California State University
Northridge

INFORMATION TECHNOLOGY
2008 SURVEY ANALYSIS

EXECUTIVE SUMMARY

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CSUN Information Technology

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IT undertook this survey to establish baseline measures of performance for many of CSUN's most important technologies and services. We also hoped to use the results to inform important initiatives that are currently underway or in advanced stages of planning. We are pleased that the feedback we have received from students, faculty and staff will provide us with valuable insight and information in regard to both goals. We appreciate the time and effort that all the respondents took to give us their feedback, share their ideas and make suggestions for improvement. While we may not be able to act on all of them right away, the results provide us with a roadmap to areas of strength as well as opportunities for improvement.

This executive summary highlights the key findings from each of the major areas of inquiry within the survey. We have organized it to follow the same structure as the full report. It starts with a summary of insights from questions related to the use of technology in instruction and research, continues with highlights of results from questions related to core technologies and user support services and concludes with findings related to governance. There is a rich amount of additional detail in the full report and we encourage readers to access those sections for additional findings, analysis, and data tables in areas of interest to them. Finally, the summary concludes with a set of recommended actions for CSUN to take in light of the learnings from this survey.

Technology in Support for Teaching, Learning and Research

Students and faculty reported relatively low frequency of use of most of the learning technologies we inquired about in the survey. It is unclear from the results whether this is attributable to shortcomings in the particular technologies, lack of understanding of their availability and use or an indication that faculty have not found them to be effective tools to promote student learning. Or, it may just be an indication that we are still early in the adoption cycle for most of these technologies. This is an area that bears further monitoring and conversation to deepen our understanding.

The technologies used most often were those that are arguably more mature and universally applicable in coursework. These included data projectors, computer labs and the CSUN learning management system, WebCT. For most of the technologies we inquired about, students and faculty reported an average frequency of use that was between never and seldom.

Students and faculty were most satisfied with the performance of the learning technologies that are used most frequently. Video projectors, in-class internet access and computer labs were among the technologies students and faculty ranked highest. Using a five point the mean satisfaction score for these technologies was 3.50 or greater (between good and very good). In fact, all but one technology received a mean score of 3.00 or greater from faculty. Students expressed somewhat lower levels of satisfaction. The mean evaluations provided by students were 3.00 or greater for all but five of the learning technologies. Students expressed mean satisfactions of between 2.00 and 3.00 (between fair and good) for smart boards, Elluminate, Moodle, podcasting and video conferencing.

Clearly there was concern among faculty regarding the features of WebCT. The mean evaluation of WebCT by faculty was 2.75 between poor or fair. In contrast, Blackboard received mean score of 3.60 and Moodle 3.08 from the limited numbers of faculty who use them. Students' evaluation of WebCT stands in contrast to that provided by faculty. Student respondents reported a mean satisfaction with WebCT of 3.60, thus students reported higher satisfaction with WebCT than the faculty using it.

In addition to supporting teaching and learning, technology is also playing an increasingly important role in faculty research and scholarship. Faculty were somewhat confident that CSUN technology was sufficient to support their research and scholarship. Mean responses from faculty were almost halfway between neutral and agree that CSUN technology meets their current and future research needs. Faculty were less confident that CSUN technology helps them to collaborate effectively with colleagues at other institutions.

We identified one pattern that may provide some insight into what differentiates faculty that were satisfied with the technology to support research and from those that were not satisfied. We observed a statistically significant relationship between confidence in the availability and capacity of the wired and wireless network and confidence in the adequacy of technology to support research. Faculty who expressed concern about network performance also disagreed that technology was adequate to support current and future research needs.

Performance of Core Technologies

We asked respondents to assess four technologies that are used widely by many at CSUN or are of particular importance to one of the constituents (faculty, students and staff). Specifically, we inquired about satisfaction with the CSUN network, email, the portal and computer labs.

