

California State University, Stanislaus

Resolution

Academic Technology Plan

Resolved: That the Academic Senate of California State University, Stanislaus endorse the Academic Technology Plan,

California State University, Stanislaus

Academic Technology Plan

February 2003

Institutions of higher education are undergoing rapid and dramatic change as technology transforms the teaching and learning process. In response, California State University, Stanislaus developed reports in 1997 and 1998 that shared ideas regarding how the institution could meet the academic technology needs of faculty and students. Some of what was outlined in these two reports was tied to funding that did not materialize; some of the proposed ideas have been implemented since that time.

This Academic Technology Plan is a work in progress, articulating a vision of the ways in which technology ought to contribute to the university's academic environment, and the necessary means to bring this vision to fruition. It was created over the 2001-2002 academic year in response to a CSU Chancellor's Office directive. Beyond that, however, the resulting Academic Technology Plan serves a very clear function in that it establishes priorities related to university strategic planning. The university must be able to respond to immediate needs as well as prepare for what will and ought to be part of the campus environment in 3 years. This cannot happen without a vision of how and why technology should be considered in instruction. It is important to note that the Academic Technology Plan does not address administrative uses of technology.

The plan was developed as a result of discussion and collaboration among and between many individuals and campus committees representing faculty, the Office of Information Technology, and the library. Instrumental in the plan's development were the Academic Technology subcommittee, the Off-Campus/Distance Learning Committee, the Faculty Development Committee, and the CSU Stanislaus academic technology planning team that participated in a 2-day Chancellor's office-sponsored workshop in San Jose. The plan was then approved by UEPC in May, 2002.

The Academic Technology subcommittee will be instrumental in operationalizing the Academic Technology Plan. The committee will review the plan annually to prioritize elements based on feedback derived from data collection. In addition, the committee must actively seek ways to find funding for what is articulated in this plan. The committee is charged with revising the plan every 3 years, a necessary function considering that technology is rapidly evolving and advancing. The first revision is scheduled for the 2006-07 academic year.

Technology itself will not change teaching or learning, nor will it automatically improve the educational process. There are critical issues that the university must address in order for CSU Stanislaus to be in a position to effectively infuse technology into our learning-centered institution. These specific issues relate to curriculum; professional development; infrastructure, hardware, technical support, and software; evaluation; and budget and funding.

CURRICULUM

University Mission

California State University, Stanislaus has identified itself as a learning-centered institution. The 1998 WASC document, Pathways to Learning, identified results of university-wide efforts to clarify this learning-centered theme. The report suggested, "Learning involves not only the acquisition of basic academic skills and the broad-based knowledge of a liberal education but goes beyond these to include inspiring and enabling students to become autonomous learners, critical thinkers, creative problem-solvers and thoughtful, reflective citizens with a passion for life-long learning." In response

to this theme, the University's mission was re-examined and updated:

The faculty, staff, administrators, and students of California State University, Stanislaus are committed to creating a learning environment which encourages all members of the campus community to expand their intellectual, creative, and social horizons. We challenge one another to realize our potential, to appreciate and contribute to the enrichment of our diverse community, and to develop a passion for life-long learning.

To facilitate this mission, the university promotes academic excellence in the teaching and scholarly activities of faculty, and encourages personalized student learning. There is no doubt that technology factors into these endeavors.

Vision of Academic Technology

The purpose of developing this Academic Technology Plan is related specifically to making learning accessible to students. The plan is about teaching and learning, and ways in which technology can enhance both. Our vision has been developed based on this principle.

Technology facilitates learning by engaging students in meaningful simulations, establishing collaborative environments, providing productivity tools by which communication can occur, and facilitating access to current resources within disciplines. In other words, technology can enhance the educational experience of students in varied ways. Given the wealth of possibilities regarding how technology can impact teaching and learning, it is important to develop a technological structure that clearly supports the learning-centered mission of CSU Stanislaus. There is no assumption that technology be universally integrated into all disciplines or courses; only that there is opportunity. It is understood that there are non-technology-based resources, activities, and strategies that are also effective, and that faculty are encouraged to draw upon what is most beneficial in their courses.

Despite a belief that technology may not always match curricular or instructional goals and objectives, it is clear that technology can be an important resource across disciplines. This suggests that all faculty and students should have access to modern technological resources that are not only general computing tools but are also technologies specific to individual fields of study. When used, technology should be well-integrated into programs and not viewed as an isolated add-on to curriculum.

