

## EXECUTIVE SUMMARY

### SUMMER 2004 STAFF TECHNOLOGY SURVEY

#### Description of Survey

In the spring and summer of 2004, researchers at the Social and Behavioral Research Institute at CSU San Marcos (SBRI) conducted a telephone survey of a representative sample of California State University non-faculty employees. This survey is the third in a series of biennial studies undertaken to provide information about CSU staff and administrator attitudes toward, access to, use of, and satisfaction with computing and network resources and services considered to be within the scope of the technology infrastructure as defined in the CSU Integrated Technology Strategy (ITS).

The initial survey, administered in summer 2000, the second survey conducted in 2002, and this survey asked CSU staff and administrators about their: 1) views on the importance of information technology; 2) perceptions of the availability to them of computing and network technologies and services; 3) use of these resources; and 4) satisfaction with the quantity and quality of the technology and support available to them. The results of the 2000 survey provided baseline information. Comparisons of the results of the 2004 survey with those from the previous administrations permit identification of changes in CSU staff use of, opinions about, and satisfaction with technology resources that have occurred during ITS implementation.

#### General Findings

The staff technology survey covers three broad areas: the importance of information technology resources and services, their availability and use, and satisfaction with them.

##### Importance

- Non-faculty employees in the CSU consider computing and network resources to be extremely important for performing their jobs at the university.
- CSU staff are reliant on the availability of technical support to solve problems they sometimes experience with their computer or the network.
- Staff generally agree that it is important for the campus to make available to them resources and opportunities for training in the use of computing equipment and software.

##### Access and Use

- Almost all of the non-faculty employees (over 98 percent) have access to and use a university-provided computer on a daily or almost daily basis. About one in six use both a desktop and a laptop computer.
- Campuses provide help to install and maintain computer workstations and to assist staff in solving problems they may have with the equipment or software. Most staff (94 percent) receive technical assistance on a routine basis.
- Essentially all non-faculty employees use the campus computer network in connection with the performance of their jobs. Most (75 percent) can access the network via a wireless connection, although only about one in four does so.
- Two-thirds connect to the campus network from their homes, just under half of them via a high-speed Internet connection (cable or DSL modem).
- Over one-half of CSU non-faculty employees participate in some form of technology training provided by their campus.
- About four out of 10 CSU staff and administrators regularly use the campus student or financial information systems, and three out of 10 use the human resources information system.
- In 2003-04, more than eight out of 10 staff working with human resources data used applications of the Common Management System/PeopleSoft information systems. For financial information, the percent of staff using CMS/PeopleSoft applications was two-thirds, and for student records, the CMS/PeopleSoft share was almost one half (44 percent).

## **Satisfaction**

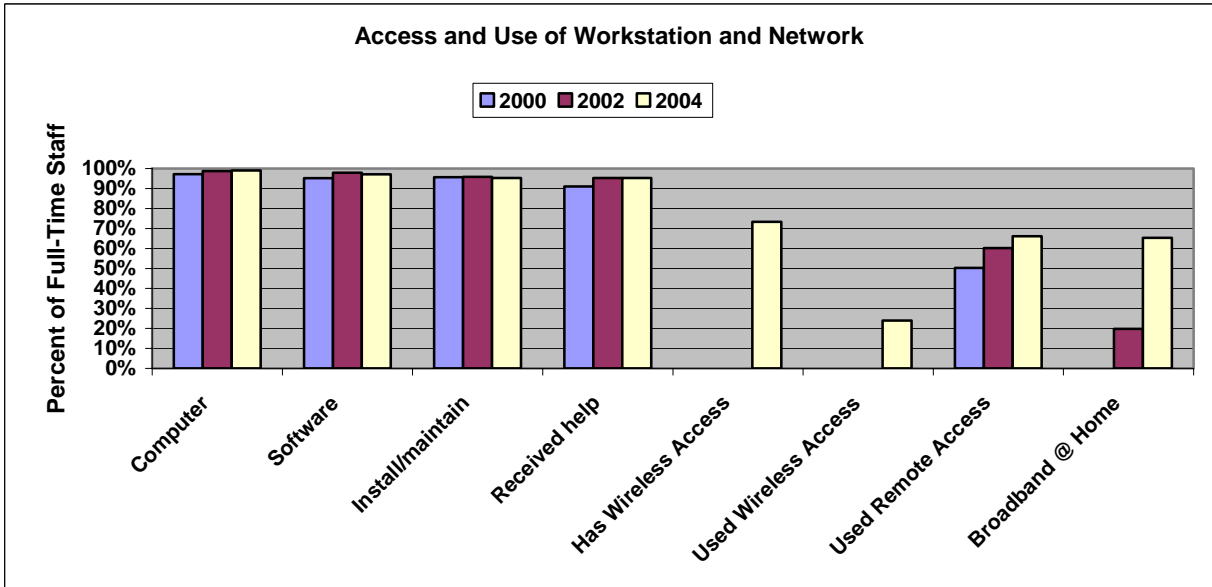
Staff were asked to rate the level of their satisfaction with the information technology equipment and services they personally used using a scale of zero-to-10 scale where 10 equates to *extremely satisfied*, 0 means *not at all satisfied*, and 5 represents the divide between satisfaction and dissatisfaction.

