

Fort Ross School

Educational Technology Plan

2004-2009

Board Approved February 2, 2005

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Fort Ross School Technology Plan 2004-2009

I. PLAN DEVELOPMENT

The 2004-2009 Technology Plan was reviewed by the School Technology Committee in January, 2005.

The committee consisted of:

- 1 administrator
- 1 teacher
- 1 instructional assistant
- 1 technology consultant
- 1 community volunteer

The Technology Plan was reviewed by the School Site Council consisting of three parents and three staff members. This document reflects the Board adopted technology standards for students, needs of the staff, the state guidelines for technology and the state content standards. The District Strategic Plan, the Single Plan for Student Achievement and the Local Education Plan for Fort Ross Elementary School District address an articulated K-8 curriculum integrating technology and the arts, and professional development opportunities for staff and administration.

II. VISION STATEMENT

Students will use technology for effective communication, problem solving, critical thinking, decision making; and for developing social responsibility and personal accountability for life-long learning. We envision that technology for the students, staff and community will:

- Be ongoing in its growth, access, training and use
- Create an active and interactive working/learning environment that approaches innovation ethically, thoughtfully and enthusiastically.

The Board of Trustees has adopted the following goal:

- To maintain quality instruction that meets state standards, provides needed instructional materials for an articulated K-8 curriculum integrating technology and the arts.

III. INFRASTRUCTURE

Hardware

The technology that is needed to implement the curriculum and professional development for staff and students is already established at Fort Ross. The technology is placed in the Computer Lab where there can be a concentration of students with one teacher. The technology in place is: 10 computers (512 MB Ram 2 GHz speed processor, with Windows XP Professional operating system, 40 Gigabyte Hard Drive, CD RW, integrated 10/100 ethernet network card), one printer, one scanner, one digital camera, one DVD player and one video projector. One of the computers has DVD R/RW in addition to CD RW. The video projector is being used in the

computer lab for weekly computer classes and is transportable to the classrooms and to the multi purpose room if needed. Throughout the school, including classrooms, there are a total of 4 IMACs, 7 printers, 2 EMAC, 8 PC computers, 1 PowerMac computer, 4 TV-VCRs, 1 TV, 2 photocopiers, 1 laminator, and 3 overhead projectors.

The cost of ownership of the hardware is addressed on an annual basis. The funding of the technology program and the implementation of the technology comes from parcel tax and REAP monies. The use of technology is accessible to all students. The classroom technology hardware is maintained and upgraded.

Fort Ross maintains an annual inventory of all hardware in the school. Equipment that does not meet the school site needs is donated to students and community members.

Electronic Learning Resources

The school district has adopted student technology standards. The electronic resources are available through the lab software library and sharing data through the network that connects all the PC's in the classrooms and the lab. The resources that are available online are search engines.

Sample of software used with students include:

Kindergarten – Second Grade: Mavis Beacon Typing, Online Websites, Flying Colors, Office 2000

Grades 3-4-5: Office 2000, Photoshop, Mavis Beacon Typing, Internet Sites, and Search Engines, Reading Counts, Digital Camera

Grades 6-7-8: Same as grades 3-5 plus video camera, scanner.

Gate Students: Q Basic, Geometers Sketchpad.

The lab technology is used once a week and daily in the classrooms. The library computer has been upgraded to EMAC with Follett cataloging program. The license the school currently owns allows for the use of software by multiple users.

Networking and Telecommunications Infrastructure

Fort Ross has implemented a local area network that is Ethernet based. We now have a bandwidth of 10/100. For security we are currently using Schools Connect firewall. Schools Connect provides filtering software to filter out inappropriate internet sites. A written internet use agreement signed by students and parent/guardians annually is necessary for students to access the Internet.

Physical Plant

The infrastructure is secured in the administrative office. The layout of hardware is configured in a way that is safe for the students. A Fire Marshall and a Building Inspector have been consulted to ensure code compliance. At present there is no access to the lab after hours unless by special arrangement.