Specialty Labs

Technology is so integral to such instructional programs as geographic information systems, visual art and music technology that discipline-specific labs have been called for. Specialty labs to support the programs of nursing, computer information systems, the sciences and foreign languages are also already in place or in planning. While start-up funds for specialized labs are typically recognized as a major challenge, sustainability must be given equal attention when planning for such labs. Like all technology, specialized technology needs to be routinely and regularly updated or it becomes obsolete, and obsolete technology limits teaching and learning possibilities, eventually resulting in the effective loss of the initial investment. Support for knowledgeable and trained technical support staff must also be addressed prior to start-up in order to insure proper and secure maintenance as well as appropriate lab availability for students.

While this campus plan acknowledges the place and importance of specialty labs in academic technology, their discipline-specific nature and linkage to a particular academic program make it the responsibility of the appropriate department, school or college to provide initial and on-going funding for the hardware, software and technical support of specialty labs.

Distance Learning

Quality of instructional programs should be maintained when technology is used to deliver courses. Students who enroll in courses that are offered via distance learning must be provided with the same amount and quality of support that students receive when they take classes via more traditional

means. This support goes beyond merely having access to the library catalog online. It means that faculty, resources, and reference materials must be available and accessible beyond the physical campus.

Assistive Technology/ADA Compliance

The Americans with Disabilities Act requires the university to provide hardware and software that will enable students with disabilities to become self-sufficient learners. It also requires the availability of personnel who can assist students in ultimately achieving this independence. In 2001-02, the Academic Technology subcommittee worked with Office of Information Technology staff, library faculty, Disabled Student Services personnel, and the campus ADA-Compliance Officer to identify assistive technology needs and to develop a plan for responding to those needs. To date, however, no funding has been identified to implement the plan. Compliance, particularly as it relates to assistive technology, and including hardware, software and technical support, remains a pressing concern. The University's continued inaction in this area exposes it to liability.

Information Competency

Advances in technology have led to dramatic growth in the amount and availability of information. With these changes have come increased recognition of the significance of information competence for the teaching and learning processes. The Association of College and Research Libraries developed Information Literacy Competency Standards for Higher Education (2000). These Standards suggest students should be able to:

- Determine the nature and extent of information needed;
- Access the needed information effectively and efficiently;
- Evaluate information and its sources critically;
- Use information effectively to accomplish a specific purpose;
- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.

In addition to developing skills related to these Standards, CSU Stanislaus students are expected to communicate an understanding of synthesized information. As information-competent graduates, students will be assured of greater competitiveness in the information age if they develop the listed skills; they will have learned how to learn, and they will thus be prepared to be life-long learners.

The library serves a vital role in addressing the information competency of CSU Stanislaus students. Research indicates the most effective information literacy programs are those that are integrated into the curriculum and built upon strong alliances between discipline faculty and library faculty. Information competency skills are related to critical thinking skills in general, and therefore should be developed as a part of the general education of CSU Stanislaus students. Continued dialog between library faculty and discipline faculty is necessary to determine how to most effectively develop and assess such skills among students.

Computer Competency

Educated citizens in general should be prepared for the 21st century, which includes effective use of computers and other technologies. As a result, CSU Stanislaus students are expected to have basic computer skills prior to enrollment. Currently, computer skills vary widely among students, which makes it difficult for faculty to require students to complete assigned technology-based activities. Though the university is the appropriate place for students to refine their computer skills and to develop skills specific to their discipline, establishing a basic computer proficiency level will help faculty in planning experiences that students are capable of completing, and it will make students aware of expectations prior to entry.

Development of a computer proficiency assessment required of all incoming students—both new freshmen and transfer students—is recommended. The purpose of the assessment is to determine current skill levels and provide suggested means by which students who fall below expected skill levels can acquire the proficiencies. Such options may include one-on-one assistance through the Tutoring Center, online training, workshops through Extended Education or local Adult Schools, or Modesto Jr. College's Open-Entry/Open-Exit courses. The assessment would not be tied to graduation requirements and would, instead, be merely advisory for students. Because no such

assessment is currently administered on campus, the Academic Technology Subcommittee, or an appropriate sub-group, should assume responsibility for developing an instrument.

Accreditation

Several accreditation reviews include an evaluation of the technological resources available to students, faculty, and staff. It is important that CSU Stanislaus provide adequate resources so that accreditation agencies do not identify stipulations based upon technology. NCATE, AACSB, and WASC are some examples of such accreditation reviews.

PROFESSIONAL DEVELOPMENT

Professional development needs to not only provide faculty members with skills in using technology, but also in integrating technology into curriculum. Research indicates that curriculum integration does not occur until personal proficiency with technology is first achieved. Professional development opportunities must ensure that faculty have proficiency with technology so that informed decisions can be made in regard to the use of technology in curriculum.

