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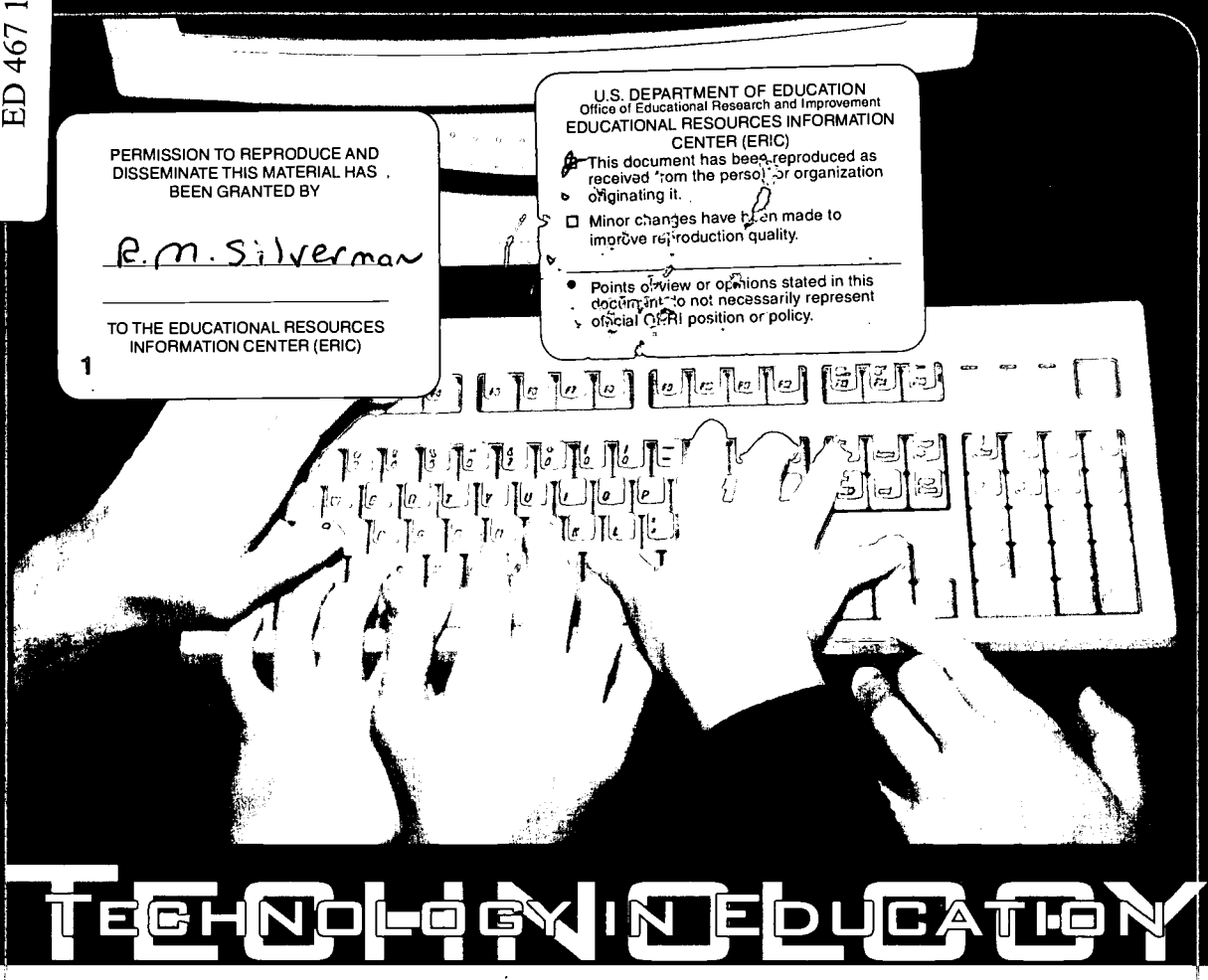
ABSTRACT

This is a collected edition of the Academic Senate for California Community Colleges adopted papers on technology-related issues. These six papers, written between 1995 and 2000, raise the issues which must be discussed at each college; they also provide suggestions and examples to consider. The most recent of the papers, "Guidelines on Minimum Standards for College Technology," considers the technology necessary for faculty and students to successfully perform different levels of technological enhancements. Two other papers--"Academic Freedom, Privacy, Copyright and Fair Use in a Technological World" and "Technology in Education: a Summary of Practical Policy and Workload Language"--discuss major issues of importance to faculty who are considering the use of technology in the classroom, such as e-mail privacy and intellectual property rights. "Curriculum Committee Review of Distance Learning Courses and Sections" and "Guidelines for Good Practices: Effective Instructor-Student Contact in Distance Learning" examine the evolving Title 5 regulations on distance learning and the responsibilities of the local curriculum committee to ensure integrity. Finally, "Guidelines for Good Practice: Technology Mediated Instruction" explores some of the literature, recommendations, and tools for the effective pedagogical use of technology. Each article contains appendices and references. (NB)



TECHNOLOGY IN EDUCATION

A Collection of Academic Senate Papers on Technology

1995 - 2000

Second Edition

Technology in Education

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Ian Walton
Technology Committee Chair, 1998 - 2001

Welcome to this collected edition of the Academic Senate for California Community Colleges adopted papers on technology related issues. We hope that bringing together this material from the last six years will provide a valuable resource to the local academic senate, as your college considers and develops its instructional technology plans.

The Academic Senate has long held that the purpose of instructional technology in a community college is to enhance the student educational experience—be it by better providing for alternative student learning styles or by creating improved access options. Planning for this then becomes a fundamental part of the curriculum process in particular, and the more general educational master-planning process. Ultimate success in these two planning areas depends on the active work of the local academic senate in collegial consultation with the local governing board and/or their administrative designee. It also in large measure will involve workplace issues that must be engaged by the local collective bargaining agent in the collective bargaining process. The six adopted position papers collected here raise the issues which must be discussed at each college and provide suggestions and examples to consider.

The most recent of the six papers, "Guidelines on Minimum Standards for College Technology," considers the technology necessary for faculty and students to successfully perform different levels of technological enhancements such as an existing on-campus class or an online course. It should help with implementation of the state Technology II Plan.

Immediately prior to that, a pair of papers considered major issues of importance to faculty who are considering the use of technology in the classroom - for example, e-mail privacy and intellectual property rights. The first of these papers, "Academic Freedom, Privacy, Copyright and Fair Use in a Technological World" lays a broad, somewhat philosophical, foundation for the discussion. The second paper, "Technology in Education: a Summary of Practical Policy and Workload Language" uses language selected from a variety of policy documents or collective bargaining contracts to illustrate the specific questions that need to be discussed and resolved at each college.

Two papers ("Curriculum Committee Review of Distance Learning Courses and Sections" and the more recent "Guidelines for Good Practices: Effective Instructor-Student Contact in Distance Learning") examine the evolving Title 5 Regulations on distance learning and the responsibilities of the local curriculum committee to ensure integrity by its separate review of instructor-student contact for distance learning courses. Between the publication of those two papers, "Guidelines for Good Practice: Technology Mediated Instruction" examined some of the literature, recommendations and tools for the effective pedagogical use of technology.

Ian Walton
Technology Committee Chair, 1998 - 2001
with thanks to Technology and Educational Policy Committees since 1995

The Academic Senate 1999 paper "Guidelines for Good Practice: Effective Instructor-Student Contact in Distance Learning" (p.61) described the status of Title 5 Regulations governing distance education in the California Community Colleges. These regulations effected a trial period that was originally scheduled to sunset in January 2002 and was temporarily extended for six months until June 2002.

At their March and May 2002 meetings, the Board of Governors approved final regulations regarding distance education.

The following summarizes the effects of the permanent regulations on the material described in the "Technology in Education" papers:

1) The trial period was ended and the regulations governing distance education were made permanent.
2) The regulations were moved from their prior location under the subchapter on "independent study" and relocated in the subchapter describing regular programs, courses and classes.
3) The language regarding academic integrity and reporting of courses was in general preserved by being moved to a new location with a different number as shown in the table below:

Section Name	New Number in Title 5	Language of interest to Senate	Comments	Old Number reference to papers
Definitions and Application	55205	All distance education is independent study - language.	Removed	55370
Ongoing Responsibilities of Districts	55219	Language mandating annual reporting requirements for districts.	Maintained as before	55317
Separate Course Approval	55213	Each proposed or existing course, if delivered by distance education, shall be separately reviewed and approved, according to the district's certified course approval procedures.	Maintained as before	55378
Instructor Contact	55211	All approved courses offered as distance education shall include regular effective contact between instructor and students. Regular effective contact is an academic and professional matter pursuant to Title 5 §53200.	Maintained as before	55376
Course Quality Standards	55207	The same standards of course quality shall be applied to distance education as are applied to traditional classroom courses.	Maintained as before	55372
Course Quality Determinations	55209	Determinations and judgments about the quality of distance education shall be made with the full involvement of the faculty.	Maintained as before	55374
Faculty Selection	55215	Instructors of sections delivered by distance education technology shall be selected by the same procedures used to determine all instructional assignments. Instructors shall possess the minimum qualifications.	Maintained as before	55380
Number of Students	55217	Procedures used for determining the number of students assigned to a course section offered by distance education may include a review by the Curriculum Committee.	Maintained as before.	55352

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Curriculum Committee Review of Distance Learning Courses and Sections

1999 - 00 Technology Committee

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Guidelines on Minimum Standards for College Technology

Adopted Spring 2000

PREAMBLE

Community colleges provide students with access to life skills. The ability to understand and utilize information technologies is now a vital basic skill for students. Technology is becoming an increasingly important tool to enhance instruction as well as student services. Therefore, the Academic Senate for California Community Colleges recommends that all California community colleges provide at least the following technology resources to best serve their students.

The following standards should be regarded as the minimum to be achieved as soon as possible by all colleges. Other colleges may wish to go beyond these standards. As local academic senates consult collegially regarding budget, planning and educational policies related to technology, they should ensure that the planning processes and priorities are based upon sound academic principles and educational considerations, and that the first consideration is always to enhance the learning experience of students.

The guidelines that follow are intended to cover a comprehensive collection of tools for instructional technology hardware, software, training, support and services which are essential for state-of-the-art development and delivery of instruction. Administrative uses of technology, such as registration, are not addressed in this document. The hardware and software used for instruction must either be in the hands of individual faculty, or be easily accessible to them. Equipment, training, support and services should meet private sector standards for quality and performance.

Technology is a vital component in the instructional arsenal. Incorporation of technology into instruction can advance critical thinking skills and promote the ability to adapt in all California community college students. To be effective, instructional uses of technology must relate to a student's educational and human needs. It is important when technology is incorporated into teaching to achieve effective enhancement that increases student learning and success.

Technology is not limited to computers. The Academic Senate strongly supports the concept that state-of-the-art equipment and instrumentation are indispensable across the curriculum, especially in vocational areas, for the development of hands-on student skills. However, these technologies are very specific to programs and disciplines and are beyond the scope of the following general guidelines.

Availability of technology is a student access and equity issue. Local academic senates should ensure that their technology policies promote the enhancement of instruction for all students and contribute towards reducing the "digital divide."

Note: While clearly the pace of change is such that any delimited list stands the risk of becoming quickly dated, the need to establish some baseline of expected technological resources is compelling. Local academic senates should be advised that this list is best understood as a minimum as of the date this document was adopted, and should expect future updates.

POLICIES

The college should have policies and procedures that ensure the following:

1. A college technology plan where the primary driving force is curriculum and instruction.
2. Integration of the college technology plan with the college educational master plan.
3. Collegial consultation with the local academic senate in the development and implementation of the technology plan.
4. Collaboration between the local academic senate and the local collective bargaining agent on instructional technology issues that involve faculty working conditions.
5. Appropriate consideration for students with disabilities as part of the technology plan.
6. Appropriate consideration of student access and equity issues, including impact on diversity, as part of the technology plan.
7. Collegial consultation with the local academic senate in the process to fund the technology plan.
8. Decisions about software and hardware in individual disciplines that are made by faculty exercising their academic judgment and expertise.
9. A computer use policy that promotes accessibility and safeguards academic freedom, while ensuring security and appropriate usage.
10. Web guidelines that safeguard accessibility and academic freedom.
11. Widely available basic training for new users.
12. Ongoing training and staff development in emergent technologies.
13. Adequate and timely support of all technology.
14. Adequate and timely repair of all technology.
15. Comprehensive replacement plans to maintain currency of all technology.
16. Plans and budgets that support the full cost of technology, including training, staff support, maintenance and replacement.

FACULTY OFFICE AND LOCAL ACADEMIC SENATE OFFICE RESOURCES

1. Every full-time faculty member should have an appropriate computer on his/her desk. The choice of platform is an academic and professional decision to be made by the individual faculty member.
2. Every part-time faculty member should have adequate access to computers.
3. The local academic senate office/secretary should have a computer and e-mail address.
4. Every computer should be connected to the college network.
5. Every computer should have convenient access to a printer.
6. Every computer should have high speed Internet access and current browser software.
7. Every computer should have e-mail access with software that permits attachment of formatted documents.
8. Every full- and part-time faculty member should have an e-mail address/account that is readily available, and is accessible from both on and off campus.
9. Every computer should have standard office software including current word processor, spreadsheet and presentation packages in addition to e-mail, browser and web authoring.
10. Every computer should have software to access the library catalog system.
11. Every computer should have software to access appropriate areas of the administrative/student record system.

12. Technical support with prompt response time should be available to all users.

13. Every computer should have access to the college/district local and wide area networks.

14. Every computer should have additional software and equipment appropriate to the faculty member's discipline.

COLLEGE WEBSITE

1. The college should maintain a website with adequate server space for the following content:
   - Individual faculty pages.
   - Class related pages for both on-campus and online classes.
   - Department/division pages.
   - Local academic senate pages, including the curriculum committee.
2. The following support should be available:
   - Direct upload access for faculty to the appropriate server area.
   - Technical support for faculty.
   - Design support for faculty to create pages.

ONLINE COURSE SUPPORT

If the college offers online instruction, the following should be available:

1. Website with direct upload access for faculty to appropriate course server area.
2. Capability for individual faculty and class pages.
3. Capability for listserv, chatroom and threaded discussion.
4. Capability for online tutoring.
5. Capability for online advising.
6. Capability for online financial aid information.
7. Immediate technical support for faculty and students.
8. Course management software and training for faculty.
9. Multimedia software training for faculty.

CAMPUS COMPUTER LABS OR LIBRARY

Students should have access to the following:

1. Computers for on campus computer instruction.
2. Computers for on campus technology mediated instruction.
3. Computers for computer assignments from any class.
4. Computers for Internet assignments and research from any class.
5. Computers for e-mail communication to instructors (either free on campus e-mail and Internet, or optional off campus access at a reasonable cost).
6. Computers for access to library catalog system.
7. Library orientation in the use of technology in library research.
8. Technical support for student on campus users.

CAMPUS CLASSROOMS

There should be an adequate number of each of the following:

1. Classroom/labs with individual student computer stations for hands-on instruction.

2. Classrooms with instructor computer/media stations for demonstration.
3. Classrooms with Internet access.
4. Classrooms with computer projectors and sound.
5. Classrooms with smart podium and videoconferencing capability.

TECHNOLOGY SUPPORT SERVICES

The college should provide the following resources:

1. An immediate response system if instruction is delivered online.
2. Technical support for hardware and software for students and faculty at home if instruction is delivered online.
3. Technical support for hardware and software for faculty on campus.
4. Web design support for faculty.
5. Instructional design support for faculty.
6. Availability of additional equipment and software for faculty in some central accessible location:
   - Scanners with text recognition
   - Color printers
   - Slide scanners
   - CD ROM writers
   - Laptops for faculty checkout
   - Portable computer projectors for faculty checkout
   - Digital still and video camera
   - Media, drawing, graphic and image manipulation software
   - Studio quality audio and video editing capability
   - Database Internet interfacing capability
   - Streaming audio and video broadcast capability
   - VTML programming capability

OTHER TECHNOLOGY RESOURCES/SUPPORT

1. Videoconferencing equipment and training.
2. Training in the pedagogy and teaching effectiveness of technology.
3. Release time for development of technology mediated instruction and online courses.
4. Staff development support for technology.
5. A program to promote purchase and use of computers at home (e.g., loan program).

1999 - 00 Educational Policies Committee

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Technology in Education:

A Summary of Practical Policy and Workload Language

Adopted Spring 2000

ABSTRACT

This position paper of the Academic Senate for California Community Colleges examines practical issues in the area of technology in education and provides a sample of possible policy and contract language. It is the fourth in a recent series of related papers that have addressed academic freedom in a more general setting, instructor-student contact in distance education, and foundations of privacy and copyright in a technological world. This paper discusses details of technology implementation in both the academic and the collective bargaining setting. It concentrates on faculty issues and viewpoints, although several of the topics examined has parallel implications for students. Individual institutions will decide on a case-by-case basis which issues belong in an academic policy setting and which belong in contract language.

The first section examines general instructional policy issues in technology and includes definitions and instructional technology decisions. These include academic freedom and use policies, faculty and curriculum standards, support, and access issues. The second section examines issues of intellectual property and various compensation options. The third section examines issues of workload, including class size and preparation. These discussions focus on faculty and institutional needs rather than on individual student needs.

Specific recommendations for involvement and action of local academic senates are included, as well as suggestions to faculty in general. The paper also provides an annotated bibliography of currently available reference material and of materials used in the earlier papers in the series.

INTRODUCTION

For many years, the Academic Senate for California Community Colleges has played a leading role in the successful development and introduction of technology within the curriculum. The increasing use of technology in teaching has resulted in significant changes in the ways that faculty and students work and interact. E-mail has become a routine means of scholarly communication, while websites and the Internet have become major vehicles for research, dissemination and delivery of course material. Students have participated in these changes through online learning, technology mediated instruction, use of multimedia, e-mail, and other Internet activities.

The Academic Senate has helped to shape this change with a series of position papers on academic freedom, curriculum implications and pedagogical issues involved in technology and distance learning:

Fall 1993, "*Distance Education in the California Community Colleges: An Academic Senate Review of the Social, Fiscal and Educational Issues,*"

Fall 1995, "*Curriculum Committee Review of Distance Learning Courses and Sections,*"

Fall 1997, "*Guidelines for Good Practice: Technology Mediated Instruction,*"

Spring 1998, "*Academic Freedom and Tenure: A Faculty Perspective,*"

Spring 1999, "*Guidelines for Good Practice: Effective Instructor-Student Contact in Distance Learning,*"

Fall 1999, "*Academic Freedom, Privacy, Copyright and Fair Use in a Technological World.*"

The most recent (Fall 1999) paper, "*Academic Freedom, Privacy, Copyright and Fair Use in a Technological World,*" established the philosophical foundations necessary for campus discussion of academic freedom and intellectual property issues by faculty involved in technology mediated and distance instruction. The Fall 1997 and Spring 1999 papers examined primarily pedagogical and curriculum issues related to technology in the classroom and in distance education. The Spring 1998 paper examined the traditional setting of academic freedom and more recent developments.

This paper examines the more immediate, practical aspects of these same issues of privacy and intellectual property but also includes implications for faculty workload and compensation. Satisfactory resolution of these practical concerns often requires a mixture of policy language and collective bargaining contract language. For this reason, representatives of statewide collective bargaining groups have been included in the development of this paper. Sample language is included in many areas, but individual institutions will decide whether the implementation of these ideas belongs in policy or contract language. The content of this paper was guided by the following two resolutions of the Academic Senate Plenary Body and by additional discussion at breakout sessions in 1998 and 1999.

S98 11.01 Internet-based Instruction
Whereas faculty are increasingly involved in development and use of electronic material, and

Whereas expansion of Internet-based instruction and communication via e-mail has created new venues for the use of such electronic material, and

Whereas protection of faculty rights to their own materials and the fair use of materials developed by others has both academic and workload implications,

Therefore be it resolved that the Academic Senate for Community Colleges, in conjunction with faculty union leadership, develop and disseminate a position paper on intellectual property rights, privacy rights, and copyright as they apply to electronic media, especially e-mail, multimedia, and use of the Internet.

S99 11.01 Effective Instructor-Student Contact in Distance Learning
Whereas there are issues related to distance learning that are properly the purview of collective bargaining and some areas that are relevant to pedagogy and academic and professional issues,

Therefore be it resolved that the Academic Senate for Community Colleges direct the Executive Committee to develop a paper, in collaboration with our collective bargaining colleagues, covering such areas as faculty load, class size, compensation and related issues, with regard to distance learning and teaching.

The viewpoint of this paper is defined by faculty and instructional needs although many of the issues

are reflected in corresponding student needs. These areas will be identified but deserve a more comprehensive treatment in possible future papers. Many of the items examined in this paper will have impact on both academic and professional policies that are the purview of the local academic senate and working conditions that are the purview of the local collective bargaining agent. Their precise resolution will depend on local agreements between the two groups and could result in college policy language or contract language, or both. Some of the examples used in this paper already exist in local collective bargaining agreements, but many are only in the proposal stage. Both types of examples should provide useful background to local academic senate leaders and collective bargaining negotiators. Many of the source documents are of considerable length and should be consulted for additional details.

In general, the goal of such contract or policy language should be to promote innovative and effective approaches to the use of technology in instruction. These approaches should be motivated by instructional and pedagogical planning and should enhance the student learning experience. Policy and contract language should balance instructor and institutional legal rights with incentives to produce and distribute high quality course material and instructional practices.

GENERAL INSTRUCTIONAL POLICY ISSUES INCLUDING ACADEMIC FREEDOM, ACCESS AND PRIVACY

The fundamental starting point for institutional policies and contract language should be to ensure that instructional technology decisions are made in an academic and professional manner utilizing collegial consultation or collective bargaining where appropriate. The college educational master plan should clearly delineate the role of an instructional technology plan and this, in turn, should lead to specific technology planning and funding. Local academic senates should consult collegially on these plans and the process for developing them, as part of their responsibility for development of educational programs, institutional planning and budget processes. Local academic senates should also work with the local collective bargaining agents to identify whether specific issues should be resolved in policy language or in contract language.

This section will consider the following issues:

- Definitions of Technology Mediated Instruction and Distance Learning
- Instructional Technology Decisions
- Computer/Electronic Use Policies and E-mail Privacy
- Instructor Hiring and Assignment to Courses
- Selection of Course Materials and Textbooks
- Equipment and Support Services for Faculty
- Instructional Quality Standards - Curriculum and Contact
- Access Issues
- Library Technology
- Counseling Technology

Definitions of Technology Mediated Instruction and Distance Learning

Many institutions begin their work on these issues with definitions of technology mediated instruction and of distance learning, which serve to clarify their consideration of the issues under discussion.

For example Napa Valley College included the following definitions at the beginning of their May 1999 draft position paper, "Proposal on Technology Mediated Instruction":

- Technology Mediated Instruction (TMI) is the use of technological devices to assist in the teaching and learning process.
- Distance Learning, a subset of TMI, is the use of technological devices to bring the teaching and learning process to students who are at a different location(s) and/or are at a different time(s) from the instructor.
- TMI may be implemented at two levels:

Primary TMI, in which on-campus or distance-learning courses or labs use technology as the dominant mode of instruction; at this level, TMI will comprise 50 percent or more of class instruction.

Partial TMI, in which on-campus or distance-learning courses or labs use technology as a periodic mode of instruction; at this level, TMI will comprise less than 50 percent of class instruction.

Notice that technology mediated instruction can involve different levels and amounts of technology, but that Title 5 curriculum requirements apply in all cases. Title 5 '55370 defines distance education as:

> Instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology.

"Guidelines for Negotiating Distance Education Issues"—a collection of contract language compiled by Tom Tyner, President of the California College Council/California Federation of Teachers (CCC/CFT), builds on this definition as follows:

> Distance education is instruction in which the instructor and students are separated and interact through the assistance of communication technology. Distance education may include two-way interactive, online courses, or telecourses.

For a more comprehensive discussion of the political context of the growth in distance education see the "Report on Distance Learning" issued by Committee R of the American Association of University Professors (AAUP) and published in the May-June 1998 issue of AAUP's Journal, *Academe.* This report also contains a thoughtful analysis of the benefits of distance education plus useful definitions and discussion. It is based on three fundamental assumptions:

> Distance learning is not a future possibility for which higher education must prepare; it is a current reality whose growth potential is virtually unlimited.
>
> Distance learning, used properly in its various modes, can enhance the learning experience and increase access to higher education for a wide variety of potential students.
>
> Distance learning, even used properly in its various modes, raises a number of issues that have to be examined carefully, to determine its impact on faculty, students, and the learning experience in general.

In December 1999, the same AAUP committee produced suggestions and guidelines with sample language for institutional policies and contracts governing two areas: ownership of intellectual property and distance education.

Instructional Technology Decisions

A fundamental Academic Senate position is that instructional technology decisions should originate in educational and instructional planning activities that determine how technology can best enhance the student learning experience. They should not be made in a vacuum, nor in a manner where technology is dictating instructional decisions.

In the draft, "Framework for Contract Negotiations Related to Instructional Technology Issues," produced by the California Federation of Teachers, a joint subcommittee on the impact of technology is recommended. Part of its charge should be to assure that:

- The institution's faculty assumes responsibility for and exercises oversight over distance education, ensuring both the rigor of programs and the quality of instruction,
- The institution ensures that the technology used is appropriate to the nature and objectives of the programs, and
- The academic department ensures the currency of materials, program and courses.

Computer/Electronic Use Policies and E-mail Privacy

This section presents some specific policy or contract language to address concerns of the Academic Senate. For a more comprehensive analysis and discussion of issues in this area, see the Academic Senate's Fall 1999 paper, "*Academic Freedom, Privacy, Copyright and Fair Use in a Technological World.*" In this fast evolving area legal requirements are often not clear and much of the case law relates specifically to

private industry. The Academic Senate believes that despite a lack of technological guarantees, a higher standard of access and privacy should be expected in the higher education arena and that the faculty can benefit from strong statements of principle in both policy and contract language.

The traditional background for academic freedom is based on the AAUP report "1940 Statement of Principles on Academic Freedom and Tenure." A much more recent AAUP report, "Academic Freedom and Electronic Communications," provides an excellent framework for the corresponding discussion in light of current technology.

Particularly relevant is the report's statement that:

> freedom of expression and academic freedom should be limited to no greater degree in electronic format than in printed or oral communication, unless and to the degree that unique conditions of the new media warrant different treatment.

In "*Academic Freedom, Privacy, Copyright and Fair Use in a Technological World*," the Academic Senate made the following recommendations to local academic senates regarding language that should be included in college policies or contracts:

> Since there is so much concern in the area of academic freedom and privacy and so many examples of strong and weak policy language, it is recommended that local academic senates play a major role when developing policies and procedures:
>
> - To ensure that local electronic/computer use policies include a statement of the fundamental principle of academic freedom in the electronic medium, including e-mail, websites and online courses,
> - To ensure that local electronic/computer use policies include a statement of the fundamental principle of the confidentiality of e-mail communications, while acknowledging the inherent lack of absolute security,
> - To actively involve each local academic senate in creating and implementing the process that deals with possible exceptions or violations of academic freedom and privacy, and
> - To consult with collective bargaining colleagues to ensure contract language creating and implementing the process that deals with confidentiality and with possible exceptions and technical safeguards or limitations.

Appropriate language could be as simple as the following excerpt from Bowen's 1999 Senate Bill 1016 which passed the Legislature but was vetoed by the Governor:

> An employer may not secretly monitor the electronic mail or other personal computer records generated by an employee.

The University of California "Electronic Mail Policy" contains the following exemplary language:

> The University recognizes that principles of academic freedom and shared governance, freedom of speech, and privacy of information hold important implications for electronic mail and electronic mail services. The University affords electronic mail privacy protections comparable to that which it traditionally affords paper mail and telephone communications.

The Board of Trustees at Palomar College passed a resolution in 1998 that included the following language:

> It is the policy of the District not to monitor electronic transmissions for content except when required to do so in the normal course of business, in a criminal investigation, in response to a lawfully issued subpoena or valid court order, or when specific written permission to do so is granted by the Superintendent/President.

It is important to realize that as policy emerges in this area, groups other than the Academic Senate are making considerably different policy recommendations. *Legal Issues and Education Technology* presents many of these issues from the perspective of K-12 school district attorneys and includes positions and much proposed language that the Academic Senate would oppose. Such positions include the ideas that use of technology is a privilege, that student e-mail should never be considered private and that school officials will search data or e-mail at any time for any reason.

There are also many sources that portray the issues from the perspective of the private sector business community. One such is the 1995 book, *Netlaw*, by computer law attorney Lance Rose.

Neither of the above two references reflects positions that are supported by the Academic Senate, but both present interesting and contrasting points of view. It can be very helpful to be aware of such proposals.

Notice also that computer use and e-mail policies are areas where related language may be needed in the college's student code of conduct and student computer use policy.

Instructor Hiring and Assignment to Courses

Instructor hiring in technology areas should follow the regular college process. Education Code '87360 (b) requires that this faculty hiring process be developed and agreed upon jointly by representatives of the governing board and the academic senate. The assignment of instructors to technology mediated or distance education classes should also follow the existing college process and should ensure adequate training. Contract language may cover course assignment.

AAUP, in its "Statement on Distance Education," suggests that:

> no member of the faculty should be required to participate in distance education courses or programs without adequate preparation and training, and without prior approval of such courses and programs by the appropriate faculty body.

Related to this is the concept of faculty job protection in the implementation of distance education programs. Sample contract language for this appears in Tom Tyner's, "Guidelines for Negotiating Distance Education Issues":

- A regular on-campus class will not be canceled for the purpose or with the effect of transferring or directing students into a distance learning class.
- No faculty employee shall be laid off as a result of the offering of distance education courses in the district.
- Distance education courses will be used to supplement rather than to replace course sections taught on the district's campuses.
- In offering distance education courses, it is not the purpose of the district to eliminate any faculty positions or to reduce the number of course offerings the district provides.

Selection of Course Materials and Textbooks

This area is an academic freedom concern and is covered in greater depth in the Academic Senate's two position papers (Spring 1998 and Fall 1999) on academic freedom.

There are also accreditation standards in this area, from the Accrediting Commission for Community and Junior Colleges. These can be found in the 1996 testimonial policy, "Principles of Good Practice for Electronically Delivered Academic Degree and Certificate Programs" where the Commission states as a principle that:

> ...distance learning is characterized by the same concerns for quality, integrity, and effectiveness that apply to campus-based instruction.

In 1999, a more detailed Commission document on distance learning addressed many of the issues in this paper as it sought to provide expanded assistance to institutions planning distance learning programs and recommended that such programs:

> ...should remain consistent with and central to the stated mission of the institution.

Local academic senates should support the right of individual faculty members to select the technological materials most appropriate for their course. In the case of technology this would include the choice of the best software. This is analogous to a faculty member's selection of appropriate textbooks. Moreover, the broader decisions such as choice of computer platform and other hardware must be made using a process where academic instructional reasons take priority.