- Staff are highly satisfied with the computing equipment, software, and network access provided to them by their campuses (average scores between 8 and 9).
- Satisfaction with the technical support and technology training provided by the university is similarly high (average scores of 7.97 and above).
- Staff are fairly well satisfied with the technology training opportunities and the frequency of workstation upgrades provided by the campus (averages between 7.36 and 7.63).
- The level of satisfaction with campus administrative information systems, especially the CMS/PeopleSoft applications, was marginally positive; i.e., average scores below 7.

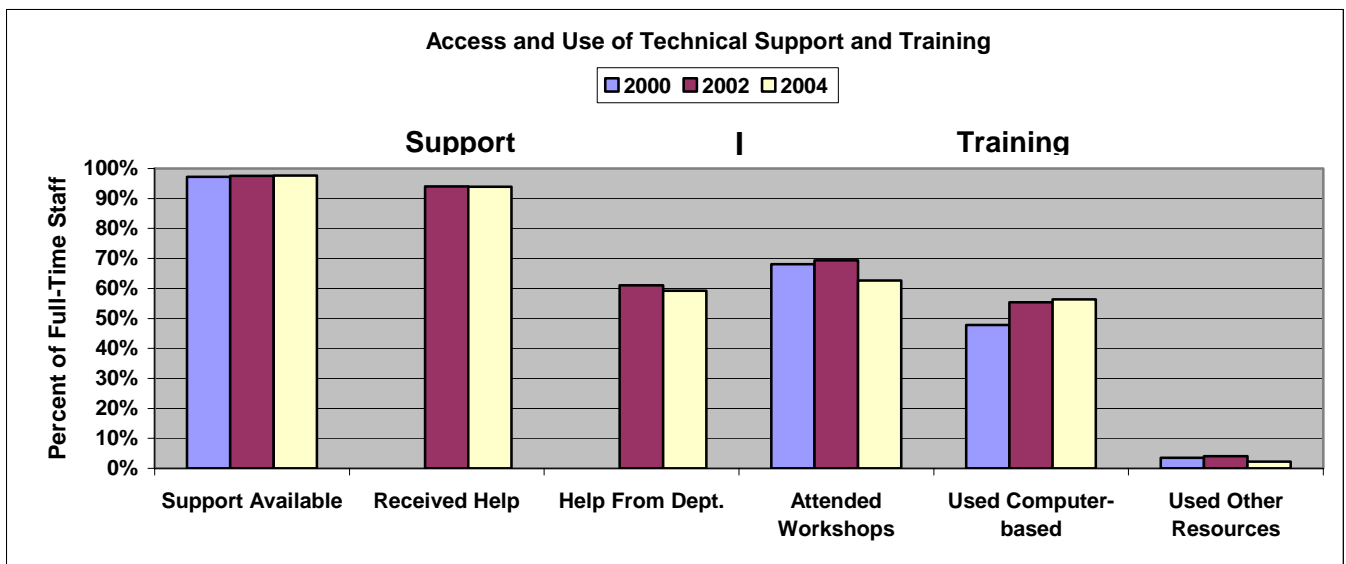
## Major Trends over the Six-Year Period

In broadest terms:

