CSU Technology Metrics Student Survey Report

Conducted for:

The California State University Chancellor's Office

Prepared by:

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INTRODUCTION

The CSU Student Technology Metrics report was produced for the California State University Chancellor's Office by the Social and Behavioral Research Institute at California State University, San Marcos. The report summarizes responses of students in the California State University (CSU) system concerning access to, use of, and satisfaction with computing and network technology. This report also addresses CSU student's attitudes regarding computing and network resources at their campus.

The report contains a description of the data, an account of the results, and a summary of the key findings. Appendix A displays summaries of the key variables.

DATA

The data come from telephone interviews with 3,204 students in the CSU system from 21 campuses. The interviews were conducted between March 13th, 2001 and July 5th, 2001. At least 150 interviews were conducted with students at each of the campuses except the Maritime Academy and Channel Islands campuses. These campuses were excluded because they do not have student populations adequate for sampling.

The sample was stratified on student level and ethnicity. This insures obtaining a sample representative of the CSU student population with respect to these characteristics.

The interview questions addressed attitudes about, access to, use of, and satisfaction with computing and network technology. Additionally, data regarding respondent characteristics were obtained from interview questions and institution databases.

Measures

A number of attitudes regarding technology were assessed using 11-point scales. For example, students were asked about the importance of having access to distance learning opportunities. They were asked to respond "using a scale of zero to ten, where zero equals not at all important and ten equals extremely important." Similarly, satisfaction items used an 11-point scale "where zero equals not at all satisfied and ten equals extremely satisfied." (See the questionnaire for the full text of the questions.) On each of the 11-point scales, higher numbers indicate higher levels of the quantity being measured. Most of the items regarding access to and use of technology were yes/no type questions. Additionally, some demographic information was provided in databases received from each campus.

RESULTS

Respondent Characteristics

Of the students responding, 59.6% were female, and 40.4% were male. They averaged 28.05 years of age.

Table 1a shows the ethnicity reported by the students on their application for admission; 43.3% of the respondents were white, 20.7% were Hispanic, 15.2% were Asian, and 6.3% were African American. Additionally, 14.5% declined to state their ethnicity. Those who had declined to state their ethnicity on their application were asked for their ethnicity in the interview. Their responses are summarized in Table 1b. Almost all (99.1%) of these students reported their ethnicity; nearly two-thirds (62.7%) of these were white, and 15.3% stated that they were some other ethnicity. Over two thirds (69.1%) of the students were employed, and those that were employed worked an average of 28.14 hours per week.

Table 1a: Ethnicity.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 White	1388	43.3	50.7	50.7
	2 Hispanic	664	20.7	24.2	74.9
	3 African American	201	6.3	7.3	82.3
	4 Asian	486	15.2	17.7	100.0
	Total	2739	85.5	100.0	
Missing	7 Decline to state	465	14.5		
Total		3204	100.0		

Table 1b: Ethnicity of Students Who Initially Declined to State.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 White	259	8.1	62.7	62.7
	2 Hispanic	42	1.3	10.2	72.9
	3 African American	17	.5	4.1	77.0
	4 Asian	24	.7	5.8	82.8
	5 American Indian	8	.2	1.9	84.7
	6 Other	63	2.0	15.3	100.0
	Total	413	12.9	100.0	
Missing	8 Refuse	29	.9		
	System	2762	86.2		
	Total	2791	87.1		
Total		3204	100.0		

The 21 campuses were evenly represented, with the number of interviews at each campus ranging from 150 to 160. Table 2 displays the enrollment status of the respondents. Most (67.0%) of the students are continuing undergraduates, while 8.4% are transfer students. Over a quarter (28.4%)

of the respondents were lower division students, while 52.6% were upper division students. Additionally, 19.0% of the students were post baccalaureate.

Table 2: Enrollment Status.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Continuing Undergraduate	2147	67.0	67.0	67.0
	2 Returning Undergraduate	21	.7	.7	67.7
	3 Undergraduate Returning Transfer	14	.4	.4	68.1
	4 Undergraduate Transfer	257	8.0	8.0	76.1
	5 First Time Freshman	138	4.3	4.3	80.4
	6 Transitory Undergraduate	18	.6	.6	81.0
	7 Continuing Graduate	609	19.0	19.0	100.0
	Total	3204	100.0	100.0	

The discipline of the respondents is displayed in Table 3a. A fifth (19.6%) of the students were in the behavioral and social sciences, and 16.0% of the students were undeclared. Humanities, art, and science and math were the least common disciplines.

Table 3a: Discipline.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Art	164	5.1	5.2	5.2
	2 Business	426	13.3	13.5	18.7
	3 Education	233	7.3	7.4	26.1
	4 Engineering/Computer Science	343	10.7	10.9	37.0
	5 Humanities	154	4.8	4.9	41.8
	6 Science & Math	178	5.6	5.6	47.5
	7 Behavioral/Social Sciences	617	19.3	19.6	67.0
	8 Professional/Technical	201	6.3	6.4	73.4
	9 Undeclared	505	15.8	16.0	89.4
	10 Interdisciplinary Studies	334	10.4	10.6	100.0
	Total	3155	98.5	100.0	
Missing	System	49	1.5		
Total		3204	100.0		

Many of the following analyses give attention to the effects of discipline and gender on attitudes and behaviors of interest. Consequently, it is important to note the relationship between these two factors. Table 3b shows there some disciplines which tend to be predominantly male or predominantly female. Most notably, education and interdisciplinary studies have higher proportions of females, while engineering and computer science has a higher proportion of males.

Table 3b: Discipline by Gender.

			SEX Gender		
			1 Male	2 Female	Total
DISC Discipline Division	1 Art	Count	83	81	164
		% within DISC Discipline Division	50.6%	49.4%	100.0%
	2 Business	Count	205	221	426
		% within DISC Discipline Division	48.1%	51.9%	100.0%
	3 Education	Count	55	178	233
		% within DISC Discipline Division	23.6%	76.4%	100.0%
	4 Engineering/Computer Science	Count	266	77	343
		% within DISC Discipline Division	77.6%	22.4%	100.0%
	5 Humanities	Count	59	95	154
		% within DISC Discipline Division	38.3%	61.7%	100.0%
	6 Science & Math	Count	88	90	178
		% within DISC Discipline Division	49.4%	50.6%	100.0%
	7 Behavioral/Social Science:	Count	218	399	617
		% within DISC Discipline Division	35.3%	64.7%	100.0%
	8 Professional/Technical	Count	54	147	201
		% within DISC Discipline Division	26.9%	73.1%	100.0%
	9 Undeclared	Count	184	321	505
		% within DISC Discipline Division	36.4%	63.6%	100.0%
	10 Interdisciplinary Studies	Count	65	269	334
		% within DISC Discipline Division	19.5%	80.5%	100.0%
Total		Count	1277	1878	3155
		% within DISC Discipline Division	40.5%	59.5%	100.0%

Technology Attitudes

The students were asked a series of questions regarding their impressions and beliefs about computing and network technology. Students believe computing and network resources are very important in completing their school work. Where zero indicates *not at all important* and ten indicates *extremely important*, the respondents, on average, rated the importance of computing and network resources at 8.40. Over half (55.1%) of the students responded with a 9 or 10 on the zero-to-ten scale.

The perceived importance of computing and network resources for completing school work varied by class level. Specifically, upper division students viewed this as more important than did post baccalaureate students. This is illustrated in Table 4a, which shows the average importance ratings of computing and network resources for completing school work by each class level.

Table 4a: Perceived Importance of Computing and Network Resources by Class Level.

QGLOB1 Importance of Computing and Network Resources for Completion (School Work

	N	Mean	Std. Deviation
1 Lower Division	907	8.33	1.66
2 Upper Division	1679	8.53	1.85
3 Post Baccalaureate	605	8.15	2.38
Total	3191	8.40	1.92

The perceived importance of computing and network resources for completing school work also varied by discipline. Table 4b reveals that science and math students rated the computing and network resources less important for completing school work than did students in some of the other disciplines.

Table 4b: Perceived Importance of Computing and Network Resources by Discipline.

QGLOB1 Importance of Computing and Network Resources for Completion of School Work

	N	Mean	Std. Deviation
1 Art	164	8.40	1.88
2 Business	424	8.59	1.72
3 Education	232	8.25	2.10
4 Engineering/Computer Science	342	8.62	1.64
5 Humanities	152	8.13	2.22
6 Science & Math	178	7.98	2.22
7 Behavioral/Social Sciences	616	8.52	1.73
8 Professional/Technical	201	8.46	1.92
9 Undeclared	500	8.12	2.11
10 Interdisciplinary Studies	333	8.63	1.74
Total	3142	8.41	1.90

There was also a difference by gender. Females rated the importance of computing and network resources for completing school work a little higher (8.50) compared to male students (8.25).

The students rated their satisfaction with the computing and technology resources that were available to them on a zero-to-ten scale, where zero indicates *not at all satisfied*, and ten indicates the respondent was *extremely satisfied*. The students were rather satisfied, offering an average satisfaction rating of 7.51. Though there is a high level of satisfaction with the available computing and technology resources, only 29.1% of the students responded with a 9 or 10.

The level of satisfaction with the available computing and technology resources differed by class level. Lower division students were more satisfied with technology resources than were upper division students, who in turn, were more satisfied than post baccalaureate students. This is seen in Table 5a.

Table 5a: Satisfaction with the Available Computing and Network Resources by Class Level.

QGLOB2 Satisfaction with Computing and Technology Resources Availat

	N	Mean	Std. Deviation
1 Lower Division	898	7.89	1.61
2 Upper Division	1647	7.49	1.81
3 Post Baccalaureate	572	6.97	2.02
Total	3117	7.51	1.82

Discipline also qualified ratings of satisfaction with available computing and technology resources. This may be seen in Table 5b. Interdisciplinary studies students were more satisfied than were students in art, education, and engineering and computer science. Additionally, business students were more satisfied than were art students and engineering and computer science students. Level of satisfaction did not differ by gender.

Table 5b: Satisfaction with the Available Computing and Network Resources by Discipline.

QGLOB2 Satisfaction with Computing and Technology Resources Available

	N	Mean	Std. Deviation
1 Art	158	7.20	1.87
2 Business	420	7.69	1.70
3 Education	219	7.24	1.91
4 Engineering/Computer Science	339	7.32	1.68
5 Humanities	149	7.50	1.87
6 Science & Math	176	7.55	1.73
7 Behavioral/Social Sciences	606	7.52	1.82
8 Professional/Technical	196	7.33	1.88
9 Undeclared	486	7.50	1.96
10 Interdisciplinary Studies	325	7.90	1.72
Total	3074	7.51	1.82

Students were also asked if they were aware of any efforts to improve computing and network resources on their campus in the last two years. Less than half (44.4%) of the respondents were aware of such efforts to improve their computing and network resources.

Those 1,369 respondents indicating they were aware of improvement efforts were asked about the consequences of these efforts. Explicitly, these respondents were asked to rate on a scale of zero to ten, where zero equals *no improvement at all* and ten equals *extremely improved*, how much they thought these efforts to improve computing and network resources have improved their work conditions. On average, the respondents offered a rating of 6.97, suggesting these efforts have been perceived as somewhat helpful in improving work conditions for many respondents. The perceived helpfulness did not vary by class level, discipline, or gender.

Students rated their knowledge of computer hardware and software important to their school work. They were asked to respond on a scale of zero to ten, where zero means *not at all knowledgeable* and ten means *extremely knowledgeable*. On this zero-to-ten scale, students, on average, said their knowledge of computer hardware and software important to their school work was 7.38.

The level of knowledge reported by students was different for students at different class levels. This is illustrated in Table 6a. Lower division students rated their knowledge of hardware and software important to their school work more highly than did post baccalaureate students.

Table 6a: Knowledge of Computer Hardware and Software by Class Level.

Q4A9 Knowledge of Computer Hardware and Software Important to School Work

	N	Mean	Std. Deviation
1 Lower Division	909	7.49	1.70
2 Upper Division	1678	7.38	1.89
3 Post Baccalaureate	608	7.22	1.96
Total	3195	7.38	1.85

Reported knowledge of computer hardware and software important to school work was different for students in different disciplines. Students in business and in engineering and computer science reported higher levels of knowledge of computer hardware and software important to their school work than did students in all other disciplines. This is seen in Table 6b.

Table 6b: Knowledge of Computer Hardware and Software by Discipline.

Q4A9 Knowledge of Computer Hardware and Software Important to School Work

	N	Mean	Std. Deviation
1 Art	163	7.26	1.90
2 Business	424	7.82	1.59
3 Education	232	7.02	1.97
4 Engineering/Computer Science	341	8.05	1.63
5 Humanities	153	7.16	1.85
6 Science & Math	178	7.24	1.84
7 Behavioral/Social Sciences	616	7.28	1.85
8 Professional/Technical	201	7.22	1.84
9 Undeclared	504	7.22	1.93
10 Interdisciplinary Studies	334	7.18	1.88
Total	3146	7.38	1.85

Gender was also a significant indicator of self-ratings of knowledge of computer hardware and software important to school work. As may be seen in Table 6c, males rated themselves more highly than females with respect to knowledge of computer hardware and software.

Table 6c: Knowledge of Computer Hardware and Software by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q4A9 Knowledge of Computer Hardware and Software Important to School Work	1 Male	1292	7.59	1.81
	2 Female	1903	7.24	1.86

Technology in Courses

Class Technology Use and Satisfaction

Internet. Respondents were asked about the number of classes they took that required use of different types of technology. They were asked how many classes they had taken over the last two years in which they were required to use the Internet. Most (89.8%) students said they were required to use the Internet in at least one class over the last two years, and 80.4% reported that they were required to use the Internet in more than one class over the last two years. Students were required to use the Internet in almost half the classes they took. That is, the proportion of classes in which Internet use was required was .44. The proportions of classes in which students were required to use various technologies are displayed in Table 7.

Table 7: Proportion of Classes Requiring Technology Use.

	N	Minimum	Maximum	Mean	Std. Deviation
Q1C1P Proportion of Classes Taken That Required Use of the Internet	3147	.00	1.00	.4395	.3349
Q1C2P Proportion of Classes Taken in Which Class Materials Were Posted on the Web	3114	.00	1.00	.3045	.2976
Q1C3P Proportion of Classes Taken That Required Use of E-Mail	3151	.00	1.00	.3098	.3367
Q1C4P Proportion of Classes Taken in Which Any Instruction Was Conducted in a Computer Classroom or Lab	3149	.00	1.00	.1597	.1951
Valid N (listwise)	3105				

The proportion of classes taken over the past two years that require use of the Internet is broken down by class level in Table 8a. A higher proportion of the classes taken by upper division students required use of the Internet compared to the classes taken by lower division students.

Table 8a: Proportion of Classes Requiring Use of the Internet by Class Level.

Q1C1P Proportion of Classes Taken That Required Use of the Internet

	N	Mean	Std. Deviation
1 Lower Division	896	.4101	.3177
2 Upper Division	1646	.4552	.3342
3 Post Baccalaureate	605	.4405	.3583
Total	3147	.4395	.3349

The proportion of classes taken over the past two years that require Internet use varied by discipline. Art, science and math, and engineering and computer science students took proportionally fewer classes requiring Internet use than some other disciplines, while business and interdisciplinary studies students took classes more likely to require Internet use. Table 8b shows these effects.

Table 8b: Proportion of Classes Requiring Use of the Internet by Discipline.

Q1C1P Proportion of Classes Taken That Required Use of the Internet

	N	Mean	Std. Deviation
1 Art	157	.3331	.3320
2 Business	416	.5006	.3158
3 Education	231	.4231	.3284
4 Engineering/Computer Science	334	.4008	.3038
5 Humanities	151	.4368	.3643
6 Science & Math	176	.3507	.3086
7 Behavioral/Social Sciences	609	.4569	.3440
8 Professional/Technical	197	.4992	.3419
9 Undeclared	498	.4088	.3307
10 Interdisciplinary Studies	329	.4965	.3454
Total	3098	.4401	.3346

There was also a difference by gender in the proportion of classes taken that require Internet use. This is seen in Table 8c. Classes taken by females were more likely to require use of the Internet than were classes taken by males.

Table 8c: Proportion of Classes Requiring Use of the Internet by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q1C1P Proportion of Classes Taken That Required Use of the Internet	1 Male	1275	.4124	.3207
	2 Female	1872	.4580	.3430

Students who took a class requiring Internet use were asked about their satisfaction using the Internet to help fulfill course requirements. On the zero-to-ten satisfaction scale, the average satisfaction rating was 7.78, indicating students were fairly satisfied. The average satisfaction scores are displayed in Table 9.

Table 9: Satisfaction with Technology Requirements.

	N	Minimum	Maximum	Mean	Std. Deviation
Q1C1A Satisfaction with the Internet to Fulfill Course Requirements	2812	0	10	7.78	1.93
Q1C2A Satisfaction with Accessing Materials on the Web to Fulfill Course Requirements	2625	0	10	7.74	2.18
Q1C3A Satisfaction with Use of E-Mail to Fulfill Course Requirements	2355	0	10	7.77	2.31
Q1C4A Satisfaction with Use of a Computer Classroom to Fulfill Course Requirements	2245	0	10	7.52	2.15
Valid N (listwise)	1604				

Satisfaction with using the Internet to help fulfill course requirements varied by class level. Specifically, post baccalaureate students were less satisfied than were undergraduate students. This is illustrated in Table 10. Satisfaction with using the Internet for course requirements did not vary by discipline or gender.

Table 10: Satisfaction with Use of the Internet to Fulfill Course Requirements by Class Level.

Q1C1A Satisfaction with the Internet to Fulfill Course Requirements

	N	Mean	Std. Deviation
1 Lower Division	820	7.88	1.84
2 Upper Division	1488	7.81	1.92
3 Post Baccalaureate	504	7.54	2.08
Total	2812	7.78	1.93

Web Postings. Most (84.6%) of the respondents said they had taken classes in the past two years that had posted class materials on the web. As Table 7 shows, faculty posted class material on the web in under a third (.30) of their classes.

The proportion of classes a student had taken over the past two years that had posted class materials on the web differed by discipline. This is illustrated in Table 11a. Business and engineering and computer science students compared to some other disciplines, reported a higher proportion of their classes posting materials on the web.

Table 11a: Proportion of Classes in Which Materials Were Posted on the Web by Discipline.

Q1C2P Proportion of Classes Taken in Which Class Materials Were Posted on the Web

	N	Mean	Std. Deviation
1 Art	155	.2468	.2952
2 Business	413	.3780	.2911
3 Education	228	.2390	.2775
4 Engineering/Computer Science	331	.3645	.2882
5 Humanities	151	.3103	.3154
6 Science & Math	176	.3110	.2822
7 Behavioral/Social Sciences	604	.2739	.2996
8 Professional/Technical	194	.3331	.3128
9 Undeclared	491	.2866	.2980
10 Interdisciplinary Studies	323	.2883	.2878
Total	3066	.3050	.2974

The proportion of classes a student had taken that posted class materials on the web also differed by gender. Table 11b shows that a higher proportion of classes taken by males posted material on the web than did those taken by females.

Table 11b: Proportion of Classes in Which Materials Were Posted on the Web by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q1C2P Proportion of Classes Taken in Which Class Materials Were Posted on the Web	1 Male	1267	.3340	.3034
	2 Female	1847	.2842	.2919

Students expressed satisfaction with accessing class materials on the web. On average, the satisfaction rating on the zero-to-ten scale was 7.74. This is seen in Table 9.