AAUP in its "Statement on Distance Education" suggests:

- A faculty member engaged in distance education is entitled to academic freedom as a teacher, researcher, and citizen in full accordance with the provisions of the 1940 "Statement of Principles on Academic Freedom and Tenure."

- Teachers should have the same responsibility for selecting and presenting materials in courses offered through distance education technologies as they have in those offered in traditional classroom settings.

Equipment, Training and Support Services for Faculty

To provide effective instructional use of technology, colleges must provide adequate training and support for faculty and timely support and repair for equipment. This can be addressed in a variety of arenas, such as the college technology plan, staff development plan and instructional equipment process.

Tom Tyner's, "Guidelines for Negotiating Distance Education Issues," suggests possible contract language regarding training and support of faculty:

- Technical support will be provided for instructors of all distance education courses, including technicians both on site and at distance sites of interactive courses, freeing instructors to teach most effectively.
- No faculty shall be assigned to teach a distance learning course that involves learning new technologies without the opportunity to be trained in those technologies. Faculty willingness to teach these courses shall be considered, but program need will be given higher priority.
- No faculty member shall be assigned to teach a distance learning course using new technologies without adequate prior opportunity to prepare materials required to use those technologies.
- Faculty members assigned to teach a distance learning course will receive appropriate clerical, logistical, instructional, and technical support.

The California Federation of Teachers' "Framework for Contract Negotiations Related to Instructional Technology Issues," makes the following recommendations on equipment, support and training:

> **Equipment**: When equipment is required for classes, it is desirable that there be sufficient equipment to accommodate the students assigned thereto. The Board and the District are committed to seek funding to provide for the replacement of obsolete equipment, recognizing the necessity for maintaining an adequate inventory of technologically current equipment.
>
> **Support**: Faculty who participate in Distance Learning courses shall be provided logistical, instructional, and technical support. In the event of system failure, the instructor will not be obligated for additional instructional hours beyond the regular schedule. Prior to implementation of the Distance Education program logistical procedures will be addressed and mutually agreed upon.
>
> **Training**: Faculty who agree to participate in Distance Learning courses shall receive appropriate training paid for by the District. Additional training shall be offered where feasible as determined by the District at the request of the bargaining unit member.

In general there is a corresponding need for equipment and support for students, including the provision of adequate computer facilities on campus and the availability of timely technical support for both on-campus and distance students. Many of these details are addressed in the Academic Senate Executive Committee's Spring 2000 document *"Guidelines on Minimum Requirements for College Technology,"* which makes specific equipment recommendations. Lastly, AAUP in its "Statement on Distance Education" cautions that responsibility for educational content still belongs to the faculty:

> The institution is responsible for the technological delivery of the course. The teacher, nevertheless, has the final responsibility for the content and presentation of the course.

Instructional Quality Standards Curriculum and Contact

Quality standards for the curriculum are an area of local academic senate concern. Course approval should follow the standard curriculum committee approval process, and distance education sections in particular are subject to separate review and should follow the recommendations in the Spring 1999 Academic Senate position paper *"Guidelines for Good Practice: Effective Instructor-Student Contact in Distance Learning"*:

- To ensure that the local curriculum committee performs a separate review of courses offered by distance education, as required by Title 5, '55378,
- To ensure that this separate review considers both the information transfer and the instructor-student contact aspects of the course,
- To ensure that this separate review of instructor-student contact addresses the methods to be used, their effectiveness, and their frequency,
- To ensure that this separate review considers the availability of technical support for faculty and students,
- To ensure that this separate review considers issues of access for students with disabilities,
- To ensure that adequate support services are provided to distance education students, by consulting with counseling and library faculty, and
- To consult with local bargaining agents on distance education issues that involve working conditions.

For example, in its May 1999 draft position paper, Napa Valley College included an article on TMI standards for instructional quality that has language on curriculum process, contact with students, and technical support.

Also related to quality standards are issues that involve student codes of conduct. AAUP in its December 1999 guidelines for distance education suggests the following policy language:

> Students taking distance-education courses should be held to the same requirements of academic honesty as students taking traditional courses.
>
> The University will ensure that safeguards have been built into the distance-education course format to require that students be held to the same standards of academic honesty as students in traditional courses.

Access Issues

There are many access issues related to technology and education. Of primary interest in this paper is the need to provide adequate equipment and services to ensure faculty access to technology and thereby safeguard faculty academic freedom to teach and research. There is also a corresponding concern for student access.

Access to computers and electronic networks is now an important component of research, publication, and teaching. This access and communication is largely controlled by an institution's computer/electronic use policy. A disturbing feature of many institutional electronic use policies is the suggestion that the right to computer access has a low priority - lower, for example, than the right of access to the library. Computer access is often portrayed as a privilege that may be suspended or terminated for perceived violations of use policy.

In its foundations paper *"Academic Freedom, Privacy, Copyright and Fair Use in a Technological World,"* the Academic Senate recommended that local academic senates include language in college policies or contracts to ensure:

> that local electronic/computer use policies guarantee appropriate access to computers and networks for faculty and students.

The following sample language appears in the Academic Senate Executive Committee's Spring 2000 document *"Guidelines on Minimum Requirements for College Technology."*

- Every full-time faculty member should have an appropriate computer on his/her desk. The choice of platform is an academic and professional decision.
- Every part-time faculty member should have adequate access to computers.
- Every computer should be connected to the college network.
- Every computer should have high speed Internet access and current browser software.
- Every full-time and part-time faculty member should have an e-mail address/account accessible from both on and off campus.

"Guidelines on Minimum Requirements for College Technology," also describes other access issues including general student access to on-campus and distance-learning technology.

Students should have access to the following:

- Computers for on campus computer instruction;
- Computers for on campus technology mediated instruction;
- Computers for computer assignments from any class;
- Computers for Internet assignments and research from any class;
- Computers for e-mail communication to instructors; (either free on campus e-mail and Internet, or optional off campus access at a reasonable cost);
- Computers for access to library catalog system;
- Library orientation in the use of technology in library research; and
- Technical support for student on campus users.

In addition, with reference to access, college policies must guard against any disproportionate impact on underrepresented and economically disadvantaged populations and must also accommodate the needs of students with disabilities. For a definitive study of this second issue see the California Community College Chancellor's Office 1999 document, "Distance Education: Access Guidelines for Students with Disabilities."

Library Technology

There are many technology issues that are specific to the library and to discussions of information competency. A fuller discussion of these must await a future paper. However, there are also several library issues that relate to those already discussed in this paper.

The AAUP document, "Academic Freedom and Electronic Communications" comments that restrictions on printed library material are highly unusual and that restrictions on library computer access should meet comparable standards. Theoretical perceptions of possible abuse should not drive the creation of library computer use policies. For example, filtering or blocking technology can easily violate academic freedom by censoring access to some sites. Computer use policies need to be written with maximum protection of access firmly in mind.

The California Federation of Teachers, in the draft "Framework for Contract Negotiations Related to Instructional Technology Issues" recommends that contracts include language to assure faculty primacy in assessing the benefits and costs of library technology.

The Academic Senate's Spring 1998 position paper, *"Information Competency in the California Community Colleges,"* makes several references to the issues of academic freedom, privacy and legal concerns raised by the growth of digital information. The paper states that:

> Information competency is the ability to find, evaluate, use and communicate information in all its various formats. It combines aspects of library literacy, research methods and technological literacy. Information competency includes consideration of the ethical and legal implications of information and requires the application of both critical thinking and communication skills.

Other areas of concern to library faculty may include the replacement of paper databases and journals with electronically published versions and the need to educate students in how to judge the value of material that is placed on a website without undergoing any review or evaluation process. The ease with which electronic material may be plagiarized is also an area of concern for student codes of conduct.

Counseling Technology

The counseling area also raises many unique issues around technology. As with the library, these could be the subject of a future paper, and the present discussion will be confined to ideas already discussed in this paper.

In the area of confidentiality, an even higher standard is required when technology is used in student advising.

Under the 1974 federal Family Educational Rights and Privacy Act (FERPA), colleges are required to protect the confidentiality of basic student records and data. Even more important is to protect the confidentiality of faculty-student communication and counselor-student advising as described in the ethical standards for counselors laid out in the American

Counseling Association Code of Ethics and Standards of Practice (1997), which states:

> **Respect for Privacy.** Counselors respect their clients' right to privacy and avoid illegal and unwarranted disclosures of confidential information.

One possible solution to the privacy issue for counselors is simply to not use technology for any privileged communication with students-especially since the role of the community college counselor includes academic, career, and personal counseling. However, this approach excludes the provision of possible new benefits for students. The Spring 1997 Academic Senate position paper, *"Standards of Practice for California Community College Counseling Programs,"* recommends the introduction of appropriate technology with effective safeguards:

- Counseling programs should select only those technologies which enhance the delivery of services to students. Electronic access to student educational plans, articulation information, transcripts, petitions, and the like should be encouraged.
- Counseling programs should use technologies to enhance communication within the counseling department, as well as to the college and to the community.
- Policies and procedures to maximize technology use and access, while ensuring safety of records and appropriate confidentiality, should be developed and implemented.

Finally, the California Federation of Teachers, in the draft, "Framework for Contract Negotiations Related to Instructional Technology Issues," recommends that contracts include language to assure faculty primacy in assessing the benefits and costs of technology used for academic counseling.

ISSUES OF INTELLECTUAL PROPERTY RIGHTS AND COMPENSATION

Intellectual Property Rights is another area of hot debate. The Academic Senate paper "*Academic Freedom, Privacy, Copyright and Fair Use in a Technological World*," discussed the foundations of this area and included a thought provoking section which raised the possibility of faculty simply creating material for the greater good. For faculty who wish to protect their intellectual endeavors, this section examines some possible language.

A good resource is the AAUP December 1999 report, "Suggestions and Guidelines: Sample Language for Institutional Policies and Contract Language - Ownership of Intellectual Property."

As the National Education Association Technology Brief "Distance Education: Challenges and Opportunities" states:

> As the financial stakes are raised, intellectual property rights and faculty rights increasingly become intertwined. Institutions that previously asserted no ownership claim to a scholarly book are rethinking their policies on intellectual property rights.

Whether faculty members wish to create material that is distributed free on the world wide web or wish to create courses that are marketed like textbooks, there is a need for clear policies regarding course development, ownership of electronic courses, and recording and distribution rights for future use.

This section will examine the following issues:

- Course Development
- Ownership of Electronic Courses
- Future Use of Material

Course Development

To facilitate the development of high quality online courses, there is a need for release time and support. For example, in their May 1999 draft position paper, Napa Valley College (NVC) included the following language to provide support in the three areas of course development, implementation, and evaluation:

> **Support for Development of Courses**
> NVC shall provide reassigned time (or a stipend equal thereto) for the initial development of a course that the faculty member will teach in the TMI mode. The reassigned time (or stipend) shall be equal to the load credit for the course and shall be provided the semester prior to that during which the course will be offered.

Support for Implementation of Courses
NVC shall provide reassigned time (or a stipend equal thereto) for the initial implementation of a course that the faculty member will teach in the TMI mode. The reassigned time (or stipend) shall be equal to the load credit for the course and shall be provided the semester in which the course is offered.

Support for Evaluation of Courses
NVC shall provide reassigned time (or a stipend equal thereto) for the initial evaluation (and possible revision) of a course that the faculty member has taught in the TMI mode. The reassigned time (or stipend) shall be equal to the load credit for the course and shall be provided the semester following that when the course was offered.

The provision of reassigned time may affect ownership of material or create a "work for hire" as discussed in the next section.

Ownership of Electronic Courses

A central debate in the technology area is author rights versus "work-for-hire" material which affects both course development and rights for future use. This section presents some specific policy or contract language to address concerns of the Academic Senate. For a more detailed description of copyright, fair use and work-for hire provisions see the Academic Senate's 1999, "*Academic Freedom, Privacy, Copyright and Fair Use in a Technological World.*"

Many four-year institutions have long-standing agreements on intellectual property rights, but this practice is less common in the community college system. For example, the California State University (CSU) Memorandum of Understanding with the California Faculty Association states:

> Faculty bargaining unit employees may use for non-CSU purposes materials created by them without extraordinary University support, if in the past the CSU has never disputed the use of such materials by faculty bargaining unit employees for non-CSU purposes. Such works may include, but shall not necessarily be limited to, lecture notes and materials, course syllabi, instructional text and manuscripts, software, or plans, patterns and works of art or design. Unless there is a separate individual agreement or past practice at a campus to the contrary, faculty bargaining unit employees shall be entitled to grant licenses or make assignments with respect to such materials to publishers and publishing agents or any other third party.

The ownership of online course material is often the point at which intellectual property rights becomes a more pressing issue than it has been with traditional courses. In a December 1999 *Chronicle of Higher Education* article, Dan Carnevale and Jefferey Young provide a selection of recent examples of conflicts and solutions in this area.

At one end of the spectrum are institutions that continue the traditions of faculty textbook authorship in which the faculty member owns it. This position is likely to provide incentives that promote the development of courses.

An example of language in this vein comes from the May 1999 draft position paper from Napa Valley College:

> **Intellectual Property Rights**
> All materials developed by a faculty member for use in TMI instruction, counseling, or library service are the property of that faculty member. The dissemination and control of those materials shall be at the sole and complete discretion of that faculty member.

At the opposite extreme are institutions that use the definitions of the 1976 Copyright Act and the concept of a "work for hire" to assert the employer's legal "authorship" of the work. Some colleges claim that the college owns course material if any college resources are used in the development. It has been reported that some colleges have tried to extend this argument to claim that the provision of summer health benefits to faculty means that they own any material produced in the summer. Such a position is likely to result in the refusal of faculty to develop material and is certainly not in the best interests of students.

As a result, many colleges have developed compromise language that shares resources and ownership.

For example, the draft, "Framework for Contract Negotiations Related to Instructional Technology Issues," produced by the California Federation of Teachers includes the following definitions of support:

- District Support includes the use of district funds, personnel, facilities, equipment, materials, or technology. District Support may be either Nominal or Substantial Resources, or a combination thereof. Grant funds obtained at the initiative of, and through the efforts of, the Faculty Member(s) who create a Work or Invention shall not be considered District Support.

- Nominal Resources include those which are customarily available or provided in the course of the Faculty Member's usual appointment or assignment, such as (but not limited to) support services provided by other employees, the use of computers, photocopy machines, office supplies, and the use of an assigned office and telephone. A budget which is customarily provided for the Faculty Member's usual appointment or assignment shall be considered a Nominal Resource.

- Substantial Resources shall be direct costs to the District, and include the provision of a budget in excess of $ [place amount here], over and above any budget customarily provided for the Faculty Member's usual appointment or assignment. The assignment by the District of other employees to provide secretarial, technical or creative services specifically for the creation of the Work or Invention shall be considered Substantial Resources if the salary costs for those services exceed $ [place amount here]. The use of exceptionally expensive District equipment or facilities (e.g., professional recording and filming studios, and professional television cameras) are Substantial Resources. Indirect costs shall not be considered Substantial Resources.

The Foothill-De Anza Community College District has the following contract language in this area:

> 39.1 This article seeks to protect and promote the traditional academic freedom of the District's faculty in matters of publication and to balance the rights of faculty and the District reasonably and fairly.
>
> 39.2 The right to claim the copyright shall be as follows:
>
> 39.2.1 The faculty member may claim the right to copyright material if it was created outside the course of the faculty member's employment with the District. If the faculty member uses District equipment or supplies but creates the work on his or her own time, the faculty member shall retain the right to copyright the material without cost. Copyright on materials unrelated to the faculty member's employment with the District shall belong solely to the faculty member.
>
> 39.2.2 The District may claim the right to copyright material if the project was commissioned by the District, if the project is "work for hire" (i.e., the work was created by the faculty member within his or her course of employment), or the work is an institutional effort.
>
> 39.2.3 The District and faculty member may share the right to copyright material if the work is created under circumstances in which the faculty member contributes his or her time outside the normal course of employment and the District contributes services, staff, and/or financial resources, or under other circumstances not outlined in Subsections 39.2.1 and 39.2.2 above.
>
> 39.2.4 If a separate agreement is entered into between the District and faculty member(s) for a specific project, the right to claim copyright ownership shall be governed by the terms of the specific agreement.
>
> Responsibility for registration of copyright shall lie with the owner of the copyright.
>
> 39.3 Royalty distribution rights shall parallel ownership in copyright.

More specific written agreements may be useful in cases of joint development and ownership. In its December 1999, "Suggestions and Guidelines: Sample Language for Institutional Policies and Contract Language - Ownership of Intellectual Property," the AAUP, provides the following sample language:

> The institution can exercise joint ownership under this clause when it has contributed specialized services and facilities to the production of the work that goes beyond what is traditionally provided to faculty members generally in the preparation of their course materials. Such arrangement is to be agreed to in writing, in advance, and in full conformance with other provisions of this agreement.

> Funds received by the faculty member and the college or university from the sale of intellectual property owned jointly by the faculty member and the college or University shall be allocated and expended in accordance with the specific agreement herein provided: [must be negotiated by the parties.]

Possible options to consider in writing such an agreement might include faculty ownership after reimbursement of costs to District, or faculty ownership after the District has recovered costs from sales or royalties.

Future Use of Material

A particular area where the interpretation of intellectual property rights is often in question involves future use, recording and rebroadcast rights, and the issue of what happens to an online course if the original faculty developer moves to another institution.

The Academic Senate paper, *"Academic Freedom, Privacy, Copyright and Fair Use in a Technological World,"* stated:

> Historically, there has been an understanding among teachers: their syllabus and the course materials that they generate are their own. It is also understood that the course outline of record, on file at the college, belongs to the college, though departmental staff is usually responsible for generating and updating it. In the days of dittos and mimeographed handouts, this understanding, vague as it might be, was perhaps sufficient. With the advent and exponential growth of current technologies from e-mail to online courses, multimedia course materials, and computing work as part of interactive education, the old understanding is seriously deficient.

The AAUP in its "Statement on Distance Education" suggests:

> Provision should also be made for the original teacher-creator, the teacher-adapter, or an appropriate faculty body to exercise control over the future use and distribution of recorded instructional material and to determine whether the material should be revised or withdrawn from use.
>
> A teacher's course presentation should not be recorded without the teacher's prior knowledge and consent. Recordings of course material are academic documents, and, thus, as with other works of scholarship, should have their author or creator cited accordingly.

The Foothill-De Anza Community College District has the following contract language in this area:

> 39. 4 If the District wishes to videotape, broadcast or televise any classroom, laboratory, or other instructional activity, it shall first obtain permission of the faculty member. Before the District may enter into an agreement for commercial redistribution of videotaped, broadcast or televised instructional activity performed by a faculty member as part of his or her employment with the District, the District shall first obtain the written permission of the faculty member. All profits from such commercial redistribution shall be held by the District.

Notice that the above language assigns profits to the district. Sample language more advantageous to the faculty member is found in Tom Tyner's "Guidelines for Negotiating Distance Education Issues":

> Employer may transmit or record for transmission any classroom instruction, lecture, or other instructional or performance event produced by faculty members as a part of a program of distance learning, where the faculty member has received either an equivalent reduction in other classroom assignments or overload compensation. The employer, however, may not sell or retransmit in future semesters any such recording except under the terms of a written agreement between the employer and faculty member providing each party with a 50 percent interest in net profits from either the sale or rebroadcast.

It is also possible to provide for works where the faculty member has been specifically compensated for producing material - the classic "work for hire" of copyright law. Again, Tyner's "Guidelines for Negotiating Distance Education Issues" suggest sample language:

> The college is the presumed owner of intellectual property when it enters into an agreement with the faculty member specifically to create such specified intellectual property in exchange

for compensation and/or released time as mutually agreed upon by the college and faculty member.

ISSUES OF WORKLOAD AND COMPENSATION

Workload and compensation is clearly an area where collective bargaining language is a likely vehicle for protection. However, many areas are also appropriate for inclusion in local academic senate policies.

The following issues are examined in this section:

- Class Size
- Workload
- Evaluation of Distance Courses
- Contracting Out

Class Size

Class size is the classic example of an area that involves both working conditions and instruction because of its effect on both instructor load and quality of instruction. Many colleges have a default mode where technology-mediated or distance classes are held to the same size as the standard on-campus class. In the Academic Senate paper, "*Guidelines for Good Practice: Effective Instructor-Student Contact in Distance Learning*," it is recommended that class size be one of the specific areas included in curriculum committee scrutiny of distance education courses. Title 5 '55352 permits this. Title 5 '55378 requires that distance education courses undergo a separate review and approval by the curriculum committee.

Title 5 '55352 requires that "the number of students assigned to any one course section offered by distance education shall be determined by and be consistent with district procedures related to faculty assignments." To implement this, Tyner's "Guidelines for Negotiating Distance Education Issues" suggest the following sample language:

> The number of students assigned to any one distance education course section shall be consistent with the class size maximum set for the regular course sections in that discipline.
>
> In the absence of an established class size maximum for a given course, the determination of the number of students assigned to a distance education course section shall be guided by what class size best contributes to educational quality and a reasonable faculty workload.

Colleges might develop a policy to share responsibility for class size by, for example, setting class size parameters in the contract and having the curriculum committee ensure that instructional methods are appropriate for the selected class size.

Workload

More general workload issues involve such ideas as preparation time, online office hours, and other student contact methods including any possible "on-campus" requirement for instructors. In general, research has shown that despite vague promises of large cost savings through the use of technology, distance education courses with effective instructor-student contact require more faculty time than corresponding lecture courses. In her August 1998 article, "How Many Students are 'Just Right' in a Web Course?," Judith Boettcher, director of the Corporation for Research and Educational Networking, cites examples of distance education courses that have been accepted as effective and where the maximum class sizes are in the 15- to 20-student range. She also cites the growing evidence that faculty spend more time than in a traditional course when they interact via e-mail or the web. A follow-up article, "Cyber Course Size: Pedagogy and Politics," appeared in April 1999. For many colleges, the starting point for instructor load assigned to TMI or distance classes is again a default value of the load assigned to the corresponding classroom based course. For example, the May 1999 draft position paper from Napa Valley College states:

> Load credit for a TMI course shall be the same as for the class presented using traditional methods.

For others, the starting point is that distance education classes actually involve more preparation than traditional classes and that both additional preparation and additional students must be acknowledged. The AAUP's December 1997 "Report on Distance Learning" makes the following recommendations:

1. Enrollment. Faculty who have substantial additional student enrollment in a course section due to distance learning should be compensated by additional credit in load assignment. Those students enrolled as distant learning students should be considered to be an additional class section, relative to the size of the original class, for the purpose of load.

2. Preparation. Faculty who teach in distance learning programs should be additionally compensated for the extra time required to prepare for distance learning courses, particularly those transmitted by interactive television. This compensation should be financial or, preferably, in order to promote quality, in the form of credit toward load assignment.

Tyner's "Guidelines for Negotiating Distance Education Issues" suggest the following sample language to account for the extra faculty work:

- Instructors teaching interactive distance education courses shall receive one additional LHE (lecture hour equivalent) for each 3 LHE's taught. (For example, an instructor teaching a three-unit interactive course will receive 4 LHE's of teaching credit.)

- An instructor developing a district-approved distance education course shall receive 3 LHE's released time during the semester the course is developed, or the paid equivalent of 3 LHE's if developed during summer break.

- A faculty member teaching a distance learning course for the first time, which requires substantial time and effort to learn new technologies and/or develop or adapt new materials, will be awarded additional LHE's up to twice the number given for a regular course.

Office hour requirements are covered in the May 1999 draft position paper from Napa Valley College as follows:

> **Office Hours**
> TMI courses carry the same office hour requirement as traditional courses. However, with the agreement of the Division Chair or Dean, the faculty member may hold office hours for a TMI course via e-mail, which may be from a remote location.

Notice in this language the explicit acknowledgment that office hours may be conducted from a remote location. This relates to a larger issue regarding what is an appropriate on-campus presence for faculty who teach a substantial portion of their load in a distance mode. The 1998 change to Title 5 '55376 regarding instructor student contact in distance education removed any requirement for "face-to-face" contact and now requires "regular effective contact." This change should be reflected in any guidelines regarding on-campus presence.

Evaluation of Distance Courses

The success of technology-mediated or distance learning courses should be evaluated using the regular course and program review processes of the institution.

Evaluation of faculty members who teach such courses should correspondingly use the regular faculty evaluation process. Some parts of the process may have to be modified to account for distance classes. Such items as the traditional peer classroom observation could, with agreement, be replaced by observation of selected e-mails, websites or other activities that constitute the "regular effective contact" with students. Student evaluations of the instructor should be possible in the normal way.

Contracting Out of Instruction

In addition to general faculty job protection described on page 8 in the "Instructor Hiring and Assignment to Courses" section, some colleges address issues regarding delivery or reception of distance education courses by other institutions. For example, Tyner's "Guidelines for Negotiating Distance Education Issues" suggests language which prohibits the elimination of a locally offered course where the substitution of a distance course from another institution would supplant the local instructor:

> Reception of a distance education course transmitted by another institution is prohibited if the course is currently being taught and/or listed in the college catalogue.

Notice, of course, that many colleges receive transmitted material to conduct their own course, with their own instructor.

A broader selection of examples is included in the draft, "Framework for Contract Negotiations Related to Instructional Technology Issues," produced by the California Federation of Teachers:

- No work normally performed by any member of the faculty bargaining unit shall be contracted out without the express agreement of the bargaining agent.
- No distance education sections shall be instructed or conducted by persons not employed within the faculty bargaining unit.
- No distance education or technology-related work shall be performed by other than members of this bargaining unit.
- Courses outside the capabilities of bargaining unit members, such as prepackaged courses or courses available through membership in educational consortia, must be approved by the appropriate department and the appropriate Committees before they can be included in a college catalog or incorporated into a program of study.

Related to this is the discussion of "anytime, anywhere home delivery." This phrase has been used to describe the potential of various technology grant projects in California, such as the satellite uplink facility at Palomar College and the California Virtual College. The implication is that in a short number of years the technology will exist to originate a course at any community college in the state and beam it directly into the student's home. While such technology has the potential to deliver education to students who are otherwise unable to receive it, tremendous questions are raised regarding the effect of such a policy on the current campus based attendance and apportionment funding mechanisms for the whole system. Open system discussion of this issue has not yet taken place.

CONCLUSION AND RECOMMENDATIONS FOR LOCAL ACADEMIC SENATES

In conclusion, the Academic Senate believes that there are many issues where technology has a profound impact on the educational experience of our students. From a faculty perspective, these issues occur in overlapping areas of academic policy and working conditions. The Academic Senate therefore encourages faculty and local academic senates to discuss these issues in the setting of their own college and to put in place academic policy language or collective bargaining contract language to address them in the most appropriate manner for their institution.

The Academic Senate makes the following recommendations to local academic senates:

1. Local academic senates should consult collegially and take a leading role in the development of college educational master plans; local senates should ensure that such plans address technology mediated instruction and distance learning, both of which may have an impact upon facilities master plans.
2. Since both technology mediated instruction and distance learning are academic and professional matters, local academic senates should take the lead in working with colleges and districts to establish definitions of technology mediated instruction and of distance learning that are incorporated in educational master plans.
3. Local senates should consult collegially in establishing parameters derived from definitions of technology mediated instruction and distance learning, as well as formulating criteria that can be applied to instruction to determine where and when such definitions apply.
4. Local senates should monitor the impact of technology mediated instruction and distance learning on curriculum and may wish to assign such monitoring activities to the curriculum committee.

5. Local senates should collaborate with appropriate local collective bargaining agents to secure policy or support contract language regarding issues that may affect work load, compensation, assignments, and policies governing privacy and intellectual property rights.

6. Local senates should consult collegially to develop electronic use and e-mail privacy policies that are no more restrictive to freedom of expression and academic freedom than are policies governing printed and oral communications, usages, and contents. Such policies should explicitly address and reaffirm academic freedom throughout the spectrum of the electronic medium, including e-mail, websites, and online instruction, counseling, research, and communication.

7. Local senates should collaborate with the appropriate local collective bargaining agents to secure policy or support contract language ensuring that instructor hiring, class assignments, and responsibilities for teaching remain the same in the arena of technology mediated instruction and distance learning as they are in traditional campus-based in-classroom courses. There should be an appropriate balance of curriculum, discipline and student needs.

8. Since technology mediated instruction and distance learning courses require equipment and technological and technical support, local senates should consult collegially to develop policies and institutional commitments that adequately and appropriately support such instructional activities.

9. Local senates need to be sure that the curriculum committee fulfills its duties in reviewing distance education courses as specified in Title 5 '55378.

10. All issues of access require local senates to consult collegially with the college and district, including instructor access to computers and networks, student access to technology mediated instruction and distance learning, and access of the disabled to online and all distance-learning courses.

11. Local senates should consult collegially with colleges to ensure that Library electronic access, including access to the Internet and websites, is no more restrictive than is access to the printed word.

12. Local senates need to consult collegially with colleges to secure the same level of confidentially for all aspects of electronic advising that are recognized as necessary for traditional counseling modalities.

13. Local senates should collaborate with the appropriate collective bargaining agents to secure policy or support contract language ensuring that evaluation of electronic instruction and of instructors engaged in such instruction conforms to classroom instruction evaluation and non-classroom teaching evaluation.

14. Where materials are developed by an instructor for technology mediated instruction and/or distance learning, local senates should collaborate with the appropriate collective bargaining agents to secure policy or support contract language ensuring that ownership of such instructor-developed materials remain with the instructor, in line with current practice regarding traditional course materials, handouts, and textbooks.

15. With the appropriate collective bargaining agents, local senates should develop policies or support contract language that ensures agreement and appropriate delineation of copyright, ownership rights, and future use rights between the originating faculty member and the college.

16. Local senates need to collaborate with the appropriate collective bargaining agents to support contract language that fully and adequately covers all issues of workload and compensation surrounding technology mediated instruction and distance learning.