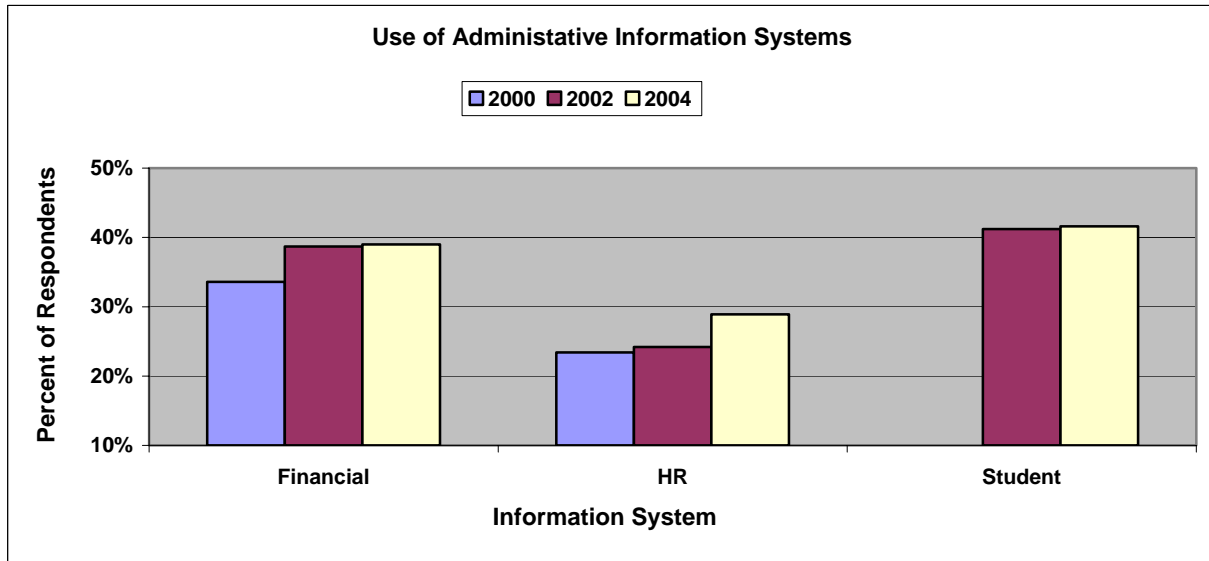
- Staff access and use of computer workstation and network resources have remained stable. Availability and use of wireless and remote access have increased rapidly.



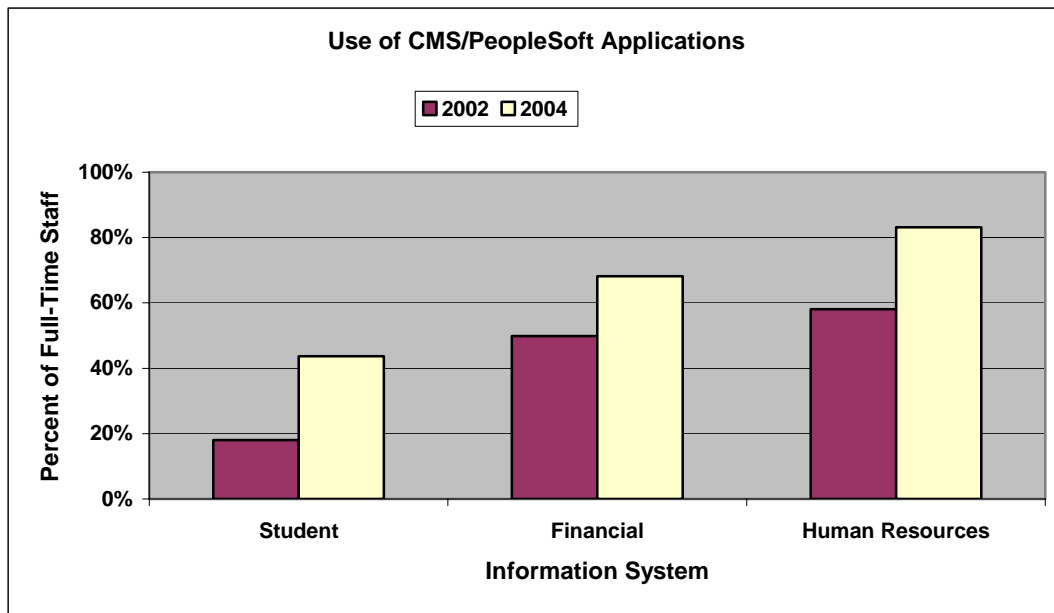
- Availability and use of technical support and end-user technology training services have remained generally constant.