The CSU system-wide academic technology planning conference made it clear that providing some type of incentives for faculty to integrate technology is important. Stipends, release time, and/or materials should be made available to assist and/or facilitate faculty efforts to integrate technology into the curriculum. Non-financial incentives should also be considered. Certainly recognition within the Retention, Promotion, and Tenure process will encourage faculty who may otherwise choose to pursue other endeavors that are seemingly better rewarded in this process, to experiment and innovate with technology. Many California State University campuses offer a competitive proposal process to provide faculty with resources and equipment related to academic technology. It would be advantageous to institute such a model here at CSU Stanislaus.

Beyond incentives, the following issues and activities related to professional development have been identified as crucial in regard to academic technology on the CSU Stanislaus campus.

- On-demand training and assistance must be available to support faculty in their efforts to utilize technology efficiently and effectively at both personal and professional levels. The Faculty Development Committee/Faculty Center for Excellence in Teaching and Learning and the Office of Information Technology should work jointly to plan professional development events that meet campus needs. This may involve a combination of one-on-one or small group training as well as larger workshops. Curriculum development at a discipline level should also be supported.
- Develop or identify and acquire online assessment instruments to help faculty and staff determine their proficiency level with various software programs. Online training would then be offered at levels that are consistent with user needs, providing opportunities for flexible scheduling. Students could also capitalize upon such offerings, which will maximize the use of resources.
- Incentives or rewards should be provided to encourage faculty to teach appropriate courses via instructional television or via the Internet, and to recognize the extra work it takes to deliver such courses well.
- Adequate faculty training for Web-based distance learning courses has become a critical issue in many institutions of higher education. Increasing student demand for online courses is dictating mediation to the web. Support and assistance for online courses must be provided to maintain quality of such offerings.
- It would be advantageous to develop and share ideas regarding what could be done with different technology tools (such as tables in Word or email in web-based courses) to assist faculty in brainstorming possibilities related to their discipline and teaching style, then to deliver training that would teach those who are interested how to implement that idea. These sessions would not teach faculty how to use the software in general, but rather to apply software in specific curricular settings.

- To provide peer support, a list of “ambassadors,” those proficient with certain software, could be generated. These ambassadors need some type of compensation to encourage them to help other faculty.
- Support must be provided to engage faculty in an exploration of their own individualized vision of how technology should/should not be integrated into their professional lives. This would relate to personal productivity tools, classroom applications of technology, and implications of the use of technology.
- Professional development includes the gathering and dissemination of research about the impact of technology on faculty, student learning, health, and attitude toward teaching. The Faculty Development Committee can assist by maintaining an ongoing campus conversation about these issues and others that are relevant such as Copyright/Fair Use and privacy issues. The results of these conversations should be woven into campus planning efforts and policies. We should, in all cases, be able to specify why we are investing in technology.

INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE

The CSU Stanislaus self-proclaimed learning-centered focus implies that this institution provides opportunities for students to experience education in ways that encourage critical thinking, problem solving, and reflection. Effectively used technology-based resources can be instrumental in achieving this goal. For technology to be effective, selected hardware and software must be readily available to faculty and students; technical support to maintain equipment and provide assistance must be timely; and faculty development opportunities must meet the needs of those who reach students.

There is no such thing as one-time funding for technology. Individual departments, colleges, the library, and the Office of Information Technology have been forced to finance technology in a piecemeal fashion, often adding components as one-time funds become available. This is an insufficient process that does not keep pace with the actual need.

The piecemeal approach also fosters the kinds of oversights involving technology that have been evident in recent grant-supported projects. Technology has become so ubiquitous and is so much a part of the campus infrastructure that grant writers often aren't even aware of the support implications of their requests. Campus procedures for grant applications should be revised to include the Associate Vice President for Information Technology's signature as one of the mandatory signatures. Such a review would insure that OIT is fully aware of all technology-based implications of proposed projects and that budget proposals accurately and completely reflect technology needs.

The CSU Stanislaus Academic Technology Plan articulates needs and priorities for hardware, software and support, all of which must be addressed with continuous funding. It is critical that this plan be recognized as part of campus strategic planning to ensure that appropriate financial resources are allocated to articulated needs.

Technical Support

The top priority identified by those involved in writing the Academic Technology Plan is providing adequate technical support. Nothing else in the plan will be successful unless sufficient funding is provided for such services, services which must be allocated as a recurring expense.

