including iSafe information at grade level parent meetings, school and District websites, Back-to-School Nights, parent orientation meetings, PTA/PTSA meetings, and more.

The iSafe program provides resources for training teachers, students, and parents in protecting children and adults from dangers on the Internet. The iSafe Foundation is supported by grants, thus the online modules are free of cost. In addition, by going through the process of filing plans with iSafe for implementation, teachers gain access to free downloadable materials. The District can choose to observe participation by purchasing the monitoring module from iSafe for a cost of $600 annually.

In the fall of 2009, five teacher members of the Technology Advisory Committee (TAC) will pilot the iSafe program in the classroom. This process entails the teachers completing the training, scheduling the lessons, presenting the lessons to their classes, and evaluating the process. In winter of 2010, these teachers will give a recommendation to the TAC about developing a plan to implement iSafe District wide or to investigate other options. If iSafe is adopted, full implementation will begin in Fall 2010.

Appropriate measures are taken to enhance the District's spam filtering capabilities, and employees are notified of potential viruses. Privacy protection and "hacking" are monitored by software and reviewed daily by the MBUSD Coordinator of Technology Services.

3h. District Policies and Practices Ensuring Equitable Technology Access

Students and teachers have access to technology tools in the classrooms, library media centers, and computer labs at each elementary school, the middle school, and the high school. Please see sections 3a and 3b above for a thorough description.

Monitoring the equitable distribution of technology across the District is an area of responsibility for the newly established Technology Advisory Committee. In the past, the task of overseeing equity has been a informal joint effort by many different stakeholders, including PTA/PTSAs, school principals, and District staff. The Manhattan Beach Unified School District needs to develop a policy and practices that ensure access equity to students and staff, yet allow school site administrators, teachers, and parents to continue to provide input regarding technology tools used in the classroom.

Beginning in 2008-2009, with the establishment of the Technology Advisory Committee that is developing this plan, meetings to discuss technology use and education within the MBUSD will occur at least monthly during the school year. In the first year, the committee will focus on this plan and developing District policies and guidelines to support its implementation and evaluation. Some of the areas addressed will include:

1) Updating this Technology Use Plan
2) Updating the Technology Use Agreement signed by all students, parents, and staff members.
3) Developing a uniform policy on purchase of equipment to ensure equity among elementary schools that includes adequate budget sources for installation and maintenance of newly purchased equipment.

4) Adopting a blueprint for computer upgrades that allows for the curricular standards to be met in the classroom by the classroom teacher, e.g. replacing desktop computers for laptops.

During the second year, 2009-2010, the Technology Advisory Committee will work on more effective use of District resources for support of technology. Streamlining processes for consumable supplies like printer ink cartridges or bulbs for projectors will be part of the task, but mechanisms for support of capital equipment like Smartboards or additional computers will also be examined.

3i. Student Record Keeping and Assessment Supports Individual Academic Needs

All student records are kept electronically in the MBUSD Aeries student information database. Teachers are required to submit electronic attendance and grading information via the online version of Aeries. Site and District administrators, office personnel, health assistants, and advisors also input important data such as master schedules, student demographic data, STAR data, discipline records, health information, and qualification for special programs. The Aeries database can be used to aggregate and disaggregate information in ways that support the needs of individual students and teachers as well as data that displays information by school, grade, and/or department.

3j. Improving Two-Way Communication Between School and Home

All District personnel are provided with email and voicemail. In addition to individual communication between teacher and parent, many teachers, particularly at the elementary and middle schools, send periodic newsletters and reminders to parents via email. Principals at all sites send out frequent news and informative emails to subscribers among the parent population. Web-based tools, such as Grade Book Wizard and Edline, are utilized at the secondary grade levels, providing an additional link between home and school. Websites provide information about each of the seven K-12 schools and the supporting parent groups such as the PTA/PTSAs, the Manhattan Beach Education Foundation, the Manhattan Beach Athletic Foundation, and MCHS booster clubs.