ANNOTATED BIBLIOGRAPHY

REFERENCES CITED IN THIS PAPER

Academic Senate for California Community Colleges, "Academic Freedom and Tenure: A Faculty Perspective," Position Paper, Spring 1998. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Academic Senate for California Community Colleges, "Academic Freedom, Privacy, Copyright and Fair Use in a Technological World," Position Paper, Fall 1999. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Academic Senate for California Community Colleges, "Curriculum Committee Review of Distance Learning Courses and Sections," Position Paper, Fall 1995. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Academic Senate for California Community Colleges, "Distance Education in the California Community Colleges: An Academic Senate Review of the Social, Fiscal and Educational Issues," Position Paper, Fall 1993. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Academic Senate for California Community Colleges, "Guidelines for Good Practice: Technology Mediated Instruction," Position Paper, Fall 1997. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Academic Senate for California Community Colleges, "Guidelines for Good Practice: Effective Instructor-Student Contact in Distance Learning," Position Paper, Spring 1999. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Academic Senate for California Community Colleges, "Guidelines on Minimum Requirements for College Technology," Executive Committee Paper, Spring 2000. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us)

Academic Senate for California Community Colleges, "Information Competency in the California Community Colleges," Position Paper, Spring 1998. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Academic Senate for California Community Colleges, "Standards of Practice for California Community College Counseling Programs," Position Paper, Spring 1997. (Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Accrediting Commission for Community and Junior Colleges, "Principles of Good Practice for Electronically Delivered Academic Degree and Certificate Programs", Adopted June 1996. (Testimonial policy with principles of good practice and applications in areas of accreditation standards - included in Handbook of Accreditation and Policy Manual. Available February 2000 on the world wide web at http://www.accjc.org/handbok1.htm# principles of good practice for electronically delivered academic degree and certificate programs)

Accrediting Commission for Community and Junior Colleges, "Distance Education Handbook", 1999. (Paper that expands the 1996 principles above and provides advice to institutions on how to plan distance learning programs that incorporate accreditation principles and concerns. Available February 2000 on the world wide web at http://www.accjc.org/dislearn.htm)

American Association of University Professors, "1940 Statement of Principles on Academic Freedom and Tenure with 1970 Interpretive Comments," Washington, DC. (The definitive statement on academic freedom, adopted by many institutions of higher education including the Academic Senate. Available February 2000 on the world wide web at http://www.aaup.org/1940stat.htm)

American Association of University Professors, "Academic Freedom and Electronic Communications," Washington, D.C., June 1997. (A definitive report on the importance of academic freedom in the electronic age, produced by a subcommittee of the AAUP Committee A on Academic Freedom and Tenure. Available February 2000 on the world wide web at http://www.aaup.org/statelec.htm)

American Association of University Professors, "Report on Distance Learning," *Academe,* May/June 1998, Washington, D.C., November 1997. (A comprehensive examination of the political context, definitions and issues in distance learning. Available January 2000 on the world wide web at http://www.aaup.org/dlreport.htm)

American Association of University Professors, "Statement on Copyright," Washington, D.C., November 1999. (A draft statement produced by the AAUP special committee

on distance education and intellectual property issues. Includes summary material on copyright and specific references to distance education. Available February 2000 on the world wide web at http://www.aaup.org/spccopyr.htm)

American Association of University Professors, "Statement on Distance Education," Washington, D.C., November 1999. (A draft statement produced by the AAUP special committee on distance education and intellectual property issues. Includes definitions, principles and areas of concern. Available February 2000 on the world wide web at http://www.aaup.org/spcdistn.htm)

American Association of University Professors, "Suggestions and Guidelines: Sample Language for Institutional Policies and Contract Language - Distance Education," Washington, D.C., December 1999. (A follow-up document from the committee that produced the 1997 Report on Distance Learning. Contains sample language. Available January 2000 on the world wide web at http://www.aaup.org/deguide.htm)

American Association of University Professors, "Suggestions and Guidelines: Sample Language for Institutional Policies and Contract Language - Ownership of Intellectual Property," Washington, D.C., December 1999. (A follow-up document from the committee that produced the 1997 Report on Distance Learning. Contains sample language. Available January 2000 on the world wide web at http://www.aaup.org/ipguide.htm)

American Counseling Association, "Code of Ethics and Standards of Practice," April 1995, updated 1997. (Contains statements on expectations of confidentiality in the counseling process. Available February 2000 on the world wide web at http://www.counseling.org/resources/codeofethics.htm#eb)

Boettcher, Judith V., "How Many Students are 'Just Right' in a Web Course?," *Syllabus*, August 1998. (Research citing small class size in online programs that are deemed successful.)

Boettcher, Judith V., "Cyber Course Size: Pedagogy and Politics," *Syllabus*, April 1999. (Follow-up discussion of August 1998 article.)

California Federation of Teachers, "A Framework for Contract Negotiations Related to Instructional Technology Issues," Community College Council, Distance Education and Technology Issues Committee, 1999. (Document presented at breakout at Academic Senate Spring 1999 Plenary Session. Contains outline of important issues, with general policy statement and specific contract language in several of nine subsections.)

California State University and California Faculty Association, "Memorandum of Understanding - Intellectual Property Rights," January 1997. (CSU faculty collective bargaining agreement on intellectual property rights. Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Carnevale, Dan and Jeffrey Young, "Who Owns On-Line Courses? Colleges and Professors Start to Sort It Out," *Chronicle of Higher Education*, December 17, 1999. (Examples of how different specific institutions deal with intellectual property and online courses)

Chancellor's Office, California Community Colleges, "Distance Education: Access Guidelines for Students with Disabilities," August 1999. (A definitive study of the legal and technical issues of providing access to technology for students with disabilities. Developed by the High Tech Center Training Unit. Available January 2000 on the world wide web at http://www.htctu.fhda.edu/dlguidelines/final percent20dl percent20guidelines.htm)

Foothill-De Anza Community College District and Foothill-De Anza Faculty Association, "Agreement," Cupertino, July 1, 1998 - June 30, 2001. (Collective bargaining agreement contains article on intellectual property rights. Available January 2000 on the world wide web at http://www.academicsenate.cc.ca.us/)

Napa Valley College, "Proposal on Technology Mediated Instruction," Draft Position Paper, May 1999. (A draft proposal for agreement between the Napa Valley College Academic Senate and Board of Trustees containing language to encourage full utilization of instructional technology.)

National Education Association, "Distance Education: Challenges and Opportunities," *Technology Brief*, 1997 #7. (Brief discussion of new issues in distance education as technology advances. Available February 2000 on the world wide web at http://www.nea.org/cet/briefs/brief7.html)

National School Boards Association, *Legal Issues and Education Technology - A School Leader's Guide*, 1999. (A guide for K-12 school district administrators and attorneys that contains many ideas, principles and proposed policy

language that varies greatly from Academic Senate recommendations.)

Palomar College, "Network and Telecommunication User Policy", Board of Trustee minutes, April 28, 1998.

Rose, Lance, *Netlaw - Your Rights in the On-line World, 1995*, McGraw Hill. (A comprehensive book that examines control, contracts, property, dangers, privacy, crime, searches and adult material in the online world, from the perspective of the private sector business user.)

Senator Bowen, "SB1016 Employee Computer Records," California State Senate, Introduced, February 26, 1999

Tyner, Tom, "Guidelines for Negotiating Distance Education Issues," Community College Council, California Federation of Teachers. (A compilation of contract language on distance education issues negotiated by community and four-year colleges throughout the country - arranged by topic.)

University of California, "Electronic Mail Policy," March, 1998. (University of California systemwide electronic mail policy that shows strong language regarding academic freedom and academic senates. February 2000 on the world wide web at http://www.ucop.edu/ucophome/policies/email/email.html)

ADDITIONAL REFERENCES FROM "ACADEMIC FREEDOM, PRIVACY, COPYRIGHT AND FAIR USE IN A TECHNOLOGICAL WORLD"

E-mail Privacy, Security, Free Speech and Computer Use Policies

Alger, Jonathan, "Prying Eyes in Cyberspace," Academe, September-October, 1999, American Association of University Professors, Washington, DC. (An article proposing the same dual recommendations of principle and caution as the Academic Senate.)

Brett, Victoria, "Colleges Grapple with Offensive E-Speech," Community College Week, April 1998. (Article on a case involving student posting of a threatening e-mail.)

California State Senate, "Employee Computer Records" (SB 1016), introduced February 26, 1999 by Senator Bowen. (A bill that would have required employers wishing to monitor employee computers to distribute a privacy policy in advance. Vetoed by the Governor October 10, 1999. Available October 1999 on the world wide web at http://www.leginfo.ca.gov/pub/bill/sen/.)

California State University, "Internet Use Policy," January 1997. (California State University systemwide Internet use policy that shows language violating AAUP recommendations on academic freedom. Available February 1999 on the world wide web at http://www.calstate.edu/tier3/hr-adm/Use_Policy.HTML.)

Grossman, Wendy, "Private Parts," *Scientific American*, February 1999. (An article describing the implications of the new European Union directive requiring strict privacy standards in digital communications.)

Long Beach Community College District, "Computer/Network Use Regulations," October 1997. (Interim regulations available April, 1998 on the world wide web at http://fm.lbcc.cc.ca.us/aup3.html.)

Long Beach Community College District, " Policy on Computer and Communications Technology Use," November, 1997. (Community College District computer use policy showing protection for academic freedom used as an example in the paper.)

Los Angeles Harbor College, "Rules for Internet Use," December 1996. (Community College use rules and signature form for student users used as an example in the paper.)

McCollum, Kelly, "With Computer Hacking on the Rise, Colleges Seek Ways to Handle Attacks," *The Chronicle of Higher Education*, May, 1998. (Description of some recent attacks on college computer networks and possible remedies.)

Mendels, Pamela, "Virginia workers sued state over law," *New York Times*, printed in the San Jose Mercury News, February 12, 1999. (A report on a law case challenging computer access restrictions on state employees in Virginia.)

National Education Association, "E-mail and Privacy," *Technology Brief*, 1997 #6. (Discussion of some workplace issues regarding e-mail and employer/employee expectations. Available February 1999 on the world wide web at http://www.nea.org/cet/briefs/brief6.html.)

National Education Association, "Security and Privacy," *Technology Brief*, 1997 #1. (Recommendations for school policies on security. Available February 1999 on the world wide web at http://www.nea.org/cet/briefs/brief1.html.)

Palomar Community College District, "Network and Telecommunications User Policy," April 1998. (Community College District computer use policy showing protection for academic freedom used as an example in the paper.)

Privacy Rights Clearinghouse, "Privacy in Cyberspace: Rules of the Road for the Information Superhighway," San Diego, December 1996. (Good discussion of different levels of activity and expectations of privacy. Available February 1999 on the world wide web at http://www.privacyrights.org/fs/fs18-cyb.htm.)

Sacks, Marleen, "Legal Issues Surrounding Employee and Student Use of Computers and Internet," A workshop for Community College League of California, November, 1997. (Analysis of privacy, e-mail, liability and how to control use from the district's point of view.)

Santa Rosa Junior College, "Privacy and Access Policy," May, 1999. (A comprehensive privacy and access policy that includes references to computer and e-mail files. Available September 1999 on the world wide web at http://www.santarosa.edu/polman/4person/4.21.html and http://www.santarosa.edu/polman/4person/4.21.p.html)

Solano Community College District, "Computer and Communications Technology Use Policy," March, 1998. (Community College District computer use policy showing protection for academic freedom used as an example in the paper.)

Sipior, Janice and Burke, Ward, "The Ethical and Legal Quandary of E-mail Privacy," *Communications of the ACM*, December 1995. (Extensive analysis of employer and employee privacy and legal protections. Large reference list. Available February 1999 on the world wide web at http://www.acm.org/pubs/citations/journals/cacm/1995-38-12/p48-sipior/.)

University of North Carolina, " Privacy Issues on the Internet, December 1995. (Good analysis of different places where e-mail can be intercepted. Available February 1999 on the world wide web at http://ils.unc.edu/ ~ caim/privacy.html.)

Wallace, Jonathan, "E-mail Privacy: What are your Rights?," 1996. (Description of the Pillsbury e-mail lawsuit. Available February 1999 on the world wide web at http://www.uniforum.org/news/html/publications/ufm/aug96/legal.html.)

West Valley-Mission Community College District, "Computer and Technology Use", May 1995. (Community College District computer use policy showing protection for academic freedom used as an example in the paper. Available March 1999 on the world wide web at http://www.westvalley.edu/wvmccd/use.html.)

Young, Jeffery, "University of Nebraska Suspends Controversial English Professor," *The Chronicle of Higher Education*, February 1998. (Description of incident on posting controversial material.)

Copyright, Intellectual Property and Fair Use

Blumenstyk, Goldie, "Academic Groups Say Copyright Legislation in Congress would Impede Scholarship," *The Chronicle of Higher Education*, May 1998. (An article describing academic concerns with pending copyright legislation.)

Blumenstyk, Goldie, "New Copyright Law Closes Loophole that let MIT Student Distribute Software Free," *The Chronicle of Higher Education*, December 1997. (Description of new law that removes nonprofit loophole from copyright.)

Boettcher, Judith, "Copyright and Intellectual Property," *Syllabus*, March 1999. (Copyright assumes a new dimension in distance education.)

Brinson, Dianne and Radcliffe, Mark, "The Multimedia Law Handbook," December 1995. (A practical guide for developers and publishers. Extensive discussion of copyright with case examples. Available February 1999 on the world wide web at http://www.eff.org/pub/CAF/law/multimedia-handbook.)

California Department of Education, "Suggested Copyright Policy and Guidelines for California's School Districts, 1991. (Extensive descriptions of fair use in different educational situations.)

California State University, Chico, "Intellectual Property Policy," May 1997. (Preamble and guidelines for allocation of ownership rights to intellectual property.)

Chabot-Las Positas Community College District, "Sample Materials on Intellectual Property Rights," April 1995. (A collection of intellectual property rights policies and agreements from several California community colleges.)

Diotalevi, Robert, "Copyright Law: A Guide for the New Millennium," *Syllabus,* April 1999. (New legal issues created by emerging technology.)

Diotalevi, Robert, "Copyrighting Cyberspace: Unweaving a Tangled Web," Syllabus, January 1999. (New legal interpretations of copyright law emerging from Congress.)

Diotalevi, Robert, "Copyright in Cyberspace: Practices and Procedures in Higher Education," *Syllabus*, May 1999. (University guidelines on copyright in cyberspace.)

Enghagen, Linda, "Fair Use Guidelines for Educators," National Education Association, 1997. (A discussion of fair use guidelines for educators in specific areas: books, periodicals, music, broadcasts, multimedia, distance learning, digital images, software.)

Enghagen, Linda, "Intellectual Property Concerns for Faculty," National Technological University, 1993. (Includes discussion of distance education and general technology transfer.)

Freibrun, Eric, "Intellectual Property Rights in Software: What They Are and How the Law Protects Them," 1993. (Good description of the differences among patents, copyrights and trade secrets.)

Harper, Georgia, "Fair Use of Copyrighted Materials," January 1998. (Extensive article on educational fair use with many other references.) Available February 1999 on the world wide web at http://www.utsystem.edu/ogc/intellectualproperty/copypol2.html.)

House of Representatives, US Congress, "Fair Use Guidelines for Educational Multimedia," July 1996. (A non-legislative report of the subcommittee on courts and intellectual property committee on an attempt to agree fair use provisions. Available February 1999 on the world wide web at http://www.libraries.psu.edu/mtss/fairuse/guidelinedoc.html.)

Lide, Casey, "What Colleges and Universities Need to Know about the Digital Millennium Copyright Act," *Cause/Effect,* 1999. (Analysis of the DMCA. Available September 1999 on the world wide web at http://www.educause.edu/ir/library/html/cem9913.html.)

Mariscal, Richard, " Letter to the Editor," *Syllabus,* November/December 1998. (Letter citing copyright problems as the biggest barrier to web course development.)

McLuhan, Marshall, Quentin Fiore, Jerome Angel, "The Medium is the Massage: An Inventory of Effects," 1967.

National Education Association, "Distance Education: Challenges and Opportunities," *Technology Brief*, 1997 #7. (Brief discussion of new issues in distance education as technology advances. Available February 1999 on the world wide web at http://www.nea.org/cet/briefs/brief7.html.)

National Education Association, "Intellectual Property Rights," *Technology Brief*, 1997 #8. (Good contrast of intellectual property rights in the academic world compared to private industry. Available February 1999 on the world wide web at http://www.nea.org/cet/briefs/brief8.html.)

National Education Association, "Intellectual Property Rights and Protections," *Technology Brief*, 1997 #2. (Discussion of fair use in the college technology setting. Available February 1999 on the world wide web at http://www.nea.org/cet/BRIEFS/brief2.html.)

University of California, "Policy on Copyright Ownership," 1992. (Detailed contract style policy regarding university and faculty ownership rights - but no mention of technology.)

U.S. Copyright Office (Website containing full texts of copyright laws, legislative updates, international laws and some current analyses and interpretations including the Digital Millennium Copyright Act. Available September 1999 on the world wide web at http://lcweb.loc.gov/copyright.)

Fair Use: the Philosophical Background

Weckert, John and Adeney, Douglas, *Computer and Information Ethics*, Westport, Conn., London: Greenwood Press, 1997.

References to Other Resources

Bailey, Charles, "Network Based Publishing of Scholarly Works: A Select Bibliography," *The Public Access Computer Systems Review* #6, 1995. (A comprehensive list of references to articles on intellectual property rights and electronic publishing. Available March 1999 on the world wide web at http://info.lib.uh.edu/pr/v6/n1/lcopyr.htm.)

California State University, State University of New York, City University of New York, "Fair Use of Copyrighted

Works," 1995. (A comprehensive examination of fair use issues with case examples and suggestions for the future.)

Consortium of College and University Media Centers, "Proceedings of the Fall 1998 Conference," November 1998. (Session VII contains an update on fair use and copyright with a large selection of relevant website resources.)

Enghagen, Linda, (editor), "Technology and Higher Education," National Education Association, 1997. (A selection of papers on technology in education issues, including both teaching/learning and legal/contract.)

Tonella, Karla, "Copyright and Multimedia Law for Webbuilders and Multimedia Authors," University of Iowa, January 1999. (Links to world wide web sites covering multimedia law. Available February 1999 on the world wide web at http://www.lib.uiowa.edu/proj/webbuilder/copyright.html.)

Additional References From "Guidelines For Good Practice: Effective Instructor-Student Contact In Distance Learning"

Academic Senate for the California Community Colleges, "Curriculum Committee Review of Distance Learning Courses and Sections," Position Paper, adopted Fall 1995.

Academic Senate for the California Community Colleges, "Distance Learning in California Community Colleges: An Academic Senate Review of the Social, Fiscal and Educational Issues," Position Paper, adopted Fall 1993.

Academic Senate for the California Community Colleges, "Good Practices for Course Approval Processes," Position Paper, adopted Spring 1998.

Academic Senate for the California Community Colleges, "Guidelines for Good Practice: Technology Mediated Instruction," Position Paper, adopted Spring 1997.

Academic Senate for the California Community Colleges, "Stylistic Considerations in Writing Course Outlines of Record," Position Paper, adopted Spring 1998.

Academic Senate for the California Community Colleges, "The Future of the Community College: A Faculty Perspective," Position Paper, adopted Fall 1998.

Accrediting Commission for Community and Junior Colleges, "Principles of Good Practice for Electronically Delivered Academic Degree and Certificate Programs," Adopted June 1996. (Available March 1999 on the world wide web at http://www.accjc.org/handbok1.htm# principles of good practice for electronically delivered academic degree and certificate programs)

Boettcher, Judith V., "How Many Students are 'Just Right' in a Web Course?," *Syllabus*, August 1998.

California Virtual University, "Academic Plan—Principles of Good Practice". (Available March 1999 on the world wide web at http://www.california.edu/Faculty/AcademicPlan/academic_plan.html)

Chickering, Arthur W. and Stephen C.Ehrmann, "Implementing the Seven Principles: Technology as Lever," American Association of Higher Education *Bulletin* 49, 1996.

Additional References From "Academic Freedom And Tenure: A Faculty Perspective"

"2005, Report of the Task Force for the Chancellor's Consultation Council," California Community Colleges, September 1997. (A vision statement for the California Community College system that includes much interesting trend data on faculty and funding levels.)

"Funding Patterns in California Community Colleges: A Technical Paper for the 2005 Task Force of the Chancellor's Consultation Council," November 1997 Chancellor's Office CCC, Policy Analysis and Management Information Services Division.

American Association of University Professors, "1940 Statement of Principles on Academic Freedom and Tenure with 1970 Interpretative Comments" (The definitive statement on academic freedom and tenure, adopted by many institutions. Available on the world wide web at http://www.aaup.org/1940stat.htm)

American Association of University Professors, "Defending Tenure: A Guide for Friends of Academic Freedom" (A compilation of statistics, arguments, articles, bibliography and case studies. Available from AAUP, 1012 Fourteenth St. NW Suite #500, Washington, DC 20005)

American Association of University Professors, "Policy Documents and Reports," Washington DC, 1995

American Association of University Professors, "On Tenure," *AAUP Bulletin* Winter 1972.

American Association of University Professors, "The American Concept of Academic Freedom," *AAUP Bulletin* Spring 1960.

American Association of University Professors, "On Freedom of Expression and Campus Speech Codes," adopted by AAUP Council, November 1994.

American Association of University Professors, "Recommended Institutional Regulations on Academic Freedom and Tenure," revised in 1982 and with footnote added in 1990. (Sample regulations designed to enable a given college or university "to protect academic freedom and tenure and to ensure academic due process". Available on the world wide web at http://www.aaup.org)

American Association of University Professors, "Academic Freedom and Electronic Communications," report prepared by subcommittee of Committee on Academic Freedom and Tenure. (This paper sets discussion and recommendations for the adaptation of principles of academic freedom in the context of new media.)

Benjamin, Ernst, "Some Implications of Tenure for the Profession and Society," AAUP Webpage, January 98. (An article that describes the effects of tenure on recruitment and the implications for professional integrity. Available on the world wide web at www.aaup.org/ebten2.htm)

Benjamin, Ernst, "Improving Teaching: Tenure is not the Problem, It's the Solution," AAUP Website, January 1998. (An article that cites statistics on faculty productivity and declining public funding to explain the problems in teaching. Available on the world wide web at http://www.aaup.org/fnebwart.htm)

Benjamin, Ernst & Wagner, Donald, "Academic Freedom-An Everyday Concern," *New Directions for Higher Education,* Winter 1994.

Chait, Richard P., "The Future of Academic Tenure," *AGB Priorities,* Number 3, Spring 1995. (A criticism of tenure including survey data that its abolition would improve higher education.)

Chait, Richard P., "A Scholar Provides an Intellectual Framework for Plans to End or Revamp Tenure Systems," *Chronicle of Higher Education,* February 14, 1997. (An article describing alternatives to tenure. Chait holds a tenured position at Harvard School of Education.)

Chronicle of Higher Education, September 13, 1996 pp12-15A (an article including survey data arguing that tenure is an outmoded concept.)

Academic Senate for the California Community Colleges, "Faculty Ethics: Expanding the AAUP Ethics Statement," Position Paper April 1994. (Contains a section on maintaining academic freedom)

Academic Senate for the California Community Colleges, "Part-Time Faculty in the California Community Colleges," Position Paper, November 1992. (Contains a section on academic quality and equal treatment)

Finkin, Matthew, "The Assault on Faculty Independence," *Academe*, AAUP, October 1997. (An article presenting six myths used by opponents of tenure and arguments for their rebuttal. Available on the world wide web at http://www.aaup.org/fnmfart.htm. Finkin is Professor of Law at University of Illinois, Champaign-Urbana.)

Finkin, Matthew, *The Case for Tenure,* Cornell, 1996. Grosz, Karen S., *Political Correctness and First Amendment Right to Freedom of Speech*, unpublished monograph, Presented at the Academic Senate for California Community Colleges, Plenary Session, 1987. (Grosz monograph addresses a particular case at Santa Monica College involving charges of "political correctness" which arose in a dispute over multicultural curriculum materials. Grosz paper provides an excellent overview of legal status of academic freedom and relevant court cases.)

Hutcheson, Philo, "Faculty Tenure: Myth and Reality 1974 to 1992," *The NEA Higher Education Journal.* (Considerable long-term data on trends in tenure. Available on the world wide web at http://www.nea.org/he/heupdate. Hutcheson is assistant professor of educational policy studies at Georgia State University.)

Kasper, Hirschel, "On Understanding the Rise in Non-Tenure-Track Appointments," Princeton University Working Paper #211, August 1986. (An article detailing the effect of oversupply of candidates for academic jobs.)

Kolodny, Annette, *Chronicle of Higher Education,* March 22, 1996. (An article arguing that dismantling tenure diminishes the academic opportunities available for those entering academe.)

McGrath, Peter C., "Eliminating Tenure without Destroying Academic Freedom," *Chronicle of Higher Education,* February 28, 1997. (An article proposing post-tenure review. McGrath is President of the National Association of State Universities and Land Grant Colleges.)

National Education Association Policy Statement,"Academic and Intellectual Freedom and Tenure in Higher Education." (Available on the world wide web at http://www.nea.org/he/truth.html)

National Education Association Policy Statement, "The Truth about Tenure in Higher Education." (Available on the world wide web at http://www.nea.org/he/policy.html)

National Education Association Policy Statement, "A Resource Page on Tenure". (Available on the world wide web at http://www. nea.org/he/heupdate)

New York Times, March 11, 1998, "High Schools Fear Telling Colleges All About Johnny"

Perley, James E., "Tenure Remains Vital to Academic Freedom" *Chronicle of Higher Education,* April 4, 1997. (A rebuttal of many of the current arguments against tenure. Available on the world wide web at http://www.aaup.org/jeped44.htm. Perley is President of AAUP.)

Poch, Robert K. "Academic Freedom in American Higher Education: Rights, Responsibilities, and Limitations," ED366262, January 94, *ERIC Digest.*

Roworth, Wendy Wassyng "Why is Tenure being Targeted for Attack?," AAUP Website. (An article discussing the current climate of applying business metaphors to education and using them to attack tenure. Available on the world wide web at http://www.aaup.org/fnwrwart.htm. Rowarth is professor of art history at University Island and chair of the AAUP task force on Tenure.)

"Tenure," *National Education Association Update,* September 1995. (A national overview of patterns of tenure. Available on the world wide web at http://www.nea.org/he/heupdate)

Van Alstyne, William, "Tenure: A Summary, Explanation, and 'Defense'," *AAUP Bulletin,* Summer, 1971. (This classic statement by a former General Counsel and Chair of the Committee on Academic Freedom and Tenure of the AAUP is frequently cited as an authoritative statement on the relationship of tenure to academic freedom. It contains also a special postscript on the academic freedom on non-tenured faculty.)

Wiener, Jon, "Tenure Trouble," *Dissent,* Winter 1998. (An article that makes many effective arguments for tenure. Wiener is a contributing editor of *The Nation* and teaches at U.C. Irvine.)

1999 - 00 Educational Policies Committee

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Academic Freedom, Privacy, Copyright and Fair Use in a Technological World

Adopted Fall 1999

ABSTRACT

This position paper of the Academic Senate for California Community Colleges examines the increasing use of technology in education and the fundamental, academic implications of this increase for the traditional understanding of academic freedom, privacy, copyright and fair use. It is third in a series of four related papers that have already discussed academic freedom in a more general setting and instructor-student contact in distance education. The fourth paper will discuss more specific details of technology implementation in both the academic and the collective bargaining setting.

The widespread use of computer Email systems for both faculty and student communication, and of websites and the Internet for research, teaching and dissemination, has raised new concerns regarding the protection of academic freedom. This paper examines a variety of educational computer use policies and makes recommendations for good practice in this area. In addition, the paper discusses evolving interpretations of copyright and fair use in light of the availability of digital material, and makes recommendations to both authors and users of this material. Finally it provides a philosophical setting for discussions of intellectual property issues. Specific recommendations for involvement and action of local academic senates are included, as well as suggestions to faculty in general. The paper also provides an annotated bibliography of currently available reference material.

INTRODUCTION

For many years, the Academic Senate for California Community Colleges has played a leading role in the successful development and introduction of technology into the curriculum. The increasing use of technology in teaching has resulted in significant changes in the ways that faculty and students work. Email has become a routine means of scholarly communication while websites and the Internet have become a major vehicle for research, dissemination and delivery of course material. Students have participated in these changes through technology mediated instruction, use of multimedia, Email and other Internet activities.

The Academic Senate has helped to shape this change with a series of position papers on the curriculum and on pedagogical issues involved in technology and distance learning:

November 1993, *"Distance Education in the California Community Colleges: An Academic Senate Review of the Social, Fiscal and Educational Issues,"*

November 1995, *"Curriculum Committee Review of Distance Learning Courses and Sections,"*

November 1997, *"Guidelines for Good Practice: Technology Mediated Instruction,"*

April 1999, *"Guidelines for Good Practice: Effective Instructor-Student Contact in Distance Learning."*

However, in parallel with this rise in the use of technology has come an increasing concern regarding the related issues of academic freedom, copyright and fair use in an electronic environment. The Academic Senate's Spring 1998 position paper, "Academic Freedom and Tenure: A Faculty Perspective," reiterated the Academic Senate's traditional support for academic freedom in research and teaching, but did not address changes caused by the development of electronic communication. This paper will examine some of these recent academic and philosophical issues, as directed by the following resolution from the Spring 1998 Plenary Session:

S98 11.01 Internet-based Instruction
Whereas faculty are increasingly involved in development and use of electronic material, and

Whereas expansion of Internet-based instruction and communication via e-mail has created new venues for the use of such electronic material, and

Whereas protection of faculty rights to their own materials and the fair use of materials developed by others has both academic and workload implications,

Therefore be it resolved that the Academic Senate for Community Colleges, in conjunction with faculty union leadership, develop and disseminate a position paper on intellectual property rights, privacy rights, and copyright as they apply to electronic media, especially e-mail, multimedia, and use of the Internet.

Prompted by an additional resolution from the Spring 1999 Plenary session, a later paper in the series will examine the "nuts and bolts" issues of technology and teaching, from both a curriculum and a collective bargaining standpoint.

S99 11.01 Effective Instructor-Student Contact in Distance Learning
Whereas there are issues related to distance learning that are properly the purview of collective bargaining and some areas that are relevant to pedagogy and academic and professional issues,

Therefore be it resolved that the Academic Senate for Community Colleges direct the Executive Committee to develop a paper, in collaboration with our collective bargaining colleagues, covering such areas as faculty load, class size, compensation and related issues, with regard to distance learning and teaching.

In the last few years, there has been considerable interest and public discussion of many of these issues: the United States Congress has worked on copyright and Internet issues; Email privacy has been a contentious legal issue in private industry; copyright and fair use have been a growing concern as faculty implement distance education and multimedia enhancements of course material. As the National Education Association Technology Brief "Distance Education: Challenges and Opportunities" states:

As the financial stakes are raised, intellectual property rights and faculty rights increasingly become intertwined. Institutions that previously

asserted no ownership claim to a scholarly book are rethinking their policies on intellectual property rights.

However, most of this discussion, particularly in the privacy area, has been of a legal nature and has taken place in the private sector rather than within higher education.

The Fall 1998 Plenary Session of the Academic Senate featured a breakout session to collect faculty concerns in preparation for this position paper. Those present at the breakout were most immediately concerned with academic freedom and its most visible manifestation in the shape of Email privacy. The breakout discussed three interconnected aspects of the larger issue:

- Academic freedom to teach, research, communicate and publish in a technological environment.
- User considerations in copyright, fair use and availability of material from the Internet.
- Author considerations of property rights, compensation and use in distance education and technology mediated instruction.

