

APPENDIX A: FIGURES AND TABLES

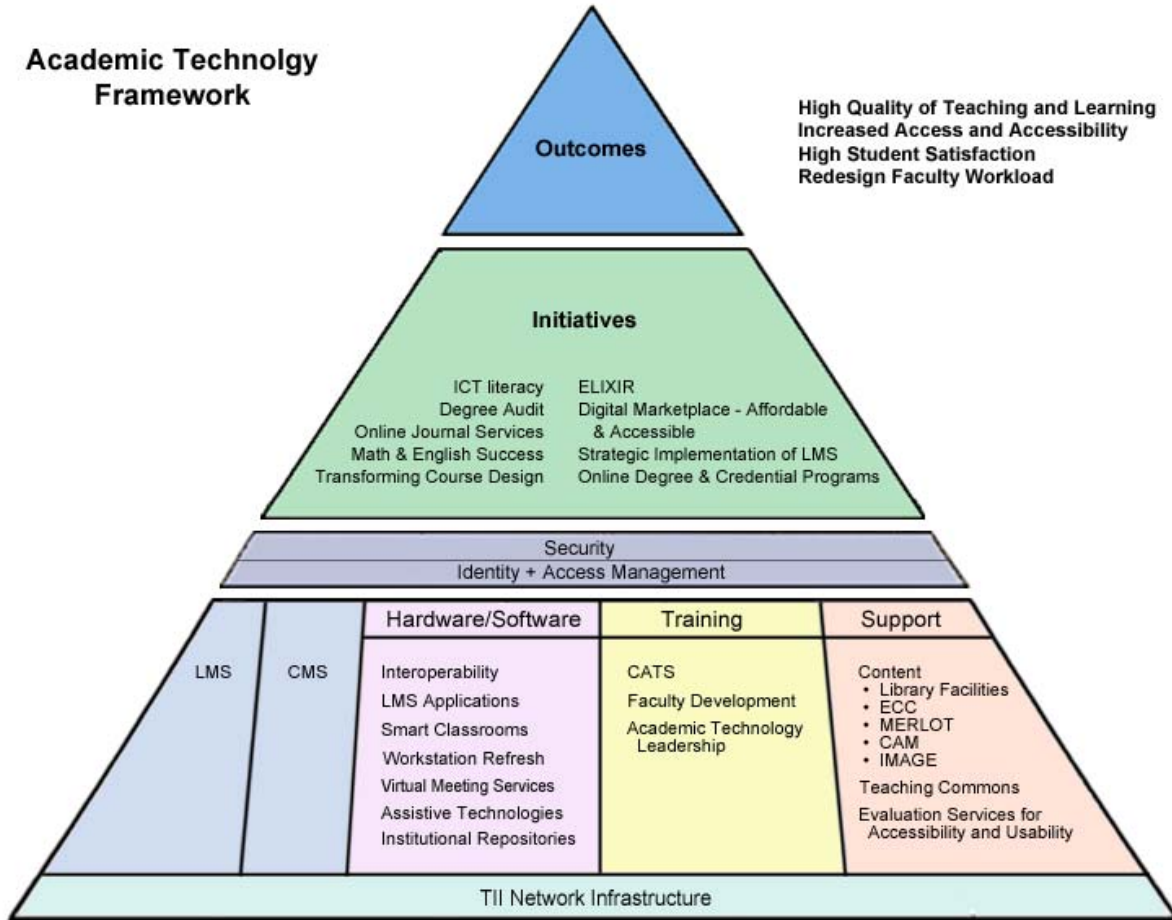


Figure 2

Information Technology Matrix of Major CSU Technology Initiatives

DECADE	C-SU SYSTEMIC ORGANIZATION	STRATEGIC PLANNING	ACADEMIC TECHNOLOGIES/ LIBRARIES	ADMINISTRATIVE SYSTEMS	C-SU COMPUTING ENVIRONMENT	TELECOMMUNICATIONS AND NETWORKING
1960s Mainframes	<ul style="list-style-type: none"> Division of Information Systems mandated by state legislation No formal campus computing organizations 	<ul style="list-style-type: none"> Feasibility Study Reports (DOF) in response to state regulations 		<ul style="list-style-type: none"> Used state agency financial systems Campus based student systems established 	<p>Northern and southern data centers; mainframe computers at San Jose and Los Angeles</p>	
1970s Timesharing	<ul style="list-style-type: none"> Division of Information Systems (CO) Embryonic computing organizations on campus 	<ul style="list-style-type: none"> Feasibility Study Reports (DOF) in response to state regulations 	<ul style="list-style-type: none"> Creation of audio-visual and media centers on campus 	<ul style="list-style-type: none"> SIMS ERSS APDB 	<ul style="list-style-type: none"> Creation of State Data Center DEC academic timesharing computers for every campus 	<ul style="list-style-type: none"> Regulated telephony environment Statewide ATSS network capabilities established
1980s Personal Computing	<ul style="list-style-type: none"> Computing and Communications Resources (CO) Full scale computing organizations on campus Beginning of integration of computing, networking and telecommunications organizations at system and campus levels Commission on Instructional Technology Commission on Extended Education 	<ul style="list-style-type: none"> Campus Information Resource Plans (CIRP) 1984 – CSU received exemption from state procurement oversight 	<ul style="list-style-type: none"> Library Automation Project EAR/ECC AIRC/Specialty Centers Library Strategic Planning Expansion of campus media centers 	<ul style="list-style-type: none"> IBS Financial Aid System AIMS OASIS EASE 	<ul style="list-style-type: none"> Cyber mainframes for each campus Desktop word processors Personal computers IBM mainframes begin replacing Cyber Discontinuance of Statewide Data Center Campus-based Academic Computing Specialty Centers 	<ul style="list-style-type: none"> CSU/Net established Telecommunications upgrades (Centrex to PBX) Expanded microwave and satellite course delivery ITFS licenses for 14 campuses
