Technology Integration: Overview

1   Curriculum   _____

Tasks

> writing poems
> report on ancient
> civilizations

2   Technology   _____

Tools

> word processor
> video camera
> VCR and microphone
> multimedia

**3**   Student Outcomes   _____

Product

> expressive video poem
> mini-documentary
> interactive tour of Rome
> Tut's home page

The Classroom / The School
Know the curriculum.
Familiarize yourself with the tools.
Be bold.
Back off (and let students do it.)
Be the teacher.
"In time of drastic change, it is the learners who inherit the future. The learned usually find themselves equipped to live in a world that no longer exists"   Eric Hoffer
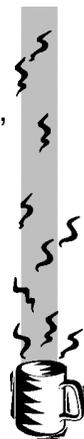
Today
The Technology
Demonstrations, Constructions,
Student Projects
Classroom Integrations
Curriculum Connections
Brainstorm
The Tools/Price/Availability
Resources

Management Support

Teachers Background

Technology Plan

Teacher Technology Attitude in General

Teacher Technology Attitude in Education

Use of Technology on Job

Use of Technology at Home

Building a Technology Use Plan

TO: **Technology Planners**
FROM: **CSLA (California School Library Association)**
             Educational Technology Committee

This guide to building a technology plan is offered to assist you in developing a plan to meet the technology needs of your students. CSLA and its members have a long history of support for and participation in planning and implementing programs which integrate technology with curriculum. This guide has already proven useful in the field and we hope it will be of assistance to you.

Building a Technology Use Plan
Below is a simple checklist of the steps outlined in the CSLA Educational Technology Planning Guide. We hope that following this guide through the planning process, with its shopping list of items to be considered in each phase, will help you create a plan which fills the needs of your students and staff as they face the challenges of the 21st Century.

Checklist of Steps
- Form the planning committee
- Create the mission statement
- Assess needs
- Survey existing programs and resources
- Establish goals and objectives
- Develop an action plan
- Establish a timeline
- Provide evaluation instruments and criteria

I. Form the Planning Committee

Consider:
- stakeholders in school's success
  - teachers, administrators, business, parents, students
  - community organizations
- all subject areas and/or grade levels
- representatives of all levels of expertise
- include implementors/coordinators of plan
- timelines for plan development
- district or outside advisers/consultants if necessary
- school buy-in important to plan

General Hints: Utilize existing committees when possible, such as school restructuring, educational technology, or School Improvement Program (SIP/SBCP). Welcome experienced and inexperienced users of technology to insure a broad range of input. Also include representatives from local agencies, the county office, business, or higher education if you are considering a partnership or wish to establish an advisory group.

II. Create the Mission Statement

<u>The mission statement drives needs.</u> Consider:
- integration of technology into the curriculum.
- technology as a tool, not an end product
- coordination with existing school and district plans, i.e, Chapter 1, others
- technology skills students will need In 21st century, i.e., SCANS report
- development of Information literacy for all students
- ethical use (inappropriate use of resources, computer hacking)
- creation of viruses, etc.)
- legal compliance

Hints: Check state, district, or county documents and guidelines

III. Assess Needs

Consider:
- survey of staff, students, parents, community
- matching needs with mission statement
- matching district goals, frameworks, Goals 2000, etc.
- changing demographics
- student technology needs determined by assessments, performance
- reports, accreditation reports, i.e., WASC
- adequacy of all staffing - certificated and paraprofessional
- technology skills of staff
- software - computer, video, etc.
- hardware, including equipment peripherals, networking, etc.
- facility needs (furniture, phone lines, network wiring, etc.)

Hint: Do not forget other classrooms (media center, etc.) and administrative needs.
Remember to include in your thinking existing programs and resources. Can they may be used to achieve your mission? This should be reflected in your needs. The tyranny for only the newest of things can lead to overlooking important resources. Old equipment has good uses: telecommunications, word processing. mail servers, etc. Examine existing resources in light of the needs and the mission.