This paper will present a limited examination of these interconnected issues. It makes no claim to provide definitive legal answers in a situation that changes almost daily. For example, at the time of writing, Pamela Mendels in the New York Times reports that a federal appeals court in Virginia has just upheld a law restricting computer access for state employees. The law had been challenged by the American Civil Liberties Union on behalf of six professors at state universities and colleges. On another front, Wendy Grossman in Scientific American reports that American companies may soon experience difficulty because a European Union's legally binding privacy directive prohibits exchange of data with countries that do not have equivalent levels of privacy protection.

Despite the complex and rapidly changing situation, this paper provides a brief examination of copyright issues and practice. Several of the documents listed in the bibliography perform a more comprehensive analysis. Rather, this paper will make a principled examination of the current situation, from a faculty point of view, and make recommendations for involvement of local academic senates.

ACADEMIC FREEDOM AND PRIVACY

The Academic Senate's interest in privacy, copyright and fair use issues differs in two major respects from much of the debate that has been taking place in private industry, and that has resulted in several lawsuits and congressional proposals for legislation. In the first place, the Academic Senate's discussion takes place in the different and more general context of academic freedom in higher education institutions. There is long-standing protection for the right of free inquiry, the right of free expression and the concept of no prior restraint. Furthermore, student right-to-privacy requirements impose a significantly higher standard on the confidentiality of communications in an educational setting (see discussion of FERPA (Family Educational Rights and Privacy Act) and Counseling Ethics in the following Email privacy section).

The traditional background for academic freedom is based on the American Association of University Professors (AAUP) "1940 Statement of Principles on Academic Freedom and Tenure." A much more recent AAUP report, "Academic Freedom and Electronic Communications," provides an excellent framework for the current discussion.

Particularly relevant is the report's statement that:

> One overriding principle should govern such inquiry: Freedom of expression and academic freedom should be limited to no greater degree in electronic format than in printed or oral communication, unless and to the degree that unique conditions of the new media warrant different treatment.

Computer/Electronic Use Policies

The same AAUP report comments that this principle of freedom must include several parts:

- Freedom of research, including access to information in electronic format.

- Freedom of publication, including the ability to post controversial material.
- Freedom of teaching, including the extended classroom produced by distance education.

Access to computers and electronic networks is now an important component of research, publication, and teaching. This access and communication is largely controlled by an institution's computer/electronic use policy. Therefore an obvious place to start an examination of this principle is the electronic use policies at various higher educational institutions in California. In developing or reviewing policy language, local academic senates may find the following examples useful in developing a sufficiently strong statement of their own. Local computer use policies can affect academic freedom in many of the areas that they address, including Email, Internet access, websites and permissible uses.

The following excerpts from the University of California "Electronic Mail Policy" make a strong statement of principle by explicitly recognizing academic freedom and the role of the academic senate in implementing effective procedures.

> The University recognizes that principles of academic freedom and shared governance, freedom of speech, and privacy of information hold important implications for electronic mail and electronic mail services. The University affords electronic mail privacy protections comparable to that which it traditionally affords paper mail and telephone communications. This Policy reflects these firmly-held principles within the context of legal and other obligations ...
>
> ...Where the inspection, monitoring, or disclosure of e-mail held by faculty is involved, the advice of the Campus Academic Senate shall be sought in writing in advance.

In contrast, one California community college district's "Computer and Technology Use" policy contains a statement that is perhaps realistic but lacks any support for academic freedom. It simply gives a warning about technical constraints but makes no statement of basic principles. It is important that both principle and caution be present.

> The systems have the ability to read your mail: your own account, and the system administrator account. While reasonable attempts have been made to ensure the privacy of your accounts and your electronic mail, this is no guarantee that your accounts or your electronic mail is private. The systems are not secure, nor are they connected to a secure network.

This final example from the California State University Office of the Chancellor "Internet Use Policy" uses precisely the broad language that the AAUP report warns against when it comments that colleges and universities often try to restrict electronic access to material that would rarely be restricted in print format. AAUP suggests that only material that would be unlawful in print should be banned or removed from computer systems.

> Chancellor's Office personnel are prohibited from utilizing California State University information resources for any unlawful, unethical, or unprofessional purpose or activity. Examples of prohibited uses include but are not limited to:
>
> ...intentional access or dissemination of materials which can be considered pornographic.

Such broad language fails to protect academic freedom, and suggests anonymous censorship that would not be acceptable for print material in a college library.

Another disturbing feature of many electronic use policies is the suggestion that the right to computer access has a low priority. Computer access is often portrayed as a privilege that may be suspended or terminated for perceived violations of use policy; note this example from a California community college "Rules for Internet Use":

> An individual's computer use privileges may be suspended immediately upon the discovery of a possible violation of these rules. Such suspected violations will be confidentially reported to the appropriate system administrator.

The AAUP report comments that restrictions on library access and publication are highly unusual and that restrictions on computer access should have a comparable process and meet comparable standards to any library access policy. Theoretical perceptions

of possible abuse should not drive the creation of use policies.

In summary, since research, publication and teaching now make intensive use of electronic media, the well established reasons for academic freedom must be applied in these new areas. Academic freedom provides the strong moral argument for educational institutions to extend equivalent protections from the print setting into the electronic environment even if clear legal requirements do not yet exist. The latest information from the Digital Millennium Copyright Act is reviewed in the second part of this paper. It is the position of the Academic Senate for California Community Colleges that local academic senates should use the principle of academic freedom to guide the development and review of their local computer use policies.

Email Privacy

Another area which local academic senates should address is the security of Email correspondence, both as it is used between faculty, and, increasingly with the growth of distance education, as it is used for instructor-student communications. Guidelines for effective instructor-student contact encourage a rich variety of technological communication. This poses a practical dilemma. Such instructor-student communication might inadvertently involve advising or other confidential information. Avoidance is the safest solution but may inhibit the very richness of communication that we strive to provide. Under the 1974 Federal Family Educational Rights and Privacy Act (FERPA), colleges are required to protect the confidentiality of basic student records and data. Even more important is to protect the confidentiality of faculty-student communication and counselor-student advising as described in the ethical standards for counselors laid out in the American Counseling Association Code of Ethics and Standards of Practice (1997), which states:

> Respect for Privacy. Counselors respect their clients' right to privacy and avoid illegal and unwarranted disclosures of confidential information.

Thus colleges that use technology and distance education must be able to provide adequate student services in a secure, confidential environment. Since any deliberate Email surveillance is almost guaranteed to involve student interactions, a college's difficulty in protecting faculty-student Email could possibly jeopardize the whole concept of technology mediated distance learning as practiced by a rapidly increasing number of colleges.

However, most use policies make the comment that electronic communication and especially the Internet tend to be public mediums and warn users that it is virtually impossible to guarantee privacy. Faculty should clearly exercise considerable caution. The Privacy Rights Clearinghouse document "Privacy in Cyberspace: Rules of the Road for the Information Superhighway" states:

> There are virtually no online activities or services that guarantee an absolute right of privacy.

But the *a priori* assumption of confidentiality as quoted earlier from the University of California policy is clearly a principle worth stating. The argument laid out above for protection of faculty-student Email could, in practice, extend to the protection of all Email, including faculty-faculty Email. But there is an additional argument for protection of faculty-faculty Email in the academic freedom setting. It is a long accepted educational position that students in large part gain their own academic freedom by observing the example set by the faculty. This tradition of teaching by example would be rendered ineffective here if the faculty themselves could not demonstrate adequate protection.

The lack of adequate protection can also lead to a significant negative effect on campus climate and employee morale. This effect has already been observed on at least two different occasions when the administration at a California community college searched the Email records or computer files of faculty. In one case the college later adopted a comprehensive privacy and access policy.

In the private sector, court cases have generally held that internal Email systems belong to the employer and that message interception is therefore acceptable. In "E-mail Privacy: What Are Your Rights?" Jonathan Wallace describes a classic case involving a Pillsbury employee who was fired for sending Email critical of the company.

In contrast, in higher education, there is little clear legal precedent on Email privacy. It should be force-

fully argued that, in light of academic freedom, different standards and ethics must prevail in higher education. While Title I of the Electronics Communications Privacy Act prohibits intentional, unauthorized interception of electronic communication in transit, it then proceeds to authorize interception either by the provider of the service, or if prior consent has been given. Sipior and Ward, in "The Ethical and Legal Quandary of e-mail Privacy," provided a fairly detailed analysis of the legal issues surrounding Email from both the employee and the employer perspective, but they do not specifically address the higher education sector.

Many electronic use policies effectively require advance consent for interception as a condition of access, and make no acknowledgment of principles of privacy. For example, one California community college district's "Technology Use Policy" contains this disturbingly broad language:

> The District shall have the right to access all communication systems to ensure integrity and security.

In contrast, another California community college district's "Procedures and Guidelines for Telecommunications Access and Use" starts with a strong statement of principle on Email:

> The District considers Email transmitted using District resources to be private correspondence between the sender and recipient and will not monitor it for content.

Local academic senates should urge inclusion of a similar statement of principle in their local computer use policies, even though absolute privacy cannot be guaranteed.

In 1999, California State Senate Bill 1016 (Bowen), would have prohibited an employer from secretly monitoring the electronic mail or other personal computer records generated by an employee. Although the bill was passed by both the Senate and the Assembly it was vetoed by Governor Davis in October 1999.

In an educational environment, it is clearly valuable for the institution to state the principled belief that there is a strong initial presumption of privacy, (notwithstanding technical difficulties). To violate that initial expectation requires exceptional circumstances, and there must be a clearly defined process that involves the local academic senate (as in the University of California "Electronic Mail Policy," mentioned above). The National Education Association brief "E-mail and Privacy" suggests that, absent strong federal or state statutes protecting Email communications in the educational setting, the best safeguard is to negotiate strong collective bargaining contract language in this area. The most recent position in the AAUP September 1999 issue of Academe reflects the dual recommendations of this paper: make a statement of principle, but also urge caution. Author Jonathan Alger states "In an era in which colleges are encouraging faculty members to teach, conduct research, and communicate with students on-line, they can best protect academic freedom and the integrity of their institutional mission by respecting the privacy of these communications."

While it is important to avoid greater restrictions on electronic communication than those extended to spoken or written communication, it must also be recognized that there are traditional individual responsibilities of faculty and students that accompany academic freedom in any medium. The 1940 Statement of Principles on Academic Freedom and Tenure observes that faculty must "exercise appropriate restraint", "respect the opinions of others", and "indicate when they are not speaking for the institution". These responsibilities are perhaps especially important owing to the immediacy of much electronic communication and the lack of opportunity for contemplation.

Recommendations on Academic Freedom and Privacy

Since there is so much concern in the area of academic freedom and privacy and so many examples of strong and weak policy language it is recommended that local academic senates play a major role when developing policies and procedures:

- To ensure that local electronic/computer use policies include a statement of the fundamental principle of academic freedom in the electronic medium, including Email, websites and online courses.

- To ensure that local electronic/computer use policies include a statement of the fundamental principle of the confidentiality of Email communications, while acknowledging the inherent lack of absolute security.
- To ensure that local electronic/computer use policies guarantee appropriate access to computers and networks for faculty and students.
- To actively involve each local academic senate in creating and implementing the process that deals with possible exceptions or violations of academic freedom and privacy.
- To consult with collective bargaining colleagues to ensure contract language creating and implementing the process that deals with confidentiality and with possible exceptions and technical safeguards or limitations.

COPYRIGHT AND FAIR USE ISSUES

Traditionally, intellectual property rights have been preserved and protected by three mechanisms: copyrights, trademarks and patents. After distinguishing between these three forms of protection, this section will focus primarily on copyrights. Fair use is discussed in the section entitled "Standpoint of the User."

Copyrights protect the development of ideas that are original or are expressed in original ways. Books and newspapers are copyrighted and copyrights can apply to all written materials, including poems, short texts, pamphlets and syllabi, in short anything that might be published. With the advent of television, copyrights were extended to programs: news broadcasts commonly end with an indication of copyright ownership.

Trademarks apply to brand names that associate a company with a particular product. Perhaps the most famous trademark change in the last few decades is that of a major oil company concerned about the number of non-company products being sold around the world sporting the company's name and logo. Computers were used to search for a name that was not used anywhere in the world by anyone, no matter what the product. The result was EXXON. This exercise showed the protective nature of trademarks: they aim to prevent imitations being sold as the known product.

Patents apply to inventions from machines to medicines, and by extension to procedures and manipulations of nature (such as systematically mutating plant DNA for developing vegetables resistant to insects). Patents, like copyrights and trademarks, allow the creators to profit from their work.

Although patent issues are crucial to individuals involved in research institutions, including major universities, community college teachers are most likely to find themselves concerned with copyrights. Trademarks will be a concern when faculty develop multimedia materials that may contain company logos, names and products.

Historically, there has been an understanding among teachers: their syllabus and the course materials that they generate are their own. It is also understood that the course outline of record, on file at the college, belongs to the college, though departmental staff is usually responsible for generating and updating it. In the days of dittos and mimeographed handouts, this understanding, vague as it might be, was perhaps sufficient. With the advent and exponential growth of current technologies from Email to online courses, multimedia course materials, and computing work as part of interactive education, the old understanding is seriously deficient. Teachers (and students) are not adequately protected in two ways: they may not be able to preserve their own original work and they risk violating the protections of others when they use others' works.

Copyright Law

Copyright law applies to any work or production immediately upon its expression in any tangible medium. Copyright law protects original work without the need for any positive action by the author. It does not protect ideas or processes, though it does cover expression of those ideas and accounts of processes. Copyrights law protects the creator who brings ideas to fruition as books, poems, drawings, plays, cartoons and other publishable or performable material, including music and works of art. It also provides those who do not possess the copyright to materials fair use access to them. Copyright issues thus affect anyone

who produces or uses copyrighted material. There are, then, two perspectives to take into account-that of the individual who holds the copyright and that of the individual who wishes to make use of copyrighted material. Both points of view are addressed in a variety of sources (see the reference list in this paper). The three most relevant bodies of law on copyright are The U.S. Copyright Act of 1976 amended, the Sonny Bono Copyright Term Extension Act of 1998, and the Digital Millennium Copyright Act (DMCA) of 1998. The DMCA attempted to bring United States law in line with the 1996 treaty of the World Intellectual Property Organization (WIPO).

The essential source for copyright information is the United States Copyright Office, Library of Congress, 101 Independence Ave., S.E., Washington, D.C. 20559-6000. Its Public Information Office phone number is (202) 707-3000. The U.S. Copyright Office maintains a comprehensive website at: http://lcweb.loc.gov/copyright that includes a frequently asked questions section, as well as full texts of copyright laws, legislative updates, international laws and some current analyses and interpretations of law. Within the answers provided to the questions section, there are links to U.S. Copyright Office circulars that analyze a variety of issues in detail.

Among useful secondary sources, several cover all forms of copyright: "Fair Use Guidelines for Educators," compiled by Linda K. Enghagen, includes wording from the copyright law of 1976. "Fair Use Guidelines for Educational Multimedia" suggests guidelines for multimedia use of material in an instructional setting. In addition, the California Department of Education has issued "Suggested Copyright Policy and Guidelines for California's School Districts" a set of guidelines that local boards might use in formulating school district policies. While there is general agreement in the guidelines these documents offer, they all urge teachers and users of copyrighted material to seek legal advice tailored to their distinctive conditions.

As described in "Fair Use Guidelines for Educators," copyright gives the holder or owner exclusive control, (but see also fair use), of the copyrighted work, including the right to reproduce it and to create derivative works based on it, the right to publish it (including selling, renting, leasing and lending), the right to perform it publicly and the right to display it in public. Infringement of copyright occurs when someone violates this exclusive control. Fair use covers those instances when an individual may use copyrighted work without obtaining prior permission and without infringing copyright. The Copyright Act of 1976 allows for fair use, including quotation for purposes of criticism, comment or news reporting, and for teaching purposes, scholarship and research. The various guidelines referenced above attempt to clarify the lines between fair use and infringement. These guidelines will be discussed in this paper under the heading "Standpoint of the User."

Standpoint of the Creator

Individuals will have differing points of view regarding their work. Teachers are justly famous for exchanging materials and teaching techniques, often in the form of educational components that are effective in the classroom setting. Some writers believe that scholarly and other materials should be available to anyone who uses them. Others recognize both "pros and cons" of protecting their work: wanting to hold the copyright on published essays and creative writing while insisting that what appears on the Internet-contributions to chat rooms, interest groups and bulletin boards, Email exchanges, and original material posted on websites-should be "public domain" in the sense that anyone should be able to use and reproduce what appears there. Still others wish to have their creative expression protected, either so that it cannot be used in ways the creator would not approve or for potential profit of others.

Though law is clear that the creator of a copyrightable work is automatically the holder of the copyright to that work, (or determines the holder), once the work takes tangible form, there is an important exception to this principle regarding works made for hire. When a work is "made for hire" (in the language of the Copyright Act), it is the property of the employer which can be a firm, organization or an individual. The "complex concept of a work made for hire" requires a review of the statutory definition in the Copyright Act and a survey of court interpretations. (See "Circular 9: Works Made for Hire Under the 1976 Copyright Act," U.S. Copyright Office.) In the case of a work made for hire, the employer is the legal "author" of work. In CCNV vs. Reid, the Supreme Court set out three factors that characterize an employer-employee relationship in which works are

made for hire. The first characteristic is the control of the work by the employer, which includes determining how the work is done, whether the work is done at the employer's location and whether the employer's equipment or other means of production is used. The second characteristic deals with control of the employer over the employee, including scheduling the employee's time, giving the employee other assignments outside the production of the work, setting the method of payment and holding the right to hire the employee's assistants. The third characteristic concerns the status and conduct of the employer, such as whether the employer is in business to produce such works and whether the employer provides benefits to the employee and/or withholds taxes from payment for the work.

Circular 9 provides some rather obvious examples of employer ownership of copyright: the creation of a software program as part of a staff programmer's duties; a musical arrangement produced for a company by a salaried arranger on its staff; a sound recording made by a salaried staff member of a record company. Perhaps the most significant example for teachers is the following: "A newspaper article written by a staff journalist for publication in the newspaper that employs him" (Circular 9, p. 2). This example suggests that course materials and other documents and materials created in the line of teaching courses have an ambiguous status. The need for institutional policies and agreements regarding copyright ownership is clear.

Authors who publish articles in professional journals well know the difficulties of maintaining copyright control of their work. Many journals demand copyright ownership as the condition for publishing an article. A quick look behind the title pages of books show that books written for a wide audience are often copyright by the writer, but university and specialized presses just as often hold the copyright. Publication in professional journals and through specialized presses is seldom work for hire as discussed above. Copyright ownership in such cases is an issue deserving close attention of the author.

Although an individual may refuse to exercise any copyright, it remains in place unless specifically renounced by the holder. That release may be whole or partial. For example, in the case of the "Suggested Copyright Policy and Guidelines for California's School Districts" referenced above, the California Department of Education stipulated on the copyright page that "School Districts in California may freely copy all or part of this publication for distribution to their staffs." This is a doubly restricted release of copyright. It implies that only school districts in California may copy this text without permission and then only for distribution to their own staffs. If a school district outside California wanted to reproduce this material, (other than in a fair use context), it would have to seek permission of the California Department of Education. And if a California school district wanted to reproduce this text for individuals other than its staff-for a community conference, for example-it would have to seek permission.

It is unlikely, of course, that the Department of Education is closely scrutinizing the reproduction of this document, but the restriction is clear. If parties others than those granted blanket permission were to reproduce the text, they could find themselves in court. Restrictions of this kind serve to reserve the right to seek remuneration from those not included in the blanket permission and to seek legal means of halting reproduction beyond this permission. By insisting that others seek permission, the copyright holder can get an idea of where the text is disseminated and by whom.

Even if an individual wanted to preserve all rights under a copyright, all a copyright itself can do is establish the foundation for seeking legal or other redress for violations. The listing of a copyright in a text or at the end of a film broadcast or production establishes this foundation and indicates where permission for use is to be sought. Notice though, that written copyright notice is not required.

Those who do not believe that their work should be copyrighted are in something of a quandary. They want the whole world to have access without fuss. If they renounce their copyrights, others may copyright and then restrict the reproduction of the material in question. Perhaps the preferred route for those who support the free flow of expressed ideas is to indicate copyright and then give blanket permission for reproduction as long as the source is acknowledged. In the example above, the Department of Education gave blanket permission to a defined group, but an individual or an institution could give that permission to any interested party. This approach prevents anyone

else from copyrighting the material, since it is already copyrighted, and therefore from restricting distribution.

Standpoint of the User

Both the Copyright Act and fair use guidelines serve to: (1) protect the copyright holder from infringement, and (2) protect the user from accidentally or unintentionally infringing the owner's rights. There is one cardinal principle that applies to all fair use, and that is that full credit must be given to the copyright holder, including owner, publisher or producer, dates and places of publication or performance.

The Copyright Act of 1976, Section 107, gives a general characterization of fair use:

> Notwithstanding the provisions of Section 106, the fair use of copyrighted work, including such use by reproduction in copies of phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include:
>
> 1. the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
> 2. the nature of the copyrighted work;
> 3. the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
> 4. the effect of the use upon the potential market for or value of the copyrighted work.

Even a brief analysis reveals that the Act leaves much room for ambiguity. The factors to be considered are not deemed to be exhaustive, but other factors are not listed. While these factors are to be considered, how are they to be considered? Listing a factor as "the nature of the copyrighted work" provides no direction in considering that work. Fair use as established by the Act requires guidelines and is open to legal interpretation by courts.

The need to clarify the meaning and scope of fair use was recognized from the moment the Act became law. The Authors League of America, the Association of American Publishers, and a congressional committee, called the Ad Hoc Committee on Copyright Law Revision, reached agreement in 1976 on the meaning of "fair use" regarding books and periodicals. The same congressional committee joined music organizations representing publishers, teachers and institutions to issue fair use guidelines in respect to music, also in 1976. In 1979 a congressional subcommittee worked with various television organizations to produce guidelines for off-air recording of broadcast programming for educational purposes. Only in 1996 did the Council on Fair Use (CONFU) adopt guidelines for multimedia education. CONFU has proposed guidelines for distance learning and for educational fair use for digital images. In addition, CONFU, working with a variety of organizations, issued a statement on the use of copyrighted computer programs (software) in libraries. (All these guidelines may be found in "Fair Use: Guidelines for Educators," compiled by Linda K. Enghagen, J.D., National Education Association, 1997.)

Guidelines, whether agreed to by a congressional subcommittee or proposed by CONFU and organizations working with it, are not laws. The Frequently Asked Questions (FAQ) document on the U.S. Copyright Office's website makes this plain:

> Under the fair use doctrine of the U.S. copyright statute, it is permissible to use limited portions of a work including quotes, for purposes such as commentary, criticism, news reporting, and scholarly reports. There are no legal rules permitting the use of a specific number of words, a certain number of musical notes, or percentages of a work. Whether a particular use qualifies as fair use depends on all the circumstances. (Question 47, italics are this paper's.)

Repeating all the guidelines in this paper is not feasible, but for purposes of illustration, the guidelines for reproducing work published in journals and books can be stated.

A teacher who is conducting scholarly research or teaching a class may, under fair use guidelines, make a single copy of a chapter of a book; an article from a periodical or newspaper; a short story, short essay or

short poem; a chart, graph, diagram, drawing, cartoon or picture from a book, periodical, or newspaper.

A teacher may make copies of a work for a course, providing that the number of copies made does not exceed one copy per student in that course, and providing that the copying meets tests of brevity, spontaneity, and cumulative effect, and that notice of copyright is on each copy.

Brevity is defined in the guidelines as: a poem of not more than 250 words (if on no more than two pages), a portion of a poem not to exceed 250 words; an article, story or essay of not more than 2500 words, or an excerpt from any prose work of not more than 1000 words or 10% of the work, whichever is less; one chart, diagram, drawing, cartoon or picture per book or per periodical issue. Special works, like children's books, may contain prose and pictures and not equal 2500 words. These may not be reproduced in their entirety. Rather, a maximum of two pages may copied, provided that this is not more than 10% of the words found in the text. Spontaneity is copying at the instance and inspiration of the individual teacher and that the time between the decision to copy the work and its use in class is so short as to make seeking permission unreasonable.

Cumulative effect includes copying for one course in the school only. No more than one piece or two excerpts may be copied from the same author and not more than three from the same periodical or collection during one class term. And there can be no more than nine instances of such copying during one class term.

Besides these strictures, there are further prohibitions in the guidelines. Copying cannot be used to create or substitute for anthologies, compilations or collective works. Consumable items, such as test booklets, standardized tests, exercises and workbooks cannot be copied. Copying cannot substitute for the purchase of books, publishers' reprints or periodicals. Copying cannot be directed by an authority higher than the teacher and cannot be repeated in respect to the same item from term to term. Finally, students cannot be charged more than the cost of copying.

The guidelines for copying music, television programs, digital images and multimedia, and for use in distance learning, are all as or more complex than those for book and periodical material. Sheet music may be copied for a performance when it cannot be purchased in time for that performance, but it must be replaced by purchased copies in a reasonable time. Programs and performances may be taped for use but must be destroyed within a stated length of time. (The length of time involved depends upon what is copied and the uses to which it is put.) As a cautionary example, taping a television program for later viewing is permissible; keeping the tape more than 45 days is not. Fair use rules for computer software and for library use are even less clear than for individuals.

The Internet and Email, as well as digital artwork, constitute a new and evolving challenge to copyright law and fair use guidelines. The Internet has allowed for a rich and even fantastic exchange of information and views, and so far the mood and sense of both individuals and government has been to allow the Internet to be "open" and relatively uncontrolled. In practice that means that material placed on the Internet may be accessed and downloaded in ways that make copyright control virtually impossible. The creator of material should keep this fact in mind and note that laws may not prevent free use by others. Material already copyrighted would be subject to law, of course, but enforcement of an individual's copyright claims are even more difficult when that material has appeared on the Internet than it has been with the advent of copier machines. The "Fair Use of Copyrighted Works" comments that fair use limits for materials found on the Internet are essentially the same as for other media, while also observing that images are particularly problematic because their use normally involves using the entire work.

Recent Developments

Two important congressional acts have been signed into law in the last few years. The Sonny Bono Copyright Term Extension Act of 1998 generally extends all copyright protections by 20 years. The Digital Millennium Copyright Act of 1988 (DMCA) implements two 1996 World Intellectual Property Organization (WIPO) treaties - the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.

Provisions regarding online service provider liability may be of interest to colleges. The new law provides that a college providing chat rooms, sponsoring websites or allowing students and faculty to post material on their network could be considered an online

service provider and, as such, liable for third-party copyright infringements. Colleges can avoid liability if they were not involved in creating and posting the infringing content, did not select who received it and blocked access immediately upon receiving notice of copyright violation. However, in creating takedown policies to respond to copyright problems, colleges must also avoid violations of academic freedom and disruption of online courses.

In addition, the DMCA creates an exemption for making a copy of software for purposes of computer maintenance or repair and addresses a number of issues regarding distance education, libraries, making ephemeral recordings and "webcasting" sound recordings on the Internet, among other items not of relevance here.

The U.S. Copyright Office website has an 18-page summary of the DMCA, though that summary warns that "A complete understanding of any provision of the DMCA requires reference to the text of the legislation itself." That text is on the same website.

In respect to distance education, the DMCA does not alter preexisting copyright law, nor does it clarify fair use issues. Rather, it recognizes the need to consider distance education for exemption from some restrictions and calls for a study of the issues involved with the aim of making recommendations to Congress. The DMCA does not address Email issues.

Issues and Questions

Views differ on what and whether an individual's original ideas should be protected and preserved. Recall that by default, original work is protected by copyright without the need for any positive action by the author. If a teacher writes a textbook, for example, that work will most likely be copyrighted, if not by the individual then certainly by the publisher. Here copyright ownership is part of an agreed to mechanism for compensation. Perhaps the overwhelming majority of teachers do not copyright their syllabi and class handouts, simply because the issue of compensation does not arise. Two considerations regarding such materials need to be considered.

1. Such materials may be reproduced by a college or local printer. The California Education Code (§76365) and Title 5 Regulations on instructional materials (§§59400-59408) place conditions on the sale of such materials. If a college prints such materials and they are unique to the district in which they are produced, the campus bookstore can be the exclusive seller of the material, but the bookstore and/or district cannot make a profit from their sales. However, a faculty author can choose to make a profit by having the bookstore purchase the material from a "vanity publisher."

2. The author or creator does not want someone else to assert a copyright on his or her work and thereby make it subject to fair use restrictions for the very people for whom it was written or created. Even if the author or creator does not wish to restrict distribution of his or her work, copyrights can assure the producer of universal access to the production. One way to accomplish this is the inclusion of a statement granting unrestricted use of the material provided that the source is acknowledged.

Plagiarism has long plagued institutions of higher learning, and the Internet is now filled with sites offering to produce "term papers" on virtually any topic for a price. Teachers cannot be expected to monitor all these sites or to detect every time a student's work is actually lifted from a website. When copyright issues are involved, as they can be for both teachers and students, the issue of plagiarism becomes fuzzy in itself and may bleed into issues of infringement. Take, for example, the case of an artfully produced multimedia presentation. It may contain text, graphics, bits of film or video footage, music, recorded speech. In that mix, one might find a trademarked logo, a bit of Martin Luther King, Jr.'s "I have a dream" speech, a few bars of music from Philip Glass, a touch of footage from a current film or news program. Has plagiarism occurred? Although the sources may be obvious, must they be cited? Which bits are copyrighted or trademarked? Must permission be sought (and use fees paid) for everything in the presentation? How does one decided what can and cannot be used without seeking permission? It is easy to imagine that more time and energy might go into sorting out the issues raised in these questions than was absorbed in creating the educational presentation itself. Of course, expediency cannot justify copyright violation.

Despite, and in part because of, emerging technologies and the attempt of law to catch up with and cover

new forms of communication, courts and legislators are as confused by expanding technologies and expanded use of current technologies as citizens and teachers are. Despite the guidelines referenced and discussed above, there is no clear national or state consensus on how to apply copyright and trademark law to the classroom. The increase in distance education and technology mediated instruction exacerbated questions of copyright ownership, copyright protection and fair use. As the Internet becomes available to almost everyone and Email becomes the preferred mode of communication, copyright concerns fade into the murky territory of privacy rights. Just as copyright control may be little more than a fantasy on the Internet, the privacy of a person's Email communications may be just as unlikely.