Technical Support

Fort Ross technical support needs for hardware, LAN and printers as well as questions regarding technical support for teachers are addressed by the Technology Consultant and computer consultant volunteers at the Technology Committee meetings. The target ratio of hardware to technical support personnel is 1 to 20. The general response time of is one week to one month. This level of support generally meets the needs of the teachers. A goal for the school would be to contact other schools regarding their software and technology curriculum and to have available industry members that contribute the latest information and equipment. The expertise of the parents and the community are utilized through the classrooms and staff in-service.

IV. GOALS / IMPLEMENTATION PLAN FOR ACQUIRING TECHNOLOGY

Learning resources are determined by the Technology Committee. Technical support in three to five years may be reduced if enrollment declines.

- Goal 1: Screen for the multi-purpose room.
- Goal 2: Digital Video Camera.
- Goal 3: LCD Flat Screen Monitors.
- Goal 4: Upgrade IMACs in the classrooms.
- Goal 5: Maintain and upgrade hardware.
- Goal 6: Increase the reliability and the speed of the internet connection.
- Goal 7: To purchase technology as appropriate.

Any purchases for technology will constantly be re-evaluated to assure up-to-date equipment and software.

V. CURRICULUM GOALS AND PLAN FOR INFORMATION LITERACY SKILLS

Computer Skills and Strategies by Grade Level

General Categories:

1. Basic Computer Operation
2. File Management
3. Word Processing
4. Spreadsheet Use
5. Graphics Use
6. Internet Use
7. Ethical and Appropriate Use
8. Research
9. Video Production
10. Presentation Skills

K-2 Levels

1. **Basic Computer Operation:** Students will turn on, turn off, log on, and log off a computer. Students will use the keyboard, mouse, basic shortcuts and print.
2. **File Management:** Students will select, open and save documents on different drives; load CD-ROM; load software. Students will learn vocabulary having to do with hardware and software.
3. **Word Processing:** Students will use a word processor for basic keyboarding tasks; use templates or wizards to create a published document.
4. **Spreadsheet Use:** Not used.
5. **Graphics Use;** Students will create pictures with painting and drawing programs; use clip art.
6. **Internet Use:** Students will access web sites on CD and sites stored on school hard drives; access bookmarked sites only.
7. **Ethical and Appropriate Use:** Students will learn that copyright restrictions apply to computer software; follow District rules concerning harassment, language, passwords, copyright, privacy, appropriate use of resources, etc.
8. **Research:** Student will conduct simple searches with electronic encyclopedia and library software for major topics.
9. **Video Production:** Not used.
10. **Presentation Skills:** Not used.

3-5 Levels

1. **Basic Computer Operation:** Students will learn new programs on their own; teach others; move around the desktop; navigate the desktop; learn computer vocabulary.
2. **File Management:** Students will create own folders to keep files organized; understand the importance of back-up system.
3. **Word Processing:** Students will use the edit tools of the word processor, such as cut, copy and paste to edit written work.
4. **Spreadsheet Use:** Students will use a spreadsheet to make pie charts and histogram (5th or 6th grade level).
5. **Graphics Use:** Students will create pictures with painting and drawing programs; use clip art.
6. **Internet Use:** Students will use staff bookmarked web sites only: perform appropriate searches; conduct search for library book access catalog.
7. **Ethical and Appropriate Use:** Students will learn District rules concerning student and adult use of e-mail and internet; understand the school board policy on the use of copyright materials.
8. **Research:** Student will conduct simple searches with electronic encyclopedia and library software for major topics.
9. **Video Presentation:** Not used.
10. **Presentation Skills:** Not used.