There was a limited effect on satisfaction with accessing class materials on the web by discipline. Specifically, business, engineering and computer science, and interdisciplinary studies students were more satisfied than were professional/technical students with accessing class materials on the web. This is seen in Table 12. Class level and gender did not qualify satisfaction with accessing class material posted on the web.

Table 12: Satisfaction with Accessing Class Materials on the Web by Discipline.

Q1C2A Satisfaction with Accessing Materials on the Web to Fulfill Course Requirements

	N	Mean	Std. Deviation
1 Art	115	7.58	2.22
2 Business	387	7.96	2.03
3 Education	171	7.64	2.35
4 Engineering/Computer Science	307	7.98	1.83
5 Humanities	123	7.85	2.21
6 Science & Math	155	7.74	2.55
7 Behavioral/Social Sciences	483	7.69	2.14
8 Professional/Technical	169	7.20	2.33
9 Undeclared	402	7.61	2.23
10 Interdisciplinary Studies	276	7.89	2.21
Total	2588	7.74	2.18

E-mail. Three quarters (75.1%) of the students reported being required to use e-mail in at least one class over the last two years. The proportion of classes taken that required e-mail use was .31, about the same proportion of classes that posted class material on the web.

The proportion of classes taken that required students to use e-mail depended on the discipline of the student. This is revealed in Table 13. Business students were required to use e-mail in more of their classes than were most other students. The likelihood of being required to use e-mail was not qualified by class level or gender.

Table 13: Proportion of Classes Requiring Use of E-Mail by Discipline.

Q1C3P Proportion of Classes Taken That Required Use of E-Mail

	N	Mean	Std. Deviation
1 Art	158	.2602	.3221
2 Business	417	.3997	.3514
3 Education	231	.2533	.3013
4 Engineering/Computer Science	334	.2895	.3082
5 Humanities	151	.3410	.3626
6 Science & Math	176	.2147	.2951
7 Behavioral/Social Sciences	609	.2961	.3358
8 Professional/Technical	197	.3631	.3492
9 Undeclared	498	.2837	.3286
10 Interdisciplinary Studies	331	.3357	.3476
Total	3102	.3083	.3353

Those who had used e-mail for class were asked how satisfied they were with using e-mail to fulfill course requirements. The level of satisfaction expressed by students with using e-mail to fulfill course requirements was similar to that for using the Internet and accessing materials on the web. On the zero-to-ten scale, the average satisfaction rating was 7.77. This is illustrated in Table 9. Though the level of satisfaction was slightly higher for females (7.86) than for males (7.65), satisfaction with using e-mail to fulfill course requirements was consistent across class level and discipline.

Computer Labs. Most (71.6%) of the students reported taking classes over the last two years in which some instruction was given in a computer classroom or lab. Students said instruction in a computer classroom or lab was not common (.16) among the classes they took. This is indicated in Table 7.

The proportion of a student's classes over the past two years in which he or she had instruction in a computer classroom or lab varied by class level. Upper division students had instruction in a computer classroom or lab in greater proportion than did lower division students. This is seen in Table 14a.

Table 14a: Proportion of Classes Using a Computer Classroom or Lab by Class Level.

Q1C4P Proportion of Classes Taken in Which Any Instruction Was Conducted in a Computer Classroom or Lab

	N	Mean	Std. Deviation
1 Lower Division	897	.1483	.1754
2 Upper Division	1650	.1693	.1979
3 Post Baccalaureate	602	.1503	.2133
Total	3149	.1597	.1951

The academic discipline of the students was also related to the proportion of a student's classes over the past two years in which he or she had instruction in a computer classroom or lab. Table 14b shows that engineering and computer science students had a higher proportion of their classes involve instruction in a computer lab than those in any other discipline.

Table 14b: Proportion of Classes Using a Computer Classroom or Lab by Discipline.

Q1C4P Proportion of Classes Taken in Which Any Instruction Was Conducted i Computer Classroom or Lab

	N	Mean	Std. Deviation
1 Art	158	.1278	.1707
2 Business	416	.1889	.1935
3 Education	231	.1370	.1816
4 Engineering/Computer Science	335	.2536	.2308
5 Humanities	151	.1085	.1592
6 Science & Math	176	.1456	.1762
7 Behavioral/Social Sciences	608	.1584	.2000
8 Professional/Technical	196	.1639	.2151
9 Undeclared	498	.1310	.1734
10 Interdisciplinary Studies	331	.1314	.1714
Total	3100	.1595	.1946

Gender was also related the proportion of the classes that students had which involved at least some instruction in a computer class or lab. As shown in Table 14c, a higher proportion of the classes taken by males compared to females had instruction in a computer lab.

Table 14c: Proportion of Classes Using a Computer Classroom or Lab by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q1C4P Proportion of Classes Tak in Which Any Instruction Was Conducted in a Computer Classroo or Lab	1 Male	1278	.1908	.2135
	2 Female	1871	.1384	.1784

The results indicate that students were fairly satisfied with using a computer classroom or lab to help fulfill course requirements. The average satisfaction rating was 7.52 on the zero-to-ten satisfaction scale. This is shown in Table 9.

The degree to which students were satisfied with using a computer class or lab to fulfill course requirements depended on class level, as indicated in Table 15. Lower division students were more satisfied than were post baccalaureate students. The level of satisfaction was not qualified by discipline or gender.

Table 15: Satisfaction with Using Computer Labs by Class Level.

Q1C4A Satisfaction with Use of a Computer Classroom to Fulfill Cou Requirements

	N	Mean	Std. Deviation
1 Lower Division	656	7.72	2.00
2 Upper Division	1223	7.48	2.15
3 Post Baccalaureate	366	7.32	2.37
Total	2245	7.52	2.15

Distance Learning. The proportion of distance learning classes students take is of interest. Students were asked how many classes they have taken over the last two years that were taught wholly or partially in a distance learning mode. At least one distance learning class was taken by 29.2% of the respondents. Of all students, the proportion of classes they took that used distance learning was .05. This is seen in Table 16.

Table 16: Proportion of Distance Learning and Predominantly Distance Learning Classes.

	N	Minimum	Maximum	Mean
Q1A1P Proportion of Classes Taken Using Distance Learning	3146	.00	1.00	.0534
Q1A2PA Proportion of Distance Learning Classes Taken Predominantly Using Distance Learning	906	.00	1.00	.7495
Valid N (listwise)	906			

The proportion of a student's classes that utilized distance learning was dependent on class level. Table 17a shows that post baccalaureate students took classes over the last two years that were more likely to involve some distance learning than those taken by undergraduates.

Table 17a: Proportion of Classes that Used at Least Some Distance Learning by Class Level.

Q1A1P Proportion of Classes Taken Using Distance Learning

	N	Mean	Std. Deviation
1 Lower Division	894	.0474	.1121
2 Upper Division	1648	.0507	.1233
3 Post Baccalaureate	604	.0694	.1827
Total	3146	.0534	.1341

The proportion of classes taken that used some distance learning also differed across disciplines. As Table 17b reveals, a higher proportion of classes taken by professional/technical students involved some distance learning. The was no relationship between gender and the proportion of classes taken that used distance learning.

Table 17b: Proportion of Classes that Used at Least Some Distance Learning by Discipline.

Q1A1P Proportion of Classes Taken Using Distance Learning

	N	Mean	Std. Deviation
1 Art	158	.0173	.0547
2 Business	417	.0631	.1403
3 Education	229	.0657	.1524
4 Engineering/Computer Science	335	.0473	.1275
5 Humanities	151	.0500	.1258
6 Science & Math	176	.0252	.0609
7 Behavioral/Social Sciences	609	.0460	.1089
8 Professional/Technical	196	.1160	.2493
9 Undeclared	496	.0543	.1392
10 Interdisciplinary Studies	330	.0495	.0933
Total	3097	.0536	.1338

Of the classes students took that involved at least some distance learning, three quarters (.75) were taught predominantly in distance learning mode. This is shown in Table 16. The proportion of classes with at least some distance learning that were taught predominantly in distance learning mode was not qualified by class level, discipline, or gender.

There was a good deal of support from students for distance learning. They were asked how important they thought it was to provide distance learning opportunities. On a scale of zero to ten, the average response was 8.48. Half (48.7%) of the students rated the importance of providing distance learning at 10.

The perceived importance of providing distance learning opportunities varied by class level. The provision of distance learning opportunities was regarded as less important by post baccalaureate students than it was by undergraduates. This is seen in Table 18a.

Table 18a: Importance of Providing Distance Learning by Class Level.

Q1A3 Importance of Providing Electronic Access to Course Instruction fc Students at Any Time and Place

	N	Mean	Std. Deviation
1 Lower Division	894	8.61	1.82
2 Upper Division	1643	8.55	2.09
3 Post Baccalaureate	598	8.10	2.42
Total	3135	8.48	2.09

Academic discipline also qualified the ratings of importance of providing distance learning. Table 18b shows these results. Business students more so than students from most other disciplines regarded distance learning opportunities as important.

Table 18b: Importance of Providing Distance Learning by Discipline.

Q1A3 Importance of Providing Electronic Access to Course Instruction for Students at Any Time and Place

	N	Mean	Std. Deviation
1 Art	156	8.01	2.22
2 Business	417	8.93	1.65
3 Education	228	8.44	2.14
4 Engineering/Computer Science	334	8.39	2.01
5 Humanities	149	8.11	2.28
6 Science & Math	175	8.03	2.62
7 Behavioral/Social Sciences	606	8.49	2.09
8 Professional/Technical	195	8.64	1.84
9 Undeclared	497	8.50	2.15
10 Interdisciplinary Studies	329	8.56	2.16
Total	3086	8.48	2.09

The perceived importance of providing distance learning opportunities differed for males and females. As Table 18c shows, females viewed providing distance learning as more important than did males.

Table 18c: Importance of Providing Distance Learning by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q1A3 Importance of Providin Electronic Access to Course Instruction for Students at Any Time and Place	1 Male	1269	8.36	2.20
	2 Female	1866	8.57	2.02

The respondents reported that the amount of computer and Internet use that was required in their classes was appropriate. This is indicated in Table 19. Most (70.7%) said the amount of computer and Internet use was the right amount, while a quarter (25.6%) of the students said there was too little use of computers and the Internet required in their classes.

Table 19: Amount of Computer and Internet Use Required in Classes.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Too Little	802	25.0	25.6	25.6
	2 The Right Amount	2210	69.0	70.7	96.3
	3 Too Much	115	3.6	3.7	100.0
	Total	3127	97.6	100.0	
Missing	8 Don't Know	26	.8		
	9 Refused	1	.0		
	System	50	1.6		
	Total	77	2.4		
Total		3204	100.0		

Perceptions of the adequacy of the amount of computer and Internet use required in classes varied by the respondent's class level. This is seen in Table 20a. Lower division students were more likely to regard the amount of computer and Internet use as the right amount than were other students.

Table 20a: Amount of Computer and Internet Use Required in Classes by Class Level.

			Q1A3AMT Amount of Computer and Internet Use Required in Classes			
			1 Too Little	2 The Right Amount	3 Too Much	Total
CLLEVEL Class Level	1 Lower Division	Count	187	677	30	894
		% within CLLEVEL Class Level	20.9%	75.7%	3.4%	100.0%
	2 Upper Division	Count	445	1123	73	1641
		% within CLLEVEL Class Level	27.1%	68.4%	4.4%	100.0%
	3 Post Baccalaureate	Count	170	410	12	592
		% within CLLEVEL Class Level	28.7%	69.3%	2.0%	100.0%
Total		Count	802	2210	115	3127
		% within CLLEVEL Class Level	25.6%	70.7%	3.7%	100.0%

Gender was an important factor in the rating of the adequacy of the amount of required computer and Internet use. Males were more likely than females to believe there was not enough computer and Internet use required in their classes. This is seen in Table 20b.

Table 20b: Amount of Computer and Internet Use Required in Classes by Gender.

			Q1A3AMT Amount of Computer and Internet Use Required in Classes			
			1 Too Little	2 The Right Amount	3 Too Much	Total
SEX Gender	1 Male	Count	383	844	42	1269
		% within SEX Gender	30.2%	66.5%	3.3%	100.0%
	2 Female	Count	419	1366	73	1858
		% within SEX Gender	22.6%	73.5%	3.9%	100.0%
Total		Count	802	2210	115	3127
		% within SEX Gender	25.6%	70.7%	3.7%	100.0%

On-line Resources

Students were asked about their use of and satisfaction with on-line resources. Specifically, they were asked if they used electronic information resources such as online interlibrary loan, online database searches, or online catalogs. Most (81.8%) of the students reported using on-line information resources.

Class level qualified the likelihood that students used on-line electronic information resources. This is illustrated in Table 21a. Post baccalaureate students were less likely than others to make use of on-line electronic information resources.

Table 21a: Use of Electronic Information Resources by Class Level.

			QI1D1 Uses Electronic Information Resources		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	162	748	910
		% within CLLEVEL Class Level	17.8%	82.2%	100.0%
	2 Upper Division	Count	266	1409	1675
		% within CLLEVEL Class Level	15.9%	84.1%	100.0%
	3 Post Baccalaureate	Count	152	452	604
		% within CLLEVEL Class Level	25.2%	74.8%	100.0%
Total		Count	580	2609	3189
		% within CLLEVEL Class Level	18.2%	81.8%	100.0%

The likelihood of a student reporting the use of electronic information services was dependent on discipline. Engineering and computer science students, as well as undeclared students, were less likely than most to use electronic information resources such as online interlibrary loan, online database searches, or online catalogs. This is illustrated in Table 21b. Gender was unrelated to the likelihood of use of electronic information resources.

Table 21b: Use of Electronic Information Resources by Discipline.

			QI1D1 Uses Electronic Information Resources		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	33	130	163
		% within DISC Discipline Division	20.2%	79.8%	100.0%
	2 Business	Count	78	346	424
		% within DISC Discipline Division	18.4%	81.6%	100.0%
	3 Education	Count	46	186	232
		% within DISC Discipline Division	19.8%	80.2%	100.0%
	4 Engineering/Computer Science	Count	91	252	343
		% within DISC Discipline Division	26.5%	73.5%	100.0%
	5 Humanities	Count	19	135	154
		% within DISC Discipline Division	12.3%	87.7%	100.0%
	6 Science & Math	Count	30	147	177
		% within DISC Discipline Division	16.9%	83.1%	100.0%
	7 Behavioral/Social Sciences	Count	71	543	614
		% within DISC Discipline Division	11.6%	88.4%	100.0%
	8 Professional/Technical	Count	30	170	200
		% within DISC Discipline Division	15.0%	85.0%	100.0%
	9 Undeclared	Count	115	386	501
		% within DISC Discipline Division	23.0%	77.0%	100.0%
	10 Interdisciplinary Studies	Count	51	281	332
		% within DISC Discipline Division	15.4%	84.6%	100.0%
Total		Count	564	2576	3140
		% within DISC Discipline Division	18.0%	82.0%	100.0%

Those who had used on-line information resources were asked about their satisfaction with various aspects of the on-line information resources. Students were first asked about the *quality* of the on-line information resources. Students were satisfied with the quality of the on-line information resources. Table 22 shows that on the zero-to-ten satisfaction scale, the average satisfaction rating was 7.81.

Table 22: Satisfaction with Electronic Information Resources.

	N	Minimum	Maximum	Mean	Std. Deviation
Q1D1A Satisfaction with Quality of the Electronic Information Resources	2602	0	10	7.81	1.70
Q1D1B Satisfaction with Quantity of the Electronic Library Resources throug the Campus Library	2590	0	10	7.66	1.81
Q1D1C Satisfaction with Ease of Use of the Electronic Library Resources throug the Campus Library	2597	0	10	7.59	1.85
Valid N (listwise)	2581				

Student satisfaction with the quality of the on-line information resources varied by discipline. That is, interdisciplinary studies students expressed greater satisfaction with the quality of on-line information resources than did engineering and computer science students. This is seen in Table 23.

Table 23: Satisfaction with the Quality of Electronic Information Resources by Discipline.

Q1D1A Satisfaction with Quality of the Electronic Information Resources

	N	Mean	Std. Deviation
1 Art	129	7.60	1.73
2 Business	346	7.79	1.71
3 Education	185	7.71	1.86
4 Engineering/Computer Science	252	7.60	1.52
5 Humanities	133	7.96	1.69
6 Science & Math	146	7.73	1.69
7 Behavioral/Social Sciences	542	7.88	1.71
8 Professional/Technical	169	7.63	1.83
9 Undeclared	386	7.85	1.78
10 Interdisciplinary Studies	281	8.09	1.49
Total	2569	7.81	1.70

Students who used on-line information resources were also asked about their satisfaction with the *quantity* of the on-line information resources available through their campus library. The average satisfaction rating, shown in Table 22, was 7.66.

Satisfaction with the quantity of the on-line information resources available through their campus library varied by class level. Table 24a illustrates this effect. Post baccalaureate students were less satisfied than other students with the available on-line information resources.

Table 24a: Satisfaction with the Quantity of Electronic Information Resources by Class Level.

Q1D1B Satisfaction with Quantity of the Electronic Library Resources through the Campus Library

	N	Mean	Std. Deviation
1 Lower Division	745	7.77	1.73
2 Upper Division	1400	7.73	1.79
3 Post Baccalaureate	445	7.30	1.98
Total	2590	7.66	1.81

Discipline was also associated with satisfaction with the quantity of on-line information resources. As shown in Table 24b, students in interdisciplinary studies were more satisfied than engineering and computer science, art, and professional/technical. Gender was not associated with satisfaction with the quantity of on-line information resources.

Table 24b: Satisfaction with the Quantity of Electronic Information Resources by Discipline.

Q1D1B Satisfaction with Quantity of the Electronic Library Resources through the Campus Library

	N	Mean	Std. Deviation
1 Art	126	7.25	1.89
2 Business	344	7.78	1.79
3 Education	184	7.58	1.78
4 Engineering/Computer Science	249	7.44	1.74
5 Humanities	134	7.78	1.76
6 Science & Math	145	7.51	1.97
7 Behavioral/Social Sciences	540	7.72	1.82
8 Professional/Technical	170	7.35	1.93
9 Undeclared	385	7.64	1.83
10 Interdisciplinary Studies	280	8.10	1.60
Total	2557	7.67	1.81

Students were also satisfied with the ease of use of the electronic library resources through their campus library. The average satisfaction rating was 7.59. This is indicated in Table 22.

Satisfaction with the ease of use of the on-line information resources was qualified by the class level of the students. Table 25a shows that upper division students were more satisfied than were post baccalaureate students, and lower division students were more satisfied than were upper division students.

Table 25a: Satisfaction with the Ease of Use of Electronic Information Resources by Class Level.

Q1D1C Satisfaction with Ease of Use of the Electronic Library Resour through the Campus Library

	N	Mean	Std. Deviation
1 Lower Division	745	7.84	1.63
2 Upper Division	1405	7.58	1.85
3 Post Baccalaureate	447	7.22	2.11
Total	2597	7.59	1.85

Discipline was also a significant predictor of satisfaction with the ease of use of on-line information resources. That is, interdisciplinary studies students were more satisfied with ease of use than were professional/technical or education students. This is seen in Table 25b. Gender did not qualify satisfaction with the ease of use of on-line information resources.