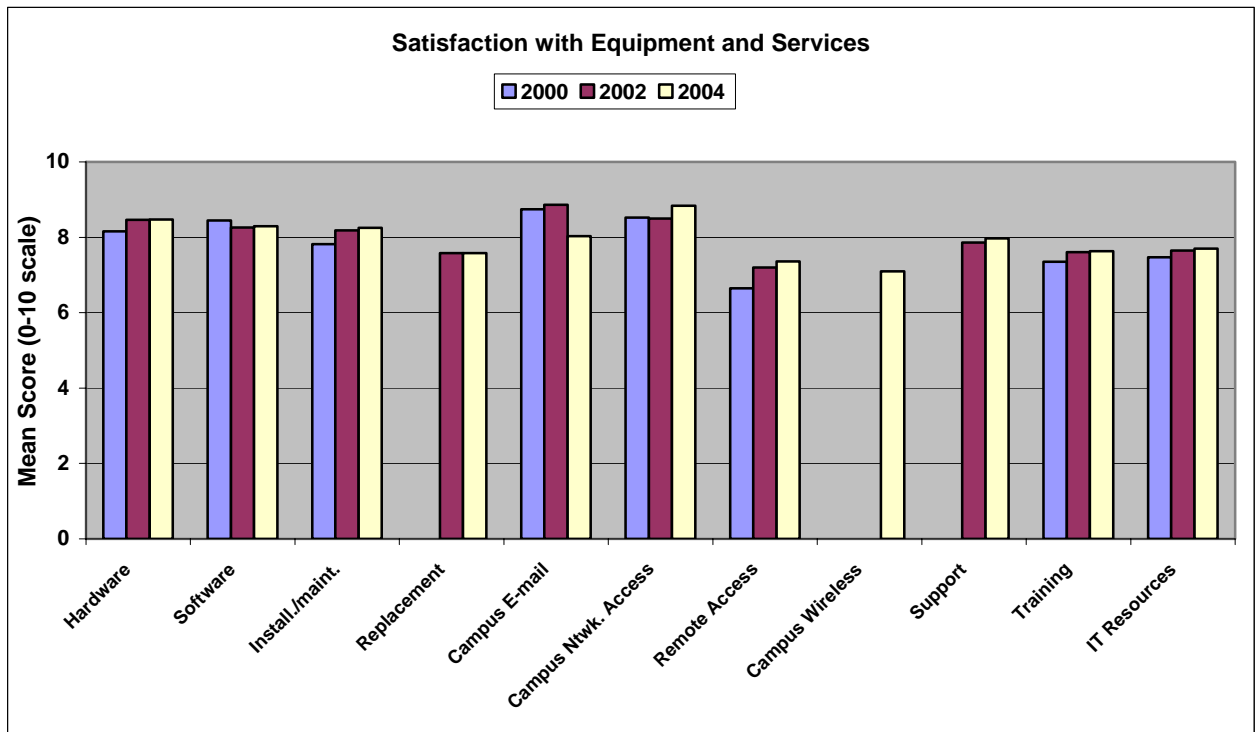
- The percent of staff and administrators who use the campus human resources information system has increased; usage levels for the financial and student information systems have changed little. (Both legacy and CMS/PeopleSoft systems are included in the chart below.)



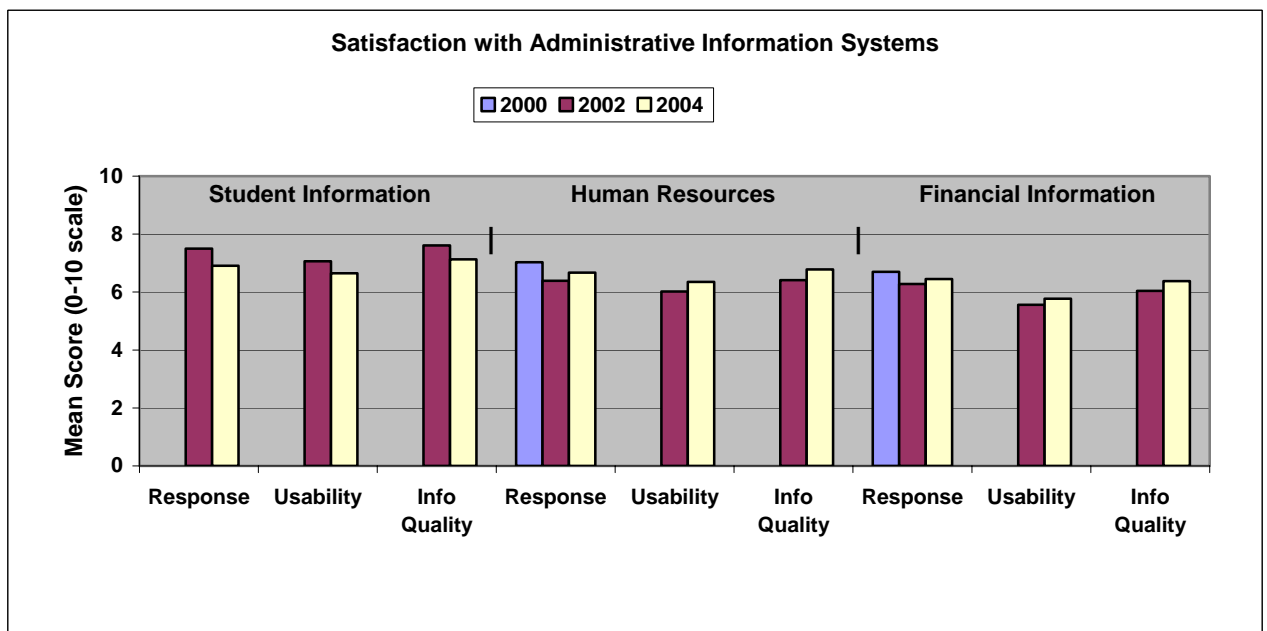
- The transition from legacy administration information systems to CMS/PeopleSoft applications is well under way.