Networking

Overall, the wired and wireless networks appeared to meeting the needs of students, faculty and staff. Across all categories respondents reported a mean agreement that the availability and capacity of the wired and wireless network met their needs. Faculty were most concerned about the wired network capacity. However, fewer than 15 percent of faculty respondents responded that the wired network's capacity and availability did not meet their needs. In fact, more than 60 percent of faculty and staff and more than 69 percent of students agreed or strongly agreed that the wired network met their needs.

Table 1: Respondents' Assessment of CSUN Networking
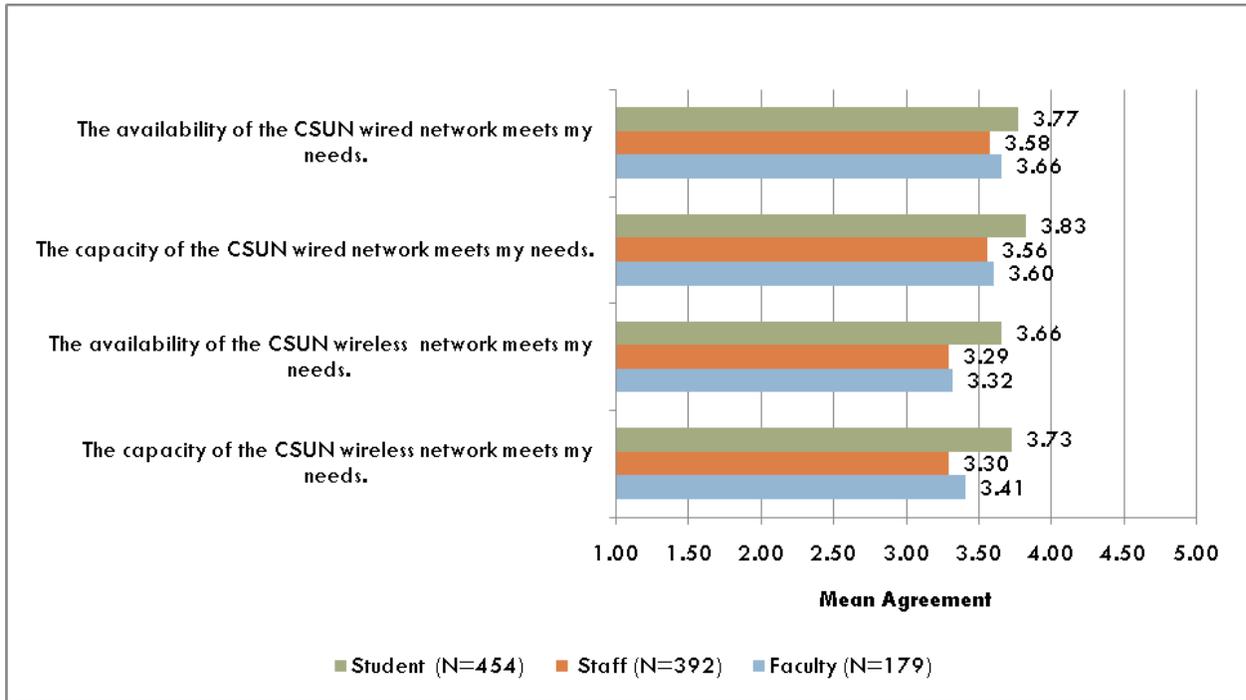
Scale: 1 – strongly disagree, 2 disagree, 3 – neither disagree nor agree, 4 – agree, 5 strongly agree

Respondents were slightly less satisfied with the capacity and availability of the wireless network. Nearly a fifth of students (19.1 percent) disagreed or strongly disagreed that the availability of the wireless network was sufficient to meet their needs. A similar percentage of faculty expressed the same concern about the availability of the wireless network (18.4 percent). Students' assessment of the wireless network was more broadly distributed. The concerns students expressed may have something to do with the areas of campus in which they predominantly take their courses. We found a statistically significant relationship between the college a student is enrolled in and their satisfaction with the availability of wireless networks.