Table 25b: Satisfaction with the Ease of Use of Electronic Information Resources by Discipline.

Q1D1C Satisfaction with Ease of Use of the Electronic Library Resources throu[g]
the Campus Library

	N	Mean	Std. Deviation
1 Art	127	7.49	1.62
2 Business	344	7.46	1.83
3 Education	185	7.32	2.03
4 Engineering/Computer Science	252	7.53	1.68
5 Humanities	134	7.69	1.78
6 Science & Math	146	7.76	1.64
7 Behavioral/Social Sciences	542	7.64	1.85
8 Professional/Technical	169	7.26	2.26
9 Undeclared	384	7.66	1.91
10 Interdisciplinary Studies	281	7.94	1.64
Total	2564	7.60	1.84

Administrative Information Systems

Students were asked if they used their campus on-line information system to get a variety of types of information. Students were asked if they accessed class schedules on-line. Most (74.1%) students reported using their campus on-line information system to access class schedule information. This is seen in Table 26, which shows that while most students used their campus electronic information system to gain information regarding class schedules, grades, and registration information, less than a third of the students accessed information about financial aid, admission status, progress toward their degree, or billing through the electronic information system.

Table 26: Type of Information Obtained through On-Line Information Systems.

	0 No		1 Yes	
	Count	%	Count	%
Class Schedules	827	25.9%	2370	74.1%
Grades	925	29.0%	2269	71.0%
Registration	1059	33.2%	2135	66.8%
Financial Aid	2273	71.2%	918	28.8%
Admission Status	2302	72.1%	890	27.9%
Progress Towards Degree	2471	77.6%	714	22.4%
Billing	2558	80.1%	634	19.9%

The class level of a student was related to the likelihood that he or she used the campus electronic information system to obtain information about class schedules. Table 27a shows that post baccalaureate students were less likely than were undergraduates to access class schedule information on-line.

Table 27a: Use of the Campus Online Information System to Get Information about Class Schedules by Class Level.

			Q3A1A Uses Campus Online Information System to Get Information about Class Schedules		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	228	683	911
		% within CLLEVEL Class Level	25.0%	75.0%	100.0%
	2 Upper Division	Count	411	1269	1680
		% within CLLEVEL Class Level	24.5%	75.5%	100.0%
	3 Post Baccalaureate	Count	188	418	606
		% within CLLEVEL Class Level	31.0%	69.0%	100.0%
Total		Count	827	2370	3197
		% within CLLEVEL Class Level	25.9%	74.1%	100.0%

The likelihood that a student used their campus on-line information system to get information about class schedules was different for students with different majors. This is illustrated in Table 27b. Education and undeclared students were relatively less likely to access information about class schedules, while engineering and computer science students were more likely to do so.

Table 27b: Use of the Campus Online Information System to Get Information about Class Schedules by Discipline.

			Q3A1A Uses Campus Online Information System to Get Information about Class Schedules		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	41	123	164
		% within DISC Discipline Division	25.0%	75.0%	100.0%
	2 Business	Count	98	326	424
		% within DISC Discipline Division	23.1%	76.9%	100.0%
	3 Education	Count	75	157	232
		% within DISC Discipline Division	32.3%	67.7%	100.0%
	4 Engineering/Computer Science	Count	51	292	343
		% within DISC Discipline Division	14.9%	85.1%	100.0%
	5 Humanities	Count	33	121	154
		% within DISC Discipline Division	21.4%	78.6%	100.0%
	6 Science & Math	Count	45	133	178
		% within DISC Discipline Division	25.3%	74.7%	100.0%
	7 Behavioral/Social Sciences	Count	164	453	617
		% within DISC Discipline Division	26.6%	73.4%	100.0%
	8 Professional/Technical	Count	48	153	201
		% within DISC Discipline Division	23.9%	76.1%	100.0%
	9 Undeclared	Count	166	337	503
		% within DISC Discipline Division	33.0%	67.0%	100.0%
	10 Interdisciplinary Studies	Count	84	248	332
		% within DISC Discipline Division	25.3%	74.7%	100.0%
Total		Count	805	2343	3148
		% within DISC Discipline Division	25.6%	74.4%	100.0%

Those who reported using their campus on-line information system were asked how satisfied they were with on-line access to class schedules. Respondents were rather satisfied. The average satisfaction rating was 8.39. Table 28 shows the average satisfaction ratings with the campus on-line information system for different purposes addressed in this study.

Table 28: Satisfaction with On-line Access to Information.

	N	Minimum	Maximum	Mean	Std. Deviation
Q3A1B Satisfaction with Online Access to Information about Classes	2368	0	10	8.39	1.78
Q3A3B Satisfaction with Online Access to Information about Grades	2268	0	10	8.57	1.88
Q3A2B Satisfaction with Online Access to Information about Registration	2134	0	10	8.26	1.85
Q3A4B Satisfaction with Online Access to Information about Financial Aid	915	0	10	7.99	1.98
Q3A6B Satisfaction with Online Access to Information about Admission Status	888	0	10	8.34	1.72
Q3A7B Satisfaction with Online Access to Information about Progress toward Degree	713	0	10	7.91	1.98
Q3A5B Satisfaction with Online Access to Information about Billing	631	0	10	8.24	1.85
Valid N (listwise)	110				

Satisfaction with on-line information system access to class schedule information varied by class level. As Table 29a shows, post baccalaureate students were less satisfied than were undergraduate students with on-line access to class schedule information.

Table 29a: Satisfaction with On-line Access to Class Schedule Information by Class Level.

Q3A1B Satisfaction with Online Access to Information about Classes

	N	Mean	Std. Deviation
1 Lower Division	683	8.42	1.69
2 Upper Division	1267	8.47	1.72
3 Post Baccalaureate	418	8.13	2.06
Total	2368	8.39	1.78

The level of satisfaction with on-line access to class schedule information was qualified by gender. That is, females were more satisfied than were males with respect to access to class schedule information through the campus electronic information system. This is illustrated in Table 29b.

Table 29b: Satisfaction with On-line Access to Class Schedule Information by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q3A1B Satisfaction with Online Access to Information about Classes	1 Male	979	8.30	1.73
	2 Female	1389	8.46	1.81

The campus on-line information system was commonly used to get information about grades. More than two-thirds (71.0%) of the students reported that they used their campus on-line information system to obtain information about their grades. This is seen in Table 26.

The likelihood that a student would access grade information through the campus on-line information system depended on class level. This is revealed in Table 30a. Post baccalaureate students were much less likely than other students to access their grades on-line.

Table 30a: Use of Campus Online Information Systems to Get Information about Grades by Class Level.

			Q3A3A Uses Campus Online Information Systems to Get Information about Grades		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	212	699	911
		% within CLLEVEL Class Level	23.3%	76.7%	100.0%
	2 Upper Division	Count	475	1201	1676
		% within CLLEVEL Class Level	28.3%	71.7%	100.0%
	3 Post Baccalaureate	Count	238	369	607
		% within CLLEVEL Class Level	39.2%	60.8%	100.0%
Total		Count	925	2269	3194
		% within CLLEVEL Class Level	29.0%	71.0%	100.0%

There was also a difference in the likelihood of accessing grades on-line by discipline. As Table 30b shows, engineering and computer science students were much more likely to access grades on-line. Education students, on the other hand, were less likely to access their grades on-line. Gender was not related to the likelihood of accessing grades through the campus on-line information system.

Table 30b: Use of Campus Online Information Systems to Get Information about Grades by Discipline.

			Q3A3A Uses Campus Online Information Systems to Get Information about Grades		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	46	118	164
		% within DISC Discipline Division	28.0%	72.0%	100.0%
	2 Business	Count	110	312	422
		% within DISC Discipline Division	26.1%	73.9%	100.0%
	3 Education	Count	97	135	232
		% within DISC Discipline Division	41.8%	58.2%	100.0%
	4 Engineering/Computer Science	Count	63	279	342
		% within DISC Discipline Division	18.4%	81.6%	100.0%
	5 Humanities	Count	56	97	153
		% within DISC Discipline Division	36.6%	63.4%	100.0%
	6 Science & Math	Count	56	122	178
		% within DISC Discipline Division	31.5%	68.5%	100.0%
	7 Behavioral/Social Sciences	Count	167	450	617
		% within DISC Discipline Division	27.1%	72.9%	100.0%
	8 Professional/Technical	Count	60	141	201
		% within DISC Discipline Division	29.9%	70.1%	100.0%
	9 Undeclared	Count	157	347	504
		% within DISC Discipline Division	31.2%	68.8%	100.0%
	10 Interdisciplinary Studies	Count	92	240	332
		% within DISC Discipline Division	27.7%	72.3%	100.0%
Total		Count	904	2241	3145
		% within DISC Discipline Division	28.7%	71.3%	100.0%

Students were quite satisfied with on-line access to get information about grades. Those reporting that they had on-line access to grade information offered an average satisfaction rating of 8.57, as seen in Table 28.

The level of satisfaction with on-line access to grades was qualified by class level. This is indicated in Table 31a. Specifically, post baccalaureate students were less satisfied with on-line access to grades than were undergraduate students.

Table 31a: Satisfaction with On-line Access to Information about Grades by Class Level.

Q3A3B Satisfaction with Online Access to Information about Grades

	N	Mean	Std. Deviation
1 Lower Division	698	8.65	1.71
2 Upper Division	1201	8.60	1.87
3 Post Baccalaureate	369	8.33	2.18
Total	2268	8.57	1.88

Satisfaction with on-line access to grades also depended on gender. Females expressed greater satisfaction than males with on-line access to grades, as indicated in Table 31b.

Table 31b: Satisfaction with On-line Access to Information about Grades by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q3A3B Satisfaction with Online Access to Information about Grades	1 Male	939	8.47	1.84
	2 Female	1329	8.64	1.90

Two-thirds (66.8%) of the respondents said they used their campus on-line information system to obtain information about registration. This is displayed in Table 26.

The likelihood that a student accessed registration information through their campus on-line information system varied by class level. This is seen in Table 32a. Again, post baccalaureate students were less likely to make use of on-line access to the information than were undergraduates.

Table 32a: Use of Campus On-line Information Systems to Get Information about Registration by Class Level.

			Q3A2A Uses Campus Online Information Systems to Get Information about Registration		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	273	638	911
		% within CLLEVEL Class Level	30.0%	70.0%	100.0%
	2 Upper Division	Count	558	1120	1678
		% within CLLEVEL Class Level	33.3%	66.7%	100.0%
	3 Post Baccalaureate	Count	228	377	605
		% within CLLEVEL Class Level	37.7%	62.3%	100.0%
Total		Count	1059	2135	3194
		% within CLLEVEL Class Level	33.2%	66.8%	100.0%

Academic discipline also qualified the likelihood of accessing registration information on-line. Table 32b shows that engineering and computer science students were more likely to access registration information on-line, while education students were less likely to do so.

Table 32b: Use of Campus On-line Information Systems to Get Information about Registration by Discipline.

			Q3A2A Uses Campus Online Information Systems to Get Information about Registration		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	49	115	164
		% within DISC Discipline Division	29.9%	70.1%	100.0%
	2 Business	Count	135	289	424
		% within DISC Discipline Division	31.8%	68.2%	100.0%
	3 Education	Count	92	140	232
		% within DISC Discipline Division	39.7%	60.3%	100.0%
	4 Engineering/Computer Science	Count	72	268	340
		% within DISC Discipline Division	21.2%	78.8%	100.0%
	5 Humanities	Count	40	114	154
		% within DISC Discipline Division	26.0%	74.0%	100.0%
	6 Science & Math	Count	65	113	178
		% within DISC Discipline Division	36.5%	63.5%	100.0%
	7 Behavioral/Social Sciences	Count	232	384	616
		% within DISC Discipline Division	37.7%	62.3%	100.0%
	8 Professional/Technical	Count	62	139	201
		% within DISC Discipline Division	30.8%	69.2%	100.0%
	9 Undeclared	Count	186	318	504
		% within DISC Discipline Division	36.9%	63.1%	100.0%
	10 Interdisciplinary Studies	Count	99	233	332
		% within DISC Discipline Division	29.8%	70.2%	100.0%
Total		Count	1032	2113	3145
		% within DISC Discipline Division	32.8%	67.2%	100.0%

There was also a difference in accessing registration information on-line by gender. Males were more likely than females to access registration information on-line. This is seen in Table 32c. It should be noted, though, that the effect of discipline seems to overlap with this gender effect. That is, engineering and computer science students, who are predominantly male, were more likely to access registration information on-line, while education students, predominantly female, were less likely to do so.

Table 32c: Use of Campus On-line Information Systems to Get Information about Registration by Gender.

			Q3A2A Uses Campus Online Information Systems to Get Information about Registration		
			0 No	1 Yes	Total
SEX Gender	1 Male	Count	374	919	1293
		% within SEX Gender	28.9%	71.1%	100.0%
	2 Female	Count	685	1216	1901
		% within SEX Gender	36.0%	64.0%	100.0%
Total		Count	1059	2135	3194
		% within SEX Gender	33.2%	66.8%	100.0%

Those students reporting that they had accessed registration information on-line were asked about their satisfaction with their on-line access to this information. Overall, students were rather satisfied, giving an average satisfaction rating of 8.26. This is shown in Table 28.

Their satisfaction ratings varied by gender. Specifically, females expressed greater satisfaction with their on-line access to information about registration than did males. This is seen in Table 33.

Table 33: Satisfaction with Access to On-line Information about Registration by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q3A2B Satisfaction with Online Access to Information about Registration	1 Male	919	8.11	1.89
	2 Female	1215	8.38	1.82

Financial aid information was accessed through the campus electronic information system by 28.8% of the students. This is shown in Table 26.

The likelihood of accessing financial aid information through the campus electronic information system differed by class level. This is illustrated in Table 34. Post baccalaureate students were less likely than other students to access financial aid information through the campus electronic information system.

Table 34: Use of Campus On-line Information Systems to Get Information about Financial Aid by Class Level.

			Q3A4A Uses Campus Online Information Systems to Get Information about Financial Aid		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	624	286	910
		% within CLLEVEL Class Level	68.6%	31.4%	100.0%
	2 Upper Division	Count	1178	496	1674
		% within CLLEVEL Class Level	70.4%	29.6%	100.0%
	3 Post Baccalaureate	Count	471	136	607
		% within CLLEVEL Class Level	77.6%	22.4%	100.0%
Total		Count	2273	918	3191
		% within CLLEVEL Class Level	71.2%	28.8%	100.0%

The respondents reporting use of on-line access to information about financial aid were satisfied with on-line access to information about financial aid. This is indicated by the average satisfaction rating of 7.99 displayed in Table 28.

The level of satisfaction expressed by the students varied by class level. Specifically, the post baccalaureate students were less satisfied with on-line access to information about financial aid than were undergraduates. This is seen in Table 35.

Table 35: Satisfaction with On-line Access to Information about Financial Aid by Class Level.

Q3A4B Satisfaction with Online Access to Information about Financial Aid

	N	Mean	Std. Deviation
1 Lower Division	286	8.22	1.72
2 Upper Division	494	8.02	2.00
3 Post Baccalaureate	135	7.39	2.28
Total	915	7.99	1.98

Access to information about admission status was used by 27.9% of the students. This is seen in Table 26. The class level of the student was associated with the likelihood that they reported access to admission status information through the campus on-line information system. Table 36a shows that post baccalaureate students were less likely than other students to access admission status information on-line.

Table 36a: Use of Campus On-line Information Systems to Get Information about Admission Status by Class Level.

			Q3A6A Uses Campus Online Information Systems to Get Information about Admission Status		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	607	301	908
		% within Class Level	66.9%	33.1%	100.0%
	2 Upper Division	Count	1206	471	1677
		% within Class Level	71.9%	28.1%	100.0%
	3 Post Baccalaureate	Count	489	118	607
		% within Class Level	80.6%	19.4%	100.0%
Total		Count	2302	890	3192
		% within Class Level	72.1%	27.9%	100.0%

Students reported accessing information about admission status through the campus on-line information system with different likelihoods depending on their academic discipline. Table 36b shows that education students were less likely than others to access admission status information on-line, while interdisciplinary studies students were more likely to do so.

Table 36b: Use of Campus On-line Information Systems to Get Information about Admission Status by Discipline.

			Q3A6A Uses Campus Online Information Systems to Get Information about Admission Status		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	116	48	164
		% within DISC Discipline Division	70.7%	29.3%	100.0%
	2 Business	Count	301	123	424
		% within DISC Discipline Division	71.0%	29.0%	100.0%
	3 Education	Count	184	47	231
		% within DISC Discipline Division	79.7%	20.3%	100.0%
	4 Engineering/ Computer Science	Count	226	115	341
		% within DISC Discipline Division	66.3%	33.7%	100.0%
	5 Humanities	Count	111	42	153
		% within DISC Discipline Division	72.5%	27.5%	100.0%
	6 Science & Math	Count	129	49	178
		% within DISC Discipline Division	72.5%	27.5%	100.0%
	7 Behavioral/Social Sciences	Count	465	150	615
		% within DISC Discipline Division	75.6%	24.4%	100.0%
	8 Professional/ Technical	Count	144	55	199
		% within DISC Discipline Division	72.4%	27.6%	100.0%
	9 Undeclared	Count	372	133	505
		% within DISC Discipline Division	73.7%	26.3%	100.0%
	10 Interdisciplinary Studies	Count	214	119	333
		% within DISC Discipline Division	64.3%	35.7%	100.0%
Total		Count	2262	881	3143
		% within DISC Discipline Division	72.0%	28.0%	100.0%

Gender was also related to the likelihood that a student accessed admission status information on-line through the campus electronic information system. As Table 36c shows, males were more likely than females to access admission status information through their campus electronic information system.

Table 36c: Use of Campus On-line Information Systems to Get Information about Admission Status by Gender.

			Q3A6A Uses Campus Online Information Systems to Get Information about Admission Status		
			0 No	1 Yes	Total
SEX Gender	1 Male	Count	890	402	1292
		% within Gender	68.9%	31.1%	100.0%
	2 Female	Count	1412	488	1900
		% within Gender	74.3%	25.7%	100.0%
Total		Count	2302	890	3192
		% within Gender	72.1%	27.9%	100.0%

Those students reporting use of the campus electronic information system in order to access information about admission status were asked about their satisfaction with their electronic access to this information. Overall, respondents were quite satisfied, reporting an average satisfaction rating of 8.34. This is seen in Table 28.

The extent to which students were satisfied with access to information about admission status varied somewhat by discipline. Specifically, interdisciplinary studies students were more satisfied with their access than were students in art or in engineering and computer science. This may be seen in Table 37a.

Table 37a: Satisfaction with On-line Access to Admission Status Information by Discipline.

Q3A6B Satisfaction with Online Access to Information about Admission Status

	N	Mean	Std. Deviation
1 Art	48	7.56	2.23
2 Business	122	8.40	1.59
3 Education	47	8.55	1.40
4 Engineering/Computer Science	115	7.99	1.89
5 Humanities	42	8.31	1.80
6 Science & Math	49	8.02	1.69
7 Behavioral/Social Sciences	150	8.40	1.79
8 Professional/Technical	54	8.61	1.42
9 Undeclared	133	8.38	1.70
10 Interdisciplinary Studies	119	8.76	1.48
Total	879	8.34	1.72

Gender was also significant in determining the degree to which students were satisfied with access to information about admission status. As Table 37b indicates, females were more satisfied than males with respect to on-line access to admission status information.