- The level of satisfaction with technology resources remains generally high and has varied little.



- Satisfaction with the administrative information systems has fluctuated with the transition from legacy to CMS/PeopleSoft applications. The chart below shows combined legacy system and CMS/PeopleSoft ratings for response time, ease of use, and information quality for each information system. Satisfaction ratings tend to go down during the first year of implementation, as occurred with the human resources and financial systems. With training and experience, ratings improve. The transition to the CMS/PeopleSoft student information applications began in 2003-04. Increased satisfaction is anticipated over time.



## Survey Sample

A total of 2,146 full-time non-faculty employees from 21 CSU campuses were interviewed. The California Maritime Academy and CSU Channel Islands were excluded because the number of faculty on these campuses is insufficient to provide statistically reliable information. More than 100 interviews were conducted at each campus.

Survey participants were selected by job classification to reflect the distribution of non-faculty employees on their respective campuses. Employees classified as Skilled Crafts or Service and Maintenance personnel were not included in the survey because their use of information technology tends to be limited to subsets of personnel. The sample population for the 2004 survey matches closely the system profile for the selected job classifications. Variances in the Professional and Managerial classifications are due to differences in the way researchers and the CSU Chancellor's Office classify MPP employees.

### Job Classification

Rank	CSU Non-Faculty Employees (Fall 03)	Survey Participants (Summer 04)	Over/Under Representation
Professional	48.1%	36.1%	-12.0%
Secretarial/Clerical	26.3%	27.8%	+1.5%
Technical	17.5%	18.5%	+1.0%
Managerial	8.1%	17.6%	+9.5%

Source: Fall 2003 Profile of CSU Employees

### Age and Gender

Category	CSU Non-Faculty Employees (Fall 03)	Survey Participants (Summer 04)	Over/Under Representation
Male	35.9%	33.9%	-2.0%
Female	64.1%	66.1%	+2.0%

Source: Fall 2003 Profile of CSU Employees

Item ID	Question	Number	% of All	SD	Mean	Change	Signif.†	Yes (% pt.)	Change	No (% pt.)	Change
<b>Global</b>											
<b>General</b>											
QGLOB2	Importance of computing/network resources for own work	2143	99.9%	1.21	9.43	<u>0.04</u>					0.0%
		2153	100.0%	1.21	9.39	<u>0.34</u>	***	0.0%			0.0%
		2316	99.8%	1.63	9.05			0.0%			
QGLOB3	Satisfaction with computing & technology resources	2136	99.5%	1.78	7.70	<u>0.05</u>					0.0%
		2149	99.8%	1.75	7.65	<u>0.18</u>	**	0.0%			0.0%
		2304	99.3%	2.00	7.47			0.0%			
Q4A9	Knowledge of computer hardware/software important to job	2127	99.1%	1.55	7.86	<u>0.14</u>					0.0%
		2146	99.6%	1.65	7.72	<u>7.72</u>		0.0%			
<b>Administrative IS 3A</b>											
<b>Financial</b>											
QI3B1	Use campus Financial Information System in own work	2126	99.1%					39.0%	<u>0.3%</u>	61.0%	<u>-0.3%</u>
		2133	99.0%				***	38.7%	<u>5.1%</u>	* 61.3%	<u>-5.1%</u>
		2298	99.1%					33.6%		66.4%	
Q3B1B	Satisfaction with Financial Info. System: response time	801	37.3%	2.57	6.45	<u>0.17</u>					0.0%
		812	37.7%	2.65	6.28	<u>-0.42</u>	**	0.0%			0.0%
		713	30.7%	2.35	6.70			0.0%			
Q3B1C	Satisfaction with Financial Info system: ease of use	812	37.8%	2.59	5.77	<u>0.21</u>					0.0%
		812	37.7%	2.71	5.56	<u>5.56</u>		0.0%			
Q3B1D	Satisfaction with Financial Info System: quality of information	809	37.7%	2.47	6.38	<u>0.34</u>					0.0%
		809	37.6%	2.61	6.04	<u>6.04</u>		0.0%			

†The relative significance of changes in responses between the 2000 survey (lower row), the 2002 survey (middle row), and the 2004 survey (upper row) is indicated by asterisks:

\* The probability that the observed change is attributable to substantive, not random, factors is from 95 percent to 98 percent.