IV. Survey Existing Programs and Resources

<u>Needs drives goals, objectives, and action plan.</u>Consider:
- what technology is available on-site
- school or district roles and commitments
- student to hardware ratio
- staffing (library media teacher, technology mentors, etc.)
- staff development, inservices, etc.
- physical plant: phone, video, electrical wiring; space limitations, etc.
- relationship of existing resources to technology plan goals
- off-site resources, i.e., business partnerships; county, state, regional agencies and programs

Hints: Determine who already provides technology instruction and access, i.e., library media teacher, technology mentors, vocational education teachers, etc.

V. Establish Goals and Objectives

Consider:
- integration of technology into curriculum
- competencies for teachers, students, administrators
- ongoing staff development
- staying abreast of changing technologies
- maximizing existing equipment - upgrade on a regular basis
- relationship to student and teacher needs
- relationship to district priorities and goals
- relationship to community, higher education, and industry
- relationship to regional educational technology services

Hints: Consider competencies for other teaching staff, i.e., student teachers (our teachers of tomorrow), instructional aides, etc.

VI. Develop an Action Plan

Consider:
- selection and evaluation of educational software to match curricular needs - <u>software determines hardware</u>
- hardware needed to implement plan
- development of hardware/software purchase plan: set specifications; check for compatibility (network, hardware/software, operating systems)
- maintenance, installation, and repair of equipment
- design of staff development
- equity of access
- development of budget and list of funding sources
- integration into other plans which determine the direction of the school (SIP/SBCP, Chapter 1, etc.)
- relationships with community, higher education, industry and regional educational technology services
- partnerships with business and higher education
- timelines, use the term phases, not years, to ensure stability
- keeping statistics and publishing them

Hints: Check with the district or county purchasing department for recommended equipment specifications. Remember copyright regulations. Make regular reports to the staff, the Board, the community, media, others
Target different subject areas in each phase. Keep planning committee aware of new software, hardware, etc. Library media center allows for equity of access

VII. Establish an Implementation Timeline

Consider:
- assessment of teacher needs and their commitment to the plan
- release time for staff development
- staff development for planning classroom lessons and activities that use technology
- staff development for training in the use of technology

- classroom and library media center activities and model lessons
- user groups and technology buddies
- ongoing support and assistance
- additional outside funding, e.g., grants, awards, partnerships, foundations
- ongoing involvement of representatives from industry, community, higher education, and regional educational technology services
- documentation of progress during the plans implementation

Hints: Documentation can be used for Board reports, grant writing, etc. Keep the plan flexible and fluid so it can be changed midcourse if circumstances warrant.

VIII. Evaluation

Consider:
- formal assessment: test scores portfolios, and pre and post testing of student performance
- informal assessment: observation and interview of teachers, students, parents, administration; increased demand for technology
- ongoing monitoring and assessment of progress in achieving phases of the plan
- ongoing monitoring and assessment of relevancy of the Technology Plan in relationship to the overall school plan
- feedback from representatives of industry, community, higher education, and regional educational technology services
- documentation of activities, progress, outcomes, etc.
- communication of progress and outcomes to stakeholders

General Tips for Building Technology Plan
- Keep your technology plan closely linked to curriculum
- Integrate information literacy into your technology planning
- There are many resources which will help you keep abreast of changes in technology. Subscribe to Electronics and Learning, Media and Methods. Computing Teacher, etc.
- Technology is not limited to computers and their use. Do not forget video, television, laser discs, calculators, distance learning, etc.
- You may have the right to a free cable hookup - call your local authority governing cable. You may have the right to produce your own programs
- You may be eligible for free or low cost services from your telephone provider for telecomputing and video teleconferencing.
- Join user groups
- Become a member of your state library and/or media organizations
- Attend area workshops and conferences.

Fact: Schools with better funded library media centers have better than average test scores regardless of whether the schools and communities are rich or poor, and whether the adults in the community are well or poorly educated. *(Impact of School Library Media Centers on Academic Achievement, Hi Willow Research and Publishing, Colorado, 1993).*

Units/Lessons

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Resources

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New Tools/Project Ideas