1990s Internet/WWW/ Multi-media	<ul style="list-style-type: none"> Information Resources & Technology (CO) late in 90's becoming Information Technology Services (CO) <ul style="list-style-type: none"> TSC CLIRIT CIMIT CTI 	<ul style="list-style-type: none"> Integrated Technology Strategy Systemwide Internal Partnership 	<ul style="list-style-type: none"> Library Strategic Planning Project DELTA NLI Projects Information Competence ITS CDL MERLOT CETUS Partnership BATS 	<ul style="list-style-type: none"> IBS transitioned to FRS (Financial Reporting System) Discontinued SIMS CMS/PeopleSoft (1998) 	<ul style="list-style-type: none"> Explosion of personal computer use by student, faculty and staff Client-Server environments Disappearance of timesharing Continuation of Cyber replacement with IBM mainframes Organized efforts to create student computing labs 	<ul style="list-style-type: none"> 4CNet CODEC video-conferencing ITS-TII (SIP/CETI)
2000s Mobile and Converged Technologies (Voice, Video, Data)	<ul style="list-style-type: none"> Information Technology Services (CO) 	<ul style="list-style-type: none"> Measures of Success (evaluation of ITS strategic plan) 	<ul style="list-style-type: none"> Library Strategic Planning ICT Literacy Project Academic Technology Initiatives (Digital Marketplace, E-Learning Framework, Student Success) 	<ul style="list-style-type: none"> FRS phased out with CMS CMS – Consolidated Data Center 		<ul style="list-style-type: none"> CENIC/AUREN SECURITY/SPAM VIRUSES

Table 1

**Progress of ITS Initiatives:
Institutional Indicators 2000-2007**

TECHNOLOGY INFRASTRUCTURE INITIATIVES		
<i>Survey Item</i>	<i>2000/01</i>	<i>2006/07</i>
Campus Baseline Capability		
	# campuses	# campuses
Percent network outlets meeting CSU connectivity standards:		
75-89 percent	1	3
90-100 percent	0	14
Percent campus workstations meeting current generation hardware and software standards:		
75-89 percent	1	0
90-100 percent	3	10
Percent campus workstations with high speed network access:		
75-89 percent	2	1
90-100 percent	3	19
Percent of technical support services meeting CSU policy standards:		
75-89 percent	5	4
90-100 percent	3	4
Percent of IT training services meeting CSU policy standards:		
75-89 percent	5	4
90-100 percent	0	1
Access Infrastructure		
Campus workstations meeting CSU hardware standards for:		
Full-time faculty	74%	88%
Part-time faculty	61%	76%
Staff	66%	88%
Students	69%	85%
Campus workstations meeting CSU software standards for:		
Full-time faculty	81%	95%
Part-time faculty	77%	84%
Staff	66%	88%
Students	69%	85%
# "smart" classrooms systemwide with multimedia equipment and network connectivity	792	2,437
ACADEMIC INITIATIVES		
<i>Survey Item</i>	<i>2000/01</i>	<i>2006/07</i>
Library Resource Sharing		
# of times Electronic Core Collection (ECC) resources were accessed	2.5M	21.3M
Cost per use of ECC resources	\$.33	\$.16
Estimated cost avoidance through collaborative purchase of ECC	\$374K	\$1.2M