\*\* The probability that the observed change is attributable to substantive, not random, factors is 99% or greater.

\*\*\* The chances that the observed change is due to random rather than substantive factors is 1 in 1,000 or less.

ns The change was not statistically significant.

Absence of an indication of significance means the change between survey administrations did not include a comparable question, or that the number of responses was insufficient for statistical analysis.

<u>Item ID</u>	<u>Question</u>	<u>Number</u>	<u>% of All</u>	<u>SD</u>	<u>Mean</u>	<u>Change</u>	<u>Signif.t</u>	<u>Yes (% pt.)</u>	<u>Change</u>	<u>No (% pt.)</u>	<u>Change</u>	
Q3B1PS	Used CMS/PeopleSoft Financial Information System	807	37.6%					68.2%	<u>18.3%</u>	*	31.8%	<u>-18.3%</u>
		786	36.5%					49.9%	<u>49.9%</u>	*	50.1%	<u>50.1%</u>
<b>Human Resources</b>												
QI3B2	Use campus HR Information System in own work	2125	99.0%					28.9%	<u>4.7%</u>		71.1%	<u>-4.7%</u>
		2134	99.1%				ns	24.2%	<u>0.8%</u>		75.8%	<u>-0.8%</u>
		2303	99.3%					23.4%			76.6%	
Q3B2B	Satisfaction with HR Info System: response time	592	27.6%	2.46	6.67	<u>0.28</u>					0.0%	
		502	23.3%	2.59	6.39	<u>-0.64</u>	***	0.0%			0.0%	
		481	20.7%	2.13	7.03			0.0%				
Q3B2C	Satisfaction with HR Info System: ease of use	601	28.0%	2.43	6.35	<u>0.33</u>					0.0%	
		500	23.2%	2.55	6.02	<u>6.02</u>		0.0%				
Q3B2D	Satisfaction with HR Info System: quality of information	599	27.9%	2.27	6.78	<u>0.37</u>					0.0%	
		499	23.2%	2.45	6.41	<u>6.41</u>		0.0%				
Q3B2PS	Used CMS PeopleSoft Human Resources Information System	577	26.9%					83.2%	<u>25.1%</u>	*	16.8%	<u>-25.1%</u>
		475	22.1%					58.1%	<u>58.1%</u>	*	41.9%	<u>41.9%</u>
<b>Student Information</b>												
Q3B3	Uses campus student administration information system	2118	98.7%					41.6%	<u>0.4%</u>		58.4%	<u>-0.4%</u>
		2136	99.2%					41.2%	<u>41.2%</u>	*	58.8%	<u>58.8%</u>
Q3B3C	Satisfaction with Student Admin. Info System: ease of use	865	40.3%	2.59	6.65	<u>-0.41</u>					0.0%	
		865	40.2%	2.36	7.06	<u>7.06</u>		0.0%				
Q3B3D	Satisfaction with Student Admin. Info System: quality of information	865	40.3%	2.34	7.13	<u>-0.48</u>					0.0%	
		863	40.1%	2.08	7.61	<u>7.61</u>		0.0%				
Q3B3B	Satisfaction with Student Admin. Info System: response time	861	40.1%	2.49	6.91	<u>-0.59</u>					0.0%	
		865	40.2%	2.23	7.50	<u>7.50</u>		0.0%				
Q3B3PS	Used CMS PeopleSoft Student Administration Information System	842	39.2%					43.7%	<u>25.7%</u>	*	56.3%	<u>-25.7%</u>
		824	38.3%					18.0%	<u>18.0%</u>	*	82.0%	<u>82.0%</u>