At the high school, approximately half of the teachers use Grade Book Wizard to record grades for each assignment and test. Teachers may also use Grade Book Wizard to post assignments and supplementary materials. Many of the teachers who use Grade Book Wizard have automatic emails sent to parents when a student misses or receives a low grade on a test or assignment. Parents and students also have access to the Intouch website, which provides attendance information and final term grades for each student. Intouch and Grade Book Wizard each have separate login and password protected entry, so each student and parent are given two login/passwords when the student first enrolls in the high school.

The Manhattan Beach Unified School District maintains a website containing District-wide information (e.g., academic calendars, Board of Education agendas and minutes, Technology Plan, GATE Plan, Capital Improvement Plans) and links to each school and stakeholder group website affiliated with the District. All school sites have websites which also provide information about the school, including calendars of events, documents, and information pertinent to that school site. Each school PTA/PTSA maintains a website showcasing all the activities in which those organizations are involved. At the high school, most booster organizations also have websites that can be accessed from the main high school site.

The middle school uses Edline to host a website which provides school wide information such as events schedules, notices, and the school handbook. At the middle school, teachers can use Edline to post grades for individual assignments, quizzes, and tests. Teachers may also use Edline to post assignments and supplementary materials and to send automatic emails to parents when their student's record is updated.

3k. Monitoring Curricular Component of Technology Plan

In the fall of 2008, the Manhattan Beach Unified School District established a Technology Advisory Committee that met monthly during the school year. The committee will monitor implementation of all aspects of this plan, provide a forum for new technology, ensure equitable distribution of technology resources across the District, and review the technology budget. The committee will be comprised of administrators, teachers, PTA/PTSA representatives, Manhattan Beach Education Foundation representatives, parents, students, and other community members.

4. Professional Development

4a, 4b, 4c. Current Technology Proficiency, Professional Development Opportunities, and Monitoring

Professional Development is a key component in assuring that teachers are able to meet student needs in our rapidly changing technological environment.

Goal	Current Status	Objectives	Budget Source	Responsibility	Evaluation
1. Administer annual skills self-evaluation survey, Ed Tech Profile, to certificated staff.	We have identified a free needs assessment, Ed Tech Profile, provided by the California Department of Education.	Administer the Ed Tech Profile annually to certificated staff (begin fall 2009).	No direct costs	Educational Services through Technology Advisory Committee (TAC), Principals (monitoring)	Participation by staff in the needs assessment
2. Identify Site Technology Leaders for each elementary site based on Ed Tech Profile.	Once Ed Tech Profile is completed, fall 2009-2010	Recruit Site Tech Leaders at each school site. These teachers can offer help and mentor others in using technology.	Explore options for offering stipend for Site Tech Leaders. No other direct cost.	TAC, Elementary Principals	TAC assures each site has identified Site Tech Leaders.
3. Identify Site Technology Leaders for each department at the middle and high schools, based on Ed Tech Profile.	Once Ed Tech Profile is completed, fall 2009-2010	Recruit Site Tech Leaders from the teachers in each department. These teachers can offer help and mentor colleagues in using technology.	Explore options for offering stipend for Site Tech Leaders. No other direct cost.	TAC, MBMS Principal, MCHS Principal	TAC assures each site has identified Site Tech Leaders.
4. Facilitate access to collegial support and best practice information from a wide variety of resources.	Many teachers and support staff in the District have been trained in a wide variety of computer applications.	Site Tech Leaders provide ongoing technology support and training for their site staff.	Stipends, but no other direct cost.	TAC	Evaluation forms for each training session.
5. Obtain periodic updates regarding staff and student technology proficiency from each school.	Grade level technology benchmarks have been revised in this plan in table 3d.	Technology benchmarks listed in table 3d are embedded in the content areas and assessed by the classroom teachers.	Cost of substitutes for attending teachers.	TAC	Benchmark reviews will guide actions for the next year.