Table 37b: Satisfaction with On-line Access to Admission Status Information by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q3A6B Satisfaction with Online Access to Information about Admission Status	1 Male	401	8.17	1.75
	2 Female	487	8.47	1.69

Less than a quarter (22.4%) of the respondents indicated that they used their campus electronic information system to obtain information regarding their progress toward their degree. This is seen in Table 26.

Use of the campus electronic information system to obtain information regarding their progress toward their degree was dependent on class level. Again, the post baccalaureate students were less likely to access progress toward degree information than were undergraduates. This is displayed in Table 38a.

Table 38a: Use of Campus On-line Information Systems to Get Information about Progress Toward Degree by Class Level.

			Q3A7A Uses Campus Online Information Systems to Get Information about Progress Towards Degree		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	696	213	909
		% within CLLEVEL Class Level	76.6%	23.4%	100.0%
	2 Upper Division	Count	1278	394	1672
		% within CLLEVEL Class Level	76.4%	23.6%	100.0%
	3 Post Baccalaureate	Count	497	107	604
		% within CLLEVEL Class Level	82.3%	17.7%	100.0%
Total		Count	2471	714	3185
		% within CLLEVEL Class Level	77.6%	22.4%	100.0%

Academic discipline also affected the likelihood that students accessed degree information on-line. Education students were much less likely to report accessing progress toward degree information on-line, while engineering and computer science students were much more likely to do so. This is seen in Table 38b.

Table 38b: Use of Campus On-line Information Systems to Get Information about Progress Toward Degree by Discipline.

			Q3A7A Uses Campus Online Information Systems to Get Information about Progress Towards Degree		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	124	38	162
		% within DISC Discipline Division	76.5%	23.5%	100.0%
	2 Business	Count	317	106	423
		% within DISC Discipline Division	74.9%	25.1%	100.0%
	3 Education	Count	203	29	232
		% within DISC Discipline Division	87.5%	12.5%	100.0%
	4 Engineering/Computer Science	Count	244	95	339
		% within DISC Discipline Division	72.0%	28.0%	100.0%
	5 Humanities	Count	112	41	153
		% within DISC Discipline Division	73.2%	26.8%	100.0%
	6 Science & Math	Count	144	33	177
		% within DISC Discipline Division	81.4%	18.6%	100.0%
	7 Behavioral/Social Sciences	Count	459	156	615
		% within DISC Discipline Division	74.6%	25.4%	100.0%
	8 Professional/Technical	Count	156	43	199
		% within DISC Discipline Division	78.4%	21.6%	100.0%
	9 Undeclared	Count	400	104	504
		% within DISC Discipline Division	79.4%	20.6%	100.0%
	10 Interdisciplinary Studies	Count	272	60	332
		% within DISC Discipline Division	81.9%	18.1%	100.0%
Total		Count	2431	705	3136
		% within DISC Discipline Division	77.5%	22.5%	100.0%

The likelihood of accessing progress toward degree information on-line varied by gender. That is, males were more likely to access degree information on-line than were females. This is shown in Table 38c. This effect coheres with the discipline finding that education students were likely to report accessing progress toward degree information, while engineering and computer science students were more likely.

Table 38c: Use of Campus On-line Information Systems to Get Information about Progress Toward Degree by Gender.

			Q3A7A Uses Campus Online Information Systems to Get Information about Progress Towards Degree		
			0 No	1 Yes	Total
SEX Gender	1 Male	Count	942	344	1286
		% within SEX Gender	73.3%	26.7%	100.0%
	2 Female	Count	1529	370	1899
		% within SEX Gender	80.5%	19.5%	100.0%
Total		Count	2471	714	3185
		% within SEX Gender	77.6%	22.4%	100.0%

The students were rather satisfied with their on-line access to information about their progress toward their degree, as indicated by an average satisfaction rating of 7.91. This is illustrated in Table 28.

The extent to which students were satisfied with on-line access to progress toward degree information varied by academic discipline. Table 39a shows the effect of academic discipline on satisfaction with on-line access to progress toward degree information is limited. Students in interdisciplinary studies were more satisfied than were engineering and computer science students.

Table 39a: Satisfaction with On-line Access to Information about Progress toward Degree by Discipline.

Q3A7B Satisfaction with Online Access to Information about Progress toward Degree

	N	Mean	Std. Deviation
1 Art	38	7.74	1.83
2 Business	106	7.71	2.07
3 Education	29	8.17	2.36
4 Engineering/Computer Science	95	7.47	2.29
5 Humanities	41	7.68	2.22
6 Science & Math	33	8.00	1.50
7 Behavioral/Social Sciences	156	7.76	2.04
8 Professional/Technical	43	7.95	1.88
9 Undeclared	103	8.25	1.54
10 Interdisciplinary Studies	60	8.67	1.69
Total	704	7.90	1.99

Satisfaction with on-line access to progress toward degree information also varied by gender. This is illustrated in Table 39b. Females were more satisfied than were males with their on-line access to progress toward degree information.

Table 39b: Satisfaction with On-line Access to Information about Progress toward Degree by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q3A7B Satisfaction with Online Access to Information about Progres toward Degree	1 Male	344	7.64	2.00
	2 Female	369	8.16	1.93

Campus electronic information systems were less commonly used to access information about billing. Only one out of five (19.9%) of the students accessed billing information on-line. This is seen in Table 26. The likelihood of accessing billing information on-line was consistent across class level, discipline, and gender.

Those that did access billing information through their campus electronic information system were quite satisfied. As shown in Table 28, the students offered an average satisfaction rating of 8.24.

The extent to which students were satisfied with accessing billing information on-line depended on gender. That is, females were a little more satisfied than were males. This is seen in Table 40.

Table 40: Satisfaction with On-line Access to Billing Information by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q3A5B Satisfaction with Online Access to Information about Billir	1 Male	270	8.04	1.81
	2 Female	361	8.39	1.87

Connectivity

Internet

Student's use and satisfaction with connectivity was assessed. Students were asked if they had used campus on-line information services. The responses are summarized in Table 41. Most (84.6%) students reported using campus access to the Internet.

Table 41: Use of On-line Information Services.

	0 No		1 Yes	
	Count	%	Count	%
Used Campus Access to the Internet Including the World Wide Web	493	15.4%	2709	84.6%
Used Campus E-Mail Services	1372	42.8%	1830	57.2%
Used Campus Network from Off-Campus, Using a Modem, Cable, DSL, or ISDN	1486	46.8%	1690	53.2%
Used Campus Network from Off-Campus by Connecting to Some Other ISP	1483	46.5%	1708	53.5%

There were differences in use of campus access to the Internet by class level. This is seen in Table 42a. Undergraduates were more likely to access the Internet through campus than were post baccalaureate students.

Table 42a: Use of Campus Access to the Internet by Class Level.

			QI4B1A Uses Campus Access to the Internet Including the World Wide Web		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	102	809	911
		% within CLLEVEL Class Level	11.2%	88.8%	100.0%
	2 Upper Division	Count	217	1465	1682
		% within CLLEVEL Class Level	12.9%	87.1%	100.0%
	3 Post Baccalaureate	Count	174	435	609
		% within CLLEVEL Class Level	28.6%	71.4%	100.0%
Total		Count	493	2709	3202
		% within CLLEVEL Class Level	15.4%	84.6%	100.0%

Table 42b shows there was also a difference in accessing the Internet through campus by discipline. Most notably, education students were less likely to use campus access to the Internet than were students in other disciplines.

Table 42b: Use of Campus Access to the Internet by Discipline.

			QI4B1A Uses Campus Access to the Internet Including the World Wide Web		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	28	136	164
		% within DISC Discipline Division	17.1%	82.9%	100.0%
	2 Business	Count	43	383	426
		% within DISC Discipline Division	10.1%	89.9%	100.0%
	3 Education	Count	70	163	233
		% within DISC Discipline Division	30.0%	70.0%	100.0%
	4 Engineering/Computer Science	Count	39	304	343
		% within DISC Discipline Division	11.4%	88.6%	100.0%
	5 Humanities	Count	18	136	154
		% within DISC Discipline Division	11.7%	88.3%	100.0%
	6 Science & Math	Count	18	160	178
		% within DISC Discipline Division	10.1%	89.9%	100.0%
	7 Behavioral/Social Sciences	Count	70	546	616
		% within DISC Discipline Division	11.4%	88.6%	100.0%
	8 Professional/Technical	Count	40	161	201
		% within DISC Discipline Division	19.9%	80.1%	100.0%
	9 Undeclared	Count	95	410	505
		% within DISC Discipline Division	18.8%	81.2%	100.0%
	10 Interdisciplinary Studies	Count	58	275	333
		% within DISC Discipline Division	17.4%	82.6%	100.0%
Total		Count	479	2674	3153
		% within DISC Discipline Division	15.2%	84.8%	100.0%

Gender was also a qualifying factor of the likelihood of using campus access to the Internet. This is illustrated in Table 42c. Males were more likely than females to utilize campus access to the Internet.

Table 42c: Use of Campus Access to the Internet by Gender.

			QI4B1A Uses Campus Access to the Internet Including the World Wide Web		
			0 No	1 Yes	Total
SEX Gender	1 Male	Count	151	1143	1294
		% within SEX Gender	11.7%	88.3%	100.0%
	2 Female	Count	342	1566	1908
		% within SEX Gender	17.9%	82.1%	100.0%
Total		Count	493	2709	3202
		% within SEX Gender	15.4%	84.6%	100.0%

Those who had used their campus access to the Internet were asked about how satisfied they were with this access. An average satisfaction rating of 8.38 indicates that students were quite satisfied. This is seen in Table 43.

Table 43: Satisfaction with Campus Connection.

	N	Minimum	Maximum	Mean	Std. Deviation
QI4B1B Satisfaction with Campus Access to the Internet	2706	0	10	8.38	1.71
QI4B2B Satisfaction with Access to Campus E-Mail Services	1825	0	10	7.68	2.28
QI4B3B Satisfaction with Campus Network from Off-Campus, Using a Modem, Cable, DSL, or ISDN	1682	0	10	7.54	2.27
QI4B4B Satisfaction with Campus Network from Off-Campus by Connecting to Some Other Internet Service	1705	0	10	7.85	1.95
Valid N (listwise)	626				

Satisfaction ratings differed by class level. Table 44a shows that post baccalaureate students were less satisfied than were undergraduates with access through their campus to the Internet.

Table 44a: Satisfaction with Campus Connection by Class Level.

QI4B1B Satisfaction with Campus Access to the Internet

	N	Mean	Std. Deviation
1 Lower Division	809	8.55	1.54
2 Upper Division	1464	8.38	1.71
3 Post Baccalaureate	433	8.04	1.92
Total	2706	8.38	1.71

There was also a difference in satisfaction with campus Internet access by gender. This is seen in Table 44b, which shows that female students were slightly more satisfied than were male students.

Table 44b: Satisfaction with Campus Connection by Gender.

	SEX Gender	N	Mean	Std. Deviation
QI4B1B Satisfaction with Campus Access to the Internet	1 Male	1143	8.26	1.81
	2 Female	1563	8.46	1.62

E-Mail

Students were asked if they used campus e-mail services. Over half the students said they used this service. Table 41 shows that 57.2% of the students reported using their campus e-mail service.

The use of campus e-mail services varied by class level. Specifically, post baccalaureate students were much less likely than other students to use campus e-mail services. In fact, Table 45a shows that while most (60.3%) undergraduates used campus e-mail, only 43.8% of post baccalaureate students did.

Table 45a: Use of Campus E-Mail Services by Class Level.

			QI4B2A Uses Campus E-Mail Services		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	364	547	911
		% within CLLEVEL Class Level	40.0%	60.0%	100.0%
	2 Upper Division	Count	666	1017	1683
		% within CLLEVEL Class Level	39.6%	60.4%	100.0%
	3 Post Baccalaureate	Count	342	266	608
		% within CLLEVEL Class Level	56.3%	43.8%	100.0%
Total		Count	1372	1830	3202
		% within CLLEVEL Class Level	42.8%	57.2%	100.0%

Discipline was also related to whether or not students used campus e-mail services. As Table 45b shows, there was a good deal of variability among disciplines in whether or not a student used campus e-mail services. Education, art, and undeclared students were less likely than those in other disciplines to use campus e-mail services. About half of these students used campus e-mail. On the other hand, about two-thirds of the engineering and computer science and interdisciplinary studies students reported using campus e-mail services.

Table 45b: Use of Campus E-Mail Services by Discipline.

			QI4B2A Uses Campus E-Mail Services		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	86	78	164
		% within DISC Discipline Division	52.4%	47.6%	100.0%
	2 Business	Count	172	254	426
		% within DISC Discipline Division	40.4%	59.6%	100.0%
	3 Education	Count	125	107	232
		% within DISC Discipline Division	53.9%	46.1%	100.0%
	4 Engineering/Computer Science	Count	116	227	343
		% within DISC Discipline Division	33.8%	66.2%	100.0%
	5 Humanities	Count	72	82	154
		% within DISC Discipline Division	46.8%	53.2%	100.0%
	6 Science & Math	Count	72	106	178
		% within DISC Discipline Division	40.4%	59.6%	100.0%
	7 Behavioral/Social Sciences	Count	255	362	617
		% within DISC Discipline Division	41.3%	58.7%	100.0%
	8 Professional/Technical	Count	82	119	201
		% within DISC Discipline Division	40.8%	59.2%	100.0%
	9 Undeclared	Count	248	257	505
		% within DISC Discipline Division	49.1%	50.9%	100.0%
	10 Interdisciplinary Studies	Count	121	212	333
		% within DISC Discipline Division	36.3%	63.7%	100.0%
Total		Count	1349	1804	3153
		% within DISC Discipline Division	42.8%	57.2%	100.0%

Students who stated that they used campus e-mail services were asked how satisfied they were with access to these services. Overall, students were fairly satisfied with their access to campus e-mail services. The average satisfaction rating was 7.68, as seen in Table 43.

Students' level of satisfaction with access to e-mail services varied by class level. Specifically, lower division students were more satisfied than were upper division and post baccalaureate students. This is illustrated in Table 46. Satisfaction with access to campus e-mail services did not vary by discipline or gender.

Table 46: Satisfaction with Access to Campus E-mail Services by Class Level.

QI4B2B Satisfaction with Access to Campus E-Mail Services

	N	Mean	Std. Deviation
1 Lower Division	545	7.96	2.09
2 Upper Division	1015	7.63	2.30
3 Post Baccalaureate	265	7.34	2.51
Total	1825	7.68	2.28

Campus Network Access

Students were asked if they had used their campus network from off-campus, using a modem, cable, DSL, or ISDN. About half (53.2%) of the respondents reported that they had accessed their campus network from off-campus, as shown in Table 41.

The likelihood of using their campus network from off-campus, using a modem, cable, DSL, or ISDN depended on academic discipline. As shown in Table 47, science and math, as well as education students were less likely to access their campus network from off-campus, while humanities and engineering and computer science students were more likely to access their campus network from off-campus.

Those that did access their campus network from off-campus, using a modem, cable, DSL, or ISDN were asked how satisfied they were with that access. Respondents were fairly satisfied, offering an average rating of 7.54. This is seen in Table 43.

Table 47: Use of Campus Network from Off-Campus by Discipline.

			QI4B3A Uses Campus Network from Off-Campus, Using a Modem, Cable, DSL, or ISDN		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	84	79	163
		% within DISC Discipline Division	51.5%	48.5%	100.0%
	2 Business	Count	207	218	425
		% within DISC Discipline Division	48.7%	51.3%	100.0%
	3 Education	Count	121	108	229
		% within DISC Discipline Division	52.8%	47.2%	100.0%
	4 Engineering/ Computer Science	Count	137	204	341
		% within DISC Discipline Division	40.2%	59.8%	100.0%
	5 Humanities	Count	59	94	153
		% within DISC Discipline Division	38.6%	61.4%	100.0%
	6 Science & Math	Count	96	81	177
		% within DISC Discipline Division	54.2%	45.8%	100.0%
	7 Behavioral/Social Sciences	Count	281	330	611
		% within DISC Discipline Division	46.0%	54.0%	100.0%
	8 Professional/ Technical	Count	96	104	200
		% within DISC Discipline Division	48.0%	52.0%	100.0%
	9 Undeclared	Count	240	259	499
		% within DISC Discipline Division	48.1%	51.9%	100.0%
	10 Interdisciplinary Studies	Count	137	192	329
		% within DISC Discipline Division	41.6%	58.4%	100.0%
Total		Count	1458	1669	3127
		% within DISC Discipline Division	46.6%	53.4%	100.0%

The average satisfaction rating differed by class level. This is illustrated in Table 48a. Lower division students were more satisfied with access to their campus network than were upper division students.

Table 48a: Satisfaction with Campus Network from Off Campus by Class Level.

QI4B3B Satisfaction with Campus Network from Off-Campus, Using a Modem, Cable, DSL, or ISDN

	N	Mean	Std. Deviation
1 Lower Division	471	7.80	2.03
2 Upper Division	904	7.40	2.37
3 Post Baccalaureate	307	7.57	2.30
Total	1682	7.54	2.27

Satisfaction with campus network access also varied by gender. Females expressed slightly more satisfaction with access to their campus network from off campus than did males. This is seen in Table 48b.

Table 48b: Satisfaction with Campus Network from Off Campus by Gender.

	SEX Gender	N	Mean	Std. Deviation
QI4B3B Satisfaction with Campus Network from Off-Campus, Using Modem, Cable, DSL, or ISDN	1 Male	704	7.40	2.21
	2 Female	978	7.65	2.31

Access through ISP

Use of their campus network from off-campus by connecting to some other Internet service provider (ISP) like AOL, CompuServe, or Earthlink was also of interest. Table 41 shows that about half (53.5%) of the respondents said they had used some Internet service provider (ISP) to connect to their campus network. The likelihood of connecting to the campus network through an ISP did not vary by class level, discipline, or gender.

Those that did report accessing their campus network through an ISP were asked how satisfied they were with their access to their campus network from off-campus by connecting to some other ISP. As Table 43 shows, respondents offered an average satisfaction rating of 7.85, suggesting that they were fairly satisfied.

Students' level of satisfaction with accessing their campus network through an ISP was consistent across class level and discipline. However, there was a difference in satisfaction level by gender, as indicated in Table 49. Females were a little more satisfied than males with accessing their campus network through an ISP.

Table 49: Satisfaction with Accessing the Campus Network through an ISP by Gender.

	SEX Gender	N	Mean	Std. Deviation
QI4B4B Satisfaction with Campus Network from Off-Campus by Connecting to Some Other Internet Service	1 Male	674	7.67	1.93
	2 Female	1031	7.97	1.96

General Computer Use

Amount and Nature of Computer Use

Computer Use for Any Purpose. Students were asked how often they used a computer for any purpose. Their responses are summarized in Table 50. Less than 1% of the respondents indicated that they use a computer less frequently than monthly. Most (82.4%) respondents report using a computer for some purpose every day. On average, the students who reported that they used computers at least weekly said they used computers for 16.37 hours per week.