Recommendations on Copyright and Fair Use

- Individuals creating original materials should copyright those materials regardless of what they wish to do in regard to their dissemination and use. While a work is automatically copyrighted the instant it is produced, individuals should consider registering a copyright with the U.S. Copyright Office. (Forms for doing so are available by phone and on the website.)
- Individuals creating original materials should review the copyright laws and CONFU guidelines in respect to ownership, especially in regard to issues of making works for hire.
- Users of copyrighted material should carefully review fair use guidelines. Where the guidelines are not absolutely clear, seek permission of the copyright owner for the use desired. For any complex fair use concerns, consult a lawyer with expertise in copyright laws.
- Individuals and institutions should be cognizant of state educational models regarding fair use of copy
- Local academic senates should seek to establish through the collaborative consultation process policies on both copyright and fair use. Such policies should be developed in consultation and cooperation with appropriate bargaining agents, since some issues may involve working conditions (e.g., compensation, released time for creation of materials, load factors, assignment of copyright for multimedia materials created by using college/district equipment and facilities). Both owner and user need to be taken into account in such policies.

PRIVACY, PROPERTY RIGHTS, AND FAIR USE: THE PHILOSOPHICAL BACKGROUND

As has been seen so far, legal standards in cyberspace are in a state of flux. Efforts to apply standards which have been developed for the world of print result in a questionable fit in the new electronic media, for even when the old rules seem applicable, their enforceability is problematic. This makes it difficult to provide secure guidelines for faculty, for whom issues of ownership and privacy become critical as Email becomes a principal mode of communication and as more and more instructors develop online materials.

At such a juncture, it might prove useful to seek clarification in a direction other than the legal, namely, the moral. For whatever legal standards ultimately prevail in an electronically networked world, those standards will-or certainly should-rest on a moral foundation. Laws will be drafted and, more importantly, obeyed, because they are perceived as reflecting a sense of the right ways for human beings to behave toward one another. Whether faculty ever actually argue their case on moral grounds (and it might not be a bad idea to do so), it will at least be helpful to get clear about the ethical commitments upon which their arguments might ultimately rest.

Moral Foundations

In entering the territory of ethical or moral thought, it is useful to recognize that one is crossing the boundary of the discipline of philosophy, and locating oneself within the province of philosophy known as "ethics." It is commonplace for philosophers today to recognize three levels or kinds of ethical thinking.

- **Metaethics:** Metaethics is concerned with an examination of the meaning or significance of ethi-

cal statements. If one says that a behavior is "right" or "good," for example, is one saying something about the way the world actually is, or is one imposing one's own private predilections upon a morally neutral reality? The metaethical view called objectivism maintains the former; the latter position is known as subjectivism. It would seem very important for those debating competing ethical claims ("It is always good to respect peoples' privacy;" "No, it is frequently good to deny peoples' privacy") to agree about the significance of ethical claims in general. Otherwise, wouldn't they just be talking past each other? In fact, it is often the case that people with apparently antithetical metaethical positions are nevertheless in complete agreement about particular values. It is quite possible, to use the sample positions cited, for an objectivist to value privacy because she believes that the world (or God, or the State) requires it, and for a subjectivist to value privacy as a requirement of his own conscience. For the purposes of the current discussion, the important point is that it is possible for those with very different and even contradictory metaethical viewpoints to share common values.

- **Normative Ethics:** Normative ethics involves an examination of the general principles which constitute the foundations of moral judgments. Every individual holds a host of views about the moral worth of a wide variety of things. The normative ethicist searches for the common denominator in all these views. What principle knits together one's views that "privacy is good," that "murder is wrong," and that "education is good"? Is it that subscribing to these views is conducive to human happiness? Or is it that they all accord with God's will as expressed in scripture? Or is it that acting on the contrary views would disrupt the orderly processes of nature? Any one of these could, and at times has, served as a normative ethical principle. To the extent that one's moral views have such a common denominator, one is said to have a "system" of values, and one's ethical thinking is thought to be clear and coherent. The absence of such a unifying principle or, worse, the appeal to contradictory principles, is taken as a mark of ethical confusion. Again, the important point for the current discussion is that individuals with very different normative viewpoints can in fact agree on common values. Two people might both hold the value that murder is wrong, for example, one on the normative ground that this view is conducive to human happiness, the other on the ground that this view is a commandment of God.

- **Applied Ethics:** Applied ethics involves an examination of the moral standards that apply in a specific field of human endeavor or area of human concern. Examples abound: business ethics, legal ethics, medical ethics, sexual ethics, research ethics, environmental ethics, and computer ethics are all instances of applied ethics, as are the statements of "professional standards" that are formulated by those belonging to associations based on their field of employment. Such statements of standards are often little more than a list of "Thou shalts" and "Thou shalt nots." They are of course useful in letting those inside the profession know what is expected of them, and those outside, what they might expect in utilizing their services. However, applied ethics at this level often involves little or no concern with general normative principles (and virtually never a concern with metaethical matters). This lack of more abstract levels of reflection has led in the past to considerable disdain for applied ethics among professional philosophers. Today, though, applied ethics has become a staple in philosophy curricula, involving for the most part the application of normative principles to specific fields, such as medicine, law and technology. In sum, the current discussion is an exercise in applied ethics. In seeking to find the moral standards to which faculty might appeal in their efforts to claim online property and privacy rights, one enters the territory of philosophy, crosses into the province of ethics, and finds that "applied ethics" is the name of the piece of earth upon which one finally stands.

The question again is how can property and privacy be defended. The pattern used by the AAUP in defending academic freedom can be instructive. The AAUP rests their argument on the value of truth: "The common good depends upon the free search for truth and its free exposition" (1940 Statement of Principles on Academic Freedom and Tenure). The

truth is a good, therefore seeking the truth is a form of right action, and anything which impedes the pursuit of truth is morally wrong, or evil. Academic freedom is then nothing more than the condition for, or of, the unimpeded pursuit of truth. The AAUP does not argue explicitly for the value of truth; rather, it is implied that truth is an ultimate value and that the rightness of seeking the truth is something upon which all people will simply agree. Certainly the AAUP seems to have been largely correct, as few have joined Dostoyevsky's Grand Inquisitor in taking exception to their assumption.

Truth, it would seem, is for most an "end in itself," that is, something so self-evidently valuable that no further argument is required in its support. The same is not the case for "privacy" and "property." In arguing one's case for the right to privacy and to intellectual property, one is going to have to find a value upon which there is the same sort of consensus as there is for the value of truth.

As a matter of fact, the arguments for privacy and property rights (intellectual and otherwise), often contain implicit appeals to normative ethical principles, which are readily recognizable, at least to professional philosophers. The individual's right to privacy in the workplace, for example, is often supported on "utilitarian" grounds. Utilitarianism is the appellation of the ethics chiefly associated with the late eighteenth- and nineteenth-century British philosophers, Jeremy Bentham and John Stuart Mill. Bentham and Mill felt that the rightness of conduct should be judged by its consequences, particularly its effects on human happiness. Thus they expressed their view in the normative ethical maxim, "Always act so as to produce the greatest happiness for the greatest number." So when one argues against policies of Email surveillance or phone monitoring on the ground that this has the effect of producing unhappy workers, one is appealing to the Principle of Utility. Interestingly, companies often defend their policies by appeal to the same principle, arguing that their customers far outnumber their employees, and thus it is all right to have a few unhappy employees if this results in a large number of satisfied clients.

The eighteenth-century German philosopher, Immanuel Kant, believed that right conduct had nothing to do with its consequences; rather, it had everything to do with one's motive, or the goodness of one's will. One cannot control the consequences of one's actions, Kant maintained, but one can control one's intentions. What makes one's will good, for Kant, was its conformity to a normative maxim, which he called the "Categorical Imperative," and which went, in one of its formulations, "Always treat other human beings as ends and never as means." One hears an implicit appeal to this principle in many arguments against corporate surveillance. It is sometimes argued, for example, that the use of technology to monitor productivity involves treating people like machines, and not as persons. Clearly, this translates readily into the assertion that the employer's actions fail to conform to Kant's maxim.

Virtually all defenses of property rights in the West appeal to principles established by the seventeenth-century British philosopher John Locke. Locke took as axiomatic the view that one's body is one's own property, or that "each man possesses himself absolutely." When one engages in labor, one "joins" the material labored upon to one's body, and the right of ownership becomes extended from one's body to the object of one's labor. "Labour being the unquestionable Property of the Labourer, no Man but he can have a right to what that is once joyned to ...." Thus to assert that the book or the painting is mine because I made it is to claim ownership on Lockean grounds.

A little reflection shows that neither the Principle of Utility nor Locke's assertion of one's right to ownership of the extensions of one's body is capable of standing on its own. The Principle of Utility, after all, could be used to justify torture on the ground that the pain of one person is more than offset by the happiness of many. Locke's principle, too, is in need of serious qualification: If one pours a jar of food dye into the ocean in an effort to improve its appearance, does one then own the ocean? And whatever debt a patient might owe to a surgeon, does it extend to becoming her property? Clearly there must be limits to one's obligation to produce happiness and to one's right to the fruits of one's labor.

In fact, both Mill's and Locke's principles are salvaged by combining them with Kant's Imperative, for what is missing from both the Utilitarians and Locke is an assertion of the absolute intrinsic worth of each human being. And it is precisely this to which Kant calls attention in his Categorical Imperative.

The requirement that human beings always be treated as ends in themselves and never as means to some further end calls attention to one's common humanity, the link that bonds one with all others, a bond from which flows the value that must inform all human interaction.

The Categorical Imperative does indeed set the proper limit upon the exercise of the Principle of Utility. One can no longer justify torture on the ground of producing "greater happiness," for torture violates the sanctity of personhood. Similarly, the employer who would justify employee surveillance as conducive to the "greater good," is answered that such conduct treats employees as means, and not as members of "the kingdom of ends."

So, too, the recognition of personhood as a "good in itself" gives definition and substance to Locke. The surgeon cannot own her patient, because the objectification involved in ownership violates the subjectively experienced sense of freedom that is such an essential feature of being human. More importantly for the current discussion, Kant's principle helps in determining when ownership of objects-books, paintings, artifacts-does and does not make sense: An artifact becomes one's property at the point at which one's self is invested in it. It is not enough that it have been produced by one's labor, as the example of the ocean-dyer illustrates; rather, it is necessary that the labor be an act of true "self-expression." Why would it be wrong to purchase a painting, only to burn it? Clearly the offensiveness of such an action springs from the perception that this would be an act of violence, not against a collection of inanimate materials, but against the artist him- or herself. Once the self, then, with its inviolable value, is invested in the work, one has a "right" to it as one's property, but not until then.

Earlier it was pointed out that the value of truth is a matter of virtually universal consensus, and thus provides a secure moral foundation for one's advocacy for academic freedom. It would seem now that a recognition of the inherent worth of the individual might provide a similarly secure basis for one's case for privacy and for intellectual property rights. In arguing against an employer's surveillance of Email, one ought to be able to say, "By invading my privacy, you diminish me." And in making a claim to one's intellectual property, it should suffice to say, "That book is mine in the same way that I own my hand or my eye." Once it is clear that one's right to privacy and to the fruits of one's intellectual labor are grounded in a recognition of the inherent worth of each human being, there should be no further need for argument. And there will not be, except when dealing with those who are accustomed to treating other people as means to their ends, rather than as ends in themselves.

RECOMMENDATIONS FOR LOCAL ACADEMIC SENATES

The Academic Senate for California Community Colleges endorses the principle that academic freedom applies equally to material in electronic format as to traditional print material, and therefore recommends to local academic senates that:

- Each local academic senate ensures that their local electronic/computer use policy includes a statement of the fundamental principle of academic freedom in the electronic medium.
- Each local academic senate is involved in creating and implementing the process that deals with possible exceptions or violations.

The Academic Senate for California Community Colleges endorses both the fundamental principle that Email communication between faculty members and between faculty and students is confidential, and the practical acknowledgment that Email is an insecure medium, and therefore recommends to local academic senates that:

- Each local academic senate ensures that their local electronic/computer use policy includes a statement of the fundamental principle of the confidentiality of Email communications, while urging practical caution regarding the inherent lack of absolute security.
- Each local academic senate works with collective bargaining colleagues to create contract language creating and implementing the process that

deals with confidentiality and with possible exceptions and technical safeguards or limitations.

The Academic Senate for California Community Colleges encourages local academic senates to urge individual faculty members to carefully consider issues of copyright and fair use, and therefore recommends that:

- Individuals creating original materials should copyright those materials regardless of what they wish to do in regard to their dissemination and use. While a work is copyrighted the instant it is produced, individuals should consider registering a copyright with the U.S. Copyright Office. (Forms for doing so are available by phone and on the website.)
- Individuals creating original materials should review the copyright laws in respect to ownership, especially in regard to issues of making works for hire.
- Users of copyrighted material should carefully review fair use guidelines. Where the guidelines are not absolutely clear, seek permission of the copyright owner for the use desired. For any complex fair use concerns, consult a lawyer with expertise in copyright laws.
- Individuals and institutions should be cognizant of state educational models regarding fair use of copyrighted material.
- Each local academic senate should seek to establish through the collaborative consultation process policies on both copyright and fair use. Such policies should be developed in consultation and cooperation with appropriate bargaining agents, since some issues may involve working conditions (e.g., compensation, released time for creation of materials, load factors, assignment of copyright for multimedia materials created by using college/district equipment and facilities). Both owner and user need to be taken into account in such policies.

AN ALTERNATIVE THOUGHT FOR INDIVIDUAL FACULTY

[Note: The following section is intended as food for serious thought; it is not proposed, in itself, as a position of the Academic Senate.]

The earlier sections of this paper describe how to protect a variety of intellectual property and activities. Some individual faculty may choose a different solution.

The "Fair Use of Copyrighted Works" states that higher education's legitimate right to use copyrighted works must be protected and that processes for this use in electronic format should not impose a myriad of separate approval transactions.

When faculty come to publishing the fruits of their intellectual labor on the Internet, their rights to compensation are essentially whatever they can negotiate. Examples are provided in Tyner's "Guidelines for Negotiating Distance Education Issues" and the 1992 "University of California Policy on Copyright Ownership" which is very detailed but does not mention technology. Perhaps some individual faculty would value a different philosophical approach.

Marshall McLuhan, author of such works as Understanding Media and The Medium is the Massage, wrote that "When faced with a totally new situation, we tend always to attach ourselves to the objects, to the flavor of the most recent past. We look at the present through a rear-view mirror. We march backwards into the future."[1]

On one level, the reason that it is difficult to give advice about copyright and fair use on the Internet is because it involves fitting the rules created for print media to an entirely different medium, namely a global computer network. The new medium is sufficiently different that there is no easy fit.

Beyond this, however, it seems possible that the very concern with intellectual property rights on the In-

[1] Marshall McLuhan, Quentin Fiore, Jerome Agel, The Medium is the Massage: An Inventory of Effects (Original copyright, 1967. Reprinted: San Francisco, Hardwired 1996) 74-75.

ternet is itself an instance of looking at the present through a rear-view mirror, of trying to experience the electronic-media world through print-media eyes. "The alphabet and print technology," McLuhan wrote, "fostered and encouraged a fragmenting process, a process of specialism and detachment."[2] Print also made possible the contemporary notion of "authorship," the commodification of one's thoughts and ideas, and fostered "ideas of literary fame and the habit of considering intellectual effort as private property."[3] "Electric technology," on the other hand, "fosters and encourages unification and involvement"[4] and marks the emergence of a single, global consciousness.[5]

The early world of cyberspace was characterized by a palpable spirit of openness, of freedom, and of sharing the fruits of one's creative efforts. The medium's "message" seemed clear: The global network was a liberating alternative to the world of "mine" and "yours," of property and the rights to it. This was a counter to the world of competition for pecuniary gain, offering instead progress through cooperation. The other side of this same message seems to be found in the virtual impossibility of ensuring property rights on the Internet: the medium itself seems positively hostile to the concept of private property.

McLuhan, again, provides a possible context for understanding what is going on here. "After three thousand years of explosion," he wrote, "by means of fragmentary and mechanical technologies, the Western world is imploding. During the mechanical ages we had extended our bodies in space. Today, after more than a century of electric technology, we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned. Rapidly, we approach the final phase of the extensions of man-the technological simulation of consciousness, when the creative process of knowing will be...extended to the whole of human society, much as we have already extended our senses and our nerves by the various media."[6] And, he asks, "might not our current translation of our entire lives into the spiritual form of information seem to make of the entire globe, and of the human family, a single consciousness?"[7]

So where does this leave us on the subject of compensation for intellectual property? Perhaps as salaried educators, we can recreate and extend the spirit of the early Internet in order to pursue knowledge and to educate. If successful communication of knowledge to others is the ultimate reward, perhaps attempts to control ownership should be abandoned. Within the unity of consciousness there is no "mine" and "yours." Perhaps for some it is time to start thinking and acting more like a single, global consciousness, and less like buyers and sellers.

[2] Ibid., 8
[3] Ibid., 122.
[4] Ibid., 8.
[5] Marshall McLuhan, Understanding Media: The Extensions of Man (Original copyright, 1964. Reprinted: Cambridge, Massachusetts, The MIT Press 1994) 3-4, 61.
[6] Ibid., 1.
[7] Ibid., 61.

ANNOTATED BIBLIOGRAPHY

EMAIL PRIVACY, SECURITY, FREE SPEECH AND COMPUTER USE POLICIES

Alger, Jonathan, "Prying Eyes in Cyberspace", *Academe,* September-October 1999, American Association of University Professors, Washington DC. (An article proposing the same dual recommendations of principle and caution as the Academic Senate.)

American Association of University Professors, "1940 Statement of Principles on Academic Freedom and Tenure with 1970 Interpretive Comments", Washington DC. (The definitive statement on academic freedom, adopted by many institutions of higher education including the Academic Senate. Available February 1999 on the world wide web at http://www.aaup.org/1940stat.htm.)

American Association of University Professors, "Academic Freedom and Electronic Communications", Washington, D.C., June 1997. (A definitive report on the importance of academic freedom in the electronic age, produced by a subcommittee of the AAUP Committee A, on Academic Freedom and Tenure. Available February 1999 on the world wide web at http://www.aaup.org/statelec.htm.) American Counseling Association, "Code of Ethics and Standards of Practice", April 1995, updated 1997. (Contains statements on expectations of confidentiality in the counseling process. Available March 1999 on the world wide web at http://www.counseling.org/resources/codeofethics.htm#eb.)

Brett, Victoria, "Colleges Grapple with Offensive E-Speech", Community College Week, April 1998. (Article on a case involving student posting of a threatening Email.)

California State Senate, "Employee Computer Records" (SB 1016), introduced February 26, 1999 by Senator Bowen. (A bill that would have required employers wishing to monitor employee computers to distribute a privacy policy in advance. Vetoed by the Governor 10/10/99. Available October 1999 on the world wide web at http://www.leginfo.ca.gov/pub/bill/sen/.)

California State University, "Internet Use Policy", January 1997. (California State University systemwide Internet use policy that shows language violating AAUP recommendations on academic freedom. Available February 1999 on the world wide web at http://www.calstate.edu/tier3/hr-adm/Use_Policy.HTML.)

Grossman, Wendy, "Private Parts", *Scientific American,* February 1999. (An article describing the implications of the new European Union directive requiring strict privacy standards in digital communications.)

Long Beach Community College District, "Computer/Network Use Regulations", October 1997. (Interim regulations available April, 1998 on the world wide web at http://fm.lbcc.cc.ca.us/aup3.html.)

Long Beach Community College District, " Policy on Computer and Communications Technology Use", November 1997. (Community College District computer use policy showing protection for academic freedom used as an example in the paper.)

Los Angeles Harbor College, "Rules for Internet Use", December 1996. (Community College use rules and signature form for student users used as an example in the paper.)

McCollum, Kelly, "With Computer Hacking on the Rise, Colleges Seek Ways to Handle Attacks", *The Chronicle of Higher Education,* May, 1998. (Description of some recent attacks on college computer networks and possible remedies.)

Mendels, Pamela, "Virginia workers sued state over law", *New York Times,* printed in the San Jose Mercury News, February 12, 1999. (A report on a law case challenging computer access restrictions on state employees in Virginia.)

National Education Association, "E-mail and Privacy", *Technology Brief,* 1997 #6. (Discussion of some workplace issues regarding Email and employer/employee expectations. Available February 1999 on the world wide web at http://www.nea.org/cet/BRIEFS/brief6.html.)

National Education Association, "Security and Privacy", *Technology Brief,* 1997 #1. (Recommendations for school policies on security. Available February 1999 on the world wide web at http://www.nea.org/cet/BRIEFS/brief1.html.)

Palomar Community College District, "Network and Telecommunications User Policy", April 1998. (Community College District computer use policy showing protection for academic freedom used as an example in the paper.)

Privacy Rights Clearinghouse, "Privacy in Cyberspace: Rules of the Road for the Information Superhighway", San Diego,

December 1996. (Good discussion of different levels of activity and expectations of privacy. Available February 1999 on the world wide web at http://www.privacyrights.org/fs/fs18-cyb.htm.)

Sacks, Marleen, "Legal Issues surrounding Employee and Student Use of Computers and Internet", A workshop for Community College League of California, November 1997. (Analysis of privacy, Email, liability and how to control use from the district's point of view.)

Santa Rosa Junior College, "Privacy and Access Policy", May 1999. (A comprehensive privacy and access policy that includes references to computer and Email files. Available September 1999 on the world wide web at http://www.santarosa.edu/polman/4person/4.21.html and http://www.santarosa.edu/polman/4person/4.21.p.html)

Solano Community College District, "Computer and Communications Technology Use Policy", March 1998. (Community College District computer use policy showing protection for academic freedom used as an example in the paper.)

Sipior, Janice and Burke, Ward, "The Ethical and Legal Quandary of e-mail Privacy", *Communications of the ACM,* December 1995. (Extensive analysis of employer and employee privacy and legal protections. Large reference list. Available February 1999 on the world wide web at http://www.acm.org/pubs/citations/journals/cacm/1995-38-12/p48-sipior/.)

University of California, "Electronic Mail Policy", March 1998. (University of California systemwide electronic mail policy that shows strong language regarding academic freedom and academic senates. February 1999 on the world wide web at http://www.ucop.edu/ucophome/policies/email/email.html.)

University of North Carolina, " Privacy Issues on the Internet", December 1995. (Good analysis of different places where Email can be intercepted. Available February 1999 on the world wide web at http://ils.unc.edu/ ~ caim/privacy.html.)

Wallace, Jonathan, "e-mail Privacy: What are your Rights?", 1996. (Description of the Pillsbury Email lawsuit. Available February 1999 on the world wide web at http://www.uniforum.org/news/html/publications/ufm/aug96/legal.html.)

West Valley-Mission Community College District, "Computer and Technology Use", May 1995. (Community College District computer use policy showing protection for academic freedom used as an example in the paper. Available March 1999 on the world wide web at http://www.westvalley.edu/wvmccd/use.html.)

Young, Jeffery, "University of Nebraska Suspends Controversial English Professor", *The Chronicle of Higher Education,* February 1998. (Description of incident on posting controversial material.)

Copyright and Fair Use

Blumenstyk, Goldie, "Academic Groups Say Copyright Legislation in Congress would Impede Scholarship", *The Chronicle of Higher Education,* May 1998. (An article describing academic concerns with pending copyright legislation.)

Blumenstyk, Goldie, "New Copyright Law Closes Loophole that let MIT Student Distribute Software Free", *The Chronicle of Higher Education,* December 1997. (Description of new law that removes non-profit loophole from copyright.)

Boettcher, Judith, "Copyright and Intellectual Property", *Syllabus,* March 1999. (Copyright assumes a new dimension in distance education.)

Brinson, Dianne and Radcliffe, Mark, "The Multimedia Law Handbook", December 1995. (A practical guide for developers and publishers. Extensive discussion of copyright with case examples. Available February 1999 on the world wide web at http://www.eff.org/pub/CAF/law/multimedia-handbook.)

California Department of Education, "Suggested Copyright Policy and Guidelines for California's School Districts", 1991. (Extensive descriptions of fair use in different educational situations.)

California Federation of Teachers, "Guidelines for Negotiating Distance Education Issues". (Definitions and sample contract language regarding many issues in distance education including intellectual property rights.)

California State University and California Faculty Association, "Memorandum of Understanding—Intellectual Property Rights", January 1997. (Faculty collective bargaining agreement on intellectual property rights.)

California State University, Chico, "Intellectual Property Policy", May 1997. (Preamble and guidelines for allocation of ownership rights to intellectual property.)

Chabot-Las Positas Community College District, "Sample Materials on Intellectual Property Rights", April 1995. (A collection of intellectual property rights policies and agreements from several California community colleges.)

Diotalevi, Robert, "Copyright Law: A Guide for the New Millennium", *Syllabus,* April 1999. (New legal issues created by emerging technology.)

Diotalevi, Robert, "Copyrighting Cyberspace: Unweaving a Tangled Web", *Syllabus,* January 1999. (new legal interpretations of copyright law emerging from Congress.)

Diotalevi, Robert, "Copyright in Cyberspace: Practices and Procedures in Higher Education", *Syllabus,* May 1999. (University guidelines on copyright in cyberspace.)

Enghagen, Linda, "Fair Use Guidelines for Educators", National Education Association, 1997. (A discussion of fair use guidelines for educators in specific areas: books, periodicals, music, broadcasts, multimedia, distance learning, digital images, software.)

Enghagen, Linda, "Intellectual Property Concerns for Faculty", National Technological University, 1993. (Includes discussion of distance education and general technology transfer.)

Freibrun, Eric, "Intellectual Property Rights in Software: What they are and how the law protects them", 1993. (Good description of the differences among patents, copyrights and trade secrets.)

Harper, Georgia, "Fair Use of Copyrighted Materials", January 1998. (Extensive article on educational fair use with many other references.) Available February 1999 on the world wide web at http://www.utsystem.edu/ogc/intellectualproperty/copypol2.html.)

House of Representatives, US Congress, "Fair Use Guidelines for Educational Multimedia", July 1996. (A nonlegislative report of the subcommittee on courts and intellectual property committee on an attempt to agree fair use provisions. Available February 1999 on the world wide web at http://www.libraries.psu.edu/mtss/fairuse/guidelinedoc.html.)

Lide, Casey, "What Colleges and Universities Need to Know about the Digital Millennium Copyright Act", *Cause/Effect,* 1999. (Analysis of the DMCA. Available September 1999 on the world wide web at http://www.educause.edu/ir/library/html/cem9913.html.)

Mariscal, Richard, " Letter to the Editor", *Syllabus,* November/December 1998. (Letter citing copyright problems as the biggest barrier to web course development.)

McLuhan, Marshall, Quentin Fiore, Jerome Angel, "The Medium is the Massage: An Inventory of Effects", 1967.

National Education Association, "Distance Education: Challenges and Opportunities", *Technology Brief,* 1997 #7. (Brief discussion of new issues in distance education as technology advances. Available February 1999 on the world wide web at http://www.nea.org/cet/BRIEFS/brief7.html.)

National Education Association, "Intellectual Property Rights", *Technology Brief,* 1997 #8. (Good contrast of intellectual property rights in the academic world compared to private industry. Available February 1999 on the world wide web at http://www.nea.org/cet/BRIEFS/brief8.html.)

National Education Association, "Intellectual Property Rights and Protections", *Technology Brief,* 1997 #2. (Discussion of fair use in the college technology setting. Available February 1999 on the world wide web at http://www.nea.org/cet/BRIEFS/brief2.html.)

Tyner, Tom, "Guidelines for Negotiating Distance Education Issues", Community College Council, California Federation of Teachers.

University of California, "Policy on Copyright Ownership", 1992. (Detailed contract style policy regarding university and faculty ownership rights - but no mention of technology.)

U.S. Copyright Office (Web site containing full texts of copyright laws, legislative updates, international laws and some current analyses and interpretations including the Digital Millennium Copyright Act. Available September 1999 on the world wide web at http://lcweb.loc.gov/copyright.)

Fair Use: the Philosophical Background

Weckert, John and Adeney, Douglas. 1997. *Computer and Information Ethics.* Westport, Conn., London: Greenwood Press.

Piest, Sokar, ed. 1957. *John Stuart Mill: Utilitarianism.* New York: Liberal Arts Press.

Locke, John. 1689. *Second Treatise of Government.* See Laslett.

Laslett, Peter, ed. John Locke, *Two Treatises of Government: A Critical Edition with an Introduction and Apparatus Criticus.* New York: New American Library.

Kant, Immanuel. 1786. *Foundations of the Metaphysics of Morals.* Translated by L. W. Beck. Chicago 1949.

References to Other Resources

Bailey, Charles, "Network Based Publishing of Scholarly Works: A Select Bibliography", *The Public Access Computer Systems Review* #6, 1995. (A comprehensive list of references to articles on intellectual property rights and electronic publishing. Available March 1999 on the world wide web at http://info.lib.uh.edu/pr/v6/n1/lcopyr.htm.)

California State University, State University of New York, City University of New York, "Fair Use of Copyrighted Works", 1995. (A comprehensive examination of fair use issues with case examples and suggestions for the future.)

Consortium of College and University Media Centers, "Proceedings of the Fall 1998 Conference", November 1998. (Session VII contains an update on fair use and copyright with a large selection of relevant website resources.)

Enghagen, Linda, (editor), "Technology and Higher Education", National Education Association, 1997. (A selection of papers on technology in education issues, including both teaching/learning and legal/contract.)

Tonella, Karla, "Copyright and Multimedia Law for Webbuilders and Multimedia Authors", University of Iowa, January 1999. (Links to world wide web sites covering multimedia law. Available February 1999 on the world wide web at http://www.lib.uiowa.edu/proj/webbuilder/copyright.html.)

Related Academic Senate Position Papers

Academic Senate for the California Community Colleges, *"Academic Freedom and Tenure: A Faculty Perspective"*, Position Paper, April 1998.

Academic Senate for the California Community Colleges, *"Curriculum Committee Review of Distance Learning Courses and Sections"*, Position Paper, November 1995.

Academic Senate for the California Community Colleges, *"Distance Education in the California Community Colleges: An Academic Senate Review of the Social, Fiscal and Educational Issues"*, Position Paper, November 1993.

Academic Senate for the California Community Colleges, *"Guidelines for Good Practice: Technology Mediated Instruction"*, Position Paper, November 1997.

Academic Senate for the California Community Colleges, *"Guidelines for Good Practice: Effective Instructor-Student Contact in Distance Learning"*, Draft Position Paper, April 1999.

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Guidelines for Good Practice:

Effective Instructor-Student Contact in Distance Learning

Adopted Spring 1999

ABSTRACT

This position paper of the Academic Senate for California Community Colleges further elaborates the Academic Senate's existing positions on distance education and the effective use of technology in instruction. In particular it examines the implications of a 1998 change in the Title 5 regulations governing distance education in California community colleges, especially with regard to instructor-student contact. The paper begins with a review of good practices in technology mediated instruction and proceeds to consider and make recommendations on effective instructor-student contact. Many of the recommendations apply equally to courses offered in any mode of instruction, but the paper specifically addresses local curriculum committees as they decide how to apply these recommendations in their review of distance education course proposals. The paper briefly mentions some unresolved issues in the area of faculty collective bargaining. Finally the paper makes recommendations for action by local academic senates to ensure that the curriculum review process for distance education courses separately documents effective instructor-student contact, technical support, accessibility and provision of support services to students.