Email

Most staff recently transitioned to Microsoft Exchange for email. Overall, respondents were in agreement (means greater than 3.5) that they understand how to use Exchange and that the product has the features they need. In fact, only 10.2 percent of respondents disagreed that Exchange has the features they need. Thirty-eight percent of respondents agreed or strongly agreed that Exchange is better than their previous email client. The majority (41.2 percent) were neutral on the question of whether Exchange was better and a fifth disagreed. Given that staff transitioned to Exchange from different legacy systems we expected and found a statistically significant relationship between a respondent's division and their satisfaction with Exchange. Specifically, respondents from Academic Affairs and Student Affairs on average agreed less strongly that Exchange is better than their previous email solution.

Table 4 - Staff Respondents' Assessment of Email Capabilities (N=392)

	Mean	Std. Deviation
I understand how to use Microsoft Exchange (e.g., Outlook or Entourage).	3.89	1.084
Microsoft Exchange has the features I need.	3.57	0.986
Microsoft Exchange is better than the previous email client I used.	3.27	1.148
Spam mail is effectively blocked from my email.	3.10	1.258

Scale: 1 - strongly disagree, 2 -disagree, 3 neither disagree nor agree, 4 - agree, 5 - strongly agree

All CSUN students are provided with email, but their use of it varies significantly. More than half (53.2 percent) of student respondents accessed their email ten or fewer times in the past month including a fifth who reported never having accessed their email in this time period. Many students choose to forward their CSUN email to another email account. Nearly three quarters of respondents (72.5 percent) reported that they forward their CSUN email to an external email account. The choice to forward email related statistically to a students' academic standing. While the majority of students at every level chose to forward email, the practice was much more common among juniors, seniors and graduate students.

In general, students seemed satisfied with the performance of their CSUN email. Students reported mean agreements of greater than 3.50 (more than halfway between neutral and agree) with statements that asserted that CSUN email is easy to use, has sufficient features and provides adequate storage capacity. Students were also in agreement (mean 4.05) that spam mail is effectively blocked from their CSUN email. In fact, the only statement with which more than 11 percent of respondents disagreed was that the mailbox provided adequate storage capability. Slightly more than 16 percent of respondents disagreed with this statement.

It is important to students that CSUN provide them with a University email account. More than half of respondents (50.5 percent) strongly agreed that it was important that CSUN provide a university email account and another 24.4 percent agreed. It is important to note that the importance students place on having University email is not the same as asking the students whether CSUN should operate student email or it they would prefer it be outsourced to a third party (e.g., Google). It is possible that students are most interested in having a CSUN email address or a place where they can be assured of receiving CSUN related email. This issue will warrant further attention as CSUN weighs its options for operating student email in the future.

In light of the initiative to gather faculty requirements for a new email solution, we asked respondents to provide feedback both on the performance of their current email and the importance of some potential features they might want in a new solution. Faculty were somewhat satisfied with the features of their current email, but are dissatisfied with the sufficiency of email quotas (at the time of the survey). The majority of respondents (62.0 percent) agreed or strongly agreed that the functionality of the present email system meets their needs. Many faculty were concerned about the sufficiency of the email quota at the time of the survey. In fact, 41.9 percent of respondents indicated

that the quota did not meet their needs. Subsequent to the survey, the email quota was increased which presumably should assuage this concern.

To gain a sense of how faculty are impacted by the quota, we asked respondents to tell us how frequently they must delete emails in order to stay within the email quota. For most faculty, the necessity to delete email solely to remain within the quota is periodic, but not routine. There were 12.3 percent of respondents who reported that they must delete emails daily and 21.2 percent who delete emails often (weekly) to remain within the old quota. With the new quota in place, this situation should be lessened. However, this bears further monitoring and may require alternative solutions for email storage and sharing large attachments.

Portal

Overall, the views of all three constituent groups of the portal were fairly positive. The assessments given of the ease of use of the portal and the ability to find information within it were usually between neutral and agree. While there is room for improvement, the technology is new and presumably faculty, students and staff will become more familiar with its use over time. We also saw within the responses evidence that suggests more should be done to raise awareness of some of the portal's features. For several of the capabilities we inquired about we noted that there were fairly large numbers of respondents who chose the response choice don't know. This may suggest that they have not tried this feature or were unaware of it. Key findings include:

- On average, student respondents agreed that it was easy to view grades in the portal, access the portal and view and pay fees in the portal. Each of these statements received a mean agreement of 3.96 or greater. Students gave a similar assessment of the ease of registering for classes using the portal.

    o While mean responses still exceeded neutral, students were less in agreement that it was easy to locate information in the portal and that it was easy to personalize the portal.

    o We found a relationship between academic standing and a students' level of agreement that it was easier to search for courses using the portal. Freshman and sophomores provided significantly higher mean response (greater agreement) than did juniors, seniors or graduate students.