6. Provide ongoing and responsive support to staff via phone and email help lines.	Staff report technology problems or concerns to MTIS via the OPRA system.	Provide training to Site Tech Leaders so they can perform minor troubleshooting and maintenance functions (2009-2010).	MTIS Cost of substitutes for attending teachers	Site Tech Leaders and Media/Technology Information Services (MTIS) staff	Work logs of MTIS staff
7. Develop a technology professional development plan that coordinates courses and workshops in a variety of formats and times and addresses the needs of staff.	Technology workshops have been offered at some sites. Online courses are available. South Bay Adult School offers classes in technology.	Identify and train Site Tech Leaders to conduct workshops throughout the school year. A variety of on-demand, online courses are available on the District website.	Stipends, but no other direct cost.	TAC, Site Tech Leaders, MTIS	Staff participation and evaluation of professional development
8. Research, explore and communicate new technologies and their applications in the classroom.	Done by individual, interested teachers, other staff, and community stakeholders.	Technology Advisory Committee provides a forum for discussion, demonstration, and establishing pilot programs for new technology adoption (2009-2010)	Cost of substitutes for attending teachers	TAC, LACOE Workshops	TAC will modify existing instructional materials evaluation form to use for technology.
9. Increase support for emerging instructional strategies: interdisciplinary, collaborative, and active learning options.	MCHS is currently exploring alternative schedules and online courses to increase the flexibility of the school day, pending negotiations.	Explore structures that maximize learning opportunities for students	No direct costs	Educational Services, TAC, and school site administrators.	TAC reviews participation with site administration.

Goal	Current Status	Short-range Objectives	Projected Costs	Budget Source	Long-range Objectives	Responsibility	Evaluation
1. Review Data wiring and replace as necessary.	Pending	In preparation for a VoIP implementation			Through modernization, update infrastructure	District Administrative Services	Annual *Education Technology Use Plan* review
2. Review and replace all non-Cisco switches with a Cisco managed switch.	Pending				Through modernization, update infrastructure	District Administrative Services	Annual *Education Technology Use Plan* review
3. Establish and maintain a systematic, standardized acquisition, upgrade, and repair process.	MTIS is responsible for repairs, which are done on an as-needed basis. Obsolete equipment is warehoused by MTIS and used for spare parts to maintain newer equipment whenever possible. Current ratio of technicians to computers is 1:500.	Conduct a network performance analysis of the current system.			Develop a master standardization plan for systematic acquisition, upgrade, and repair of technology equipment. Explore funding to improve ratio of technicians to computers.	District Administrative Services	Master Plan in place and posted on the District website
4. Review and install anti virus software on all District PCs.	Pending	Implement automated installation or physical check on each PC			Prevent virus outbreak District wide.	District Administrative Services	Annual *Education Technology Use Plan* review
5. Equip all District IDFs (Intermediate Distribution Frames) with a UPS solution	Pending	Ensure equipment protection and up time for future power outages or spikes			Protect equipment and maintain uptime.	District Administrative Services	Annual *Education Technology Use Plan* review
6. Maintain and support computer service to include: network operations, email, website and repair technicians, equipment storage, and help-desk support.	These services all exist.	Determine the quality and effectiveness of District-wide support services.			Develop a master plan for ongoing technology support.	District Administrative Services	Annual *Education Technology Use Plan* review/CDE Technology Survey
7. Increase Internet bandwidth as current usage exceeds 60% of the bandwidth.	Pending additional analysis of data for bandwidth usage	Provide high speed Internet connectivity District wide with low lag response time			For student and staff online research and streaming media	District Administrative Services	Annual *Education Technology Use Plan* review
8. Implement VoIP Telephony	Pending	Replace antiquated telephone system			Utilize the full potential of District internal fiber system as well as using cutting edge technology	District Administrative Services	Annual *Education Technology Use Plan* review
9. Redesign website	Pending	Redesign website and host by a website hosting vendor			Accessibility and organized content for communication to increase District information that is easily accessible on the web	District Administrative Services	Annual *Education Technology Use Plan* review
10. Replace existing Content Filtering Solution	Pending	Protect staff and students from malicious and inappropriate content.			Block malicious and inappropriate websites, and allow staff to access approved websites for research and teaching tools.	District Administrative Services	Annual *Education Technology Use Plan* review
11. Equipment Inventory	Pending	Create and inventory list for all equipment to track warranties, and replace old equipment as necessary using inventory software with data collection devices.			Maintain District equipment inventory	District Administrative Services	Annual *Education Technology Use Plan* review
12. Each school site will select technology representatives to participate in District discussions and/or school technology activities.	Merge the Technology Curriculum Committee and the Automation Steering Committee to pursue common goals, based on the *Education Technology Use Plan.*	Form subcommittee to design and implement District-wide standardization of technology.			Broad, District-wide participation in and support for technology decisions	Educational Services	Annual *Education Technology Use Plan* review

5. Infrastructure, Hardware, Technical Support, and Software

Manhattan Beach Unified School District has a privately owned fiber optic wide area network (WAN), connecting the eight District schools and the District office. Each location has a district owned PABX (NEC) for voice communications and District owned data switches (Cisco) for data communications. Every location also has a fiber optic local area network (LAN).