INTRODUCTION

The Academic Senate for California Community Colleges has already been involved in many aspects of the successful introduction and implementation of technology in the learning process. In Fall 1997, the position paper Guidelines for Good Practice: Technology Mediated Instruction was adopted at the Plenary Session. That paper addressed good practices for all types of technology mediated instruction, whether it occurs in the classroom on campus, or involves distance learning. Earlier that year plenary session resolutions also called for more specific guidelines for curriculum committees as they review distance education course proposals.

S97 9.05 Curriculum Model
Whereas California community colleges must respond to the needs of a changing student body population, and

Whereas because of welfare reform, many students will have increasingly limited time to attend traditionally scheduled and offered classes, and

Whereas the need to develop alternative approaches to the delivery of education is of paramount concern to faculty, and

Whereas alternative educational institutions such as National University, other private institutions, and the virtual university are competing for our students,

Therefore be it resolved that the Academic Senate for California Community Colleges direct the Executive Committee to develop a model for dealing with curricular review of changing modes of delivery and methods of instruction, i.e., new class size, new hours of instruction, new electronic ways of delivering instruction, and ways of packaging courses, and

Be it further resolved that the Academic Senate for California Community Colleges urge local senates to develop a faculty-driven process, in consultation with their local curriculum committee, by which curricular decisions are made concerning new modes of offering, teaching, and packaging courses, and

Be it finally resolved that the Academic Senate for California Community Colleges direct the Executive Committee to develop minimum standards for faculty equipment, faculty training, and faculty support for purposes of technology mediated instruction.

S97 9.06 Adherence to Distance Education Curriculum Review Requirements
Whereas Title 5 §55378 states, "Each proposed or existing course, if delivered by distance education, shall be separately reviewed and approved according to the district's certified course approval procedures," and

Whereas the Academic Senate has published guidelines for implementing curriculum review and approval of courses delivered by distance education in its paper "Curriculum Committee Review of Distance Learning Courses and Sections" (November 1995), and

Whereas chief executive officers of some community colleges and districts have sought to implement distance education courses without such a curriculum committee review and approval, and

Whereas some at the University of California and the California State University have called into question community college distance education courses which have not had their quality assured by full curriculum committee review and approval,

Therefore be it resolved that the Academic Senate for California Community Colleges urge local senates to seek the timely review and approval of distance education courses in line with Title 5 "55316-55380 and to follow guidelines in the Academic Senate paper "Curriculum Committee Review of Distance Learning Courses and Sections" (November 1995), and

Be it further resolved that Academic Senate for California Community Colleges direct the Executive Committee to identify models of good practice currently in place, which curriculum committees could use to develop their own guidelines for approval of technology mediated instruction that ensure a quality curriculum with appropriate methodologies for interaction between faculty and students.

The Academic Senate's Fall 1993 position paper Curriculum Committee Review of Distance Learning Courses and Sections has already addressed the more

general aspects of distance education course review. This current paper will address changes caused by the introduction of new technology, and also by the 1998 revision in Title 5 regulations regarding distance education. In particular the paper will consider appropriate curriculum committee review of effective instructor-student contact in distance learning courses.

Instructor-student contact is at the very heart of all college courses. The Academic Senate's recently adopted Fall 1998 position paper The Future of the Community College: A Faculty Perspective states:

- the greatest strength of the community college lies in the quality of instruction, and
- the Academic Senate maintains that technology, both now and in the future, is a marvelous enhancement to instruction, and would urge that its potential continue to be explored and utilized.

Ensuring that this instructor-student contact is as effective as possible should be a primary goal of the curriculum review process for all courses. It should also be an important aspect of the peer review process for instructors. In both cases, the standards for distance education courses should be no different from the standards for any other course. The goal is to implement sound pedagogy. However, the use of technology may allow an instructor to meet that goal in a greater variety of ways and to tailor methods to individual students. Since Title 5 regulations call for separate curriculum committee review of distance education courses, this paper examines the challenges of and opportunities for effective instructor-student contact in that setting.

TITLE 5 REGULATION CHANGES

One of the forces motivating this discussion of curriculum committee procedures for review of distance education course proposals was the 1998 change in Title 5 regulations.

Prior to 1998 language distinguished between associate level courses and transferable level courses as follows (emphasis added):

Old Language
55376. Instructor Contact.
...district governing boards shall ensure that:

(a) Each section of a credit transferable course which is delivered as distance education shall include regular personal contact between instructor and students, through group or individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, or other in-person activities. Personal contact may be supplemented by telephone contact and correspondence.

(b) All other approved courses offered by distance education shall include regular contact between instructors and students consistent with guidelines issued by the Chancellor pursuant to Section 409 of the Procedures and Standing Orders of the Board of Governors.

Following considerable work by the Academic Senate's Technology Committee and Educational Policies Committee, proposals to change Title 5 regulation language were debated at the Fall 1997 Plenary Session and a modified proposal was approved by delegates.

After the consultation process, the following revised Title 5 regulation was adopted by the Board of Governors in July 1998 (emphasis added):

Current Language
55376. Instructor Contact.
...district governing boards shall ensure that:

(a) All approved courses offered as distance education shall include regular effective contact between instructor and students, through group or individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, telephone contact, correspondence, voice mail, e-mail, or other activities.

(b) All distance education courses shall be delivered consistent with guidelines issued by the Chancellor pursuant to Section 409 of the Procedures and Standing Orders of the Board of Governors. Regular effective contact is an academic and professional matter pursuant to Title 5 §53200.

Notice that the main effect of the new language was to replace the requirement for "in-person" contact (commonly referred to as "face to face," although these words never appeared in regulation) with a require-

ment for "regular effective contact." Moreover, "regular effective contact" was defined as an academic and professional matter, which places it in the purview of the local academic senate and collegial consultation. Also, the distinction between transferable and other credit courses was removed.

The Academic Senate's original proposal also included the following additional language, but it was not adopted by the Board of Governors:

> **Senate Proposal - Not Adopted**
> Separate Course Approval.
>
> Districts are to review courses with a specific emphasis on regular effective contact between instructor and student pursuant to Title 5 §55376.

However the following existing language was retained:

> **Adopted Language - Unchanged**
> 55378. Separate Course Approval.
> Each proposed or existing course, if delivered by distance education, shall be separately reviewed and approved, according to the district's certified course approval procedures.

This language, therefore, still requires curriculum committees to perform a separate review of distance education courses. Combined with the "academic and professional matter" language, §§ 55376 and 55378 together provide curriculum committees with the opportunity to oversee the implementation of the new effective contact regulation as part of their local curriculum approval process.

GOOD PRACTICES IN TECHNOLOGY MEDIATED INSTRUCTION

Much of the background to effective technology mediated instruction has already been described in detail in the Fall 1997 Academic Senate paper *Guidelines for Good Practice: Technology Mediated Instruction* and the works it references.

In the many specific techniques suggested in that paper, the principal purpose is to provide the most effective learning experience for the student. This purpose, of course, should be the goal of all instruction, no matter the mode of instruction, and most good practices apply to all courses. Effective instructor-student contact is a universal requirement for instruction. However, since the determination of effective instruction is not an easy task in the planning and discussion of any course, it is important that technology mediated courses should not be held to a higher or different standard than other courses.

Two quotations from the 1993 Academic Senate position paper *Distance Learning in California Community Colleges* are particularly appropriate:

- innovation should always serve the best interests of students, and
- innovation should be initiated by faculty when it enhances student success.

The use of innovative technology offers an opportunity to simultaneously encourage progress for the comfortable majority of students while at the same time concentrating on the variety of individual and specific difficulties encountered by smaller groups of students. Just as one lecture style is not effective for every student, so one mode of technology is not universally effective. The goal should be to make a variety of options available for different students with different learning styles.

Traditional ideas of good teaching practices are important, regardless of methodology: they simply need to be extended to new situations. Chickering and Ehrmann in *Implementing the Seven Principles: Technology as Lever* (1996), point out that instructor-student contact is a key component in the teaching and learning process. Pure content can, for example, be conveyed by a lecture, a text, a computer, a video or a CD-ROM. But it is the instructor who conveys the relevance of information and sets the context. Making the information come alive takes a dynamic interaction between teacher and learner. A large lecture format is not necessarily the best way to accomplish this dynamic interaction. By using more technology for content delivery, the instructor may be made available for more meaningful interactions with the student. The course approval process for distance learning courses should seek to demonstrate these possibilities, for example by asking about the nature of individual interactions.

This distinction is particularly the case with the use of "off the shelf" courses such as the traditional television course. The college has both the opportunity and

the obligation to add value to the content material rather than to simply transmit it. Most obviously, value can be added by the provision of services to students, such as the dynamic instructor-student interaction mentioned above, or library and counseling services. The course approval process should document how these services will be provided.

Another feature for consideration in course design and review is accessibility. A course designed to use technology or distance learning should make provisions to accommodate disabled students in a comparable manner to regular courses. One well known example is ensuring that websites used for courses are accessible to screen readers for the visually impaired. Current information on accessibility and the world wide web can be obtained from the Web Accessibility Initiative at: *http://www.w3.org/WAI/*

In addition, the Center for Applied Special Technology maintains a website at: *http://www.cast.org/bobby* which provides a means of checking individual pages or sites for accessibility.

EFFECTIVE CONTACT FOR DISTANCE LEARNING

The design for a distance learning course should show attention to both parts of the learning experience: the information transfer portion of the course and also the individual instructor-student contact portion.

In *Guidelines for Good Practice: Technology Mediated Instruction*, the following ideas are listed for possible consideration during design and implementation of the information transfer portion of the course.

The video, multimedia, or web-based instruction can:

- relate the new material to previous student knowledge,
- place new material properly in relationship to the rest of the course content,
- create logical sequences for each element presented,
- integrate introductory statements, detailed content, examples and illustrations, colorful asides designed to spur interest, and summative statements into a well-paced, attention-holding package,
- intersperse instructional methodologies using different learning styles such as logical/deductive style with text-based material; verbal-visual style with well-explained pictures and diagrams; visual-kinesthetic style with interactive exercises, and
- anticipate areas of questions, and supply appropriate and timely replies.

This paper is mainly interested in the instructor-student interaction portion of the course. Students need timely help with understanding course material and with skills that are relevant to their goals; they need timely access to college support services; they need timely access to faculty; and they need to be engaged. Creatively used technology can significantly enhance the individual experience for the student, and can improve the services provided by the college and the instructor. For example, students who correspond with the instructor once a week, or more, by e-mail may in fact receive considerably more useful personal attention than those who sit quietly in the back of a lecture all semester. A student who participates electronically in a guided, threaded online discussion will almost certainly experience a richer interaction than that provided by a single question and answer in a traditional classroom.

Guidelines for Good Practice: Technology Mediated Instruction also lists the following possible examples of individual instructor-student interactions:

- Technology can foster contact, providing additional vehicles for instructor-student interactions and for placing the information in an appropriate context.
- Technology has given us additional tools to foster interaction in a student-driven manner adapted to the technology used, for example:
  - Web based: frequently-asked-questions that can be kept current ("FAQs"),
  - Interactive: question-and-answer ("Q&A") areas or chat rooms,
  - Phone based: phone-in office hours or voice mail,

- Video based: video conferencing with "smart" cameras which can focus on students asking questions,
- Internet based: e-mail distribution lists, chatrooms or bulletin boards where threaded conversations or guided discussions could be held, and
- FAX and e-mail based: exchange of ideas and comments or communication of documents over distance.

In order for effective instructor-student contact to occur in technology mediated courses, faculty development must include adequate training for both full-time and part-time instructors. Furthermore, ongoing responsive technical support must be provided to both faculty and students. If course delivery depends on technology, then all aspects of that technology must function properly whenever faculty and students require them. Colleges that offer distance learning courses must plan, prepare, budget and implement ongoing faculty development and technical support in a timely, systematic manner.

CURRICULUM COMMITTEE IMPLEMENTATION

In the words of the 1995 Academic Senate position paper *Curriculum Committee Review of Distance Learning Courses and Sections:*

> "Curriculum committees must make a judgment as to the quality of the course based on a review of the appropriateness of the methods of presentation, assignments, evaluation of student performance, and instructional materials. Are these components adequate to achieve the stated objectives of the course?"

This statement, of course, applies to curriculum committee evaluation of any course. More particularly, the purpose of curriculum committee review of distance education course proposals should be to assure that both information transfer and instructor-student interaction are well planned. The review process should be designed to document this assurance.

The information transfer portion would normally be covered in traditional sections of the course outline on Student Objectives and Course Content. For example, this might well specify the number of hours spent studying material from a CD-ROM and should show the correct relationship to the Carnegie Units of credit for the class. (See for example, Appendix 1 and Appendix 4.) Title 5 defines the Carnegie Unit as follows:

> 55002 Units.
> The course grants units of credit based upon a relationship specified by the governing board between the number of units assigned to the course and the number of lecture and/or laboratory hours or performance criteria specified in the course outline. The course requires a minimum of three hours of student work per week, per unit, including class time and/or demonstrated competency, for each unit of credit, prorated for short-term, laboratory, and activity courses.

For a more complete discussion of Carnegie Units, see the Spring 1998 Academic Senate position paper *Good Practices for Course Approval Processes.*

The instructor-student interaction portion of the curriculum review should be presented not as a challenge or an obstacle to the course originator. Rather it should provide an opportunity to show what interactions will be used and why they should be effective. This description should occur in the Methods of Instruction Section of the course outline where "types and examples" illustrate the appropriate classroom-based or distance education part. There is no need to demonstrate that distance education interactions are more effective than a traditional course format, but there should be an opportunity to include this data if the course originator desires. While "in-person" contact is no longer required by regulation, there are still situations where it remains effective and appropriate as an option. Checkbox lists of interaction methods may be used by the curriculum committee to organize responses, but are discouraged as a means of collecting information from the course originator. (See for example, Appendix 2 and Appendix 3). In particular, this information should clarify both the nature of "effective" and of "regular" for the instructor-student contact in the proposed course. Information is best collected from the course originator using more open-ended questions such as the following (See for example Appendix 1).

Describe how the course content is delivered:

- describe the distance education methods (teaching modalities) used to deliver the course content and provide an approximate schedule of the time allocated to each modality.

Describe the nature and frequency of instructor-student interactions:

- provide examples of synchronous and asynchronous components of the course taught using distance education technology. List the criteria that will be used to substantiate student learning, and describe the methods of evaluating student achievement,
- describe the number and frequency of different types of instructor-student interaction for students making satisfactory progress, and
- describe the nature and methods of instructor-student communications designed to intervene when students are at-risk of dropping the course due to poor participation or low test performance.

For each type of interaction listed above describe why you believe it will be effective:

- describe how the interactions will facilitate and affect student learning and how students will benefit from the distance education modalities selected.

Describe how the course design will accommodate students with disabilities:

- describe the availability of appropriate devices such as screen readers and the design of web or e-mail material to ensure access, and
- describe the availability of support services for students with disabilities.

Describe the availability of adequate technology and support to carry out the course design:

- describe the adequacy of available technology to carry out effective distance education courses,
- describe the adequacy of support personnel to maintain hardware, software, media resources and to ensure uninterrupted access to the delivery system, and
- describe the availability of technical support for faculty and students.

Describe the support services that ensure student success:

- describe how students will access services such as tutoring, counseling, financial aid, etc., and
- describe how students will have access to course materials, library materials, learning resource materials, etc.

Describe the use of assignments and methods of evaluation to ensure effective instructor-student contact:

- describe an ongoing series of small interactions to ensure participation, such as regular e-mail or phone contact, and
- describe an ongoing series of evaluations that ensure verification of student learning and permit timely instructor intervention.

Notice once again that almost all of these questions, and the information they seek to elicit, are appropriate for the review of all courses - not just for distance education.

BARGAINING IMPLICATIONS

Several issues around the successful design and review of distance education courses involve collective bargaining concerns and the provision of support services.

For example, the class size is a crucial component. As in a classroom-based course, class size has implications for both educational effectiveness and faculty working conditions. Title 5 §55352, acknowledges that class size in distance education sections "shall be determined by and be consistent with other district procedures related to faculty assignment" and specifically mentions that such procedures "may include a review by the curriculum committee."

Despite the hopes of some that budget savings will occur from the use of large classes in a distance educa-

tion mode, there is little evidence that this has happened. In *How Many Students are 'Just Right' in a Web Course?* (1998), Judith Boettcher cites examples of distance education courses that have been accepted as effective and where the maximum class sizes are in the 15 to 20 student range. She also cites the growing evidence that faculty spend more time when they interact via e-mail or the web than in a traditional course.

Issues of compensation for course development and intellectual property rights of faculty are also a concern. Details of compensation may be included in a bargaining contract or may be negotiated individually. The Academic Senate is currently working with faculty on a position paper that includes bargaining implications.

RECOMMENDATIONS

The Academic Senate for the California Community Colleges recommends to local academic senates that they:

1. ensure that the local Curriculum Committee performs a separate review of courses offered by distance education, as required by Title 5 §55378,
2. ensure that this separate review considers both the information transfer and the instructor-student contact aspects of the course,
3. ensure that this separate review of instructor-student contact addresses the methods to be used, their effectiveness, and their frequency,
4. ensure that this separate review considers the availability of technical support for faculty and students,
5. ensure that this separate review considers issues of access for students with disabilities,
6. ensure that adequate support services are provided to distance education students, by consulting with counseling and library faculty, and
7. consult with local bargaining agents on distance education issues that involve working conditions.

BIBLIOGRAPHY

Academic Senate for the California Community Colleges, *"Curriculum Committee Review of Distance Learning Courses and Sections"*, Position Paper, adopted November 1995.

Academic Senate for the California Community Colleges, *"Distance Learning in California Community Colleges: An Academic Senate Review of the Social, Fiscal and Educational Issues"*, Position Paper, adopted November 1993.

Academic Senate for the California Community Colleges, *"Good Practices for Course Approval Processes"*, Position Paper, adopted April 1998.

Academic Senate for the California Community Colleges, *"Guidelines for Good Practice: Technology Mediated Instruction"*, Position Paper, adopted November 1997.

Academic Senate for the California Community Colleges, *"Stylistic Considerations in Writing Course Outlines of Record"*, Position Paper, adopted April 1998.

Academic Senate for the California Community Colleges, *"The Future of the Community College: A Faculty Perspective"*, Position Paper, adopted November 1998.

Accrediting Commission for Community and Junior Colleges, *"Principles of Good Practice for Electronically Delivered Academic Degree and Certificate Programs"*, Adopted June 1996. (Available March 1999 on the world wide web at http://www.accjc.org/handbok1.htm# principles of good practice for electronically delivered academic degree and certificate programs)

Boettcher, Judith V., *"How Many Students are 'Just Right' in a Web Course?"*, Syllabus, August 1998.

California Virtual University, *"Academic Plan—Principles of Good Practice"*. (Available March 1999 on the world wide web at http://www.california.edu/Faculty/AcademicPlan/academic_plan.html)

Chickering, Arthur W. and Stephen C.Ehrmann, *"Implementing the Seven Principles: Technology as Lever"*, American Association of Higher Education Bulletin 49, 1996.

APPENDICES

The following pages show a variety of forms, questions, answers and calculations that could be used by a course proposer or by a local curriculum committee. They are chosen to illustrate some of the points made in the text of the paper. They illustrate both good and bad practices. These examples are only a few of the many possibilities available and should not be interpreted as model forms or as the only option.

Example of an "effective" Curriculum Committee Distance Learning Form for the course proposer, that includes "distance" and "in-person" contact, information on hours, and sample responses. There are many other possibilities. This is not intended as a "model."

DISTANCE LEARNING COURSE OUTLINE ADDENDUM

Course Title & No. Math C, Intermediate Algebra (4 units)

Each proposed or existing course, if delivered by distance education, shall be separately reviewed and approved by the curriculum committee prior to being offered. [Education Code §55378]

Address the following questions:

1. Need/Justification

What is the intent in offering the course by distance education?

How will learning be enhanced by the use of distance education technology?

There are three main intentions in delivering this class by distance learning:

- to make the course available to students unable or unwilling to attend class twice a week on campus,
- to make the course available to students unable to meet the fixed class schedules, and
- to make the computer-based version of this course available to more students without requiring an increase in the use or acquisition of computer equipment available on campus.

Many of our Math C students have been unable to complete the course due to time commitments that arise during the semester: changes in job obligations, illnesses and other difficulties within their families. We believe that offering the course by distance learning will lessen this difficulty, as well as make the resources for learning the material available to students 24-hours a day.

Students will use a home, work or other Windows based computer, with a CD-ROM drive and Internet access to connect with a college server. They will use a set of CD-ROMs, and a set of workbooks, to learn the material of the course, with the server recording their work, including online quiz scores.

2. Methods of Instruction: Instructor-Student Contact

Regular Contact

Please indicate type and number of instructor-student contacts per semester and why you feel this will be effective.

e-mail communication			
Individual	2 - 10	Via listserve	____
Via Chatroom	4 - 6	Via Bulletin Board	____
Via FAQS	____		
Telephone contacts	4 - 6		
Orientation sessions (in person)	1 (2 hrs, mandatory)		
Group meetings (in person)	4 (2 hrs each, mandatory)		
Review session (in person)	1 (2 hrs, optional)		
Other (describe)	____		

Contact with the instructor is to have four forms:

- A minimum of five on-campus meetings: orientation at the beginning of the semester, a midterm examination, two lecture classes on material not covered by the CD-ROMs and a final examination,
- Messages sent between the instructor and student via computer within the mathematics software,
- E-mail sent between the instructor and student, and
- Weekly real-time individual and group conferences via a web-based chat room.

Describe how you will identify and respond to students experiencing difficulty:

- Test, online and homework scores will be monitored for signs of student difficulty, and
- Identified students will be contacted individually and encouraged to use optional group meetings, instructor office hours, or tutor programs.

Hours for Content Delivery and Interaction

Please show the approximate hours anticipated for student activities.

5 CD-ROMs	= 60 hrs	supplants normal lecture format
5 Mandatory meetings: 1 orientation session, 1 mid-term exam, 2 lecture sessions 1 final exam	= 10 hrs	sessions designed to assist students in understanding assignments and enable instructor to evaluate student progress
1 Optional meeting to review for exams, lecture on selected topics	= 2 hrs	sessions designed to assist students in learning difficult material
Total	= 72 hrs	

3. Assignments

Please describe student assignments.

In order for a student to be successful in this course it is anticipated that each student will need to spend time, aside from that necessary to do computer-based lessons and take exams, using the course workbooks. Consequently, although the majority of student time will not be spent attending class sessions at the college, students should still expect to spend approximately seven hours each week reading and completing the workbook, studying the materials and doing additional online work. In addition, at least one hour per week will be spent communicating via computer with the instructor and other students in the class using e-mail and chat rooms.

4. Methods of Evaluation

Please describe how you will evaluate students.

Testing will include computerized online tests as well as on-site classroom tests.

Participation in contact activities will be evaluated.

Project papers will require submission of drafts to document progress.

Written, comprehensive midterm and final exam.

5. Technical Support

What equipment and staff are necessary to support the course (for students and faculty)? Is it already available?

Students will use a non-campus Windows based computer (at home or work) to access a college internet server, which has already been purchased. The chatroom periods will be handled by an existing college server. All needed equipment is currently available.

Faculty and students may call the District Information Services Helpline for technical assistance. Additional help will be provided by the instructor.

6. Instructional Materials and Resources

Please describe how you will provide students with access to instructional materials and resources.

Students may access the college library and instructional material center when on campus for orientation and testing sessions.

The college library catalog may be accessed over the internet.

7. Student Services

Please describe how you will provide students with access to counseling and financial aid services.

Students may access counselors and financial aid assistance when on campus for orientation and testing sessions.

Web advising is available on a limited basis.

8. Accommodations for Students with Disabilities

Please describe how you will accommodate students with disabilities.

Students may contact the DSPS program staff when they are on campus for orientation sessions, or by telephone at other times to make suitable arrangements.

Web site course material will be accessible to screen readers.

9. Additional Resources

Are additional resources/or secretarial support needed or anticipated to teach by distance learning?

No.

10. Class size

30 (standard limit for Math classes taught in the on-campus computer lab)

This Distance Learning Course Outline Addendum was modified with thanks to Mission College

____ Approved _____ (date) CAC Chair

NOT RECOMMENDED

For curriculum office use only

Example of an "ineffective" Curriculum Committee Distance Learning Form that uses checkbox lists for the submission of information from the course proposer to the Curriculum Committee. This format is discouraged.

Distance Learning Certification Request

To The Curriculum Committee

A request for a course taught in a distance learning format must be accompanied by a Title 5 Course Outline.

Section 1: General Information					
Course Title & Number:				Units:	
Submitted by:				Date:	
Mode of Delivery:		Telecourse		Videoconferencing	
		Internet		Other (explain)	

1. All or part of the sections of the course will be taught by distance education as indicated by **all** of the following:

- Some or all of the hours of instruction are provided by communication technology without the instructor within line-of-sight of the students.
- Such hours are claimed for apportionment.
- Such hours serve as the basis for awarding students units.

2. The objectives and content of the course are adequately covered as specified in methods of instruction, assignments, evaluation of student outcomes, and instructional materials.
3. If the course is taught in both traditional and distance learning modes, both achieve the stated objectives and content of the course.
4. The distance learning methodology is effective for the specific class size per the load book.
5. For transferable and non-transferable courses, effective contact on a regular basis is required. Indicate below the activities that best describe the type of effective, regular contact.

	Group Meetings		Individual Meetings
	Orientation Sessions		Review Sessions
	Field Trips		Seminar / Study Sessions
	Library Workshop		Correspondence
	E-mail		Telephone/Voice Mail
	Two-way Interactive Video		Audioconference
	Internet Chat		Other Activities (Please Explain)

continues next page

For curriculum office use only

Curr Com:		Board:		MCF:	
Max class size:		Catalogue:		GE:	
Max class size imposed by an accrediting agency:				What?	
SAM code:		TOP Code		Course Outline:	
Load:		Lec:		Lab:	Lab by
Discipline:			Human Resources:		

Resource Availability, and Signature sections must be completed if this proposed distance learning course is currently in the College catalog. (New courses will contain this current information.)		
Section 2: Resources Availability		
$	What is the projected implementation cost?	
These signatures are necessary to ensure there are sufficient resources to support the course/program offering.		
Library:		
	Dean, Learning Resources or Designee Signature (Required for all courses)	
Computer Lab:		
	If there is a computer lab requirement (scheduled or by arrangement), the signature of the appropriate lab coordinator is required.	
Section 3: Signatures. Department and division signatures imply approval of articulation and course proposal content.		
New Course Proposal submitted by:		
Department		
Department/Discipline Chair		Date
Division Chair		Date
Curriculum Committee Member		Date
		Date

Example of TMI Form showing checkbox lists for use by the **curriculum committee** in evaluating a proposal. Not recommended for use by the course proposer.

Curriculum Committee Checklist

Review of Technology Mediated Instruction (TMI)

Course Title and Number _____

Originating Department _____

Originator _____

Directions:

1. "N/A" answer indicates an issue that does not apply to the course.
2. "YES" answer indicates approval.
3. "NO" answer indicates a need for revision except for #5.
4. "?" answers indicate the need for additional information before the review can be completed.

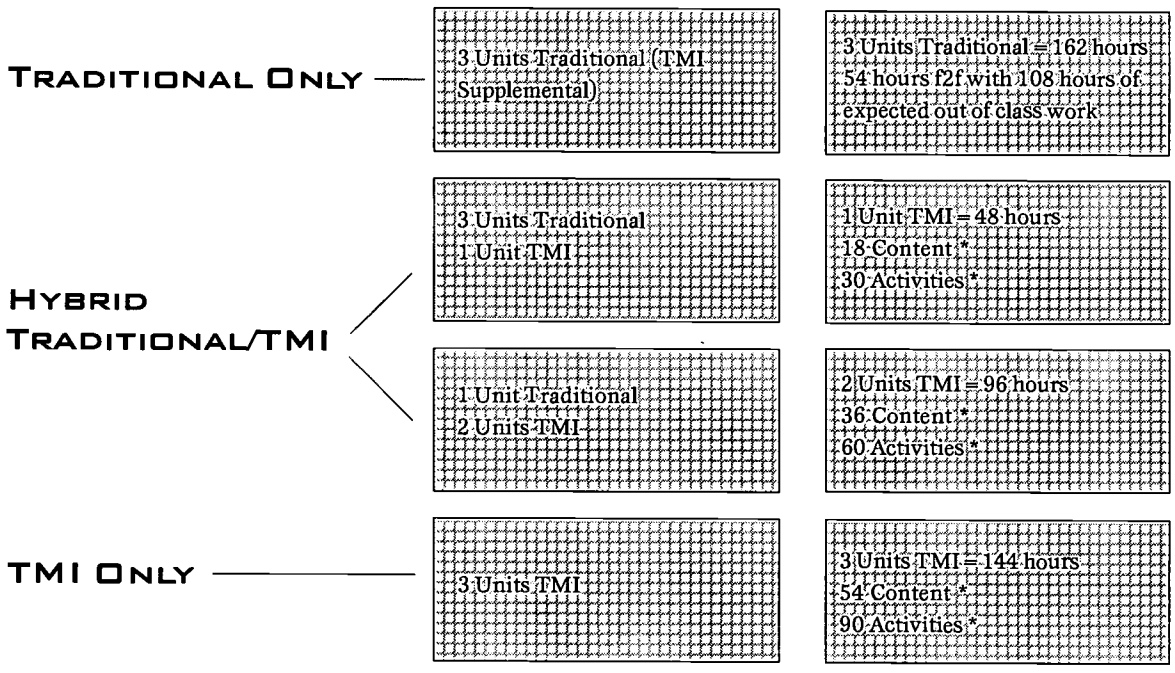
	N/A	YES	NO	?
1. If this course is taught in both traditional and TMI modes, do both achieve the stated objectives and retain content?				
2. Does section ?Methods of Instruction? indicate: A. Description of delivery methods, eg: discussion groups, orientation, review sessions, field trips, etc?				
B. Description of Regular Effective Contact?				
C. Units and equivalent hours of content/activity?				
D. Types of technologies and how they are utilized, eg: e-mail, chat, video, audio, Internet, phone, C.D? Are these accessible for students with disabilities?				
3. Is the TMI methodology effective for the specified class size?				
4. Do the ?Methods of Evaluation? appropriately address the course objectives and methods of instruction?				
5. Are equipment or supplies for this course or sections of this course offered through TMI, listed under ?Required Texts and Supplies??				
6. Is the course accessible for students with disabilities? (videotapes, screen readers, closed captioning etc.)				
7. Are campus and/or district instructional equipment, materials and training available and sufficient to make the offering of the course/section manageable and realistic?				

____ Approved pending minor change(s). See attached recommendation.
____ Conditional or temporary approval until _____ (date). See attached recommendation
____ Not approved. See attached reasons.