<u>Item ID</u>	<u>Question</u>	<u>Number</u>	<u>% of All</u>	<u>SD</u>	<u>Mean</u>	<u>Change</u>	<u>Signif.†</u>	<u>Yes (% pt.)</u>	<u>Change</u>	<u>No (% pt.)</u>	<u>Change</u>
<b>Workstation Access 4A</b>											
<b>Hardware</b>											
Q4A1	Access to a university-provided computer workstation	2140	99.7%					99.0%	<u>0.3%</u>	1.0%	<u>-0.3%</u>
		2152	99.9%				**	98.7%	<u>1.5%</u>	1.3%	<u>-1.5%</u>
		2319	100.0%					97.2%		2.8%	
Q4A1C	Satisfaction with university-provided computer workstation	2115	98.6%	1.69	8.47	<u>0.01</u>				0.0%	
		2119	98.4%	1.71	8.46	<u>0.30</u>	***	0.0%		0.0%	
		2252	97.1%	1.97	8.16			0.0%			
QCOMP	Type of university-provided computer	2115	98.6%								
		desktop	1668	78.9%							
		laptop	101	4.8%							
		desk- & laptop	346	16.4%							
<b>Software</b>											
Q4A2	Access to university-provided computer software	2104	98.0%					97.1%	<u>-0.8%</u>	2.9%	<u>0.8%</u>
		2116	98.2%				***	97.9%	<u>2.7%</u>	2.1%	<u>-2.7%</u>
		2253	97.1%					95.2%		4.8%	
Q4A2C	Satisfaction with university-provided computer software	2033	94.7%	1.66	8.29	<u>0.03</u>				0.0%	
		2068	96.0%	1.69	8.26	<u>-0.19</u>	***	0.0%		0.0%	
		2138	92.2%	1.55	8.45			0.0%			
<b>Installation/Maintenance</b>											
Q4A3	Access to help to set up, upgrade... univ.-provided computer equipment	2101	97.9%					95.3%	<u>-0.4%</u>	4.7%	<u>0.4%</u>
		2120	98.4%				ns	95.8%	<u>0.1%</u>	4.2%	<u>-0.1%</u>
		2247	96.9%					95.7%		4.3%	
Q4A3B	Received help to set up, upgrade,...univer.-provided computer equipment	1991	92.8%					95.3%	<u>0.0%</u>	4.7%	<u>-0.0%</u>
		2023	93.9%				***	95.3%	<u>4.2%</u>	4.7%	<u>-4.2%</u>
		2148	92.6%					91.0%		9.0%	
Q4A3C	Satisfaction with quality of work: set up, maintain... hardware	1897	88.4%	1.77	8.25	<u>0.07</u>				0.0%	
		1924	89.3%	1.82	8.18	<u>0.36</u>	***	0.0%		0.0%	
		1952	84.1%	2.05	7.82			0.0%			

Item ID	Question	Number	% of All	SD	Mean	Change	Signif.t	Yes (% pt.)	Change	No (% pt.)	Change
Q4B5C	Satisfaction with frequency of workstation upgrade/replacement	2078	96.8%	2.22	7.58	<u>0.00</u>					0.0%
		2074	96.3%	2.18	7.58	<u>7.58</u>		0.0%			

### Network Access 4B

#### General

Q4B1B	Satisfaction with campus E-mail services	2137	99.6%	1.84	8.03	<u>-0.83</u>					0.0%	
		2123	98.6%	1.34	8.86	<u>0.12</u>	**	0.0%			0.0%	
		2224	95.9%	1.48	8.74			0.0%				
Q4B2B	Satisfaction with campus access to the Internet	2140	99.7%	1.40	8.84	<u>0.34</u>					0.0%	
		2127	98.7%	1.63	8.50	<u>-0.02</u>	ns	0.0%			0.0%	
		2249	96.9%	1.66	8.52			0.0%				
Q4B3A	Used remote access campus network	2131	99.3%					66.1%	<u>5.9%</u>	*	33.9%	<u>-5.9%</u>
		2151	99.9%				***	60.2%	<u>9.9%</u>	*	39.8%	<u>-9.9%</u>
		2304	99.3%					50.3%			49.7%	
Q4B3B	Satisfaction with remote access to campus network	1387	64.6%	2.20	7.36	<u>0.16</u>					0.0%	
		1285	59.7%	2.21	7.20	<u>0.55</u>	***	0.0%			0.0%	
		1145	49.4%	2.39	6.65			0.0%				
QDSL	Has hi-speed network access from home (cable, DSL)	1393	64.9%					65.3%	<u>65.3%</u>	*	34.7%	<u>34.7%</u>
QWIRL1	Campus provides wireless access to campus network	1468	68.4%					73.3%	<u>73.3%</u>	*	26.7%	<u>26.7%</u>
QWIRL2	Used campus wireless network	1067	49.7%					23.9%	<u>23.9%</u>	*	76.1%	<u>76.1%</u>
QWIRL3	Satisfaction with campus wireless network	387	18.0%	2.43	7.10	<u>7.10</u>						