The Media Technology Information Services (MTIS) group has been wiring the District with Voice and Data network and successfully identified the wiring layout to each school site. All MDF (Main Distribution Frame) switches have been upgraded from Alcatel to Cisco Layer 3 core switches. Most of the legacy production servers have been upgraded to Dell Servers with redundant hard drives and power supplies. MTIS developed a standard Operating System (Windows XP Pro) and application methodology for accurate and well-documented steps on re-imaging computer desktops, workstations, and laptops. MTIS implemented a tape backup solution that is scheduled to backup critical data on a daily basis, as well as real time replication of all File Servers District wide. MBUSD is now running on Microsoft Exchange 2003 email system, and all District teachers are utilizing this system as a primary communication tool to parents, colleagues, staff, and the community.

6. Funding and Budget

Description of Major Items to be purchased	2008-09 Expenditures	Budget Source	2009-10 Expenditures	Budget Source	2010-11 Expenditures	Budget Source	2011-12 Expenditures	Budget Source
Telecommunications Expenses								
Phone	$72,000	Gen Fund	$75,600.00	Gen Fund	$79,380	Gen Fund	$83,349	Gen Fund
Data	$12,000	Gen Fund	$12,600.00	Gen Fund	$13,230	Gen Fund	$13,891	Gen Fund
Internet Access								
8 T-1s	$42,000	Gen Fund	$42,000	Gen Fund	$42,000	Gen Fund	$42,000	Gen Fund
Increase bandwidth when usage hits 60%			$10,000	Gen Fund	$20,000	Gen Fund	$30,000	Gen Fund
Infrastructure Required to Achieve Tech Plan Goals								
Wiring	Cat 5 E Existing all sites							
Electronics	$ 250,000	Gen Fund	$ 100,000	Gen Fund	$ 50,000	Gen Fund	$ 50,000	Gen Fund
Hardware Required to Achieve Tech Plan Goals								
Computers & Peripherals (1500 each year)	$ 90,000	Gen Fund & Donations	$ 90,000	Gen Fund & Donations	$ 90,000	Gen Fund & Donations	$ 90,000	Gen Fund & Donations
Software Required to Achieve Tech Plan Goals								
NOS & MS Office	$ 10,000	Gen Fund	$ 10,000	Gen Fund	$ 10,000	Gen Fund	$ 10,000	Gen Fund
SIS (Eagle)	$ 7,500	Gen Fund	$ 7,500	Gen Fund	$ 7,500	Gen Fund	$ 7,500	Gen Fund
Business System (LACOE Peoplesoft)	$ 36,800	Gen Fund	$ 36,800	Gen Fund	$ 36,800	Gen Fund	$ 36,800	Gen Fund
Curriculum Software	$ 5,000	Gen Fund	$ 5,000	Gen Fund	$ 5,000	Gen Fund	$ 5,000	Gen Fund
Library Software (Follett)	$ 4,555	Gen Fund	$ 4,555	Gen Fund	$ 4,555	Gen Fund	$ 4,555	Gen Fund