(Modified with thanks to Santa Barbara City College)

Some examples showing possible calculations for Carnegie Units based on an independent study model. This is not the only possible approach to Carnegie Units.

TMI OPTIONS: 3 UNIT MODEL



* These designated hours are guidelines based on independent study units.

Content: equivalent to information delivered by the instructor in a traditional classroom environment, i.e., lecture material, discussions, collaborate learning, and exams

Activity: equivalent to activities traditionally viewed as "out of class" assignments, i.e., homework, projects, research, and reading.

(Modified with thanks to Santa Barbara City College)

TECHNOLOGY COMMITTEE 1996 - 97

RIC MATTHEWS, CHAIR, SAN DIEGO MIRAMAR COLLEGE

CHRISTINE BUNN, CITY COLLEGE OF SAN FRANCISCO

KATHLEEN "KATS" GUSTAFSON, GROSSMONT COLLEGE

DAVE MEGILL, MIRA COSTA COLLEGE

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GUIDELINES FOR GOOD PRACTICE:

TECHNOLOGY MEDIATED INSTRUCTION

ADOPTED FALL 1997

INTRODUCTION

As a society, we are racing along a revolutionary path of developing technological tools which have the potential to aid the teaching and learning process. New hardware and software continues to be developed with rapid speed; and as a faculty we need to plan for how to best utilize these tools. Other educational groups have developed standards around the use of technology in their instructional programs. The Executive Committee of the Academic Senate for the California Community Colleges, through the President, directed the Technology Committee to develop guidelines for our faculty. The focus of this paper is to establish guidelines for good practices for using Technology Mediated Instruction (TMI). The emphasis is centered around the concept that good teaching is good teaching, regardless of the medium or method chosen for delivery. This paper underscores that technology mediated instruction is an alternate mode of delivery, another tool in the instructor's toolbox, and should be held to the same standards as any other delivery method. This paper is not meant to suggest that traditional classroom instruction is obsolete or inferior. When appropriate, technology may assist learners in achieving their particular goals. Decisions surrounding the use of technology needs to be in the hands of the faculty.

Chickering and Ehrmann (1996) discussed the implementation of "The Seven Principles for Good Instruction," using technology, as an outgrowth of an earlier paper by Chickering and Gamson (1987) on good teaching principles. The American Council of Education assembled a task force of business and education professionals in 1996 to establish "Guiding Principles for Distance Learning in a Learning Society." The Academic Senate for California Community Colleges wrote a review of social, fiscal and educational issues surrounding Distance Learning in California Community Colleges (1993). The Academic Senate of the California State University released a set of "Guiding Principles for Technology Mediated Instruction" in 1996 as well. The Western Interstate Commission on Higher Education (WICHE) has established guidelines for the use of technology as an educational tool (1995) (See Appendix). As we examine the role of technology in the teaching and learning processes, it would be beneficial to remember these are time-tested ideas of good teaching practice, regardless of the methodologies. Extrapolating and extending these ideas to technology are discussed on the following pages.

GOOD PRACTICE ENCOURAGES EFFECTIVE CONTACT BETWEEN STUDENTS AND FACULTY

Chickering and Ehrmann (1996)

Instructor-student contact is a key component in the teaching/learning process. One can think of that process as having two components: *content transmittal/acquisition* and *learning facilitation/mastery.* In other words, the student must not only take in information but also learn the relevance of the material, the circumstances under which to apply the new knowledge, the relationship of this added data to that acquired previously, and so forth. Knowledge without context is not useful! That said, it is a reasonable assertion that information-transfer and context-setting do not necessarily take the same type or degree of instructor-student contact. For example, describing and explaining the internal components of a cell can be accomplished by a text, a video, or a multimedia CD-ROM presentation—largely independent of the characteristics of the instructor or student. However, making that information come alive takes the dynamic interaction of the teacher and learner. That, too, can be facilitated by communications technology, but the human dimension places special challenges on that process. Keep these two criteria and their different requirements in mind during the following discussion of technology mediated instructor-student contact.

When designed and implemented effectively, technology can assist *information transfer.* The video, multimedia, or web-based instruction can:

- relate the new material to previous student knowledge
- place new material properly in relationship to the rest of the course content
- create logical sequences for each element presented
- integrate introductory statements, detailed content, examples and illustrations, colorful asides designed to spur interest, and summative statements into a well-paced, attention-holding package
- intersperse instructional methodologies using different learning styles: logical/deductive with text-based material, verbal-visual with well-explained pictures and diagrams, visual-kinesthetic with interactive exercises, and so forth.
- anticipate areas of questions and supply appropriate replies

Technology can foster contact, providing additional vehicles for student/faculty interactions and placing the information in an *appropriate context.* Technology has given us additional tools to foster interaction in a student-driven manner adapted to the technology used, for example:

- web-based: frequently-asked-questions "FAQ" or interactive question-and-answer "Q&A" areas
- video-based; phone-in office hours or voice mail
- video-conferencing: "smart" cameras which can focus on students asking questions
- internet-based: e-mail distribution lists, chatrooms and bulletin boards
- FAX and e-mail has allowed for the passage of documents over distance

None of these techniques is effective unless well-designed and implemented. Key criteria for *context-setting* instructor-student contacts include:

- easy access for the student to the technology (at home, at school, or at a community facility)
- rapid response by the instructor (same day, if possible)
- opportunities for feedback and incremental learning (such as exchange of draft documents with the instructor's editing comments)
- placing the problem area in context (such as instructor references to relevant material in the text, video, web site, etc.)
- efficient use of instructor time (chat rooms and distribution lists instead of just depending on individual e-mail messages—although individual communication should still be available to the student; FAQs instead of answering the same questions 20 times to 20 different students)

E-mail is evolving as a more common form of communication that is neither time nor space dependent, truly asynchronous. Studies have suggested that many students, including those who have learned English as a second language, find that e-mail allows them to carefully formulate their questions, double-checking spelling and syntax (Krauth, 1996). These questions can be formulated the instant that the student has the question. The faculty can more efficiently utilize their time by answering e-mail at convenient times and from various locations. By faculty answering the e-mail and voice mail frequently throughout the day, on and off campus as convenient the student receives more rapid replies. Of course, issues regarding faculty compensation for e-mail feedback, expectations of instructor availability and other workload issues must be addressed in conjunction with the collective bargaining agents.

Faculty must maintain their primary role in applying these standards of effective instructor-student contact. Title 5 Regulations requires courses taught using distance education to be approved by separate action of the curriculum committee. Campus curriculum committees must determine what constitutes effective personal contact and apply that standard as a minimum, the same way that they would with a campus based course. Most important is for the curriculum committee to assure that maximum use is made of the given technology to foster instructor-student contact, not using technology for only technology's sake. Efficient strategies can be developed to improve the addressing of repetitious questions, e.g., developing knowledge-based sites such as FAQs and Listservs. Taken to a different level, discussion (chat) rooms can be established where student questions may be posted and FAQs or they can encourage interactively between classmates, fostering collaborative learning. Desktop video-conferencing technology is rapidly developing so that "face-to-face" meetings will be more possible in asynchronous mode as well. With the continued development of the World Wide Web, these connections are possible from anywhere in the world. Additional technology can create individual learning environments with immediate feedback to the student, such as computer drill and practice, well designed web sites and other TMI.

GOOD PRACTICE DEVELOPS RECIPROCITY AND COOPERATION AMONG STUDENTS

Chickering and Ehrmann (1996)

Education in a learner-centered model can be enhanced technologically by giving more team-based projects which create working situations for collaboration. Team based projects can be between members of the same course and/or class, or it may connect similar learning environments to create an even larger learning community. Cooperation among students can be assisted by technology in many ways:

- electronic communication can provide opportunities to transcend barriers posed by gender and racial/ethnic boundaries and promote equity of participation.
- chat rooms promote spontaneity and idea exchange
- bulletin boards allow longitudinal growth of ideas (once an issue is raised, all following responses are attached so that the train of thought of the group can be followed)
- electronic and video "role playing" fosters situational learning and "out-of-the-box" thinking
- e-mail allows peer review of papers

Technology makes it practical to connect students who are separated by vast distances, encouraging shared problem-solving and cooperation, widening the scope of student communities and extending the educational arena to a more global context.

GOOD PRACTICE USES ACTIVE LEARNING TECHNIQUES

Chickering and Ehrmann (1996)

The separation between a teacher and learner is based on more than just distance. Active learning has been shown to be most effective when the learner is engaged. Technology, when used well, can tailor the instruction and learning experience. As students become more involved in their learning, they assume greater responsibility for that learning. Examples include:

- interactive web-based and CD-ROM materials aid visual-kinesthetic learners
- e-mail promotes writing on-line recapturing previously-attempted materials (e.g., drafts of papers) removes the need for repetitive tasks (like retyping)
- multimedia simulations allow the student the opportunity to manipulate conditions that might otherwise be expensive or dangerous, such as chemical reactions.

GOOD PRACTICE GIVES PROMPT FEEDBACK

Chickering and Ehrmann (1996)

Individualized technology-mediated instruction has the capability of providing prompt and frequent feedback to the learner. That capability can be achieved only if certain factors are in place:

- students have access to the technology and log in and use the system regularly
- instructors respond frequently to the voicemail/e-mail/FAX AND/OR the system is set up to provide student-driven feedback in the form of FAQs, help screens, or structured learning environments (such as diagnostic tests which give direction to the student regarding the area in need of improvement and the resources available to enhance learning in that area)

Tracking and reporting student performance to the student and/or to the instructor can be built into the delivery system. Using technology, students can easily share their work with the instructor or other students for evaluation and collaboration independent of time or place.

Curriculum committees have the responsibility to ensure evaluation of student performance is adequate that course objectives have been met and course content covered. This is a key criteria for the committee to consider in the separate approval process for courses taught is distance learning mode, as per the Academic Senate for California Community Colleges' Guidelines for Distance Education course approval.

GOOD PRACTICE EMPHASIZES QUALITY TIME ON TASK

Chickering and Ehrmann (1996)

Not only can technology extend the time on task, it can also increase the quality of that time. The use of technology can provide learning directed and meaningful assignments and activities. Technology extends classroom activities beyond formalized meeting times. For example, a CD-ROM or web-based learning module can begin by assessing a students present knowledge and directing that student to an appropriate learning presentation. After going through the exercise, the system can assess learning of that task/skill/concept and diagnose the extent of learning, directing the student to another, differently structured cycle of learning or moving the student on to the next step in the module. Student work might be posted on the Web, promoting a more serious and broader audience than just the instructor and class peers.

A major issue raised by this time-on-task discussion is that of the relationship of units earned to time in the classroom. The Carnegie formula which suggests that a combination of in-class and out-of-class assignments should equal three hours per week for one unit of credit is generally cited as the standard for instruction. The relationship of time on task to units is less clear in a technology-mediated learning mode. So is the connection between classroom hours and faculty load. Generally, 15 lecture hours per week equate to a full teaching load. When one spends no hours at all in classroom teaching how should one's load be determined? Clearly, new or redefined relationships are needed. Curriculum groups will need to propose new approaches to calculating contact hours, seat time, student units as well as unions will need to establish new definitions of faculty load and apportionment.

GOOD PRACTICE COMMUNICATES HIGH EXPECTATIONS

Chickering and Ehrmann (1996)

Instruction of any kind, using any delivery method, should start by establishing high standards of performance which are clearly defined and articulated. TMI creates unique opportunities for the communication

of expectations, but the same standards for quality curriculum hold for TMI as for traditional modes. (See the Curriculum Standards Handbook for further guidance on these standards.)

- Is the course appropriate to the mission of community colleges?
- Does the course serve a unique need in the college curriculum?
- Is the offering of the course feasible given the resources of the college: faculty expertise, support staff, facilities, equipment, library holdings?
- Is the course in compliance with Title 5 Regulations?
- Is the course of appropriate quality, that is:
  1. Is the scope of the course described adequately?
  2. Are the objectives clearly stated and appropriate to the stated need for the course?
  3. Is the course content thorough and appropriate to the stated scope of the course?
  4. Are the types and examples cited for methods of instruction, assignments, methods of student evaluation, and texts complete and appropriate to meet course objectives and cover course content?
  5. If a credit course, is critical thinking integrated in the course components in the form of essays, problem-solving, or skills demonstrations?

Courses taught in distance education mode are subject to particularly close scrutiny by those beyond the campus boundaries. Demonstrated commitment to high standards of curriculum quality are necessary to assure that

- course outlines are followed and articulation agreements are maintained without the need to separately articulate TMI courses
- accreditation is maintained following the "Principles of Good Practices" adopted by the Accreditation Commission for Community and Junior Colleges to help ensure the quality, integrity, and effectiveness of distance learning. These good practices make the following points:
  1. coursework is of appropriate rigor and breath,
  2. degree or certificates are coherent and complete,
  3. program provides for real time faculty student interaction,
  4. courses are taught by qualified instructors,
  5. program provides faculty support services and training,
  6. program provides full range of student support and services, and
  7. institution demonstrates an ongoing commitment for students to complete degrees.

GOOD PRACTICE RESPECTS DIVERSE TALENTS AND MODALITIES OF LEARNING

Chickering and Ehrmann (1996)

Varied learning styles, multiple intelligence's and multi-sensory inputs can be addressed through various delivery methods including technology mediated instruction. Students have varied learning styles, and many traditional campus-based delivery methods emphasize a single modality, such as the lecture. Various technologies can provide an array of delivery techniques which can match the diverse learning styles accommodating the auditory, visual and kinesthetic, or various combinations when appropriately designed.

GOOD PRACTICE USES APPROPRIATE TOOLS

The Academic Senate for California Community Colleges Technology Committee

Technology Mediated Instruction can be used to improve access and to provide alternate learning modalities, to reach individuals that might not readily make it to a campus, or who might have difficulty

with a traditional campus approach. Provisions will need to be made to assist those students who do not have ready access to be able to get to the technology easily. Faculty should be encouraged and be provided with appropriate levels of support to develop new materials, as the content experts, in conjunction with instructional designers and software experts. Unions will need to help define intellectual property rights that are equable and encourage faculty participation. Wherever feasible students should be offered a choice of modalities - including classroom based and TMI - for a give course. It is essential that faculty consider the appropriate mix of TMI, personal contact, as well as classroom-based methods to match the subject matter and the students being served.

Lever-Duffy and Lemke and Johnson (1996) offered examples currently available in technology mediated instruction. These include:

Audio technologies such as:

- radio
- telephone
- voice mail
- and audiocassettes

Video technologies such as:

- television
- teleconferencing
- compressed video
- and prerecorded videocassettes

And information technologies such as:

- stand alone work stations
- CD ROM prepackaged multimedia
- e-mail
- chatrooms and bulletin boards
- and the World Wide Web

GOOD PRACTICE IS SELF RENEWING

The Academic Senate for California Community Colleges Technology Committee

Technology is an investment which requires a commitment to staff development, maintenance of tools and equipment, ongoing support and emerging technologies. Like all practices surrounding instruction there needs to be an ongoing investment in the hardware, software and human resources to perfect that which works well. Consideration of balance in the curriculum mix as well as college budget needs must be addressed by local senates. Particularly with TMI, ongoing funding for technical support and staffing is essential to guarantee students consistent access to instruction.

GOOD PRACTICE RECOGNIZES THE NEED FOR COMPREHENSIVE STUDENT SERVICES

The Academic Senate for California Community Colleges Technology Committee

A comprehensive approach to TMI must address student services as well as learning needs. It may be that different types of students would be involved with distance education programs, some taking their entire course load at a distance from the campus, and some that might supplement their on-campus coursework with one offered through a form of TMI. Students success requires that students feel connected to the institution and have the full range of student services available:

- One stop on-line registration
- Frequent contact between the instructor and student using phone, FAX, e-mail
- Peer tutoring, small group discussions
- Bookstore services with text and printed material delivery
- Financial aid

SUMMARY

Technology Mediated Instruction (TMI) offers additional instructional delivery tools and strategies which complement those currently in the academy. When used appropriately that should facilitate learning and the interactions between the student and the faculty. TMI should be considered to be another modality of instruction and treated in the same way as other delivery methods. Good teaching practice seeks the appropriate modality, and good practice recognizes the needs of the learner and the facilitator. Technology is not enough by itself. As rapid advancements in technology continue to happen, we should be mindful of their potential as instructional tools, when placed in the hands of qualified and trained faculty. These are tools that might allow us to reach students in new ways. This paper attempts to show that there can be a complementary role of technology mediated instruction.

BIBLIOGRAPHY

Academic Senate for California Community Colleges. 1993. "Distance Education in the California Community Colleges: An Academic Senate Review of the Social, Fiscal and Educational Issues."

Academic Senate For California Community Colleges, 1993, "Curriculum Committee Review of Distance Learning Courses and Sections."

American Council on Education - Center for Adult Learning and Educational Credentials. 1996. "Guiding Principles for distance learning in a learning society." One Dupont Circle NW, Suite 250, Washington, DC 20036-1193

California State University Academic Senate. 1996. "Principles Regarding Technology Mediated Instruction in CSU." Attachment to AS-2321-96/AA/FA.

Chickering, Arthur W. and Stephen C. Ehrmann. 1996. "Implementing the Seven Principles: Technology as Lever." *AAHE* (American Association of Higher Education) *Bulletin* 49(2):3-6

Chickering, Arthur and Zelda Gamson. 1987. "Seven Principles for Good Practice in Undergraduate Education." *AAHE Bulletin,* March

Krauth, Barbara. 1996. "Principles of Good Practice for Distance Learning Programs." *Cause/Effect.* Spring: 6-8.

Western Interstate Commission for Higher Education. 1995. "Principles of Good Practice for Electronically Offered Academic Degree and Certificate Programs."

GLOSSARY OF TERMS

Asynchronous: not at the same time.

Bulletin boards (electronic): electronic threaded discussions in which participants can follow the flow of discussion between multiple participants.

CD ROM: a storage media in which data is encoded onto disks which are read by laser, can contain multimedia.

Chatrooms: an electronic space where multiple users can type in responses and dialog with other participants who are on-line at the same time.

Distribution lists: a collection of e-mail addresses that can be easily grouped for convenient mailing to all participants at the same time.

E-mail: electronic mail delivered over a network.

FAQ (Frequently Asked Questions): a collection of the most often asked questions so that answers can be posted to assist new users.

FAX: facsimile machine, an electronic device which distributes printed material to another location using phone lines and networks.

Hardware: physical devices such as computers, telephones.

Internet: a network of computers which are electronically connected, usually refers to the greater world wide web.

Listservs: an automated electronic distribution service which e-mails information to subscribers

Multimedia: a mixture of graphics, motion, sound, text.

Q&As (Questions and Answers): a posting of a series of questions anticipated, with their corresponding answers.

Smart Cameras: video input devices capable of automatically finding and focusing on the speaker in a room of people.

Software: the coded programs that make the hardware function.

Synchronous: at the same time.

Technology Mediate Instruction: using various devices to assist in the teaching and learning process.

Title 5 Regulations: part of the California Education Code.

Video: images, either still or moving.

Video Based Voice Mail: the ability to communicate across phone lines delivering voice and images at the same time.

Videoconferencing: two or more distant sites communicating voice and video with each other, interactive TV.

Voice Mail: the ability to leave a record voice message which is stored and retrieved at a later date.

WEB (World Wide Web): a collection of a very large number of computers around the globe, all interconnected to be able to share resources.

Web site: a single computer device which stores data that can be access remotely.

PRINCIPLES OF GOOD PRACTICE FOR ELECTRONICALLY OFFERED ACADEMIC DEGREE AND CERTIFICATE PROGRAMS

Preamble

These Principles are the product a Western Cooperative for Educational Telecommunications project, Balancing Quality and Access: Reducing State Policy Barriers to Electronically Delivered Higher Education Programs. The three-year project, supported by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education, is designed to foster an interstate environment that encourages the electronic provision d quality higher education programs across state lines. The Principles have been developed by a group representing the Western states' higher education regulating agencies, higher education institutions, and the regional accrediting community.

Recognizing that the context for learning in our society is undergoing profound changes, those charged with developing the Principles have tried not to tie them to or compare them to traditional campus structures. The Principals" are also designed to be sufficiently flexible that institutions offering a range d programs—from graduate degrees to certificates—will find them useful.

Several assumptions form the basis for these Principles:

- The electronically offered program is provided by or through an institution that is accredited by a nationally recognized accrediting body.
- The institution's programs holding specialized accreditation meet the same requirements when offered electronically.
- The "institution" may be a traditional higher eradication institution, a consortium of such institutions, or another type of organization or entity.
- These Principles address programs rather than individual courses.
- It is the institution's responsibility to review educational programs it provides via technology in terns of its own internally applied definitions of these Principles.

Curriculum and Instruction

- Each program of study results in learning outcomes appropriate to the rigor and breadth of the degree or certificate awarded.
- An electronically offered degree or certificate program is coherent and complete.
- The program provides for appropriate real-time or delayed interaction between faculty and students and among students.
- Qualified faculty provide appropriate oversight d the program electronically offered.

Institutional Context and Commitment

Role and Mission

- The program is consistent with the institution's role and mission.
- Review and approval processes ensure the appropriateness of the technology being used to meet the program's objective.

Faculty Support

- The program provides faculty support services specifically related to teaching via an electronic system.
- The program provides training for faculty who teach via the use of technology.

Resources for Learning

- The program ensures that appropriate learning resources are available to students.

Students and Student Services

- The program provides students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technological competence and skills, technical equipment requirements, availability of academic support services and financial aid resources, and costs and payment policies.
- Enrolled students have reasonable and adequate access to the range of student services appropriate to support their learning.
- Accepted students have the background, knowledge, and technical skills needed to undertake the program. Advertising, recruiting, and admissions materials clearly and accurately represent the program and the services available.

- Advertising, recruiting, and admissions materials clearly and accurately represent the program and the services available.

Commitment to Support

- Policies for faculty evaluation include appropriate consideration of teaching and scholarly activities related to electronically offered programs.
- The institution demonstrates a commitment to ongoing support, both financial and technical, and to continuation of the program for a period sufficient to enable students to complete a degree/certificate.

Evaluation and Assessment

- The institution evaluates the program's educational effectiveness, including assessments of student learning outcomes, student retention, and student and faculty satisfaction. Students have access to such program evaluation data.
- The institution provides for assessment and documentation of student achievement in each course and at completion of the program.

Curriculum Committee 1994-1995

Bill Scroggins, Chabot College, Chair

Patrick Cain, Citrus College

Craig Justice, Chaffey College

Eileen Knight-White, Fresno City College

Ric Matthews, San Diego Miramar College

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Bobbi Paul, San Diego CCD

Curriculum Committee Review of Distance Learning Courses and Sections

November 1995

INTRODUCTION

In the 1970s the growing popularity of college courses broadcast over the public air waves led to the addition of regulatory language permitting the offering of such telecourses by the California Community Colleges. The offerings were limited to transferrable credit courses, and, largely due to concerns by faculty in both the California Community Colleges and the University of California, required regular, personal instructor-student contact. Class size was limited to 125 students.

The technological advances of the 1990s have added new tools for the instruction of students both in an out of the classroom. Many colleges have taken advantage of such diverse learning strategies as computer assisted instruction, real-time two-way interactive video, multimedia presentations, electronic bulletin boards, and e-mail. In 1994 the regulations were again amended to expand the range of allowed instruction. (See Appendix 2.) Use of communication technology for instruction of students who are physically separated from their instructor is now permitted for all credit and non-credit community college courses.

The requirements for offering courses or sections of courses in distance learning mode were changed substantively. These changes included such key components as class size, instructor-student contact, and methods for apportionment. As part of the process of monitoring the impact of these changes, the regulations require local curriculum committees to separately review and approve courses and sections taught in distance learning mode. Guidelines were also established which include data collection and an annual report to the local board of trustees. (Appendix 2 contains both the regulations and the guidelines.) The purpose of this paper is to recommend to local curriculum committees the basis upon which their review and approval might be accomplished.

IDENTIFYING DISTANCE LEARNING COURSES AND SECTIONS

Colleges must be able to identify which of their existing courses—and also those new courses which are being planned—fall under the new regulations and so must be separately reviewed and approved. First, many instructors use communication technology to enhance student learning outside of class. An English instructor may require students to go to the learning resource center outside of class time to use computer facilities for researching sources for a term paper. Or the math faculty may set up a learning lab in which students can drop by on their own time to use computer-assisted instructional programs to strengthen their problem solving skills. Because these activities take place outside of regular class time, they do not constitute distance learning as governed by the regulations. This out-of-class factor must be taken into consideration when identifying distance education sections and courses following the definition in Title 5 section 55370, "distance education means instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology." Courses and sections of courses may be identified as distance education whenever instruction is being provided through the assistance of communication technology, the student is out of line of sight of the instructor, and the instructional hours are claimed for apportionment and counted as credit hours for units awarded to the student for successful completion of the class. The apportionment for distance education is discussed in sections 55370 and 58003.1 of Title 5 included in Appendix 2. The regulation covering credit hours and their relationship to units earned ("Carnegie units") is section 55002.5.

SEPARATE REVIEW AND APPROVAL

Section 55378 of Title 5 requires that courses "delivered by distance education shall be separately reviewed and approved according to the district's certified course approval procedures." Such review and approval is to be done by the college curriculum committee (55002), is to use the same standards of course quality as applied to traditional classroom courses (55372), and is to be made with the full involvement of the faculty through the collegial consultation process (55374).

The impact of this regulatory change is that curriculum committees need to develop a local process to review and approve distance learning courses. Note, however, that while the review and approval process may be separate, the quality standards are the same as for courses taught traditionally. It is not the course standards which vary but the mode of instruction. Thus, if the same course content is taught both in lecture and distance learning modes, only one course outline is needed. An American history class which has definite objectives and content stated in the course outline is the same course whether those objectives are achieved in traditional lecture mode or by distance learning. However, if the objectives and content of the distance learning presentation are significantly different from the lecture-based material, the two are separate courses. Curriculum committees must decide in their review if the delivery by distance learning has significantly changed course objectives and content. If so, the distance learning approach constitutes a separate course with a unique course outline.

Note that while the objectives and content should be the same for either mode, other features of the course may vary. The methods of presentation, assignments, evaluation of student performance, and instructional materials may be significantly different. Title 5 Section 55002 requires that the course outline provide types or examples of these components. For a single course taught in both modes, these sections of the course outline should list types or examples of both the lecture and distance learning methods and materials. For those taught solely in distance learning mode, these sections should be complete enough for thorough review. Curriculum committees must make a judgement as to the quality of the course based on a review of the appropriateness of the methods of presentation, assignments, evaluation of student performance, and instructional materials. Are these components adequate to achieve the stated objectives of the course? If not, the presentation of the course in distance learning format should not be approved. It may be that adjustments to the course objectives are

needed or that supplementary materials are required to ensure adequate coverage for the distance learning material.

The changes in the regulations removed the "line-of-sight" requirement for instruction when using communication technology. This opens up the instructional methodology far beyond use of telecourses. Techniques such as computer assisted instruction and multimedia presentations provide instruction by computer-student interaction which may not be directly mediated by an instructor who is physically present. These new approaches are instructional methodologies which must be included in the course outline of record and separately approved for their quality and appropriateness by the curriculum committee.

CLASS SIZE

Section 55352 states that the "number of students assigned to any one course section offered by distance education shall be determined by and be consistent with other district procedures related to faculty assignment." Such procedures "may include a review by the curriculum committee..." These procedures cannot "impinge upon or detract from any negotiations or negotiated agreements between exclusive representatives and district governing boards."

This section acknowledges the dual impact of class size determinations. The number of students in a section affects workload and instructional quality and appropriateness. Teaching 200 is much more work than teaching 35. The instructional methodologies for effectively teaching the same material at the same level of comprehension are much different for a class of 200 than for 35. The role of the curriculum committee here is definitely that of quality assurance. Curriculum committees may, if approved by college practices, review the appropriateness of the instructional methodology of a course for the stated class size. Such a practice must follow the district's certified course approval procedures (section 55378) and cannot conflict with the bargaining agreement (section 55352).

On some campuses, curriculum committees are currently involved in class size determinations. The more common practice, however, is for class size to be determined on a course-by-course basis through negotiations with the exclusive bargaining agent. The expanded regulations which have now removed the 125 student class size limit may impact the bargaining agreement. If class sizes are increased, it may be in the best interests of the institution as a whole to have the curriculum committee review the course for effectiveness in providing instruction to this larger number of students. If the curriculum committee is to provide this review, it must not in any way impinge on the right of the bargaining agent to negotiate appropriate faculty workloads.

FEASIBILITY

One of the criteria in the *Curriculum Standards Handbook,* Section 3.4, is the feasibility of offering courses within an approved degree or certificate program. Courses offered in distance learning mode often require the use of state-of-the art equipment which represents a considerable fiscal investment by the district. It is expected that outlines of record presented to the curriculum committee for approval represent courses for which adequate instructional equipment, materials, and training are available to make offering of the course feasible.

PERSONAL AND REGULAR INSTRUCTOR-STUDENT CONTACT

For transferrable credit courses, Title 5 Section 55376 continues to require "regular personal contact between instructor and students, through group or individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, or other in person activities. Personal contact may be supplemented by telephone contact and correspondence." For non-transferrable credit and non-credit courses, "regular contact" is required. Regular contact is to be consistent with the guidelines which state, however, that "districts will need to define 'regular contact,' including how often and in what manner instructor-student interaction is achieved." In documenting local definitions of regular contact the guidelines require "the inclusion of information in applicable outlines of record on the type and frequency of interaction appropriate to each distance education course or section."

Most logically, the course outline section on methods of instruction would give the type and frequency of instructor-student contact. For transferrable courses this contact must be personal, that is, face-to-face, not even including two-way interactive video. For non-transferrable courses this contact must be in accord with the district's definition of regular contact.

Because of this close tie with the course outline, it is reasonable to suggest that curriculum committees be involved in developing the district's definition of regular contact. Then, when reviewing the course outline, the committee would be able to ascertain if the specified methods of instruction for the distance education delivery is in line with that definition.

ANNUAL REPORT TO THE BOARD OF TRUSTEES

Title 5 Section 55317 requires that colleges "provide to the local governing board...annually...a report on distance education activity...consistent with reporting guidelines...." The guidelines which accompany the regulations ask a series of specific questions in the areas of purpose, student access, faculty, quality, costs, and recommendations. (See Appendix 2.) The curriculum committee should be involved in developing this annual report to the board, particularly in addressing questions about the type and quality of student-faculty interaction (including providing the board with the definition of "regular contact"), instructional support, and effectiveness of courseware.

PROGRAM REVIEW

The expansion of distance education may involve revisiting the college's program review process. Particular attention should be paid to the effectiveness of distance education courses in basic skills and noncredit areas. In its primary role of curriculum review, the curriculum committee will play a central role in this revision of the program review process. The questions in the annual report to the board, as mention above, would serve as a starting point for this discussion.