Table 50: How Often Respondent Uses Computer for Any Purpose.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	1	.0	.0	.0
	2 Almost Never	12	.4	.4	.4
	3 At Least Once a Semester or Quarter	15	.5	.5	.9
	4 Monthly	49	1.5	1.5	2.4
	5 Weekly	485	15.1	15.1	17.6
	6 Almost Everyday	2640	82.4	82.4	100.0
	Total	3202	99.9	100.0	
Missing	8 Don't Know	1	.0		
	9 Refused	1	.0		
	Total	2	.1		
Total		3204	100.0		

The frequency with which a student used a computer for any purpose varied by discipline. This is illustrated in Table 51a. While interdisciplinary studies students were less frequent computer users, engineering and computer science students as well as business students reported using computers with greater frequency than did other students.

Table 51a: How Often Respondent Uses Computer for Any Purpose by Discipline.

			QUSE1 How Often Respondent Uses Computer for Any Purpose						
			1 Never	2 Almost Never	3 At Least Once a Term	4 Monthly	5 Weekly	6 Almost Every day	Total
Discipline Division	1 Art	Count		2	1	5	25	131	164
		%		1.2%	.6%	3.0%	15.2%	79.9%	100%
	2 Business	Count			2	3	40	380	425
		%			.5%	.7%	9.4%	89.4%	100%
	3 Education	Count		2	1	3	36	191	233
		%		.9%	.4%	1.3%	15.5%	82.0%	100%
	4 Engineering/ Computer Science	Count		1		4	23	315	343
		%		.3%		1.2%	6.7%	91.8%	100%
	5 Humanities	Count				1	24	129	154
		%				.6%	15.6%	83.8%	100%
	6 Science & Math	Count			2	5	32	139	178
		%			1.1%	2.8%	18.0%	78.1%	100%
	7 Behavioral/ Social Sciences	Count		3	5	9	113	487	617
		%		.5%	.8%	1.5%	18.3%	78.9%	100%
	8 Professional/ Technical	Count		1		4	30	166	201
		%		.5%		2.0%	14.9%	82.6%	100%
	9 Undeclared	Count	1	1	2	7	85	408	504
		%	.2%	.2%	.4%	1.4%	16.9%	81.0%	100%
	10 Inter-disciplinary Studies	Count		2	2	6	67	257	334
		%		.6%	.6%	1.8%	20.1%	76.9%	100%
Total		Count	1	12	15	47	475	2603	3153
		%	.0%	.4%	.5%	1.5%	15.1%	82.6%	100%

The frequency of computer use for any purpose also varied by gender. Table 51b shows that 85.8% of the male students reported using computers every day compared to 80.1% of the females.

Table 51b: How Often Respondent Uses Computer for Any Purpose by Gender.

			QUSE1 How Often Respondent Uses Computer for Any Purpose						
			1 Never	2 Almost Never	3 At Least Once a Term	4 Monthly	5 Weekly	6 Almost Everyday	Total
SEX Gender	1 Male	Count		6	10	19	148	1110	1293
		% within Gender		.5%	.8%	1.5%	11.4%	85.8%	100.0%
	2 Female	Count	1	6	5	30	337	1530	1909
		% within Gender	.1%	.3%	.3%	1.6%	17.7%	80.1%	100.0%
Total		Count	1	12	15	49	485	2640	3202
		% within Gender	.0%	.4%	.5%	1.5%	15.1%	82.4%	100.0%

Those who reported using a computer for any purpose were asked the locations at which they use computers. Almost all (93.6%) of the respondents reported using a computer at home. This may be seen in Table 52. More than two thirds (69.6%) of the students also reported using a computer on campus, and over a third (39.6%) of the students used computers at work.

Table 52: Computer Use Locations.

	0 Not Chosen		1 Chosen	
	Count	%	Count	%
At Home	205	6.4%	2996	93.6%
On Campus	973	30.4%	2228	69.6%
At Place of Employment	1933	60.4%	1268	39.6%
At a Friend/Relative's House	3062	95.7%	139	4.3%
At a Public Library	3121	97.5%	80	2.5%
Uses Laptop/Mobile Computer	3169	99.0%	32	1.0%
Other	3169	99.0%	32	1.0%

Use at Home. As noted above, 93.6% of the students said they used a computer at home. Use of computers at home was so pervasive that there was no significant variability by class level, discipline, or gender.

Similarly, the *amount* of computer use at home was fairly consistent across class level and discipline. There was a difference in the amount of computer use at home by gender. That is, males were more likely to report using a computer at home every day than were females. This is seen in Table 53.

Table 53: How Often Respondent Uses a Computer at Home by Gender.

			QUSE43A How Often Respondent Uses a Computer at Home						
			1 Never	2 Almost Never	3 At Least Once a Term	4 Monthly	5 Weekly	6 Almost Everyday	Total
SEX Gender	1 Male	Count	1	2	7	14	182	994	1200
		% within Gender	.1%	.2%	.6%	1.2%	15.2%	82.8%	100.0%
	2 Female	Count		6	8	32	411	1337	1794
		% within Gender		.3%	.4%	1.8%	22.9%	74.5%	100.0%
Total		Count	1	8	15	46	593	2331	2994
		% within Gender	.0%	.3%	.5%	1.5%	19.8%	77.9%	100.0%

Those who reported using a computer weekly or almost daily at various locations were asked the number of hours they spent using computers at those locations. Their responses are summarized in Table 54. This shows that the highest average number of hours spent on a computer is at work, where the students spend an average of 15.82 hours per week.

Table 54: Number of Hours per Week Using a Computer at Different Locations.

	N	Minimum	Maximum	Mean	Std. Deviation
QUSE43B Hours of Computer Use at Home	2910	0	74	10.63	8.70
QUSE41B Hours of Computer Use On Campus	1598	0	70	5.81	6.47
QUSE42B Hours of Computer Use at Place of Employment	1183	0	60	15.82	13.13
Valid N (listwise)	547				

Students spent an average of 10.63 hours per week on a computer at home. This varied by academic discipline. As Table 55a shows, engineering and computer science students spend much more time than students in other disciplines using a computer at home. In addition, the education and behavioral and social science students used computers at home less than students in business and students in engineering and computer science.

Table 55a: Hours per Week Using a Computer at Home by Discipline.

QUSE43B Number of Hours Respondent Uses Computer at Home

	N	Mean	Std. Deviation
1 Art	143	10.69	8.91
2 Business	398	11.21	9.27
3 Education	218	8.81	6.67
4 Engineering/Computer Science	321	14.36	10.30
5 Humanities	137	10.27	7.26
6 Science & Math	157	10.80	8.65
7 Behavioral/Social Sciences	556	9.29	7.70
8 Professional/Technical	181	10.34	8.31
9 Undeclared	458	10.23	8.99
10 Interdisciplinary Studies	299	10.76	8.44
Total	2868	10.65	8.72

Gender also was associated with the number of hours per week the student used a computer at home. Table 55b shows that males used a computer at home for more hours per week than did females.

Table 55b: Hours per Week Using a Computer at Home by Gender.

	SEX Gender	N	Mean	Std. Deviation
QUSE43B Number of Hours Respondent Uses Computer at Home	1 Male	1168	11.96	9.31
	2 Female	1742	9.74	8.14

Computer Use on Campus. As Table 52 above shows, 69.6% of the students reported using a computer on campus. While three quarters of the undergraduate students said they used a computer on campus, only half of the post baccalaureate students reported using a computer on campus. This is seen in Table 56a.

Table 56a: Use of Computer on Campus by Class Level.

			QUSE3_1 Uses Computer on Campus		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	229	682	911
		% within CLLEVEL Class Level	25.1%	74.9%	100.0%
	2 Upper Division	Count	432	1251	1683
		% within CLLEVEL Class Level	25.7%	74.3%	100.0%
	3 Post Baccalaureate	Count	312	295	607
		% within CLLEVEL Class Level	51.4%	48.6%	100.0%
Total		Count	973	2228	3201
		% within CLLEVEL Class Level	30.4%	69.6%	100.0%

As Table 56b reveals, there was substantial variation in the likelihood of using a computer on campus by academic discipline. Education students were by far the least likely to use a computer on campus. Undeclared students as well as professional/technical students were less likely than most others to use a computer on campus, while engineering and computer science, behavioral and social science, and science and math students were more likely to use a computer on campus.

Table 56b: Use of Computer on Campus by Discipline.

			QUSE3_1 Uses Computer on Campus		
			0 Not Chosen	1 Chosen	Total
DISC Discipline Division	1 Art	Count	45	119	164
		% within DISC Discipline Division	27.4%	72.6%	100.0%
	2 Business	Count	121	304	425
		% within DISC Discipline Division	28.5%	71.5%	100.0%
	3 Education	Count	113	120	233
		% within DISC Discipline Division	48.5%	51.5%	100.0%
	4 Engineering/Computer Science	Count	70	273	343
		% within DISC Discipline Division	20.4%	79.6%	100.0%
	5 Humanities	Count	44	110	154
		% within DISC Discipline Division	28.6%	71.4%	100.0%
	6 Science & Math	Count	42	136	178
		% within DISC Discipline Division	23.6%	76.4%	100.0%
	7 Behavioral/Social Sciences	Count	144	473	617
		% within DISC Discipline Division	23.3%	76.7%	100.0%
	8 Professional/Technical	Count	75	126	201
		% within DISC Discipline Division	37.3%	62.7%	100.0%
	9 Undeclared	Count	201	302	503
		% within DISC Discipline Division	40.0%	60.0%	100.0%
	10 Interdisciplinary Studies	Count	94	240	334
		% within DISC Discipline Division	28.1%	71.9%	100.0%
Total		Count	949	2203	3152
		% within DISC Discipline Division	30.1%	69.9%	100.0%

Gender was also an important determinant of whether or not students used a computer on campus. Table 56c shows the percentages of males and females that reported using a computer on campus. Three quarters (74.0%) of the males reported using a computer on campus, while two-thirds (66.6%) of the females used an on-campus computer.

Table 56c: Use of Computer on Campus by Gender.

			QUSE3_1 Uses Computer on Campus		
			0 Not Chosen	1 Chosen	Total
SEX Gender	1 Male	Count	336	957	1293
		% within SEX Gender	26.0%	74.0%	100.0%
	2 Female	Count	637	1271	1908
		% within SEX Gender	33.4%	66.6%	100.0%
Total		Count	973	2228	3201
		% within SEX Gender	30.4%	69.6%	100.0%

The frequency of computer use on campus was assessed for those reporting computer use on campus. This frequency varied by class level, as indicated in Table 57a. Post baccalaureate students used a computer on campus less frequently than did undergraduate students.

Table 57a: How Often Respondent Uses Computer on Campus by Class Level.

			QUSE41A How Often Respondent Uses Computer on Campus						
			1 Never	2 Almost Never	3 At Least Once a Term	4 Monthly	5 Weekly	6 Almost Every Day	Total
Class Level	1 Lower Division	Count	3	14	61	108	283	213	682
		% within Class Level	.4%	2.1%	8.9%	15.8%	41.5%	31.2%	100.0%
	2 Upper Division	Count	1	29	98	181	551	390	1250
		% within Class Level	.1%	2.3%	7.8%	14.5%	44.1%	31.2%	100.0%
	3 Post Baccalaureate	Count	1	17	51	54	123	47	293
		% within Class Level	.3%	5.8%	17.4%	18.4%	42.0%	16.0%	100.0%
Total		Count	5	60	210	343	957	650	2225
		% within Class Level	.2%	2.7%	9.4%	15.4%	43.0%	29.2%	100.0%

The frequency of computer use on campus also varied by discipline. As Table 57b shows, engineering and computer science students were much more likely than other students to use a computer on campus. On the other hand, education, undeclared, and art students were less likely to use a computer on campus.

Table 57b: How Often Respondent Uses Computer on Campus by Discipline.

			QUSE41A How Often Respondent Uses Computer on Campus						
			1 Never	2 Almost Never	3 At Least Once a Term	4 Monthly	5 Weekly	6 Almost Every Day	Total
Discipline	1 Art	Count	2	3	14	21	42	37	119
		% within Discipline	1.7%	2.5%	11.8%	17.6%	35.3%	31.1%	100.0%
	2 Business	Count	1	12	22	38	142	89	304
		% within Discipline	.3%	3.9%	7.2%	12.5%	46.7%	29.3%	100.0%
	3 Education	Count		8	14	25	47	26	120
		% within Discipline		6.7%	11.7%	20.8%	39.2%	21.7%	100.0%
	4 Engineering/ Computer Science	Count		2	13	21	122	115	273
		% within Discipline		.7%	4.8%	7.7%	44.7%	42.1%	100.0%
	5 Humanities	Count		2	8	17	51	32	110
		% within Discipline		1.8%	7.3%	15.5%	46.4%	29.1%	100.0%
	6 Science & Math	Count	1	2	10	16	65	41	135
		% within Discipline	.7%	1.5%	7.4%	11.9%	48.1%	30.4%	100.0%
	7 Behavioral/ Social Sciences	Count	1	10	48	86	201	126	472
		% within Discipline	.2%	2.1%	10.2%	18.2%	42.6%	26.7%	100.0%
	8 Professional/ Technical	Count		2	12	25	47	40	126
		% within Discipline		1.6%	9.5%	19.8%	37.3%	31.7%	100.0%
	9 Undeclared	Count		15	43	48	128	68	302
		% within Discipline		5.0%	14.2%	15.9%	42.4%	22.5%	100.0%
	10 Interdisciplinary Studies	Count		3	24	41	103	69	240
		% within Discipline		1.3%	10.0%	17.1%	42.9%	28.8%	100.0%
Total		Count	5	59	208	338	948	643	2201
		% within Discipline	.2%	2.7%	9.5%	15.4%	43.1%	29.2%	100.0%

Computer use on campus differed by gender in terms of frequency. That is, males who used a computer on campus did so more frequently than the females who used an on-campus computer. This is seen in Table 57c.

Table 57c: How Often Respondent Uses Computer on Campus by Gender.

			QUSE41A How Often Respondent Uses Computer on Campus						
			1 Never	2 Almost Never	3 At Least Once a Term	4 Monthly	5 Weekly	6 Almost Every Day	Total
Gender	1 Male	Count	2	20	66	117	431	320	956
		% within Gender	.2%	2.1%	6.9%	12.2%	45.1%	33.5%	100.0%
	2 Female	Count	3	40	144	226	526	330	1269
		% within Gender	.2%	3.2%	11.3%	17.8%	41.4%	26.0%	100.0%
Total		Count	5	60	210	343	957	650	2225
		% within Gender	.2%	2.7%	9.4%	15.4%	43.0%	29.2%	100.0%

As noted above, those using a computer on campus at least weekly reported using a computer on campus for an average of 5.81 hours per week. The average number of hours using a computer on campus did not differ by class level, discipline, or gender.

Computer Use at Place of Employment. Table 52 above shows that 39.6% of the respondents used a computer at their place of employment. The likelihood of using a computer at work depended on the class level of the student. Though post baccalaureate students used computers less often on campus, at their place of employment they were more likely to use computers in comparison to undergraduates. This is illustrated in Table 58a.

Table 58a: Use of Computer at Place of Employment by Class Level.

			QUSE3_2 Uses Computer at Place of Employment		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	641	270	911
		% within CLLEVEL Class Level	70.4%	29.6%	100.0%
	2 Upper Division	Count	1031	652	1683
		% within CLLEVEL Class Level	61.3%	38.7%	100.0%
	3 Post Baccalaureate	Count	261	346	607
		% within CLLEVEL Class Level	43.0%	57.0%	100.0%
Total		Count	1933	1268	3201
		% within CLLEVEL Class Level	60.4%	39.6%	100.0%

There was also a difference in the likelihood of computer use at work by academic discipline. This is revealed in Table 58b. Science and math students were especially unlikely to use computers at their place of employment, though interdisciplinary students were also less likely than most to use a computer at work. Professional/technical students, on the other hand, were more likely than other students to use a computer at work. There was no difference in computer use at work by gender.

Table 58b: Use of Computer at Place of Employment by Discipline.

			QUSE3_2 Uses Computer at Place of Employment		
			0 Not Chosen	1 Chosen	Total
DISC Discipline Division	1 Art	Count	103	61	164
		% within DISC Discipline Division	62.8%	37.2%	100.0%
	2 Business	Count	246	179	425
		% within DISC Discipline Division	57.9%	42.1%	100.0%
	3 Education	Count	133	100	233
		% within DISC Discipline Division	57.1%	42.9%	100.0%
	4 Engineering/Computer Science	Count	202	141	343
		% within DISC Discipline Division	58.9%	41.1%	100.0%
	5 Humanities	Count	97	57	154
		% within DISC Discipline Division	63.0%	37.0%	100.0%
	6 Science & Math	Count	130	48	178
		% within DISC Discipline Division	73.0%	27.0%	100.0%
	7 Behavioral/Social Sciences	Count	365	252	617
		% within DISC Discipline Division	59.2%	40.8%	100.0%
	8 Professional/Technical	Count	110	91	201
		% within DISC Discipline Division	54.7%	45.3%	100.0%
	9 Undeclared	Count	305	198	503
		% within DISC Discipline Division	60.6%	39.4%	100.0%
	10 Interdisciplinary Studies	Count	221	113	334
		% within DISC Discipline Division	66.2%	33.8%	100.0%
Total		Count	1912	1240	3152
		% within DISC Discipline Division	60.7%	39.3%	100.0%

There was no meaningful variation in the frequency of computer use at work by class level, discipline, or gender. However, students who used a computer at work at least weekly did differ by discipline with respect to the number of hours they spent on a computer at work. This is illustrated in Table 59.

Table 59: Hours per Week Using a Computer at Place of Employment by Discipline.

QUSE42B Number of Hours Respondent Uses a Computer at Place of Employmer

	N	Mean	Std. Deviation
1 Art	59	14.22	13.06
2 Business	164	18.79	13.47
3 Education	91	10.68	10.65
4 Engineering/Computer Science	130	19.46	14.30
5 Humanities	54	18.91	13.40
6 Science & Math	47	15.89	11.81
7 Behavioral/Social Sciences	240	15.65	12.87
8 Professional/Technical	85	12.96	12.51
9 Undeclared	186	15.25	13.10
10 Interdisciplinary Studies	102	14.14	12.48
Total	1158	15.83	13.13

As Table 52 shows, there are a number of people who reported using computers at other locations. The number of students reporting use at these other locations is too small to assess subgroup variation.

Computer Skills and Enjoyment

Computer Skills. Students were asked about their skill level with computers. Specifically, they were asked how they would rate their overall skill level in using a computer. Their responses are summarized in Table 60. Most (61.9%) students said they had good skills, while 21.6% said they had excellent computer skills.

Table 60: Computer Skill Level.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 No Skills	6	.2	.2	.2
	2 Minimal Skills	523	16.3	16.3	16.5
	3 Good Skills	1981	61.8	61.9	78.4
	4 Excellent Skills	691	21.6	21.6	100.0
	Total	3201	99.9	100.0	
Missing	System	3	.1		
Total		3204	100.0		

The self-reported computer skill level of the students varied by discipline. This is revealed in Table 61a. Interdisciplinary students and education students rated their computer skills lower than did other students. Engineering and computer science students, on the other hand, demonstrated much more confidence in their computer skills than did students in other disciplines.

Table 61a: Computer Skill Level by Discipline.