As CSU Stanislaus adds more hardware, the number of OIT staff members to support this hardware must also be increased. It is obvious that more equipment means more equipment failure, necessitating additional personnel to repair the problems. Furthermore, maintenance on equipment can extend the life and usefulness of purchases. Current technical support staff is so busy trying to keep up with equipment breakdowns that it is impossible for them to perform preventative maintenance. This just exacerbates the need for more technicians. Also adding to the problem is a lack of training for the technicians. It is essential that technical support staff members receive on-going training to keep abreast of procedures and techniques related to new technologies.

Personnel must be available to assist with technical problems during all class times, including weekends; a technician is needed in each building to troubleshoot problems that emerge during classes. Nothing will deter faculty from using technology more quickly than technical problems. Adequate technical support is an issue for the library as well, which is becoming increasingly computer-intensive.

Most college campuses provide a service-oriented help desk staffed by adequately trained students who can assist lab users as well as off-campus students in need of assistance. CSU Stanislaus provides some assistance to lab users during the 80 hours per week in which the labs are open. Quality of assistance varies greatly by personnel because little training is provided to the work-study students who staff the labs. Moreover, the campus offers no support to students who are using off-campus computers. Funding must be provided to ensure that adequate assistance with hardware and software is available to all students when the need arises.

Technical support is a necessary part of the academic environment. Funding this support is part of the total cost of ownership of electronic equipment, and it is essential if the university expects to make technology a viable tool for teaching and learning.

Beyond technical support, several items related to infrastructure, hardware, and software have been identified to help the university fulfill its learning-centered mission. Although all of these are important, items have been grouped into two levels. Tier 1 items are ideas that have been identified but un- or under-funded in the past. Tier 2 items will position CSU Stanislaus faculty to effectively integrate technology across all disciplines.

Tier 1

- Upgrade faculty computers on a 3-4 year cycle. Faculty will be required to submit an application for equipment upgrades; this application includes a justification or rationale for the request. An appropriate campus-wide committee will evaluate the requests and determine the awards. Computer lab and library equipment for students should also be updated every 3-4 years. Lab equipment upgrades extend to specialty labs as well, whether funding is provided centrally (i.e., from OIT's budget) or from the disciplines. Budgeting for such upgrades would guarantee that all faculty and students have access to adequate hardware with the capacity to handle modern computing needs. Among the CSU system, CSU Stanislaus is in the minority of campuses that do not have a plan to upgrade faculty and lab computers.
- Continue to increase the number of Smart Classrooms, where appropriate, and upgrade equipment on a 5-year cycle. Faculty are increasingly utilizing Smart Classroom equipment, but not all classrooms on campus contain the hardware that many have grown to expect. Individual components within existing Smart Classrooms are starting to fail as they are aging, and no provision has been made for their replacement. Because Smart Classrooms suggest a mode of pedagogy, it is important not to assume that all instructional rooms should be equipped with this gear. New purchases and installations should be made based on a needs analysis. In addition, an examination of smaller units which provide more flexible instructional environments, especially in cramped and crowded classrooms, must be encouraged.
- Demands for campus software licenses have increased, as have prices for such licenses. General-use software such as SPSS, Office, Blackboard, Turnitin.com, Visual Basic, and anti-virus software is used widely across campus by both faculty and students. This necessitates campus-wide funding of such licenses. Funding for discipline-specific software (GIS, business, etc.) also must be secured. Documentation software (e.g. Procite and Endnote) would assist campus efforts toward information competency, and therefore is also worthy of licensing on a campus-wide level.
- Facilitate faculty efforts to integrate technology into the curriculum by providing stipends for such work.

Tier 2

- Provide portable computer labs and wireless network access throughout campus. Many instructors only want to schedule a computer lab two or three times during the semester. Under the current system, these instructors are forced to reserve lab space for the entire semester. This results in scheduled labs being reserved but devoid of classes. A “rolling lab” of wireless laptops would provide the flexibility and access that would facilitate learning anywhere, anytime on campus. A cart specifically designed to store laptops could be reserved and wheeled to classrooms when the need arises. Each cart would be equipped with 20 laptops that have wireless network cards installed, and it would also contain a wireless hub that would plug into the room’s Ethernet port. In addition to serving faculty needs for class purposes, these labs could also be used by library faculty when they engage in instruction with groups of students. To reduce the distance these carts must travel, it would be ideal to have one rolling lab per building.

Flexible learning environments necessitate wireless connectivity in campus buildings. This would be useful for both faculty and students who bring in their own equipment (laptops and Personal Digital Assistants) to use. Perhaps arrangements could be made to extend wireless capacity to the new shopping center on Crowell Road. In addition to the noted wireless access, student network workstations need to be installed across campus so students can connect their laptops and PDAs to the network via Ethernet cables.