Multimedia Repository		
<i>Survey Item</i>	<i>2000/01</i>	<i>2006/07</i>
# CSU MERLOT members	149	1,473
Total # MERLOT members	3,922	47,541
# MERLOT peer reviews	35	2,281
# MERLOT website visits	188K	4.8M
# MERLOT learning objects	3,033	17,133
Distributed Learning and Teaching		
Course sections supported by learning management systems	3%	34%
Total FTES enrollments in non-state venues	8,070	13,772
FTES enrollments in non-state venues as percent of total FTES	2.8%	4.1%
Centers for Instructional Technology Development		
# campuses with central instructional technology centers	5	20
# faculty participations in campus instructional technology centers	4,205	9,945
Total campus expenditures for instructional technology centers	\$7.4M	\$14M
STUDENT FRIENDLY SERVICES		
<i>Survey Item</i>	<i>2000/01</i>	<i>2002/03</i>
# using student planner	259K	382K
Electronic applications as percent of total	41	69
ADMINISTRATIVE INITIATIVES		
<i>Survey Item</i>	<i>2000/01</i>	<i>2006/07</i>
# campuses implemented Common Management System:		
Financial system	0	22
Human resources system	0	23
Student administration system	0	13
# campuses using consolidated data center	11	23
Consolidated data center cost avoidance	\$-5.7M	\$16.76M

Table 2

**Technology Use And Satisfaction:
Student, Faculty, and Staff Surveys 2000-2007**

STUDENTS		
<i>Survey Item</i>	<i>2001</i>	<i>2007</i>
Satisfaction with campus computing/technology resources	7.5	7.9
Rating of importance of having electronic access to instruction any time/any place	8.5	8.6
Rating of importance of computer literacy for future employment	9.1	9.3
Rating of campus preparation with technology skills	6.6	7.0
Classes taken in last two years requiring Internet use	44%	67%
# classes taken completely online in last two years:	0.3 ('03)	0.5
Uses campus online administrative system for registration information	67%	96%
Uses the campus administrative system for grade information	71%	96%
Uses the campus online administrative system for financial aid information	29%	60%
Uses the campus online administrative system for billing information	20%	66%
Uses the campus online administrative system for degree progress information	22%	62%
Owns a computer	94%	95% ('03)
Owns a <i>laptop</i> computer	36% ('03)	74%
Has broadband access at home	80% ('05)	93%
Uses campus wireless network	27% ('05)	51%
FACULTY		
<i>Survey Item</i>	<i>2000</i>	<i>2006</i>
Importance of any time/place electronic access to instruction	5.8	5.5
How well does dept./university prepare students for technology skills in field	6.5	6.8
Required students to use spreadsheet programs	36%	50%
Required students to use database programs	24%	34%
Required students to use presentation programs	41%	69%
Required students to use electronic data repositories	30%	33%
Required students to use electronic library resources	60%	75%
Required students to use computer-based instruction/tutorials	28%	36%
Required students to use computer-based simulations and/or animations	24%	29%
Required students to use information websites	60%	74%
Required students to use streaming video presentations	11%	23%
Required students to use specialized software applications	38%	42%
Required students to use project/team-based activities employing IT	27%	49%
Uses campus online information system to get student records	54%	66%
Uses online HR Info System to access personal HR information	12% ('04)	20%
Uses campus wireless network	31% ('04)	49%
Satisfaction with campus wireless network	6.3 ('04)	6.9
Received technical help (last 2 years)	94% ('02)	92%
Satisfaction with time it took to resolve problem	7.1 ('02)	7.7

STAFF		
Survey Item	2000	2006
Importance rating of computing/network resources for own work	9.1	9.4
Satisfaction rating with computing & technology resources	7.5	7.7
Knowledge of computer hardware/software important to job (rating)	7.7 ('05)	7.9
Uses CMS PeopleSoft Financial Information System	50% ('02)	68%
Uses CMS PeopleSoft Human Resources Information System	58% ('02)	83%
Uses CMS PeopleSoft Student Administration Information System	18% ('02)	44%
Satisfaction with university-provided computer workstation	8.2 ('02)	8.5
Satisfaction with university-provided computer software	8.5 ('02)	8.3
Satisfaction with quality of work: set up, maintenance, hardware	7.8 ('02)	8.3
Satisfaction with frequency of workstation upgrade/replacement	7.6 ('04)	7.6
Uses remote access to campus network	50%	66%
Satisfaction with remote access to campus network	6.7 ('04)	7.4
Uses campus wireless network	24% ('04)	24%
Level of reliance on tech. support to solve computer problems	7.1 ('04)	7.1
Received technical help to solve problem with university-provided computer (last 2 years)	94% ('02)	94%
Satisfaction with time to resolve problem with university-provided computer (last 2 years)	7.9 ('04)	8.0
Importance for campus to offer training	7.6 ('04)	9.1
Uses training workshops	68%	63%

Note: Importance and satisfaction ratings were based on a scale of 0 to 10.

Table 3