			QUSE5 Computer Skill Level				
			1 No Skills	2 Minimal Skills	3 Good Skills	4 Excellent Skills	Total
DISC Discipline Division	1 Art	Count		32	94	38	164
		% within Discipline		19.5%	57.3%	23.2%	100.0%
	2 Business	Count	1	45	274	105	425
		% within Discipline	.2%	10.6%	64.5%	24.7%	100.0%
	3 Education	Count		48	147	38	233
		% within Discipline		20.6%	63.1%	16.3%	100.0%
	4 Engineering/ Computer Science	Count		32	171	140	343
		% within Discipline		9.3%	49.9%	40.8%	100.0%
	5 Humanities	Count		26	97	31	154
		% within Discipline		16.9%	63.0%	20.1%	100.0%
	6 Science & Math	Count		28	107	43	178
		% within Discipline		15.7%	60.1%	24.2%	100.0%
	7 Behavioral/Social Sciences	Count	1	116	381	119	617
		% within Discipline	.2%	18.8%	61.8%	19.3%	100.0%
	8 Professional/ Technical	Count	1	33	128	39	201
		% within Discipline	.5%	16.4%	63.7%	19.4%	100.0%
	9 Undeclared	Count	2	93	318	90	503
		% within Discipline	.4%	18.5%	63.2%	17.9%	100.0%
	10 Interdisciplinary Studies	Count	1	61	230	42	334
		% within Discipline	.3%	18.3%	68.9%	12.6%	100.0%
Total		Count	6	514	1947	685	3152
		% within Discipline	.2%	16.3%	61.8%	21.7%	100.0%

The self-reported computer skill level of the students was qualified by gender. As Table 61b shows, males rated their computer skills more highly than did females. Of males, 30.6% rated their computer skills as excellent and 85.8% rated their skills as god or excellent, while only 15.5% of the females rated their computer skills as excellent and 81.9% rated their skills as good or excellent. Again, the effect of gender and discipline seem to overlap.

Table 61b: Computer Skill Level by Gender.

			QUSE5 Computer Skill Level				
			1 No Skills	2 Minimal Skills	3 Good Skills	4 Excellent Skills	Total
Gender	1 Male	Count	1	182	714	396	1293
		% within Gender	.1%	14.1%	55.2%	30.6%	100.0%
	2 Female	Count	5	341	1267	295	1908
		% within Gender	.3%	17.9%	66.4%	15.5%	100.0%
Total		Count	6	523	1981	691	3201
		% within Gender	.2%	16.3%	61.9%	21.6%	100.0%

Enjoyment of Computer Use. CSU students indicated that they enjoyed using a computer. When asked how much they enjoyed using a computer, half (52.1%) of the students said they enjoyed using a computer a great deal. Additionally, as illustrated in Table 62, 94.0% of the students said they enjoyed using a computer at least somewhat.

Table 62: Enjoyment of Using a Computer.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Not At All	40	1.2	1.3	1.3
	2 Very Little	154	4.8	4.8	6.1
	3 Somewhat	1340	41.8	41.9	47.9
	4 A Great Deal	1666	52.0	52.1	100.0
	Total	3200	99.9	100.0	
Missing	8 Don't Know	1	.0		
	System	3	.1		
	Total	4	.1		
Total		3204	100.0		

Table 63a shows the degree to which students in different disciplines enjoyed using a computer. The table shows that professional/technical and humanities students reported lower levels of enjoyment of computer use. Engineering and computer sciences students, as well as those in business, reported higher levels of enjoyment.

Table 63a: Enjoyment of Using a Computer by Discipline.

			QUSE6 Enjoyment of Using Computer				
			1 Not At All	2 Very Little	3 Somewhat	4 A Great Deal	Total
Discipline Division	1 Art	Count	1	10	69	84	164
		% within Discipline	.6%	6.1%	42.1%	51.2%	100.0%
	2 Business	Count	2	15	161	247	425
		% within Discipline	.5%	3.5%	37.9%	58.1%	100.0%
	3 Education	Count	2	13	91	127	233
		% within Discipline	.9%	5.6%	39.1%	54.5%	100.0%
	4 Engineering/ Computer Science	Count	4	11	89	239	343
		% within Discipline	1.2%	3.2%	25.9%	69.7%	100.0%
	5 Humanities	Count	2	7	75	70	154
		% within Discipline	1.3%	4.5%	48.7%	45.5%	100.0%
	6 Science & Math	Count		14	78	86	178
		% within Discipline		7.9%	43.8%	48.3%	100.0%
	7 Behavioral/Social Sciences	Count	12	31	275	298	616
		% within Discipline	1.9%	5.0%	44.6%	48.4%	100.0%
	8 Professional/ Technical	Count		13	97	91	201
		% within Discipline		6.5%	48.3%	45.3%	100.0%
	9 Undeclared	Count	9	24	231	239	503
		% within Discipline	1.8%	4.8%	45.9%	47.5%	100.0%
	10 Interdisciplinary Studies	Count	8	15	152	159	334
		% within Discipline	2.4%	4.5%	45.5%	47.6%	100.0%
Total		Count	40	153	1318	1640	3151
		% within Discipline	1.3%	4.9%	41.8%	52.0%	100.0%

The degree to which students enjoyed using computers was also qualified by gender. This is seen in Table 63b. Male students said they enjoy computer use more than female students did.

Table 63b: Enjoyment of Using a Computer by Gender.

			QUSE6 Enjoyment of Using Computer				
			1 Not At All	2 Very Little	3 Somewhat	4 A Great Deal	Total
SEX Gender	1 Male	Count	16	57	465	755	1293
		% within SEX Gender	1.2%	4.4%	36.0%	58.4%	100.0%
	2 Female	Count	24	97	875	911	1907
		% within SEX Gender	1.3%	5.1%	45.9%	47.8%	100.0%
Total		Count	40	154	1340	1666	3200
		% within SEX Gender	1.3%	4.8%	41.9%	52.1%	100.0%

Academic Computer Use

Students were asked what percentage of their computer use was academically related. On average, 55.61% of the students' computer use was class or academically related as opposed to use for business, home, or recreational purposes.

The percentage of computer use that students said was academically related varied by class level. This is seen in Table 64a. Upper division students used computers for academic purposes in greater proportion to their total use than did lower division and post baccalaureate students.

Table 64a: Percentage of Computer Use that is Academic by Class Level.

QUSE7 Percentage of Total Computer Use That is Class or Academically Related

	N	Mean	Std. Deviation
1 Lower Division	909	53.27	26.39
2 Upper Division	1677	57.41	27.09
3 Post Baccalaureate	605	54.12	28.75
Total	3191	55.61	27.28

Discipline was related to the percentage of students' computer use that was academic. This can be seen in Table 64b. One finding worth noting is that academically related computer work constituted a smaller proportion of total computer use for the engineering and computer science students compared to students in most other disciplines.

Table 64b: Percentage of Computer Use that is Academic by Discipline.

QUSE7 Percentage of Total Computer Use That is Class or Academically Related

	N	Mean	Std. Deviation
1 Art	164	49.65	27.41
2 Business	423	50.57	26.93
3 Education	229	58.81	27.65
4 Engineering/Computer Science	341	47.17	25.46
5 Humanities	154	59.01	26.71
6 Science & Math	178	53.87	28.02
7 Behavioral/Social Sciences	616	58.92	26.65
8 Professional/Technical	201	56.71	26.45
9 Undeclared	503	56.37	28.21
10 Interdisciplinary Studies	333	63.42	25.52
Total	3142	55.67	27.28

Gender was also related to the percentage of students' computer use that was academic. Table 64c shows that a larger percentage of females' computer use was academically related compared to male students.

Table 64c: Percentage of Computer Use that is Academic by Gender.

	SEX Gender	N	Mean	Std. Deviation
QUSE7 Percentage of Tota Computer Use That is Class or Academically Related	1 Male	1290	49.18	26.54
	2 Female	1901	59.97	26.91

Importance of Computers and Computer Literacy

Students were asked about their perceptions of the importance of using computers for completing course work and achieving their educational goals. Students regarded the use of computers as very important in this respect. As shown in Table 65, students offered an average importance rating of 8.98 for the use of computers for completing course work and their educational goals.

Table 65: Importance of Computers and Computer Literacy.

	N	Minimum	Maximum	Mean	Std. Deviation
QUSE8 Importance of Computers for Achieving Educational Goals	3202	0	10	8.98	1.65
QUSE9 Importance of Computer Literacy for Future Employment Goals	3195	0	10	9.12	1.52
Valid N (listwise)	3194				

The perceived importance of using computers for completing course work and achieving their educational goals was qualified by class level. As revealed in Table 66a, lower division students saw the use of computers as less important to their course work and educational goals than did upper division and post baccalaureate students.

Table 66a: Importance of Computers for Course Work and Academic Goals by Class Level.

QUSE8 Importance of Computers for Achieving Educational Goals

	N	Mean	Std. Deviation
1 Lower Division	911	8.79	1.71
2 Upper Division	1683	9.04	1.60
3 Post Baccalaureate	608	9.10	1.64
Total	3202	8.98	1.65

There were differences in perceived importance of computer use for course work and academic goals by academic discipline. This is seen in Table 66b. The science and math students, on average, rated the importance of computer use for course work and educational goals at a lower level than did all other disciplines except art. Art students rated the importance of computer use for course work and educational goals lower than did those in business, education, the behavioral and social sciences, professional/technical, and interdisciplinary studies.

Table 66b: Importance of Computers for Course Work and Academic Goals by Discipline.

QUSE8 Importance of Computers for Achieving Educational Goals

	N	Mean	Std. Deviation
1 Art	164	8.48	2.19
2 Business	426	9.11	1.39
3 Education	233	9.12	1.44
4 Engineering/Computer Science	343	8.86	1.56
5 Humanities	154	8.94	1.96
6 Science & Math	178	8.30	2.22
7 Behavioral/Social Sciences	617	9.19	1.52
8 Professional/Technical	201	9.14	1.52
9 Undeclared	504	8.87	1.72
10 Interdisciplinary Studies	333	9.13	1.43
Total	3153	8.98	1.65

Gender was a significant determinant of the perceived importance of computer use for course work and educational goals. As Table 66c shows, females regarded computer use for completing course work and their educational goals as more important than did male students.

Table 66c: Importance of Computers for Course Work and Academic Goals by Gender.

	SEX Gender	N	Mean	Std. Deviation
QUSE8 Importance of Computers for Achieving Educational Goals	1 Male	1293	8.72	1.83
	2 Female	1909	9.15	1.48

Students were also asked about their perceptions of the importance of computer literacy for their future employment goals. Their average importance rating is displayed in Table 65 above. The average rating of the importance of computer literacy for their future employment goals was extremely high, a 9.12 on the zero-to-ten scale.

The average rating of the importance of computer literacy for future employment goals was qualified by academic discipline. The average importance ratings are displayed in Table 67 for each discipline. This table shows that business and engineering and computer science students regarded computer literacy as more important for their employment goals than did students in the other disciplines.

Table 67: Importance of Computer Literacy for Future Employment Goals by Discipline.

QUSE9 Importance of Computer Literacy for Future Employment Goals

	N	Mean	Std. Deviation
1 Art	164	8.80	1.92
2 Business	425	9.52	1.03
3 Education	233	8.89	1.63
4 Engineering/Computer Science	342	9.49	1.03
5 Humanities	154	8.83	1.85
6 Science & Math	177	9.02	1.64
7 Behavioral/Social Sciences	613	9.07	1.52
8 Professional/Technical	201	8.95	1.69
9 Undeclared	503	9.01	1.61
10 Interdisciplinary Studies	334	9.04	1.53
Total	3146	9.12	1.52

Workstations, Software, and Help

Hardware

Respondents were asked about access to the computer workstations, software, and maintenance. They were asked if they had access to a university-provided computer workstation to complete their school work. Almost all (94.1%) of the students said they had access to a university-provided computer workstation. Table 68 shows the percentage of students that said they had access to a university-provided computer workstation.

Table 68: Access to University-Provided Harware and Software.

	0 No		1 Yes	
	Count	%	Count	%
Access to a University-Provided Computer Workstation	186	5.9%	2956	94.1%
Access to a University-Provided Computer Software	399	14.4%	2365	85.6%

Students' class level was related to the likelihood that they reported having access to a university-provided workstation. This is illustrated in Table 69a. Post baccalaureate students were less likely than other students to report having access to a university-provided computer workstation.

Table 69a: Access to a University-Provided Computer Workstation by Class Level.

			QI4A1 Access to a University-Provided Computer Workstation Needed to Complete Work		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	35	872	907
		% within CLLEVEL Class Level	3.9%	96.1%	100.0%
	2 Upper Division	Count	75	1581	1656
		% within CLLEVEL Class Level	4.5%	95.5%	100.0%
	3 Post Baccalaureate	Count	76	503	579
		% within CLLEVEL Class Level	13.1%	86.9%	100.0%
Total		Count	186	2956	3142
		% within CLLEVEL Class Level	5.9%	94.1%	100.0%

Access to a university-provided computer workstation to complete their school work varied by discipline. Table 69b reveals that there are lower percentages of professional/technical and education students reporting that they have access to computer workstations in comparison to other disciplines.

Table 69b: Access to a University-Provided Computer Workstation by Discipline.

			QI4A1 Access to a University-Provided Computer Workstation Needed to Complete Work		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	13	147	160
		% within DISC Discipline Division	8.1%	91.9%	100.0%
	2 Business	Count	13	412	425
		% within DISC Discipline Division	3.1%	96.9%	100.0%
	3 Education	Count	25	194	219
		% within DISC Discipline Division	11.4%	88.6%	100.0%
	4 Engineering/Computer Science	Count	9	333	342
		% within DISC Discipline Division	2.6%	97.4%	100.0%
	5 Humanities	Count	8	143	151
		% within DISC Discipline Division	5.3%	94.7%	100.0%
	6 Science & Math	Count	5	172	177
		% within DISC Discipline Division	2.8%	97.2%	100.0%
	7 Behavioral/Social Sciences	Count	24	586	610
		% within DISC Discipline Division	3.9%	96.1%	100.0%
	8 Professional/Technical	Count	23	172	195
		% within DISC Discipline Division	11.8%	88.2%	100.0%
	9 Undeclared	Count	43	446	489
		% within DISC Discipline Division	8.8%	91.2%	100.0%
	10 Interdisciplinary Studies	Count	18	308	326
		% within DISC Discipline Division	5.5%	94.5%	100.0%
Total		Count	181	2913	3094
		% within DISC Discipline Division	5.9%	94.1%	100.0%

Those reporting that they had access to a university-provided computer workstation were asked how satisfied they were with the workstation provided to them. Overall, students were fairly satisfied; the average satisfaction rating was 7.57.

The level of satisfaction with computer workstations was different for students at different class levels. This is seen in Table 70a. Lower division students were most satisfied with the workstations provided for them, and upper division students, though less satisfied than lower division students, were more satisfied than post baccalaureate students with the available computer workstations.

Table 70a: Satisfaction with University-Provided Workstations by Class Level.

QI4A1C Satisfaction with University-Provided Computer Workstation Available to Respondent

	N	Mean	Std. Deviation
1 Lower Division	847	7.86	1.79
2 Upper Division	1525	7.56	2.04
3 Post Baccalaureate	434	7.05	2.22
Total	2806	7.57	2.02

The level of satisfaction with computer workstations also varied by gender. Table 70b shows that females were slightly more satisfied than were males with the available computer workstations.

Table 70b: Satisfaction with University-Provided Workstations by Gender.

	SEX Gender	N	Mean	Std. Deviation
QI4A1C Satisfaction with University-Provided Computer Workstation Available to Respondent	1 Male	1186	7.46	2.02
	2 Female	1620	7.65	2.01

Software

The availability of software was also a concern of the study. Students were asked if they had access to university-provided software they needed to complete their school work. The results are displayed in Table 68. As with workstations, most (85.6%) of the respondents said they had what they needed with respect to software.

The availability of computer software necessary to complete work varied by class level. As Table 71a shows, post baccalaureate students were a little more likely to say they did not have the software they needed available to them through the university.

Table 71a: Access to a University-Provided Computer Software by Class Level.

			QI4A2 Access to a University-Provided Computer Software Needed to Complete Work		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	122	709	831
		% within CLLEVEL Class Level	14.7%	85.3%	100.0%
	2 Upper Division	Count	197	1304	1501
		% within CLLEVEL Class Level	13.1%	86.9%	100.0%
	3 Post Baccalaureate	Count	80	352	432
		% within CLLEVEL Class Level	18.5%	81.5%	100.0%
Total		Count	399	2365	2764
		% within CLLEVEL Class Level	14.4%	85.6%	100.0%

The likelihood that a student said the software they needed was not available at the university depended on academic discipline. This can be seen in Table 71b. Students in humanities were less likely to state that they have access to university-provided computer software than were students in some other disciplines.

Table 71b: Access to a University-Provided Computer Software by Discipline.

			QI4A2 Access to a University-Provided Computer Software Needed to Complete Work		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	22	120	142
		% within Discipline	15.5%	84.5%	100.0%
	2 Business	Count	38	355	393
		% within Discipline	9.7%	90.3%	100.0%
	3 Education	Count	26	134	160
		% within Discipline	16.3%	83.8%	100.0%
	4 Engineering/Computer Science	Count	32	296	328
		% within Discipline	9.8%	90.2%	100.0%
	5 Humanities	Count	27	105	132
		% within Discipline	20.5%	79.5%	100.0%
	6 Science & Math	Count	23	144	167
		% within Discipline	13.8%	86.2%	100.0%
	7 Behavioral/Social Sciences	Count	88	470	558
		% within Discipline	15.8%	84.2%	100.0%
	8 Professional/Technical	Count	26	130	156
		% within Discipline	16.7%	83.3%	100.0%
	9 Undeclared	Count	74	330	404
		% within Discipline	18.3%	81.7%	100.0%
	10 Interdisciplinary Studies	Count	35	249	284
		% within Discipline	12.3%	87.7%	100.0%
Total		Count	391	2333	2724
		% within Discipline	14.4%	85.6%	100.0%

The was also a small effect of gender on whether or not a student reported that the software they needed was available through the university. Table 71c shows that females were more likely than males to say they did not have access to university-provided software they needed to complete their school work.

Table 71c: Access to a University-Provided Computer Software by Gender.

			QI4A2 Access to a University-Provided Computer Software Needed to Complete Work		
			0 No	1 Yes	Total
SEX Gender	1 Male	Count	149	1024	1173
		% within SEX Gender	12.7%	87.3%	100.0%
	2 Female	Count	250	1341	1591
		% within SEX Gender	15.7%	84.3%	100.0%
Total		Count	399	2365	2764
		% within SEX Gender	14.4%	85.6%	100.0%

Those stating that they had access to university-provided computer software necessary for their school work were asked how satisfied they were with that software. People who had access to software were generally quite satisfied with that software, as indicated by an average satisfaction rating of 8.02 on the zero-to-ten satisfaction scale.

Student's satisfaction with the university-provided software depended on class level. That is, post baccalaureate students were generally less satisfied with the software provided to them by the university than were upper division students. This is seen in Table 72a.

Table 72a: Satisfaction with University-Provided Software by Class Level.

QI4A2C Satisfaction with University-Provided Software Available to Respondent

	N	Mean	Std. Deviation
1 Lower Division	693	8.03	1.60
2 Upper Division	1265	8.09	1.77
3 Post Baccalaureate	324	7.75	2.01
Total	2282	8.02	1.76

Gender was also associated with the student's satisfaction with the university-provided software. This is seen in Table 72b. Females expressed greater satisfaction than males with the university-provided software available.