## Tech Support 4A

<u>Item ID</u>	<u>Question</u>	<u>Number</u>	<u>% of All</u>	<u>SD</u>	<u>Mean</u>	<u>Change</u>	<u>Signif.t</u>	<u>Yes (% pt.)</u>	<u>Change</u>	<u>No (% pt.)</u>	<u>Change</u>
<b>General</b>											
Q4A5	Access to help solve problems with univ.-provided computer or software	2109	98.3%					97.7%	<u>0.2%</u>	2.3%	<u>-0.2%</u>
		2119	98.4%				ns	97.5%	<u>0.3%</u>	2.5%	<u>-0.3%</u>
		2243	96.7%					97.2%		2.8%	
Q4A5E2	Received technical help to solve problem with univ.-provided computer	2056	95.8%					93.9%	<u>-0.1%</u>	6.1%	<u>0.1%</u>
		2061	95.7%					94.0%	<u>94.0%</u>	*	6.0%
Q4A5E3	No. of times tech help received	1921	89.5%								0.0%
		1924	89.3%					0.0%			
		1 - 2	474	24.7%		<u>0.4%</u>					
		1 - 2	467	24.3%							
		3 - 5	779	40.6%		<u>1.3%</u>					
		3 - 5	756	39.3%							
		6 - 10	363	18.9%		<u>-1.4%</u>					
		6 - 10	390	20.3%							
		>10	305	15.9%		<u>-0.3%</u>					
>10	311	16.2%									
Q4A5E4	No. of times problems with univ.-provided computer satisfactorily resolved	1931	90.0%								0.0%
		1932	89.7%					0.0%			
		all times	1098	56.9%		<u>0.1%</u>					
		all times	1097	56.8%							
		most times	658	34.1%		<u>-0.3%</u>					
		most times	664	34.4%							
		some times	164	8.5%		<u>0.2%</u>					
		some times	160	8.3%							
		none	11	0.6%		<u>0.0%</u>					
none	11	0.6%									
Q4A5E5	Satisfaction with time to resolve problem with univ.-provided computer	1919	89.4%	1.94	7.97	<u>0.11</u>					0.0%
		1921	89.2%	2.07	7.86	<u>7.86</u>		0.0%			
Q4A5E7	Level of reliance on tech. support to solve computer problems	2045	95.3%	2.65	7.11	<u>0.04</u>					0.0%
		2056	95.5%	2.70	7.07	<u>7.07</u>		0.0%			
<b>Departmental Service</b>											
Q4A5E6	Tech. help provided by employee/colleague in department/unit	1899	88.5%					59.2%	<u>-1.8%</u>	40.8%	<u>1.8%</u>
		1929	89.6%					61.0%	<u>61.0%</u>	*	39.0%

## Training 4A

<u>Item ID</u>	<u>Question</u>	<u>Number</u>	<u>% of All</u>	<u>SD</u>	<u>Mean</u>	<u>Change</u>	<u>Signif.†</u>	<u>Yes (% pt.)</u>	<u>Change</u>	<u>No (% pt.)</u>	<u>Change</u>
<b>General</b>											
Q4A8A1A	Satisfaction with training resources/program	1657	77.2%	1.77	7.63	<u>0.02</u>				0.0%	
		1729	80.3%	1.86	7.61	<u>0.26</u>		0.0%		0.0%	
		1006	43.4%	2.08	7.35			0.0%			
Q4A7	Importance for campus to offer	2135	99.5%	1.53	9.07	<u>1.46</u>				0.0%	
		1729	80.3%	1.86	7.61	<u>7.61</u>		0.0%			
<b>Mode</b>											
Q4A8A_1	Used computer-based training resources	2146	100.0%					56.4%	<u>1.0%</u>	43.6%	<u>-1.0%</u>
		2153	100.0%				***	55.4%	<u>7.6%</u>	* 44.6%	<u>-7.6%</u>
		2113	91.1%					47.8%		52.2%	
Q4A8A_3	Used training workshops	2146	100.0%					62.6%	<u>-6.9%</u>	** 37.4%	<u>6.9%</u>
		2153	100.0%				ns	69.4%	<u>1.4%</u>	30.6%	<u>-1.4%</u>
		2113	91.1%					68.1%		31.9%	
Q4A8A_95	Used "other" training resources	2146	100.0%					2.2%	<u>-1.9%</u>	97.8%	<u>1.9%</u>
		2153	100.0%				ns	4.1%	<u>0.5%</u>	95.9%	<u>-0.5%</u>
		2113	91.1%					3.5%		96.5%	
Q4A8A_4	Used online training	2146	100.0%					0.9%	<u>0.3%</u>	0.0%	
		2140	99.4%					0.7%	<u>0.7%</u>		
Q4A8A_5	Used self-paced training	2146	100.0%					0.9%	<u>0.4%</u>	0.0%	
		2143	99.5%					0.5%	<u>0.5%</u>		
Q4A8A_6	Used one-on-one training	2146	100.0%					1.4%	<u>-0.1%</u>	0.0%	
		2124	98.6%					1.4%	<u>1.4%</u>		