- Effective communication of information related to technology access and function is crucial. Currently faculty and students are unaware of many technology-based resources available on campus—workshops, equipment, network access information, available library resources, and more. A Communications Liaison, a faculty member with release time supported through the Faculty Center for Excellence in Teaching and Learning, could serve in this capacity as well as facilitating collaboration and cooperation between the library, the Office of Information Technology, students, and faculty.
- As students are increasingly expected to utilize electronic resources in class assignments, the library must be able to provide access to the resources that students require. There must be a provision for the upgrade of library support systems (such as OLLIE) on a routine cycle to insure the library’s ability to support the research needs of students and faculty. As the campus grows, the number of computers available in the library to provide access to electronic information sources must also be increased as needed to meet the demand. Costs associated with these efforts will be significant and must be anticipated and funded in a timely and appropriate manner.
- A portable video-conferencing station in Turlock and in Stockton, and the necessary infrastructure in classrooms, would facilitate learning exchanges between these two sites on a more flexible basis than the current immobile video-conferencing structure provides. A portable station could be reserved and utilized from nearly every classroom on both campuses.
- Currently the CalREN2 project provides for Internet2 access throughout much of California. Unfortunately, CSU Stanislaus is not yet connected to this high-speed infrastructure. A connection to this network will allow faculty to consider delivery of courses in ways that are not currently possible. Administrators must look at ways to finance a connection. NSF offers funding with a match that could be tapped into. In addition, the university might explore the current Codec and/or ITFS delivery system to determine whether resources are being used effectively and efficiently or whether funding that supports these current delivery methods might be diverted to fund the Internet2 connection.
- It is important to obtain the storage capacity and speed to make streaming media feasible for large numbers of users on our campus. This will be especially essential as more courses migrate to a web-delivered mode.
- The campus must examine the feasibility of installing email/web kiosks throughout campus. These kiosks could be used for email and web searching as well as for course registration. Continue to monitor the viability of thin-client technology as a possible alternative to desktops in student labs and in the library.

Although it is important for individual campuses to have autonomy and local control over technology integration, some initiatives can be most effective when implemented at a CSU system-wide level. The work done by the Systemwide Electronic Information Resources (SEIR) office in negotiating licenses and purchases of library databases is an excellent example of what can be done. CSU Stanislaus has identified the following as areas in which system-wide assistance would be appropriate. Campus representatives on the system-wide Academic Senate must advocate for such endeavors.

System-wide licenses

- Office suite. Software should be provided for faculty, staff, and computer labs on campus, and the software should be made available at low cost for faculty, staff, and students to use on home computers.
- SPSS. Software should be provided for faculty, staff, and computer labs on campus, and the software should be made available at low cost for faculty, staff, and students to use on home computers.
- Turnitin.com or an equivalent service for detecting plagiarism.
- Documentation software (e.g. Procite or Endnote).
- A web-based class management tool (Eg. Blackboard, WebCT). Individual campus licensing fees continue to increase.
- High-end web authoring/ multimedia programs (Eg. Authorware).
- Licenses for computer-based training courses (Word, PowerPoint, Windows, etc.)
- Subsidize discipline-specific databases (Eg. AMSPEC: CRSP; SSDBA).
- Virus-protection and firewall software.

Other system-wide activities

- Continue to explore student technology fees. Support is needed at the system-wide level in order to initiate a student fee at individual campuses. The benefit of such a fee is that campuses would be provided with continuous funding specifically tied to academic technology needs at the institution.
- Create a system-wide upkeep/ maintenance program. Rather than relying on individual campuses to fully fund maintenance of infrastructure, the chancellor's office should recognize the need to provide resources that are crucial in the teaching and learning process.
- Provide training at the system-wide level for things like Macromedia courses; this would be specialized training appropriate for only limited personnel on each campus. Campuses would pay travel costs for those attending.

MONITORING AND EVALUATION

It is important that the Academic Technology Plan be examined on an annual basis, as the intent is for the plan to be an evolving document. The Academic Technology subcommittee will initiate this process each spring, and will involve others as appropriate. The purpose of the annual evaluation is to determine progress, and to initiate changes in the plan as needed. In addition to an annual evaluation, the entire Academic Technology Plan should be revised on a three-year cycle. Each major revision should go through faculty governance channels.

When the Academic Technology Plan is revisited annually, it is important for the Academic Technology subcommittee to utilize data to determine whether plan components are being implemented and whether they are effective. This data will help in formulating short- and long-term goals for developing campus capacity for technology. Data collection falls into two broad categories:

assessing faculty/ student use of technology and assessing the effectiveness of technology integration into curriculum.