Table 72b: Satisfaction with University-Provided Software by Gender.

	SEX Gender	N	Mean	Std. Deviation
QI4A2C Satisfaction with University-Provided Software	1 Male	998	7.91	1.82
	2 Female	1284	8.11	1.71

Private Computer

Students were asked if they owned an operational computer. Almost all (94.1%) of the students said they did own an operational computer. The likelihood that a student said they owned an operation computer was qualified by class level. Post baccalaureate students were a little more likely than upper division students to own a computer. This is illustrated in Table 73.

Table 73: Owns an Operational Computer by Class Level.

			QCOMP1 Currently Owns an Operational Computer		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	51	858	909
		% within Class Level	5.6%	94.4%	100.0%
	2 Upper Division	Count	115	1568	1683
		% within Class Level	6.8%	93.2%	100.0%
	3 Post Baccalaureate	Count	23	582	605
		% within Class Level	3.8%	96.2%	100.0%
Total		Count	189	3008	3197
		% within Class Level	5.9%	94.1%	100.0%

Those students reporting ownership an operational computer were asked how long they owned that computer. Students had owned their computers for an average of 2.63 years. The length of time that they owned their computer was dependent on their class level. As Table 74a shows, the higher the class level the longer the respondent had owned his or her computer.

Table 74a: Years Respondents Has Owned His or Her Computer by Class Level.

COMP2C Years Respondent Has Owned Their Computer

	N	Mean	Std. Deviation
1 Lower Division	826	2.2311	1.8418
2 Upper Division	1523	2.6553	2.0307
3 Post Baccalaureate	562	3.1311	2.5079
Total	2911	2.6268	2.1036

The academic discipline of the student was also related to how long they owned their current computer. That is, education students tended to hold onto their computers longer than did other students. This is seen in Table 74b.

Table 74b: Years Respondents Has Owned His or Her Computer by Discipline.

COMP2C Years Respondent Has Owned Their Computer

	N	Mean	Std. Deviation
1 Art	146	2.7900	2.5511
2 Business	396	2.4888	1.8574
3 Education	205	3.2199	2.3328
4 Engineering/Computer Science	320	2.3422	1.7704
5 Humanities	139	2.4502	1.8310
6 Science & Math	158	2.8750	1.9829
7 Behavioral/Social Sciences	570	2.5148	1.9586
8 Professional/Technical	175	2.5605	1.7415
9 Undeclared	455	2.6896	2.3744
10 Interdisciplinary Studies	301	2.6863	2.3777
Total	2865	2.6217	2.0972

The length of time students had owned their current computer was associated with gender. This is illustrated in Table 74c. On average, females had owned their computers a half year longer than the males had.

Table 74c: Years Respondents Has Owned His or Her Computer by Gender.

	SEX Gender	N	Mean	Std. Deviation
COMP2C Years Respondent Ha Owned His or Her Computer	1 Male	1189	2.3555	1.8172
	2 Female	1722	2.8142	2.2620

Those who said they did not own an operational computer were asked if they had access to a computer other than at their university for completing school work. Of these 196 students, 77.3% said they did have access to a computer for completing their class assignments that was not provided by the university.

Help and Technical Support

Availability of Help Services

Respondents were asked about the availability and use of help services with university-provided computer equipment when needed as well as satisfaction with those help services if they had used them. Students were asked about a number of different help services. Table 75 indicates whether or not respondents said they had access to each type of help service. This table shows that most students had help available through computer lab staff, campus walk-in help desks, and e-mail help services. Most (86.1%) students reported having help available from at least one of these sources.

Table 75: Types of Available Help Services.

	0 Not Chosen		1 Chosen	
	Count	%	Count	%
Computer Lab Staff	625	20.7%	2393	79.3%
Campus Walk-In Help Desk	1145	37.9%	1873	62.1%
E-Mail Help Services	1351	44.8%	1667	55.2%
Web Site Link to Campus Help Desk	1775	58.8%	1243	41.2%
Telephone Call Center	1862	61.7%	1156	38.3%
Other Help Services	2918	96.7%	100	3.3%

Telephone Call Centers. It is interesting to note that there were reported differences in the availability of some of these campus services. There was a large difference in reported availability of a telephone call center by class level. This is seen in Table 76. Overall, 38.3% of the students reported that they had access to a telephone call center. However, only 30.6% of post baccalaureate students reported having telephone call centers available, while 43.0% of lower division and 38.3% of upper division students reported having access to a telephone call center.

Table 76: Availability of Telephone Call Center Services by Class Level.

			Q4A3_1 Telephone Call Center Services Available		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	499	377	876
		% within CLLEVEL Class Level	57.0%	43.0%	100.0%
	2 Upper Division	Count	993	616	1609
		% within CLLEVEL Class Level	61.7%	38.3%	100.0%
	3 Post Baccalaureate	Count	370	163	533
		% within CLLEVEL Class Level	69.4%	30.6%	100.0%
Total		Count	1862	1156	3018
		% within CLLEVEL Class Level	61.7%	38.3%	100.0%

Walk-in Help Desks. Most (62.1%) students said they had access to a walk-in help desk. Again, the likelihood of reporting availability of a walk-in help desk depended on class level. This is seen in Table 77a. While almost two-thirds of the undergraduate students reported having access to a walk-in help desk, only half of the post baccalaureate students said this type of help service was available.

Table 77a: Availability of Campus Walk-In Help Desk Services by Class Level.

			Q4A3_2 Campus Walk-In Help Desk Services Available		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	306	570	876
		% within CLLEVEL Class Level	34.9%	65.1%	100.0%
	2 Upper Division	Count	572	1037	1609
		% within CLLEVEL Class Level	35.6%	64.4%	100.0%
	3 Post Baccalaureate	Count	267	266	533
		% within CLLEVEL Class Level	50.1%	49.9%	100.0%
Total		Count	1145	1873	3018
		% within CLLEVEL Class Level	37.9%	62.1%	100.0%

There was also significant variability in reporting of availability of walk-in help desks by discipline. Table 77b shows that undeclared students and students in education were less likely than others to report having access to a walk-in help desk. Humanities and science and math students were more likely to say that walk-in help desks were available to them.

Table 77b: Availability of Campus Walk-In Help Desk Services by Discipline.

			Q4A3_2 Campus Walk-In Help Desk Services Available		
			0 Not Chosen	1 Chosen	Total
DISC Discipline Division	1 Art	Count	60	91	151
		% within DISC Discipline Division	39.7%	60.3%	100.0%
	2 Business	Count	160	253	413
		% within DISC Discipline Division	38.7%	61.3%	100.0%
	3 Education	Count	91	117	208
		% within DISC Discipline Division	43.8%	56.3%	100.0%
	4 Engineering/Computer Science	Count	131	203	334
		% within DISC Discipline Division	39.2%	60.8%	100.0%
	5 Humanities	Count	46	100	146
		% within DISC Discipline Division	31.5%	68.5%	100.0%
	6 Science & Math	Count	56	117	173
		% within DISC Discipline Division	32.4%	67.6%	100.0%
	7 Behavioral/Social Sciences	Count	206	387	593
		% within DISC Discipline Division	34.7%	65.3%	100.0%
	8 Professional/Technical	Count	71	107	178
		% within DISC Discipline Division	39.9%	60.1%	100.0%
	9 Undeclared	Count	199	263	462
		% within DISC Discipline Division	43.1%	56.9%	100.0%
	10 Interdisciplinary Studies	Count	105	211	316
		% within DISC Discipline Division	33.2%	66.8%	100.0%
Total		Count	1125	1849	2974
		% within DISC Discipline Division	37.8%	62.2%	100.0%

E-mail Help Services. More than half (55.2%) of the students said e-mail help services were available to them when they had trouble with a university-provided computer. Consistent with the findings for telephone call centers and walk-in help desks, post baccalaureate students were less likely to report having e-mail help services available. Table 78a shows lower division students were more likely than upper division students, who in turn were more likely than post baccalaureate students to say they had access to e-mail help.

Table 78a: Availability of E-Mail Services by Class Level.

			Q4A3_3 E-Mail Services Available		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	337	539	876
		% within CLLEVEL Class Level	38.5%	61.5%	100.0%
	2 Upper Division	Count	707	902	1609
		% within CLLEVEL Class Level	43.9%	56.1%	100.0%
	3 Post Baccalaureate	Count	307	226	533
		% within CLLEVEL Class Level	57.6%	42.4%	100.0%
Total		Count	1351	1667	3018
		% within CLLEVEL Class Level	44.8%	55.2%	100.0%

The likelihood of reporting availability to e-mail help services also depended on academic discipline. As revealed in Table 78b, students in education and business were less likely than others to report having e-mail help available. Students in interdisciplinary studies and engineering and computer science, and especially those in science and math were more likely to state that they had help available through e-mail.

Table 78b: Availability of E-Mail Services by Discipline.

			Q4A3_3 E-Mail Services Available		
			0 Not Chosen	1 Chosen	Total
DISC Discipline Division	1 Art	Count	63	88	151
		% within DISC Discipline Division	41.7%	58.3%	100.0%
	2 Business	Count	213	200	413
		% within DISC Discipline Division	51.6%	48.4%	100.0%
	3 Education	Count	108	100	208
		% within DISC Discipline Division	51.9%	48.1%	100.0%
	4 Engineering/Computer Science	Count	133	201	334
		% within DISC Discipline Division	39.8%	60.2%	100.0%
	5 Humanities	Count	63	83	146
		% within DISC Discipline Division	43.2%	56.8%	100.0%
	6 Science & Math	Count	60	113	173
		% within DISC Discipline Division	34.7%	65.3%	100.0%
	7 Behavioral/Social Sciences	Count	268	325	593
		% within DISC Discipline Division	45.2%	54.8%	100.0%
	8 Professional/Technical	Count	74	104	178
		% within DISC Discipline Division	41.6%	58.4%	100.0%
	9 Undeclared	Count	221	241	462
		% within DISC Discipline Division	47.8%	52.2%	100.0%
	10 Interdisciplinary Studies	Count	123	193	316
		% within DISC Discipline Division	38.9%	61.1%	100.0%
Total		Count	1326	1648	2974
		% within DISC Discipline Division	44.6%	55.4%	100.0%

There was also a difference in the reported availability of e-mail help services by gender. This is seen in Table 78c. Males were more likely than females to report having access to help through e-mail help services.

Table 78c: Availability of E-Mail Services by Gender.

			Q4A3_3 E-Mail Services Available		
			0 Not Chosen	1 Chosen	Total
SEX Gender	1 Male	Count	516	714	1230
		% within SEX Gender	42.0%	58.0%	100.0%
	2 Female	Count	835	953	1788
		% within SEX Gender	46.7%	53.3%	100.0%
Total		Count	1351	1667	3018
		% within SEX Gender	44.8%	55.2%	100.0%

Web Site Help Link. Many (41.2%) students said they had access to help through a web site link to a campus help desk. The reported availability of access to a web site link to a campus help desk varied by class level. This is illustrated in Table 79a. Again, the lower the class level, the more likely they were to acknowledge the availability of this help service.

Table 79a: Availability of a Web Site Link to Campus Help Desk Services by Class Level.

			Q4A3_4 Web Site Link to Campus Help Desk Services Available		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	478	398	876
		% within CLLEVEL Class Level	54.6%	45.4%	100.0%
	2 Upper Division	Count	936	673	1609
		% within CLLEVEL Class Level	58.2%	41.8%	100.0%
	3 Post Baccalaureate	Count	361	172	533
		% within CLLEVEL Class Level	67.7%	32.3%	100.0%
Total		Count	1775	1243	3018
		% within CLLEVEL Class Level	58.8%	41.2%	100.0%

Discipline was also an important qualifying factor of the likelihood that students reported availability of a web site link to a campus help desk. Undeclared students and education students were less likely to say they had access to a web site link to a campus help desk. Table 79b shows that art and business students were also low in this regard, while engineering and computer science students and interdisciplinary studies students were more likely to report having a web site link to campus help available.

Table 79b: Availability of a Web Site Link to Campus Help Desk Services by Discipline.

			Q4A3_4 Web Site Link to Campus Help Desk Services Available		
			0 Not Chosen	1 Chosen	Total
DISC Discipline Division	1 Art	Count	95	56	151
		% within DISC Discipline Division	62.9%	37.1%	100.0%
	2 Business	Count	259	154	413
		% within DISC Discipline Division	62.7%	37.3%	100.0%
	3 Education	Count	134	74	208
		% within DISC Discipline Division	64.4%	35.6%	100.0%
	4 Engineering/Computer Science	Count	180	154	334
		% within DISC Discipline Division	53.9%	46.1%	100.0%
	5 Humanities	Count	79	67	146
		% within DISC Discipline Division	54.1%	45.9%	100.0%
	6 Science & Math	Count	97	76	173
		% within DISC Discipline Division	56.1%	43.9%	100.0%
	7 Behavioral/Social Sciences	Count	340	253	593
		% within DISC Discipline Division	57.3%	42.7%	100.0%
	8 Professional/Technical	Count	99	79	178
		% within DISC Discipline Division	55.6%	44.4%	100.0%
	9 Undeclared	Count	299	163	462
		% within DISC Discipline Division	64.7%	35.3%	100.0%
	10 Interdisciplinary Studies	Count	165	151	316
		% within DISC Discipline Division	52.2%	47.8%	100.0%
Total		Count	1747	1227	2974
		% within DISC Discipline Division	58.7%	41.3%	100.0%

Computer Lab Staff. Computer lab staff was the most commonly reported type of help service available, with 79.3% of the students saying they had access to computer lab staff if they needed help with a university-provided computer. The likelihood that students said they had computer lab staff available varied by class level, as indicated in Table 80a. Post baccalaureate students were much less likely to report having access to computer lab staff when they needed help.

Table 80a: Availability of Computer Lab Staff by Class Level.

			Q4A3_5 Computer Lab Staff Available		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	170	706	876
		% within CLLEVEL Class Level	19.4%	80.6%	100.0%
	2 Upper Division	Count	289	1320	1609
		% within CLLEVEL Class Level	18.0%	82.0%	100.0%
	3 Post Baccalaureate	Count	166	367	533
		% within CLLEVEL Class Level	31.1%	68.9%	100.0%
Total		Count	625	2393	3018
		% within CLLEVEL Class Level	20.7%	79.3%	100.0%

Discipline was associated with the likelihood that a student would report having computer lab staff available. Most notable in Table 80b is that education students were much less likely than other students to say that computer lab staff was unavailable. Business students were more likely than others to say that computer lab staff were available for help with computers.

Table 80b: Availability of Computer Lab Staff by Discipline.

			Q4A3_5 Computer Lab Staff Available		
			0 Not Chosen	1 Chosen	Total
DISC Discipline Division	1 Art	Count	25	126	151
		% within DISC Discipline Division	16.6%	83.4%	100.0%
	2 Business	Count	59	354	413
		% within DISC Discipline Division	14.3%	85.7%	100.0%
	3 Education	Count	62	146	208
		% within DISC Discipline Division	29.8%	70.2%	100.0%
	4 Engineering/Computer Science	Count	70	264	334
		% within DISC Discipline Division	21.0%	79.0%	100.0%
	5 Humanities	Count	33	113	146
		% within DISC Discipline Division	22.6%	77.4%	100.0%
	6 Science & Math	Count	43	130	173
		% within DISC Discipline Division	24.9%	75.1%	100.0%
	7 Behavioral/Social Sciences	Count	114	479	593
		% within DISC Discipline Division	19.2%	80.8%	100.0%
	8 Professional/Technical	Count	42	136	178
		% within DISC Discipline Division	23.6%	76.4%	100.0%
	9 Undeclared	Count	107	355	462
		% within DISC Discipline Division	23.2%	76.8%	100.0%
	10 Interdisciplinary Studies	Count	58	258	316
		% within DISC Discipline Division	18.4%	81.6%	100.0%
Total		Count	613	2361	2974
		% within DISC Discipline Division	20.6%	79.4%	100.0%

Gender was also related to the likelihood that students reported having access to computer lab staff for help. As Table 80c shows, males were more likely than females to report having access to computer lab staff.

Table 80c: Availability of Computer Lab Staff by Gender.

			Q4A3_5 Computer Lab Staff Available		
			0 Not Chosen	1 Chosen	Total
SEX Gender	1 Male	Count	229	1001	1230
		% within SEX Gender	18.6%	81.4%	100.0%
	2 Female	Count	396	1392	1788
		% within SEX Gender	22.1%	77.9%	100.0%
Total		Count	625	2393	3018
		% within SEX Gender	20.7%	79.3%	100.0%

Other Help Services. A limited number (3.3%) of students reported having access to other types of help services when they have trouble with a university-provided computer. The number of students reporting the availability of other help services was too small to detect systematic differences by class level, discipline, or gender.

Use of Help Services

In addition to the availability of the various types of help services, those students with access to help services were asked if they had ever used those services. The responses are summarized in Table 81. The computer lab staff was the most commonly used type of support, but it was used by only 42.4% of the respondents. Proportionally, people were more likely to use the "other" service if it was available, but it was used by only 57.0% of the people to whom it was available.

Table 81: Types of Help Services Used.

	0 Not Chosen		1 Chosen	
	Count	%	Count	%
Computer Lab Staff	1378	57.6%	1015	42.4%
Campus Walk-In Help Desk	1259	67.2%	615	32.8%
E-Mail Help Services	1360	81.6%	307	18.4%
Website Link to Campus Help Desk	1027	82.6%	217	17.4%
Telephone Call Center	800	69.2%	356	30.8%
Other Help Service	49	43.0%	65	57.0%

Telephone Call Center. Of those reporting the availability of a telephone call center, 30.8% said they had used the telephone call center. The likelihood of use varied by class level. This is revealed in Table 82a. The higher the level of the student, the more likely he or she was to use the telephone call center. So, as class level increases, the likelihood of reporting the availability of the telephone call center decreases, but the likelihood of use given availability increases.

Table 82a: Telephone Call Center Use by Class Level.

			U4A4_1 Telephone Call Center		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	291	86	377
		% within CLLEVEL Class Level	77.2%	22.8%	100.0%
	2 Upper Division	Count	416	200	616
		% within CLLEVEL Class Level	67.5%	32.5%	100.0%
	3 Post Baccalaureate	Count	93	70	163
		% within CLLEVEL Class Level	57.1%	42.9%	100.0%
Total		Count	800	356	1156
		% within CLLEVEL Class Level	69.2%	30.8%	100.0%

The likelihood of use of the telephone call centers also depended on academic discipline. As Table 82b shows, engineering and computer science students were much less likely than most to use the telephone call center when available. Business students were also unlikely to use the available telephone call center, while interdisciplinary students were especially more likely to use the telephone help center if they reported that it was available.

Table 82b: Telephone Call Center Use by Discipline.