- Faculty were most in agreement that the it was easy to view course rosters and submit grades using the portal. Both these items received means greater than 4.00.

- Faculty respondents were on average between neutral and agree in their assessment of the ease of downloading rosters from the portal and the ease at which one could navigate through the portal. Faculty were in less agreement that the portal was easy to navigate and personalize.

We asked staff primarily about the ease at which they can navigate, locate information and personalize the portal. Staff responses on average were between neutral and agreement with each of the statements. Staff were most in agreement that they could personalize the portal and least in agreement that it was easy to navigate the portal.

Computer Labs

Students' use of computer labs varies. Among respondents, the majority reported that they had made between 1 and 10 visits to a campus computer lab in the month prior to the survey. A quarter of respondents had made no visits while 16.1 percent had visited 20 or more times. The reasons students reported that they use computer labs varies as well. Students reported they visit labs most frequently to access the internet or to check email. Both these items received mean frequency over 4.00 (often to almost always). Students least frequently use computer labs to work on course assignments within the learning management system or to use specialized software to support course assignments

- In general across all colleges the labs were used more frequently for printing and to use Microsoft Office products for course assignments than for work on assignments in the learning management system or on specialized software. However, within each activity area the frequency of use did vary by college. For example, students in Business and Economics and Health and Human Development reported a higher frequency of printing during their visits to the labs. Students in the College of Science and Math reported a higher frequency of use of labs to perform course assignments in the learning management system. Engineering and computer science students reported much higher frequency of use of specialized software. These differences no doubt stem from curricular differences across the colleges.

- A student's enrollment status also appeared to be related to their use of the labs. Across the board full-time students reported a greater frequency of use of labs for activities. However, the relative ordering from most frequent to least frequent activity was similar for both groups.

- Students rated the labs most positively for the condition of the printers, availability of software and the condition of the computers. They were slightly less positive in their assessment of printer availability and the knowledge of the lab staff.

We observed a statistically significant relationship between the frequency of a student's visits to the lab and the frequency they reported using the lab for each individual activity. Interestingly, the more frequent visitors more frequently performed each of the activities listed. Our hypothesis had been that frequent visitors were typically stopping into a lab to print or check email. While this is true, they also reported that they frequently work on course assignments in the MS Office suite and the learning management system. In fact, it is the less frequent visitors to computer labs who seem to use the labs predominantly for the internet access, checking email and printing.

User Support Services and Training

User support at CSUN is provided by a variety of organizations and individual including the IT Help Desk and walk-in center, technology support staff working in academic and administrative departments and individuals trying to help themselves and their colleagues. The breadth of sources of support was driven home by the survey results.

- Faculty reported that they primarily receive support from a technology staff member situated in their college or department. In fact, 45.3 percent identified this as their primary source of support. The second most prominent source of support for faculty was some form of self-help. A combined 30.2 percent of faculty reported that their primary sources of support are either themselves, a faculty colleague or a friend or family member.

- Students were even more reliant on self-help as their primary source of support. Among respondents, 35.7 percent indicated that they view themselves (solve it myself) as the primary source of support. In fact, if this self-support is combined with the number of students who turn to a fellow student (15.1 percent) or a friend or family member (22.2 percent) than nearly three-quarters of students utilize some form of self-help as their primary means of support.

- In contrast to students, staff receive their primary support from a technology professional rather than self-help. The majority (54.3 percent) received their primary support from a technology staff member in their department.