Assessing faculty/student use of technology

- The Office of Information Technology will systematically track technology-based resources available for full-time and part-time faculty. This information will assist with efforts to match goals with resources. There is software that can track this information more easily and accurately than what personnel can do manually; advantages and disadvantages of each method need to be weighed.
- The Office of Information Technology will provide the Academic Technology Subcommittee with Blackboard usage statistics.
- The campus Turnitin.com administrator will collect data annually to determine the extent to which the service is being used by faculty and students. This data can be helpful in assessing whether the campus site license should be renewed, or whether other services related to plagiarism should be explored.
- Office of Information Technology staff will monitor student use of computer lab facilities. Number of users by lab/location will be recorded hourly throughout the year. This information will provide data that can determine whether hardware availability and configuration is adequate, and whether lab availability needs to be adjusted.
- Office of Information Technology staff will record teaching lab usage throughout the year. This information will help in determining the need for additional lab facilities or other alternatives that can be scheduled for class use.
- Office of Information Technology staff will track all work order requests and the length of time needed to complete such orders to determine whether sufficient personnel is available to adequately address upkeep and maintenance.
- The Faculty Center for Excellence in Teaching and Learning will initiate surveys and/or conversations to determine faculty training needs. The Faculty Multimedia Center staff will also be involved in delivering large- and small-group training based on feedback they receive from individual faculty.
- The Academic Technology subcommittee will develop and administer a survey of student and faculty technology needs, distributed in alternate years. CSU San Bernadino and CSU San Francisco have both developed good instruments that may be useful to use as models in developing one that fits the needs of CSU Stanislaus.

Assessing the integration of technology into curriculum (effectiveness and degree)

- Library faculty will take a leadership position in monitoring information competency among students. One possible method could be based upon CSU Fullerton's model of tracking the number of courses that address information literacy standards.
- The Academic Technology subcommittee will monitor student performance on the computer proficiency assessment. An examination of these results will assist in determining whether such an assessment is needed and how the university should respond to deficiencies.
- The Academic Technology subcommittee will track the use of Smart Classrooms. Not all faculty actually utilize the components of these classrooms. For one week during each semester, faculty will be asked to record what transpires during class sessions. This will help to ascertain the need for additional Smart Classroom equipment as well as classroom furniture.
- The Academic Technology subcommittee will continue to monitor whether the university at large should support discipline-specific software licenses or whether departments or colleges should contribute resources toward such licenses.
- The Academic Technology subcommittee will work with Associated Students, Inc. to create a forum for students to voice concerns related to academic technology.

- The Off-Campus/Distance Learning committee will continue to monitor online courses. At this point, online learning is treated as are any distance learning courses. Pedagogical considerations for course delivery are up to the instructor and/or program. Since the content of the course is approved at several levels, no special consideration is given beyond curricular approval—which is the same for traditionally-delivered courses. If it is determined that the university wants to establish online programs, then it would be wise to consider quality control measures for such offerings.

FUNDING AND BUDGET

The following budget outlines the support needed for items outlined in the Academic Technology Plan. Because support is needed beyond a single year, projected expenditures for a five-year period are outlined. Budget projections and summaries follow on the next five pages.

	2003-04	2004-05	2005-06	2006-07	2007-08	TOTAL	Funding Source
Tier 1 items							
SUPPORT							
1 Help Desk	45,000	46,000	47,000	96,000	96,000	330,000	
	40,000	40,000	40,000	40,000	40,000	200,000	OIT Budget
2 Blackboard Support technician	50,000	52,000	54,000	56,000	58,000	270,000	
3 Instructional Consultant and training specialists	50,000	52,000	54,000	56,000	58,000	270,000	
	48,000	50,000	52,000	54,000	56,000	260,000	OIT Budget
4 Lab Monitors	15,000	15,000	16,000	16,000	17,000	79,000	
	35,000	35,000	35,000	35,000	35,000	175,000	OIT Budget
5 Lab Technician	35,000	36,000	37,000	38,000	39,000	185,000	
	35,000	36,000	37,000	38,000	39,000	185,000	OIT Budget
6 Classroom Support	70,000	72,000	74,000	76,000	78,000	370,000	
	114,000	116,000	118,000	120,000	122,000	590,000	OIT Budget
7 Support for faculty / depts for incr. enrollments in Distance Learning	20,000	24,000	28,000	32,000	36,000	140,000	
8 ADA / Assistive Technology	35,000	32,000	45,000	37,000	50,000	199,000	
HARDWARE & SOFTWARE							
9 Smart Classrooms (new)	50,000	50,000	50,000	50,000	50,000	250,000	
10 Smart Classrooms (upgrade)	25,000	25,000	25,000	25,000	25,000	125,000	
11 Upgrade FT faculty computers	150,000	150,000	150,000	150,000	150,000	750,000	
12 General/Teaching Labs (hardware)							
Turlock	77,500	77,500	77,500	77,500	77,500	387,500	
	35,000	35,000	35,000	35,000	35,000	175,000	OIT Budget
Stockton	27,500	27,500	27,500	27,500	27,500	137,500	
	10,000	10,000	10,000	10,000	10,000	50,000	Stockton Budget
Library	17,500	17,500	17,500	17,500	17,500	87,500	
	5,000	5,000	5,000	5,000	5,000	25,000	Library Budget
13 Site Licensed Software							
SPSS	3,500	3,600	3,700	3,800	3,900	18,500	
Blackboard Course management	7,500	7,500	9,000	9,000	10,000	43,000	
Turnitin.com	2,800	2,800	2,800	3,000	3,000	14,400	
Antivirus software	20,000	20,000	25,000	25,000	27,000	117,000	
Procite / Endnote	1,000	1,100	1,200	1,300	1,400	6,000	