PROCESSES FOR ACCOMPLISHING DISTANCE LEARNING REVIEWS

Distance learning courses and sections do not usually constitute a large portion of the college's offerings. As a result, the technical aspects of the review might best be accomplished by a small subcommittee of the curriculum committee. This would enable a group of faculty to become well informed as to the standards, to assist faculty in meeting those standards as they develop course outlines, and to do a preliminary technical review before the course is brought to the full curriculum committee for review and approval.

POLICY IMPLICATIONS FOR ACADEMIC SENATES

This paper reviews specific implementation requirements for the approval of distance education courses and sections by curriculum committees following local practices. Beyond these particular nuts-and-bolts procedures, local academic senates should consider the broader policy implications of expansion of distance education offerings. The development of educational programs, of which distance education is one, are the responsibility of academic senates through shared governance. Planning and budgeting processes, upon which the expansion of distance education will have a great impact, are also shared governance issues. The academic senate is empowered to shape the development of the college curriculum through its governance role. As colleges seek to plan, budget, and develop programs using distance education, the academic senate should assert its primary role in the development and implementation of these policies and procedures.

SUMMARY

The standards as reviewed above are:

1. All or part of the sections of the course are to be taught by distance education as indicated by all of the following:

a. Some or all of the hours of instruction are provided by communication technology without the instructor within line-of-sight of the students as specified in Title 5 Section 55370.

b. Such hours are claimed for apportionment pursuant to Title 5 Section 58003.1.

c. Such hours serve as the basis for awarding student units as defined in Title 5 Section 55002.5.

2. The objectives and content of the course are adequately covered as specified in methods of instruction, assignments, evaluation of student outcomes, and instructional materials, pursuant to Title 5 Sections 55372 and 55002.

3. If taught in traditional as well as distance learning mode, both achieve the stated objectives and content.

4. The distance learning methodology is effective for the specified class size, subject to the restrictions in Title 5 Section 55352.

5. Instructional equipment, materials, and training are sufficient to make the offering of the course or section feasible following the Curriculum Standards Handbook Section 3.4.

6. For transferrable courses, personal contact is specified, and, for non-transferrable courses, regular contact, both type and frequency, is specified in agreement with the district definition and Title 5 Section 55376.

7. Evaluation methods are in place to produce an annual report to the board on activity in offering this course or section following the guidelines to Title 5 Section 55317 and to review the impact of distance education on this program through the program review process specified in accreditation standard 2B.2.

These standards appear in check-list format in the Appendix 1.

CONCLUSION

Distance learning certainly has had and will continue to have a major impact on the curriculum of the California Community Colleges. By systematic and thorough review, districts can assure that the high academic standards which typify their course offerings will be maintained for those taught by distance education.

DISTANCE EDUCATION REVIEW AND APPROVAL CHECKLIST

- ☐ All or part of the sections of the course are to be taught by distance education as indicated by all of the following:
  - ☐ Some or all of the hours of instruction are provided by communication technology without the instructor within line-of-sight of the students as specified in Title 5 Section 55370.
  - ☐ Such hours are claimed for apportionment pursuant to Title 5 Section 58003.1.
  - ☐ Such hours serve as the basis for awarding student units as defined in Title 5 Section 55002.5.
- ☐ The objectives and content of the course are adequately covered as specified in methods of instruction, assignments, evaluation of student outcomes, and instructional materials, pursuant to Title 5 Sections 55372 and 55002.
- ☐ If taught in both traditional and distance learning modes, both achieve the stated objectives and content.
- ☐ The distance learning methodology is effective for the specified class size subject to the restrictions in Title 5 Section 55352.
- ☐ Instructional equipment, materials, and training are sufficient to make the offering of the course/ section feasible following the Curriculum Standards Handbook Section 3.4.
- ☐ For transferrable courses, personal contact is specified, and, for non-transferrable courses, regular contact, both type and frequency, is specified in agreement with the district definition and Title 5 Section 55376.
- ☐ Evaluation methods are in place to produce an annual report to the board on activity in offering this course or section following the guidelines to Title 5 Section 55317 and to review the impact of distance education on this program through the program review process specified in accreditation standard 2B.2.

Approvals:

_____	_____
(Signed) Faculty Discipline Originator	(Signed) Faculty Senate President
_____	_____
(Signed) Faculty Curriculum Chair	(Signed) Chief Instructional Officer

REGULATIONS AND GUIDELINES ON DISTANCE EDUCATION

OVERVIEW

This document sets forth the Chancellor's implementation guidelines required by the regulations adopted by the Board of Governors in March of 1994. These regulations expand district authority to design and implement distance education across the curriculum. District implementation of distance education courses pursuant to these regulations shall be consistent with these implementing guidelines.

The regulations establish a trial period through the year 2000 during which districts will be required: (a.) to provide a narrative report annually on distance education activities to their governing boards with a copy made available to the Chancellor's Office, (b.) to report data on distance education activities through full compliance with Management Information System (MIS) reporting requirements, and (c.) to respond as required by the Technical Advisory Committee established by the regulations. Any new course designed to use distance education technologies during this trial period will be subject to the same local and state approval standards and procedures that are currently applicable to all other forms of instructional delivery.

Accompanying each regulation (where applicable) is a guideline which explains and clarifies the implementation of the associated regulation. The guidelines were developed by a task force of diverse constituent groups originally convened by the Chancellor to build a common foundation for Board action. A roster of task force members and statement of principles used throughout its deliberations is attached as an appendix to this document.

The guidelines can and will be revised by the Chancellor as deemed necessary, upon the advice from a Technical Advisory Committee established according to the Board of Governors' Standing Order 409.

It is important to note that district observance of the guidelines will play an important part in the community college system's review and evaluation of distance education activities at the end of the trial period and any subsequent revisions of these regulations.

55316. Criteria.

Courses offered pursuant to this Chapter shall:

(a) Be accepted by the college toward completion of an appropriate educational sequence leading to an associate degree, and

(b) Be recognized by an institution of the University of California or the California State University upon transfer to that institution.

NOTE; Authority cited: Sections 66700, and 70901, Education Code. Reference: Sections 70901, 70902, and 78310, Education Code.

55316.5. Additional Courses.

Notwithstanding any other provision of law, after June 1, 1994, the following additional types of courses may be offered pursuant to this Chapter, consistent with guidelines developed by the Chancellor:

(a) Nontransferable courses designed to meet the requirements of Sections 55805.5, 55806, and 55002(a) or (b);

(b) Noncredit courses conducted as distance education independent study.

This Section shall become inoperative on July 1, 2000, unless a later-adopted regulation deletes or extends this date.

NOTE; Authority cited: Sections 66700, and 70901, Education Code. Reference: Sections 70901.70902. and 78310. Education Code.

Guideline for Sections 55316 and 55316.5

These sections extend the variety of courses that may be delivered through distance education. Since 1981, districts have had authority to offer transferable, degree credit courses in which the instructor and student are separated by distance and interact through the assistance of communication technology. Now

districts may offer nontransferable non-degree-credit and noncredit distance education courses.

The authority to provide nontransferable distance education is scheduled to end on July 1, 2000, or may be extended and modified. Districts are being given this period of time to explore how best to utilize new educational delivery modalities and to test whether such innovations are successful.

55317. Ongoing Responsibilities of Districts.

Any district conducting courses under Section 55316 or 55316.5 shall:

(a) Maintain records and report data through the Chancellor's Office Management Information System on the number of students and faculty participating in new courses or sections of established courses;

(b) Provide to the local governing board no later than July 1, 1995, and annually thereafter, a report on all distance education activity.

(c) Provide other information consistent with reporting guidelines which shall be developed by the Chancellor pursuant to Section 409 of the Procedures and Standing Orders of the Board of Governors.

This Section shall become inoperative on July 1, 2000, unless a later-adopted regulation deletes or extends this date.

NOTE: Authority cited: Sections 66700, and 70901, Education Code. Reference: Sections 70901,70902, and 78310, Education Code.

Guideline for Section 55317

Districts that continue existing distance education offerings or begin new ones during this trial period will be required to report regularly all management information system (MIS) elements to the Chancellor's Office Management Information System Division. To fulfill this MIS reporting requirement, districts will need to assure that data, now regularly reported within data element XF01 on each session's method of instruction, do reliably differentiate distance education from non-distance education activities. Data element XF01 Session-Instruction-Method is currently under review and will be revised to accomplish this differentiation and to better reflect the types of distance education instructional methods currently taking place. Until data element XF01 is revised, districts offering distance education courses should report MIS data with the existing instructional method codes using "30," "50," or "80" for sessions employing distance education instructional methods.

Section 55317 also requires districts to report annually all distance education activity to their local governing board and to make a copy available to the Chancellor's Office for evaluation during the trial period. In order for the local evaluations to be useful to the Board of Governors in their review of trial results, it is desirable that districts provide documentation of the evidence used in preparing their local reports and to the extent possible that they compare and contrast distance education to traditional instructional delivery.

The annual report to the local governing board should, to the extent possible, address the following questions:

Purpose

- What was the intent in offering the course by distance education ?
- How was learning enhanced by the use of technology?

Student Access

- What is the evidence, if any, that the new methodology increased the number of students served, or extended services to new populations?
- What student services were provided to support student success for distance education?
- In what ways were the goals of the district's Student Equity Plan furthered?
- What is the evidence, if any, that special community needs were met by the courses using new methodologies?

Faculty

- How were faculty selected to teach each distance education section and what relevant professional development activities and support services were provided to them ?
- What was their perception of the experience, as expressed by instructors and student services professionals? Which new approaches were judged effective? Which were judged noneffective?

Quality

- How did student satisfaction compare with that in courses offered in a traditional mode?
- In what ways was student achievement improved?
- Did students with prior independent study experience do better in distance education than those without prior experience?
- What type and quantity of student-faculty interaction occurred in each course ?
- W1hat types of instructional support and student services were provided to
- How appropriate and effective was the courseware for each course ?
- Was equipment satisfactory for each course?
- Which technological mix was used most effectively?
- What differences, if any, were there in the level of student achievement in transferable verses nontransferable distance education courses?

Costs

- How did start-up costs for distance education compare with other modes of instruction?
- How did continuing costs for distance education compare with other modes of instruction?
- In what ways, if any, does faculty and staff load differ for distance education sections?

Recommendations

- What suggestions can be made for the improvement of distance education?

Other

- Based on input from the Technical Advisory Committee referenced in the Board of Governors' Standing Order 409, the Chancellor may require districts to provide additional information.

55340. Eligibility for State Funds.

In order for attendance in a course of independent study to be eligible for state apportionment pursuant to the provisions of this Chapter, the course must be reported as required by this Chapter, and meet all other requirements of statute and regulation relative to eligibility for state apportionment.

NOTE: Authority cited: Sections 66700, and 70901, Education Code.

Reference: Sections 70901, 70902. and 78310. Education Code

55352. Number of Students.

The number of students assigned to any one course section offered by distance education shall be determined by and be consistent with other district procedures related to faculty assignment. Procedures for determining the number of students assigned to a course section offered by distance education may include a review by the curriculum committee established pursuant to Section 55002(a)(1).

Nothing in this section shall be construed to impinge upon or detract from any negotiations or negotiated agreements between exclusive representatives and district governing boards.

NOTE: Authority cited: Sections 66700, and 70901, Education Code. Reference: Sections 70901, 70902, and 78310. Education Code.

Guideline for Section 55352

As rewritten, this section no longer includes a limitation on the number of students per instructor that

could be instructed using distance education modalities. However, it is not intended that the act of removing this limitation in any other way should affect existing local practices used to determine the number of students assigned to any distance education course section. That determination should continue to be guided by informed judgment as to what class size best contributes to educational quality, student equity objectives, and reasonable faculty workload.

This section is not more specific in defining the number of students that may be enrolled in distance education sections, because there is considerable variability throughout the system in the process used to determine appropriate c/ass size under specified local circumstances, including possible provisions in local collective bargaining agreements.

Article 2. Distance Education

55370. Definition and Application.

Distance education means instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology.

All distance education is independent study, and subject to the general requirements of Article 1 as well as the specific requirements of this Article. Provided however, that fully interactive distance education courses, as defined in guidelines adopted by the Chancellor, shall not be considered independent study for purposes of calculating state apportionment pursuant to Section 58003.1. In addition, instruction provided as distance education is subject to the requirements that may be imposed by the Americans with Disabilities Act (42 U.S.C. Sec. 12100 et seq).

NOTE: Authority cited: Section 70901, Education Code. Reference: Sections 70901-70902. Education Code.

Guideline for Section 55370

As rewritten, this section no longer includes a definition of telecourses nor a listing of specific types of electronic technology that might be employed to deliver education at a distance. These references were removed because they too narrowly defined existing or possible future activity in a rapidly evolving educational area.

The term "telecourse," often associated with lack of student access to a "live" instructor, has consistently been replaced in these regulations with more generic references to courses offered in a distance education modality.

All varieties of distance education except the one defined below are considered independent study for purposes of calculating applicable state apportionment pursuant to Section 58003.1. This means that in practically every instance the district's claim is based upon the units of credit awarded to students enrolled in distance education courses rather than upon the number of hours spent attending course sessions and completing homework. The exception noted in this section is referred to as "fully interactive" distance education. Distance education shall be considered fully interactive when the technology employed provides an immediate (real time) opportunity for exchange between participants. Fully interactive distance education can be reimbursed by state apportionment based upon the district's regular student attendance c/aim as provided for in Section 58051(a)(1).

Districts should make themselves aware of the requirements of the Americans with Disabilities Act as they apply to students engaged in distance education.

55372. Course Quality Standards.

The same standards of course quality shall be applied to distance education as are applied to traditional classroom courses, in regard to the course quality judgments made pursuant to the requirements of Section 55002 of this Part, and in regard to any local course quality determination or review process.

NOTE: Authority cited: Section 70901, Education Code. Reference: Section 70901-70902, Education Code.

55374. Course Quality Determinations.

Determinations and judgments about the quality of distance education, under the course quality standards referred to in Section 55372, shall be made with the full involvement of faculty in accordance with the provisions of Subchapter 2 (commencing with Section 53200) of Chapter 2 of Division 4 of this Part.

NOTE: Authority cited: Section 70901, Education Code. Reference: Section 70901-70902, Education Code.

Guideline for Sections 55372 and 55374

These two sections emphasize the extent to which course quality depends upon the full involvement of faculty in distance education design and application. The only text change from earlier regulatory language has been to rep/ace the term "telecourse" with "distance education." See Subchapter 2 (commencing with Section 53200) of Chapter 2 of Division 4 of this Part for a fuller statement of the faculty's role.

55376. Instructor Contact.

In addition to the requirements of Section 55002 and any locally-established requirements applicable to all courses, district governing boards shall ensure that:

(a) Each section of a credit transferable course which is delivered as distance education shall include regular personal contact between instructor and students, through group or individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, or other in person activities. Personal contact may be supplemented by telephone contact and correspondence.

(b) All other approved courses offered by distance education shall include regular contact between instructors and students consistent with guidelines issued by the Chancellor pursuant to Section 409 of the Procedures and Standing Orders of the Board of Governors.

NOTE: Authority cited: Section 70901, Education Code. Reference: Section 70901-70902. Education Code.

Guideline for Section 55376

This section defines what contact must be maintained between instructor and student depending upon whether the distance education course is transferable or not.

Subsection (a) stresses the historical obligation for the instructor of record in a transferable distance education course to have regular personal contact with enrolled students. The use of the term "regular personal contact" in this context suggests that students should have a frequent opportunity to ask questions and receive answers in-person from the instructor of record. Restatement of this obligation was encouraged by the University of California in order that the transferability of existing distance education courses might not be jeopardized.

Subsection (b) honors the principle that for newly authorized nontransferable distance education courses, there are a number of different kinds of acceptable interaction between instructor and student, not all of which may require in-person contact. Thus, during the trial period, districts will need to locally define "regular contact," including how often, and in what manner instructor student interaction is achieved. On the other hand, districts are not authorized to redefine "fully interactive" as found in the guideline to Section 55370.

It is important that districts document how regular contact is achieved as this information will bear upon the overall evaluation of distance education during the trial period as provided in the Board of Governors' Standing Order 409 and cross referenced in Section 55317(c). Documentation should consist of the inclusion of information in applicable outlines of record on the type and frequency of interaction appropriate to each distance education course or section. As indicated in the Guideline to Section 55317, districts need to describe the type and quantity of student-faculty interaction in their annual reports to their local governing boards.

55378. Separate Course Approval.

Each proposed or existing course, if delivered by distance education, shall be separately reviewed and approved according to the district's certified course approval procedures.

NOTE: Authority cited: Section 70901, Education Code. Reference: Sections 7090170902, Education Code.

55380. Faculty Selection.

Instructors of sections delivered via distance education technology shall be selected by the same procedures used to determine all instructional assignments. Instructors shall possess the minimum qualifications for the discipline into which the course's subject matter most appropriately falls, in accordance with Article 2 of Chapter 4 of Division 4 of this Part (commencing with Section 53410), and with the list of disciplinary definitions and requirements adopted by the Board of Governors to implement that Article, as such list may be amended from time to time.

NOTE: Authority cited: Section 70901, Education Code. Reference: Sections 7090170902, Education Code.

Guideline for Sections 55378 and 55380

These two sections emphasize the need for districts to follow the same procedures for course approval and faculty selection in distance education courses and sections that apply in other delivery modes. The on/y text change from earlier regulatory language has been to replace the term "telecourse" with "distance education." See Article 2 of Chapter 4 of Division 4 of this Part (commencing with Section 53410) for a fuller statement of the faculty selection process. It is worth noting that many forms of distance education delivery require technical knowledge on the part of faculty.

58003.1. Average Daily Attendance; Computation.

(a) Pursuant to the provisions of Section 58051, the units of average daily attendance for apportionment purposes shall be computed for courses based on the type of course, the way the course is scheduled, and the length of the course.

(b) The governing board of each community college district shall, for each of its colleges or its district, select and establish a single primary term length for credit courses that are scheduled regularly with respect to the number of days of the week and the number of hours the course meets each week, inclusive of holidays. The units of average daily attendance of credit courses scheduled conterminously with the term, exclusive of independent study or work experience education courses, shall be computed by multiplying the average student contact hours of active enrollment as of Monday of the week nearest to one-fifth of the length of the term, unless other weeks are specified by the Chancellor to incorporate past practice, by the term length multiplier, multiplied by the statewide factor as established by the Board of Governors subject to the approval of the Department of Finance, and divided by 525. The term length multiplier for attendance accounting purposes shall be determined in accordance with regulations of the Board of Governors, provided that the maximum multiplier for semester length terms shall be 17.5 and the maximum multiplier for quarter length terms shall be 11.67.

(c) For credit courses scheduled to meet for five or more days and scheduled regularly with respect to the number of hours during each scheduled day, but not scheduled coterminously with the college's primary term established pursuant to subdivision (b), or scheduled during the summer or other intersession, the units of average daily attendance, exclusive of independent study or work experience education courses, shall be computed by multiplying the average daily student contact hours of active enrollment as of the census day nearest to one-fifth of the length of the course by the number of days the course is scheduled to meet, multiplied by the statewide factor as established by the Board of Governors subject to the approval of the Department of Finance, and divided by 525.

(d) For credit courses scheduled to meet for fewer than five days, and all credit courses scheduled irregularly with respect to the number of days of the week and the number of hours the course meets on the scheduled days, the units of average daily attendance, exclusive of independent study or work experience education courses, shall be computed by dividing actual student contact hours of attendance by 525.

(e) For all open entry-open exit credit courses and for all noncredit courses otherwise eligible for state aid, the units of average daily attendance shall be

computed by dividing actual student contact hours of attendance by 525.

(f) All independent study or work experience education courses are credit or noncredit courses.

(1) For credit courses, for purposes of computing average daily attendance only, one weekly student contact hour shall be counted for each unit of credit for which a student is enrolled in one of those courses. The average daily attendance of those courses shall be computed by multiplying the average of the units of credit for which students are enrolled as of the census dates prescribed in Subdivisions (b) or (c), as appropriate for the primary term or intersession and duration for which the course is scheduled, by the term length multiplier as provided for in Subdivision (b), and dividing by 525.

(2) For noncredit course sections conducted as distance education independent study, for purposes of computing average daily attendance only, weekly student contact hours shall be derived by counting the hours of instruction or programming received by the students, plus instructor contact as defined in Section 55376(b), plus outside-of-class work expected as noted in the course outline of record and approved by the curriculum committee, and dividing the total number of hours thus derived by 54. Hours of instruction or programming received shall be independently verified by the instructor using a method or procedure approved by the district according to policies adopted by the local governing board as required by Section 58030. Average daily attendance for such noncredit distance instruction independent study course sections shall be computed by multiplying: (A) the average of the number of students actively enrolled in the section as of each census date (those dates nearest to one-fifth and three-fifths of the length of the course section) by, (B) the weekly student contact hours as derived above in this Section, by (C) the primary term length multiplier of 17.5, and (D) dividing by 525. This Subdivision shall become inoperative on July 1, 2000, unless a later-adopted regulation deletes or extends this date.

(g) Notwithstanding subdivisions (b) and (c) of this Section, the units of average daily attendance for any credit course other than independent study or work experience education courses may, at the option of the district, be computed by dividing the actual student contact hours of attendance by 525. When a district chooses to exercise the option of computing attendance for any course section by the actual student contact hours method, such method must be used consistently for all attendance accounting for that section.

NOTE: Authority cited: Sections 66700 and 70901, Education Code. Reference: Section 70901, Education Code.

Guideline for Section 58003.1

In order for noncredit distance education to be reimbursed from state apportionment, the historical noncredit funding mechanism that was based upon the classroom attendance of students had to be modified to accommodate the fact that not all distance education activity would be occurring in the classroom. That funding change is described in Subsection (f)(2); all other provisions of this Section remain unaltered.

Subsection (f)(2) defines how to compute weekly student contact hours for noncredit distance education. The factors that are aggregated in this calculation include:

- the hours of in-person instructor contact,
- the hours of instruction (not necessarily in-person) or programming received by students, and
- the hours of outside-of-class work expected (as noted in the course outline of record).

58007. Noncredit Classes.

Contact hours of enrollment in noncredit courses shall be based upon the count of students present at each course meeting. Average daily attendance in noncredit courses shall be computed by dividing the sum of contact hours of enrollment by 525. Noncredit distance education courses described in Section 55370

shall be conducted as independent study, and the computation of average daily attendance shall be as prescribed in Section 58003.1(f)(2).

NOTE: Authority cited: Sections 66700 and 70901, Education Code. Reference: Section 70901, Education Code.

Guideline for Section 58007

This section cross-references the new noncredit computation procedure described in Section 58003.1(f)(2) above.

58009. Application of Independent Study or Work Experience Attendance Procedure.

(a) One weekly student contact hour shall be counted for each unit of credit for which the student is enrolled as of the census dates prescribed in Section 58003.1(b) or (c).

(b) For credit courses average daily attendance in independent study or work experience education courses in primary terms is computed by multiplying the weekly student contact hours authorized pursuant to Subdivision (a) of this Section, generated as of the census date prescribed in Section 58003.1(b) by the term length multiplier as provided for in Section 58003.1, and dividing by 525.

(c) For noncredit courses conducted as distance education independent study, average daily attendance is computed on a census basis as prescribed in Section 58003.1(f). This Subsection shall become inoperative on July 1, 2000, unless a later-adopted regulation deletes or extends this date.

(d) Average daily attendance in independent study or work experience education courses conducted during a summer or other intersession is computed by multiplying the weekly student contact hours, authorized pursuant to Subdivision (a) of this Section, generated in each course, by a course length multiplier that produces the same total weekly student contact hours for the same student effort as would be generated in such courses conducted in the primary terms, and dividing by 525.

NOTE: Authority cited: Sections 66700 and 70901, Education Code. Reference: Section 70901. Education Code.

Guideline for Section 58009

This section established a sunset to the new noncredit computation procedure described in Section 58003.1(f)(2) above. Thus, no noncredit distance education will be eligible for state apportionment after July 1, 2000, unless a later-adopted regulation deletes or extends this date.

58051. Method for Computing Average Daily Attendance.

(a) (1) Except as otherwise provided, in computing the average daily attendance of a community college district, there shall be included only the attendance of students while engaged in educational activities required of students and under the immediate supervision and control of an academic employee of the district authorized to render service in the capacity and during the period in which he or she served.

(2) A community college district may also include the attendance of students enrolled in approved courses or programs of independent study, including courses or programs formerly conducted as coordinated instruction systems, who are under the supervision, control, and evaluation, but not necessarily in the immediate presence, of an academic employee of the district who is authorized to render such service. Such attendance may only be included for college level credit courses and programs which are accepted for completion of an appropriate educational sequence leading to an associate degree, and which generally are recognized upon transfer by institutions of the University of California or the California State University.

The community college district shall determine the nature, manner, and place of con-

ducting any independent study course or program in accordance with rules and regulations adopted by the Board of Governors of the California Community Colleges to implement the purposes of this Subdivision. The rules and regulations shall require community college districts to ensure that the components of each individual study course or program for each student shall be set out in a written record or program, the number of units and hours of study required, the arrangements for consultation with the instructor, the work product to be evaluated, and the college facility required. The rules and regulations shall also provide for input from, and participation by, faculty, who are selected by academic senates or faculty councils, and students, in the development and evaluation of approved educational courses and programs.

(3) A community college district may also include the attendance of students enrolled in approved distance education independent study sections in accordance with the provisions of Section 55316.5(a) and (b).

(b) For the purpose of work experience education programs in the community colleges meeting the standards of the California State Plan for Vocational Education, "immediate supervision" of off-campus work training stations means student participation in on-the-job training as outlined under a training agreement, coordinated by the community college district under a state-approved plan, wherein the employer and academic school personnel share the responsibility for on-the-job supervision. The student/instructor ratio in the work experience program shall not exceed 125 students per full-time equivalent academic coordinator.

(c) For purposes of computing the average daily attendance of a community college district, attendance shall also include student attendance and participation in in-service training courses in the areas of police, fire, corrections, and other criminal justice system occupations that conform to all apportionment attendance and course of study requirements otherwise imposed by law, if the courses are fully open to the enrollment and participation of the public. However, prerequisites for the courses shall not be established or construed so as to prevent academically qualified persons not employed by agencies in the criminal justice system from enrolling in and attending the courses.

(d) Notwithstanding Subdivision (c) and any regulations adopted pursuant thereto, a community college may give preference in enrollment to persons employed by, or serving in a voluntary capacity with, a fire protection or fire prevention agency in any course of in-service fire training at the community college in cooperation with any fire protection or fire prevention agency or association. Preference shall only be given when such persons could not otherwise complete the course within a reasonable time and when no other training program is reasonably available. At least 15 percent of the enrollment in in-service fire training courses shall consist of persons who are neither volunteers of, nor employed by, a fire protection or prevention agency or association, if the persons are available to attend a course. Average daily attendance for the courses shall be reported for state aid.

(e) Subdivision (d) shall apply only to the following:

(1) Community colleges which, in cooperation with any fire protection or fire prevention agency or association, have been, as of January 1, 1980, the primary source of in-service training for any fire protection or fire prevention agency or association.

(2) Community colleges which, in cooperation with any fire protection or fire prevention agency or association, establish in-service fire training for any fire protection or fire prevention agency or association which did not have in-service fire training prior to January 1, 1980.

(f) in the event that certain in-service training courses are restricted to employees of police, fire, corrections, and other criminal justice agencies, attendance for the restricted courses shall not be reported for purposes of state apportionments. A community college district which restricts enrollment in in-service training courses may contract

with any public agency to provide compensation for the cost of conducting such courses.

(g) Positive records of student admissions and daily attendance in all in-service training courses in the areas of police, fire, corrections, and other criminal justice system occupations, as described in Subdivision (c), shall be maintained by each district and shall be separately reported annually to the Chancellor's Office.

NOTE: Authority cited: Sections 66700 and 70901, Education Code. Reference: Section 70901. Education Code.

Guideline for Section 58051

Subsection (a)(3) has been added to existing language to cross-reference the districts' new authority to offer nontransferable distance education as defined in Section 55316.5(a)and(b).

Standing Orders of the Board of Governors 409. Distance Education.

(a) The Chancellor shall convene a task force comprised of members of those Consultation Councils most closely responsible for instruction to develop implementation guidelines, by June 1994, for offering distance education courses. Subsequent to the development of implementation guidelines, the Chancellor shall establish a Technical Advisory Committee on Distance Education to provide ongoing advice on the implementation and evaluation of distance education for the system.

(b) The Chancellor shall, by December 1999, provide a report to the Board of Governors that evaluates distance education systemwide and provides data and analysis, by age, disability, ethnicity, and gender, on student access to student instruction, enrollment and completion rates, and student and faculty satisfaction.

GLOSSARY

Communication Technology. A system for sending and receiving voice, video and data electronic information.

Course Session. Used in Management Information System reporting to indicate the separate records on a section of a course that distinguish when a part of the section is scheduled at a different time, on different days, in a different facility, or with several instruction methods.

Courseware. Educational software and materials (such as programs) for a distance education course.

Distance Education. Instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology.

Fully Interactive. A variety of distance education in which the technology employed provides an immediate opportunity for exchange between participants.

Independent Study. A broad category of courses for which state reimbursement is based upon number of units of credit rather than amount of student attendance. For apportionment purposes, distance education is one variety of independent study.

Interaction. A back-and-forth dialog, using communication technology, between the user and the system.

Real Time. An electronic operation that is performed in the same time frame as its real-world counterpart. For example, real time video transmission produces a live broadcast

DISTANCE EDUCATION TASK FORCE PRINCIPLES

1. Distance education, including the use of technologies to accomplish predetermined student outcomes, should be viewed as an appropriate means to achieve learning.

2. The state standards for funding, local processes used for development and approval, and outcome

evaluation criteria of all distance education courses should be comparable to those used for other methods of achieving learning.

3. Interaction between student and faculty member is essential but may be accomplished in various ways. Various types of interaction should be addressed in the trial period.

4. The ability of the instructor to structure the learning environment is essential and should be addressed in criteria developed for the trail period.

5. No action regarding distance education should be taken at the state level which would jeopardize the transferability of courses to the University of California and the California State University.

6. State funding for the expansion of distance education and technology-mediated education should be supplemental and not come from the limited funding available for present education programs and services.

7. All courses, whether offered by distance technology or not, should be funded at comparable levels.

8. Incentives and support should be provided for community college faculty training and development related to the potential and use of distance education and technology mediated education and to instructional design assistance.

9. There should be a trial period established when nontransferable credit and noncredit courses are permitted to be offered via distance education. During the trial period, any college which chooses to incorporate distance education and technology-mediated methodologies into nontransferable credit and noncredit courses must agree to meet established criteria that will be developed at the state level.

10. In order to meet the demands of the state, there is a need to develop a plan that encourages cooperation and eliminates unnecessary duplication.

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