			U4A4_1 Telephone Call Center		
			0 Not Chosen	1 Chosen	Total
DISC Discipline Division	1 Art	Count	37	17	54
		% within DISC Discipline Division	68.5%	31.5%	100.0%
	2 Business	Count	122	41	163
		% within DISC Discipline Division	74.8%	25.2%	100.0%
	3 Education	Count	49	22	71
		% within DISC Discipline Division	69.0%	31.0%	100.0%
	4 Engineering/Computer Science	Count	101	27	128
		% within DISC Discipline Division	78.9%	21.1%	100.0%
	5 Humanities	Count	42	18	60
		% within DISC Discipline Division	70.0%	30.0%	100.0%
	6 Science & Math	Count	52	18	70
		% within DISC Discipline Division	74.3%	25.7%	100.0%
	7 Behavioral/Social Sciences	Count	155	80	235
		% within DISC Discipline Division	66.0%	34.0%	100.0%
	8 Professional/Technical	Count	55	26	81
		% within DISC Discipline Division	67.9%	32.1%	100.0%
	9 Undeclared	Count	106	45	151
		% within DISC Discipline Division	70.2%	29.8%	100.0%
	10 Interdisciplinary Studies	Count	71	57	128
		% within DISC Discipline Division	55.5%	44.5%	100.0%
Total		Count	790	351	1141
		% within DISC Discipline Division	69.2%	30.8%	100.0%

There was also a big effect of gender on the use of telephone call centers. For those reporting it was available, females were much more likely than males to make use of the telephone call center. This is seen in Table 82c.

Table 82c: Telephone Call Center Use by Gender.

			U4A4_1 Telephone Call Center		
			0 Not Chosen	1 Chosen	Total
SEX Gender	1 Male	Count	366	112	478
		% within SEX Gender	76.6%	23.4%	100.0%
	2 Female	Count	434	244	678
		% within SEX Gender	64.0%	36.0%	100.0%
Total		Count	800	356	1156
		% within SEX Gender	69.2%	30.8%	100.0%

Walk-in Help Desk. Use of the campus walk-in help desk was also assessed. As Table 81 shows, 32.8% of the students with a campus walk-in help desk made use of that service. This varied by class level. Table 83a shows that the higher the class level, the more likely the student is to make use of an available walk-in help desk.

Table 83a: Campus Walk-In Help Desk Use by Class Level.

			U4A4_2 Campus Walk-In Help Desk		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	401	169	570
		% within CLLEVEL Class Level	70.4%	29.6%	100.0%
	2 Upper Division	Count	696	342	1038
		% within CLLEVEL Class Level	67.1%	32.9%	100.0%
	3 Post Baccalaureate	Count	162	104	266
		% within CLLEVEL Class Level	60.9%	39.1%	100.0%
Total		Count	1259	615	1874
		% within CLLEVEL Class Level	67.2%	32.8%	100.0%

Gender was also related to the likelihood that students would use a walk-in help desk given that they had reported the availability of a walk-in help desk. As Table 83b shows, females were considerably more likely than males to use the walk-in help desk.

Table 83b: Campus Walk-In Help Desk Use by Gender.

			U4A4_2 Campus Walk-In Help Desk		
			0 Not Chosen	1 Chosen	Total
SEX Gender	1 Male	Count	547	238	785
		% within SEX Gender	69.7%	30.3%	100.0%
	2 Female	Count	712	377	1089
		% within SEX Gender	65.4%	34.6%	100.0%
Total		Count	1259	615	1874
		% within SEX Gender	67.2%	32.8%	100.0%

E-mail Help Desk Services. Only 18.4% of the respondents who reported that e-mail help desk services were available said they used those e-mail help desk services. The use of an e-mail help desk depended on class level. As Table 84 shows, the higher the class level, the more likely the student was to make use of the e-mail help available. Use of e-mail help desk services were not qualified by class level or gender.

Table 84: E-Mail Help Desk Use by Class Level.

			U4A4_3 E-Mail Help		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	458	81	539
		% within CLLEVEL Class Level	85.0%	15.0%	100.0%
	2 Upper Division	Count	731	171	902
		% within CLLEVEL Class Level	81.0%	19.0%	100.0%
	3 Post Baccalaureate	Count	171	55	226
		% within CLLEVEL Class Level	75.7%	24.3%	100.0%
Total		Count	1360	307	1667
		% within CLLEVEL Class Level	81.6%	18.4%	100.0%

Web Site Link to Help Desk. As Table 81 above indicates, the web site links to help desks were not commonly used. Of those with a web site link to help available, only 17.4% used this service. The likelihood of using the web site link to help services did not vary by class level, discipline, or gender.

Computer Lab Staff. Students were more inclined to make use of the computer lab staff where available than they were to use most other help services. Table 81 shows that of those with computer lab staff available, 42.4% said they had used computer lab staff when they had problems. The use of the computer lab staff differed for students at different class levels. This is illustrated in Table 85a. Specifically, lower division students were less likely than upper division or post baccalaureate students to use the computer lab staff when they had problems with computers on campus.

Table 85a: Computer Lab Staff Use by Class Level.

			U4A4_5 Computer Lab Staff		
			0 Not Chosen	1 Chosen	Total
CLLEVEL Class Level	1 Lower Division	Count	443	263	706
		% within CLLEVEL Class Level	62.7%	37.3%	100.0%
	2 Upper Division	Count	732	588	1320
		% within CLLEVEL Class Level	55.5%	44.5%	100.0%
	3 Post Baccalaureate	Count	203	164	367
		% within CLLEVEL Class Level	55.3%	44.7%	100.0%
Total		Count	1378	1015	2393
		% within CLLEVEL Class Level	57.6%	42.4%	100.0%

Use of the available computer lab staff was also qualified by gender, as Table 85b indicates. That is, of those with computer lab staff available, females were more likely than males to make use of computer lab staff.

Table 85b: Computer Lab Staff Use by Gender.

			U4A4_5 Computer Lab Staff		
			0 Not Chosen	1 Chosen	Total
SEX Gender	1 Male	Count	609	392	1001
		% within SEX Gender	60.8%	39.2%	100.0%
	2 Female	Count	769	623	1392
		% within SEX Gender	55.2%	44.8%	100.0%
Total		Count	1378	1015	2393
		% within SEX Gender	57.6%	42.4%	100.0%

Other Help Services. Many students reported using some other type of help service. As Table 81 shows, more than half of those with some other form of help made use of that help.

Satisfaction with Help Services

Those respondents who had used the various help services were asked about their satisfaction with those services. The average satisfaction ratings for each type of help service is displayed in Table 86. Users of these help services were rather satisfied, as indicated by the average satisfaction ratings ranging from 7.44 for e-mail help services to 8.35 for “other” help services.

Table 86: Satisfaction with Help Services.

	N	Minimum	Maximum	Mean	Std. Deviation
Telephone Call Centers	354	0	10	7.63	2.30
Walk-in Help Desk	614	0	10	8.09	1.92
E-Mail Help Services	304	0	10	7.44	2.33
Web Site Link to Campus Help Desk	217	0	10	7.65	1.90
Computer Lab Staff	1011	0	10	8.05	1.94
Other Help Services	66	0	10	8.35	2.23
Valid N (listwise)	4				

Telephone Call Centers. As noted above, students were fairly satisfied with telephone call center services, offering an average satisfaction rating of 7.63. The degree to which respondents were satisfied depended on gender. That is, females were more satisfied than males with telephone call center services. This is seen in Table 87.

Table 87: Satisfaction with Telephone Call Center Services by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q4A4_1S Satisfaction with Telephone Call Centers	1 Male	111	7.24	2.30
	2 Female	243	7.81	2.28

Walk-in Help Desks. Satisfaction with walk-in help desks was also high. On average, students gave a satisfaction rating of 8.09 to the walk-in help desk services. This is shown in Table 86. The satisfaction with these services was consistent across class level, discipline, and gender.

E-mail Help Services. Students were satisfied with the available e-mail help services, as indicated by a satisfaction rating of 7.44. This level of satisfaction was consistent across class level, discipline, and gender.

Web Site Link to Help Desk. The respondents also expressed satisfaction with the web site links to campus help desks. The average satisfaction rating, as shown in Table 86, was 7.65. The was a difference in the satisfaction level by gender, as revealed in Table 88. Specifically, females were a little more satisfied than males with the web site links to campus help desk services.

Table 88: Satisfaction with Web Site Links to Campus Help Desks by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q4A4_4S Satisfaction with Web Si Link Campus Help Desk Services	1 Male	84	7.33	2.12
	2 Female	133	7.86	1.73

Computer Lab Staff. The students were quite satisfied with the computer lab staff help services they received. Table 86 shows that the average satisfaction rating for computer lab staff was 8.05. Satisfaction with computer lab staff services varied by class level. This is illustrated in Table 89. Specifically, lower division students were more satisfied with computer lab staff services than post baccalaureate students.

Table 89: Satisfaction with Computer Lab Staff Services by Class Level.

Q4A4_5S Satisfaction with Computer Lab Staff

	N	Mean	Std. Deviation
1 Lower Division	263	8.30	1.70
2 Upper Division	584	8.02	2.01
3 Post Baccalaureate	164	7.77	2.02
Total	1011	8.05	1.94

Other Help Services. The students were also happy with the other help services that they received. Table 86 reveals an average satisfaction rating of 8.35. The number of people who had received help from "other" sources was too small to compare subgroups.

Training

Students were queried about attitudes regarding the importance of campus computer training activities and programs aimed at improving basic computer skills. They were also asked about their participation in and satisfaction with such training programs.

Importance of Training

Students were asked how important they thought it was for their campus to offer computer training activities or programs aimed at improving basic computer skills were. Overall, students judged that offering such training programs to be very important. They offered an average importance rating of 8.61.

The extent to which students rated offering computer training programs as important depended on the student's class level. That is, lower division students regarded it as less important than did other students to offer these training programs. This is illustrated in Table 90a.

Table 90a: Importance of Offering Computer Training Programs by Class Level.

Q4A7 Importance Camupus-Based Training Activities or Programs

	N	Mean	Std. Deviation
1 Lower Division	909	8.41	1.91
2 Upper Division	1677	8.67	1.93
3 Post Baccalaureate	600	8.72	2.01
Total	3186	8.61	1.94

The perceived importance of their campus offering computer training programs aimed at improving basic computer skills also depended on academic discipline. Table 90b shows that engineering and computer science students viewed computer training programs aimed at improving basic computer skills as less important than did students in most other disciplines.

Table 90b: Importance of Offering Computer Training Programs by Discipline.

Q4A7 Importance Camupus-Based Training Activities or Programs

	N	Mean	Std. Deviation
1 Art	164	8.46	1.75
2 Business	423	8.71	1.81
3 Education	232	8.67	1.98
4 Engineering/Computer Science	339	8.12	2.21
5 Humanities	152	8.67	1.96
6 Science & Math	177	8.21	2.23
7 Behavioral/Social Sciences	615	8.69	1.92
8 Professional/Technical	201	8.63	2.06
9 Undeclared	501	8.64	1.85
10 Interdisciplinary Studies	333	8.88	1.81
Total	3137	8.60	1.95

Gender was also related to the perceived importance of campuses offering computer training programs for improving basic computer skills. Table 90c shows that females regard offering such programs as more important than do males.

Table 90c: Importance of Offering Computer Training Programs by Gender.

	SEX Gender	N	Mean	Std. Deviation
Q4A7 Importance Camupus-Bas Training Activities or Programs	1 Male	1286	8.36	2.08
	2 Female	1900	8.77	1.83

Participation in Training

Students were asked whether or not they had participated in any campus training programs designed to improve their basic computing skills. Four hundred seventy-three (14.8%) of the respondents said they had participated in such training activities or programs. The likelihood that a student participated in training activities was not related to class level, discipline, or gender.

The type of training they received and their satisfaction with that training was of interest. Those students who said they participated in some form of basic computer skills training at their campus were asked about the type of training in which they participated. Table 91 summarizes their responses. More than half (61.6%) of these students said they participated in computer-based training. Another type of computer training that people had participated in was a workshop. Over half (54.4%) of those who had some training had participated in a workshop to improve basic computing skills. Additionally, a few people reported participating in some other form of training. The likelihood of participating in these basic computer skills training activities did not differ by class level, discipline, or gender.

Table 91: Types of Programs in Which Students Have Participated.

	0 Not Chosen		1 Chosen	
	Count	%	Count	%
Computer-Based Training	182	38.4%	292	61.6%
Workshop	216	45.6%	258	54.4%
Other	455	96.0%	19	4.0%

Satisfaction with Training

Students who had participated in basic computer skills training through their campus were asked about their satisfaction with the training programs in which they participated. Overall, students were fairly satisfied, offering a rating, on average, of 7.77. The level of satisfaction with training was consistent across class level, discipline, and gender. Additionally, there was no difference in satisfaction ratings between those who participated only in computer-based training and those who had participated only in workshops.

Personal Purchase

Access to the CSU Computer Discount Program

Students were asked about their knowledge of and experience with the CSU computer discount program. They were asked if they had access to a campus program that enables them to purchase computers and peripherals at discount prices. Only a third (33.9%) of the students said they had access to such a program.

Students at different class levels differed in the likelihood that they reported having access to a campus computer discount program. Table 92a shows the percentages of students at different class levels that report having access to a campus computer discount program. Lower division students were more likely than others to say they had access to a campus program that enables them to purchase computers and peripherals at discount prices.

Table 92a: Access to a CSU Computer Discount Program by Class Level.

			QI4A13 Access to a CSU Computer Discount Program		
			0 No	1 Yes	Total
CLLEVEL Class Level	1 Lower Division	Count	455	284	739
		% within CLLEVEL Class Level	61.6%	38.4%	100.0%
	2 Upper Division	Count	930	432	1362
		% within CLLEVEL Class Level	68.3%	31.7%	100.0%
	3 Post Baccalaureate	Count	301	149	450
		% within CLLEVEL Class Level	66.9%	33.1%	100.0%
Total		Count	1686	865	2551
		% within CLLEVEL Class Level	66.1%	33.9%	100.0%

The likelihood that students reported having access to a computer purchase discount program depended on academic discipline. This is seen in Table 92b. While business students were less likely to report that they had access to a campus computer discount program, art and engineering and computer science students were more likely to say they had access to such a program.

Table 92b: Access to a CSU Computer Discount Program by Discipline.

			QI4A13 Access to a CSU Computer Discount Program		
			0 No	1 Yes	Total
DISC Discipline Division	1 Art	Count	75	57	132
		% within DISC Discipline Division	56.8%	43.2%	100.0%
	2 Business	Count	252	103	355
		% within DISC Discipline Division	71.0%	29.0%	100.0%
	3 Education	Count	125	54	179
		% within DISC Discipline Division	69.8%	30.2%	100.0%
	4 Engineering/Computer Science	Count	175	122	297
		% within DISC Discipline Division	58.9%	41.1%	100.0%
	5 Humanities	Count	75	44	119
		% within DISC Discipline Division	63.0%	37.0%	100.0%
	6 Science & Math	Count	89	54	143
		% within DISC Discipline Division	62.2%	37.8%	100.0%
	7 Behavioral/Social Sciences	Count	336	163	499
		% within DISC Discipline Division	67.3%	32.7%	100.0%
	8 Professional/Technical	Count	98	49	147
		% within DISC Discipline Division	66.7%	33.3%	100.0%
	9 Undeclared	Count	260	132	392
		% within DISC Discipline Division	66.3%	33.7%	100.0%
	10 Interdisciplinary Studies	Count	172	79	251
		% within DISC Discipline Division	68.5%	31.5%	100.0%
Total		Count	1657	857	2514
		% within DISC Discipline Division	65.9%	34.1%	100.0%

Gender was also related to the likelihood that students reported having access to a campus computer discount program. This is illustrated in Table 92c. Males were more likely than females to state that they had access to a computer discount program at their campus.

Table 92c: Access to a CSU Computer Discount Program by Gender.

			QI4A13 Access to a CSU Computer Discount Program		
			0 No	1 Yes	Total
SEX Gender	1 Male	Count	662	405	1067
		% within SEX Gender	62.0%	38.0%	100.0%
	2 Female	Count	1024	460	1484
		% within SEX Gender	69.0%	31.0%	100.0%
Total		Count	1686	865	2551
		% within SEX Gender	66.1%	33.9%	100.0%

Purchase

Those who reported having access to a campus computer purchase discount program were asked if they had purchased computer hardware through the program. Few (11.1%) of those that reported having access to the discount program said they had taken advantage of it. That is, only 3.0% of the total sample had made a purchase the CSU computer discount program. The likelihood of having made use of the CSU computer discount program did not vary by class level, discipline, or gender.

Satisfaction

Those who had made a hardware purchase through the CSU computer discount program were asked about their satisfaction with a couple aspects of the program. They were asked about their satisfaction with the way their purchase was handled, and the computer equipment itself. Overall, students were satisfied with both how the purchase was handled and the computer equipment.

Students were rather satisfied with the way in which their purchase was handled, as evidenced by the average satisfaction rating of 8.46. This level of satisfaction was consistent across class level, discipline, and gender.

Students were also satisfied with the equipment they had purchased. The average satisfaction rating for the equipment was 8.66. As with the handling of the purchase, satisfaction with the equipment did not vary across class level, discipline, or gender.

SUMMARY

The SBRI at CSU, San Marcos, conducted a telephone survey of a representative sample of California State University students Between March 2001 and July 2001. The purpose of the survey was to provide information about student 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. This survey provides baseline in an eight-year design to assess changes in attitudes and use of information technology at CSU campuses.

A total of 3,204 students from 21 CSU campuses were interviewed. The California Maritime Academy and CSU Channel Islands were excluded because these campuses do not have student populations sufficient for sampling. A minimum of 150 students were interviewed at each university.

The CSU Student Technology Survey covers four broad areas: (1) the perceived importance of information technology, (2) its availability, (3) the use of available technology, and (4) satisfaction with resources and services. This report has described the results of a telephone survey of students throughout the CSU system. There are a few general points that should be noted here. First, the majority of classes that students have taken have not required them to use many technology resources available to them, and students are more inclined to think the amount of computer and Internet use is insufficient than they are to think it is too much. Second, while use of on-line resources is widespread, it is not universal. Additionally, while overall there is a fairly high degree of satisfaction with the technology services that are used, there is still significant room for improvement. Finally, these results suggest there is a lack of awareness by some students about the availability of various resources. Some of the key findings are noted below.

Importance

- Students believe computing and network resources are very important in completing their school work.
- Students placed a great deal of importance on electronic access to course instruction any time and place.
- Students regarded computer literacy as being very important to achieving their educational goals and future career aspirations.

Access

- Almost all students report having access to a computer workstation.
- About 85 percent of the students said they had access to the computer software they needed.
- Students reported the availability of various sources of help, with 79.3 percent saying computer lab staff help was available, 62.1 reporting the availability of a walk-in help desk, and 55.2 percent saying they had access to e-mail help services.

Use

- Nine out of ten students said they were required to use the Internet in at least one class over the last two years, and nearly as many were required to access course material posted on the web.
- Three quarters of the students said they have taken a class that required them to use e-mail in the previous two years.
- While most students used their campus electronic information system to gain information regarding class schedules, grades, and registration information, less than a third of the students accessed information about financial aid, admission status, progress toward their degree, or billing through the electronic information system.
- Most (84.6%) students reported using campus access to the Internet, while about half of the students reported using campus e-mail services, accessing the campus network from off-campus, and using an ISP to connect to the campus network.
- Computer lab staff, used by about 45 percent of the students, was the most common source of help used by students.
- Four out of five students said they use a computer almost every day, and almost all said they use a computer at least weekly.

Satisfaction

- In general, students were fairly satisfied with technology requirements in their courses.
- Students were generally fairly satisfied with the online information resources that they had used

- Students were fairly satisfied with the university-provided computer workstations available to them, and were a little more satisfied with the software available to them..
- Students were most satisfied with walk-in help desks and computer lab staff, which were the most commonly used sources of help