SAS	0	0	0	0	0	0	
Office, Visual Basic etc.	0	0	0	0	0	0	CSU System
Anti-Spam Software	12,000	1,800	1,800	1,800	1,800	19,200	
PROFESSIONAL DEVELOPMENT							
14 Faculty Stipends for Tech. related							
curriculum development	22,500	25,000	27,500	30,000	32,500	137,500	
TOTAL for Tier 1 items	1,058,800	1,065,300	1,105,500	1,165,400	1,201,100	5,596,100	

FUNDING SUMMARY - TIER 1

Requested Budget	736,800	738,300	773,500	828,400	859,100	3,936,100
OIT Budget	307,000	312,000	317,000	322,000	327,000	1,585,000
Stockton Budget	10,000	10,000	10,000	10,000	10,000	50,000
Library Budget	5,000	5,000	5,000	5,000	5,000	25,000
TOTAL for Tier 1 items	1,058,800	1,065,300	1,105,500	1,165,400	1,201,100	5,596,100

	2003-04	2004-05	2005-06	2006-07	2007-08	TOTAL	Funding Source
Tier 2 Items							
15 Portable Wireless Labs	43,000	43,000		43,000	43,000	172,000	
16 Wireless Connectivity	13,000	12,000	13,000	8,000	13,000	59,000	
17 Communication Liaison	4,500	5,000	5,500	6,000	6,500	27,500	
18 Integrated Library System upgrade	100,000	100,000	100,000	100,000	100,000	500,000	
19 Portable Video Conference Station	70,000	30,000	70,000	30,000	70,000	270,000	
20 Internet 2 Connection	375,000	45,000	45,000	45,000	45,000	555,000	
21 Streaming Media Server and storage	25,000	5,000	25,000	5,000	10,000	70,000	
22 Email/ Web Kiosks	10,000	10,000	10,000	10,000	10,000	50,000	
TOTAL for Tier 2 items	640,500	250,000	268,500	247,000	297,500	1,703,500	

Academic Technology Funding Plan – Narrative

It is clear from the annual technology survey of all the CSU campuses that CSU Stanislaus is ranks far below the CSU average in the area of support for academic technology. (See Attachment). The items in the Academic Technology funding plan have therefore been prioritized to achieve a level comparable to the other CSU campuses. Support for academic technology can no longer be limited to the traditional 8:00 a.m. – 5:00 p.m. time slot. Students and faculty need and expect support for longer hours on weekdays as well as on weekends. The items listed in this funding plan would advance CSU Stanislaus closer to the CSU average.