Web Hosting Software	$8000	Gen Fund	$8000	Gen Fund	$8000	Gen Fund	$8000	Gen Fund
Professional Development Required to Achieve Tech Plan Goals (Carolyn Seaton)								
	2008-09		2009-10		2010-11		2011-12	
	376 Certificated Staff							
% of staff members who received 1 hour of training during the year	30%							
% of staff members who received 2 hours of training during the year	20%		100%		100%		100%	
Foreign language grant	10 T @ 3 days @ 6 hours a day		10 T at 2 days @ 6 hours a day					
Description of Major Items to be purchased	**2008-09 Expenditures**	**Budget Source**	**2009-10 Expenditures**	**Budget Source**	**2010-11 Expenditures**	**Budget Source**	**2011-12 Expenditures**	**Budget Source**
How many staff members do you train -								
Staff salary + benefits	$ 80,000	Gen Fund	$ 80,000	Gen Fund	$ 80,000	Gen Fund	$ 80,000	Gen Fund
Stipends for attendance at training	$ 4,500	Foreign Lang Grant	$ 3,000	Foreign Lang Grant				
Staff salary for attendance at training (part of faculty meetings, staff development days)	$ 4,700	Gen Fund	$ 18,800	Gen Fund	$ 18,800	Gen Fund	$ 18,800	Gen Fund
Outsource Training (Aeries)	$ 6,290	Gen Fund	$ 2,000	Gen Fund	$ 2,000	Gen Fund	$ 2,000	Gen Fund
Retrofitting Required to Achieve Tech Plan Goals								
Electrical repair and upgrades	$ 60,000	Gen Fund	$ 60,000	Gen Fund	$ 60,000	Gen Fund	$ 60,000	Gen Fund
Modernization (All sites modernized)								
Maintenance Required to Achieve Tech Plan Goals								
Technology Budget inc salaries - professional development hardware and software	$ 267,000	MTIS Budget	$ 280,350	MTIS Budget	$ 294,368	MTIS Budget	$ 309,086	MTIS Budget
Telephone Maintenance in-house salary	$ 50,000	MTIS Budget	$ 52,500	MTIS Budget	$ 55,125	MTIS Budget	$ 57,881	MTIS Budget
Lab Aides (portion of their time spent on maintenance)	$ 24,500	Site Budget	$ 25,725	Site Budget	$ 27,011	Site Budget	$ 28,362	Site Budget
Outside technical help	$ 7,000	MTIS Budget	$ 7,350	MTIS Budget	$ 7,718	MTIS Budget	$ 8,103	MTIS Budget

7. Monitoring and Evaluating

7a. Evaluating Plan Effectiveness

Evaluating the implementation of the Education Technology Use Plan is the primary responsibility of the newly-established Technology Advisory Committee, under the supervision of the Executive Director of Educational Services, with support from the Media/Technology Information Services (MTIS) staff.

7b. Schedule for Evaluation

The Technology Advisory Committee meets from 1:00 PM to 3:00 PM on the second Monday of the following months: September, October, November, January, February, March, April, and May, under the direction of the Executive Director of Educational Services. The following schedule for evaluation will be followed for the first two years:

June 2009:

- Technology Use Plan approved by Board of Trustees and submitted to appropriate agencies.
- Update Technology Use Agreement for students, parents, and teachers and submit to Board for approval.
- Board Policy on purchase of new equipment will be approved and submitted to the Board for approval.

September 2009:

- Request all teachers complete the Ed Tech Profile.
- Online training materials will be identified by TAC members.
- Smartboard demonstration to Tech Advisory Committee members

October 2009:

- Review Ed Tech Profile results.
- Identify nominees for Site Tech Leaders.
- Recruit Site Tech Leaders.
- Specific professional development plan, based on Ed Tech Profile, will be formulated.
- Technology Use Plan will be explained in staff meetings to stakeholders District wide by TAC members. Meetings include elementary grade level meetings, department meetings at the middle and high school, District Advisory Committee, PT(S)A meetings, Manhattan Beach Council of PTAs.
- Stakeholder input on Technology Use Plan will be requested

November 2009:

- Elementary schools technology effectiveness reviewed, including review of diverse instructional strategies.

January 2010:

- Middle school technology effectiveness reviewed, including implementation of diverse instructional strategies.

February 2010:

- High school technology effectiveness reviewed, including implementation of diverse instructional strategies. (part 1)

March 2010:

- High School technology effectiveness reviewed (part 2)

April 2010:

- Professional development effectiveness reviewed

May 2010:

- Ed Tech Profile for teachers
- School Board Update

7c. Communicating Plan Effectiveness to Stakeholders

Agendas and minutes for the MBUSD Technology Advisory Committee meetings will be posted on the District website. Meetings are open to the public.