6 – 8 Levels

- 1. Basic Computer Operation:** Students will learn new programs on their own; move around the desktop; navigate the desktop; type 25awpm – 30wpm at 80% accuracy (8th grade graduation requirement).
- 2. File Management:** Students will create their own folders to keep files organized; understand the importance of back-up system.
- 3. Word Processing:** Students will use the word processor to improve their previous drafts and publish a final document.
- 4. Spreadsheet Use:** Students will enter data in a spreadsheet and create charts.
- 5. Graphics Use:** Students will create, select and use graphics in order to make a point or illustrate what they have learned.
- 6. Internet Use:** Students will learn to use search tools efficiently to locate information; perform appropriate research and library search.
- 7. Ethical and Appropriate Use:** Students will learn and follow District rules concerning harassment, language, passwords, copyright privacy, appropriate use of resources, etc.
- 8. Research:** Student will conduct simple searches with electronic encyclopedia and library software for major topics. Student will select, gather and save information from these electronic sources to answer a question.
- 9. Video Production:** Students will learn to use a digital video camera and download movies to the computer, edit and record on DVDs.
- 10. Presentation Skills:** Students will design a multimedia presentation employing audio, video and/or still graphics to share ideas.

Special Education Skills

1. Creative writing by using word processing
2. Phonics, identifying words
3. Reading
4. Use of Internet for researching topics

Resources are:

- Living Books – following at their own pace.
- Read Naturally
- Various math games including Math Blasters

English Language Learners

All teachers use the California Department of Education English Language Development Standards for their ELL students and the Handbook of Goals and Objectives Related to the Essential State of California Content Standards when working with special education students.

VI. PROFESSIONAL DEVELOPMENT

Staff development activities are planned during the staff meetings and Site Council meetings. Staff is surveyed as to interests and needs for learning software programs.

VII. FUNDING and BUDGET

Annually funds are budgeted from unrestricted and restricted accounts for in-service and training. For the past few years the District has allocated \$1,500 in restricted Educational Technology funds for this purpose. The District allocates \$1,500 from unrestricted, general funds each year for the purpose of on-going maintenance, equipment and system upgrades, service related issues, software and supplies including print cartridges and headphones.

Additional District funds from local parcel tax and federal REAP funds are set aside for connection fees, instructional materials and supplies, and for the technology consultant/instructor position. The District also actively pursues appropriate grants and donations. In 2003-04 over \$6,000 was spent on acquiring new computers for the computer lab with matching funds donated from the Parents' Club. In addition, the local community voted in August 2004 to continue for eight years the parcel tax which helps fund the computer lab. Volunteers from the community provide in-kind donations through their technical assistance throughout the year.

The District consistently attempts to make maximum use of any available funds. The Technology Assistant aggressively searches for the best price on all items acquired. She has developed a working relationship with many different suppliers so she is able to get the best price possible for hardware and software. The District invests in servicing of equipment so as to get "the most for the money" and make the equipment last as long as possible. Over time we have found that getting service through an outside provider on an "as needed basis" is much more cost effective than signing a contract for on-going service. As the Technology Assistant has received more training, she has been able to complete more of the servicing herself, thus saving the District significant money.

VIII. MONITORING and EVALUATION

The Technology Committee meets bi-monthly to assess the efficacy of the Educational Technology Plan, the adequacy of the technology, its coordination and acquisition and to find solutions or make adjustments when necessary to enable progress for students and staff.

The Plan will be re-evaluated at least once during each school year for its ability to meet with the changing requirements from the state and the classrooms. To facilitate these requirements, a checklist may be kept in each classroom which will be used to monitor in-class student progress, enabling ongoing support for individual needs which may be met both in the classroom and where requested, by the Technology Consultant. The regular staff meeting discussions between the Superintendent and the teachers will be another way in which the topic of technology will be monitored. The Technology Committee's annual report to the School Site Council and the District Board of Trustees will be the final part of the process. Any identified problems with infrastructure, hardware, technical support and software will be addressed, prioritized and scheduled for solution. The evaluation and monitoring sessions the following year will be used to see that needs were appropriately met.

Student progress toward achieving grade level standards with the District's computer/technology curriculum will also be addressed. The Technology Consultant will work with the applicable classroom teacher to evaluate the success of the students toward meeting District expectations. In

addition, the District's partner high school will be contacted to attain assurance that Fort Ross students are coming to them adequately prepared in computer skills and technology-based curriculum. All of this information will be shared with the Technology Committee.