1. Students and faculty are on campus from 7:30 a.m. till 11:00 p.m. on weekdays and several hours on weekends. The forty hours per week that the help desk is currently open is inadequate. The plan requests funding for another employee to cover an additional forty hours immediately and another staff member in the year 2006-07 to achieve 24x7 coverage.
2. Currently over 4000 students use the Blackboard course management system for their coursework. It is therefore critical that the server be available at all times, and especially on weekends. Staff whose primary duty is to maintain many other servers are now performing the technical coverage of the Blackboard server. We are finding that this coverage is not enough to provide the service needed and expected. The request is for a technician whose primary focus will be the Blackboard server.
3. As more faculty begin using instructional technology materials on the web, in distance learning-settings and in the classrooms, there is need for an additional Instructional Design consultant to assist faculty with their curriculum preparation. This request will supplement current available assistance.
4. Current funding for student assistants covers only the open computer labs. There is a need to provide assistance to faculty when teaching in labs, especially with the use of the newer peripheral devices that are increasingly being used in the labs. The request will minimally fund additional wages for student assistants.
5. Even with over 75% of CSU Stanislaus students owning a computer, the usage of computers in the campus labs has not declined. Other CSU campuses provide at least one lab that is open 24 hours a day, 7 days a week. CSU Stanislaus labs are open only 80 hours a week and are usually staffed by student assistants. In order to provide the support needed for the hours the labs are open, additional staff must be hired. The request is for one additional lab technician.
6. Over 50% of classrooms on the main campus are smart classrooms. Many part-time faculty are not familiar with the equipment in classrooms and as with any equipment, failures do occur. Faculty depend on the equipment functioning properly at all times. To properly support this environment from 8:00 a.m. till 10:00 p.m. on weekdays and also on weekends, additional staff will be needed. Ideally a technician should be present in each classroom building for the coverage needed. The immediate need is for one additional technician and another two years later. These additional positions will still not be enough to cover each classroom building for 14 hours on weekdays and some hours on weekends.
7. In times of budget crisis, shortage of classroom space, and the anticipation of larger class sizes, distance learning options become increasingly important. Currently, there are no incentives available to faculty for teaching large classes. Other CSU campuses provide some incentive either to the faculty member or to the department. The requested funds would provide either financial incentive for faculty/departments who teach large class sizes via distance learning technologies, or provide funds for student assistants who can help the instructor manage the larger number of enrolled students.
8. Even though the funding for assistive technology for ADA compliance should include several devices across campus and the necessary support to support students and faculty, the initial requested amount includes only one such station and salary for a .5FTE staff member. The station consisting of a computer, necessary software and a handicap accessible workstation costs about \$10,000. A half-time technician's salary is \$25,000. The funding request for the following years includes maintenance costs, software and hardware upgrades and additional assistive technology stations.
9. Faculty requests for multimedia -equipped classrooms have increased dramatically over the past three years. There are over more than 25 classrooms on the main campus that need to be upgraded with permanently mounted projectors and control panels mounted either on a podium, or on the wall

- for smaller classrooms. The amount requested will upgrade 5 classrooms each year for the next 5 years.
10. In addition to creating new smart classrooms, it is also critical that the obsolete equipment in classrooms be replaced on a reasonably fixed cycle. The oldest smart classrooms on campus are about five years old and the electronic equipment is in need for of replacement. The amount requested will replace equipment in 5 classrooms each year.
 11. A survey of computers on campus indicates that about 90 % of full time tenured/tenure track faculty have computers that meet the minimum standards set by the CSU system. The same can not be said about part-time faculty who often do not have adequate access to computers and/or have access to computers that fall far below standards. Ideally each tenured/tenure track faculty member's computer should be refreshed every three years. The amount requested will provide funds to purchase 100 computers which is roughly a third of the number of permanent faculty. If computers for tenured/tenure track faculty are refreshed every 3 years, part-time faculty will then have access to computers being replaced and these will be far better than what they currently have. Minimally, a \$50,000 request each year will provide help to departments that currently do not have adequate resources to replace computers that are over three years old.
 12. Due to the rapidly changing technology of computer hardware and software, the labs at Turlock and Stockton and computers available for public access in the library have to be maintained at the latest levels of available technology. Funding for this has never been allocated on campus. OIT, Stockton and the Library receive some limited funding but the amount is not adequate to maintain needed levels of technology. The amounts requested, along with the funding provided by each area, are for replacement of a third of the computers in each area every year (90 for Turlock, 30 for Stockton and 18 for the Library each year).
 13. There have been no allocations by the campus to support the site licenses required for anti-virus, anti-spam, plagiarism detection, course management and other software needs arising from the changing technological environment. The amount requested will provide the funds for needed software.
 14. The academic technology survey of the CSU campuses shows that CSU Stanislaus does not provide any stipends for technology related curriculum development. The average for other CSU campuses is \$50,000 in the 2001-02 fiscal year. This request will enable us to begin planning and implementation of a program to assist and reward faculty who now incorporate technology into curriculum with no incentives.

Rationale: The Academic Technology Plan was developed as a result of discussion and collaboration among and between many individuals and campus committees representing faculty, the Office of Information Technology, and the library. Instrumental in the plan's development were the Academic Technology subcommittee, the Off-Campus/Distance Learning subcommittee, the Faculty Development Committee, and the CSU Stanislaus academic technology planning team that participated in a 2-day Chancellor's office-sponsored workshop in San Jose.

Rationale: The Academic Technology Plan is a thorough plan for maintaining and advancing the use of technology in our learning-centered University.