We asked respondents to indicate their level of agreement with three statements regarding the adequacy of their technology support. Specifically, we inquired if they had access to the support they need, had their problems resolved in a timely fashion, and were satisfied with the overall quality of support at CSUN. As table 5 illustrates, the mean level of agreement with all three statements across all three survey populations was between neutral and agree with means ranging from 3.40 to 3.70.

Table 5 – Faculty, Student and Staff Assessment of Technology Support

	Faculty Mean (N=179)	Std. Deviation	Student Mean (N=868)	Std. Deviation	Staff Mean (N=392)	Std. Deviation
I have access to the technology support I need.	3.39	1.092	3.57	0.883	3.71	0.926
My technology problems are resolved in a timely fashion.	3.39	1.062	3.47	0.895	3.59	0.963
I am satisfied with the quality of CSUN technology support.	3.35	1.099	3.50	0.906	3.56	0.989

Scale: 1- strongly disagree, 2 - disagree, 3- neither disagree of agree, 4 - agree, 5 - strongly agree

While the IT Help Desk and walk-in center may not be the primary source of support for most respondents, those who use them reported satisfaction with the services they received.

- Among students, faculty and staff that have used the IT Help Desk or the walk-in center over the past 12 months, the mean evaluation of its performance was between good and very good.

- The mean ratings for the walk-in center were actually higher than for the IT Help Desk both in terms of knowledge of staff, ability to solve problems and timeliness.

- For the IT Help Desk, the lowest mean rating from all three groups was for the time required to solve a problem.

The primary mechanism a respondent turns to for support appeared to have a bearing on their overall satisfaction. For example, among students we found a statistically significant relationship between a students' primary source of support and their overall satisfaction with the availability and quality of support. Students who primarily relied on self-help mechanisms were in fact less satisfied than those that turned to the IT Help Desk or walk-in center as their primary means of support. In fact, there was a fairly large drop in mean agreement for all three statements between students who turn

primarily to the IT Help Desk or walk-in center and those that turn to another student, friend or family member or attempt to solve the problem themselves. We observed similar patterns among the responses from faculty and students as well. However, the numbers of responses were not always sufficient to verify their statistical significance and the strength of the relationship between the two variables.

Respondents' had similar priorities for expanding support. Among a list of seven potential extensions of help desk and walk-in center services offered by IT, respondents were most interested in seeing the help desk extend it operations to 24 hours a day, seven days of week. For faculty and staff, the second most frequently selected expansion of services was to operate the help desk on weeknights. Approximately half of faculty and student respondents selected these two options as their top priority for extended service. Providing more walk-in centers on campus was the second most frequently selected extension of service for student respondents.

The majority of respondents had not taken part in a CSUN IT training class in the last 12 months. Among staff, 55.1 percent had not attended any CSUN IT training classes in the last 12 months and 44.1 percent had taken between one and five. The percentage of faculty who had not participated in any CSUN IT training in the past 12 months was 57.0 percent and the percentage who had participated in one to five classes was 41.9 percent.

- Both staff and faculty respondents reported a mean agreement between neutral and agree that they were confident in their technology skills. Faculty and staff reported a similar level of mean agreement that they had access to the technology training they need to do their jobs.

- Respondents were in less agreement that CSUN IT training classes met their needs. Among staff, most 56.9 percent were neutral to the statement that CSUN training classes meet my needs.

- The faculty respondents provided mean responses that hovered around neutral to the statements that available training to integrate technology in the classroom meets my needs and the training available to create on-line courses meets my needs. In fact, 27.9 percent of faculty agreed with the latter statement.

IT Governance

In the past 24 months, the University has significantly restructured its IT governance and advisory bodies and the survey provided us an opportunity to gauge how well we had communicated the purpose and nature of these changes. The responses received from faculty and staff suggests that there is work that needs to be done to build understanding of the role of the governance groups and the process by which important IT decisions are made.

- Both faculty and staff on average disagreed that they understood the role of the IT governance groups and that they were sufficiently informed about how technology decisions are made (see table).

- The mean level of agreement did not vary with statistical significance based on either a respondent's length of time at CSUN or the area in which they worked. Even staff within IT expressed disagreement with both statements.

Table 6 - Faculty and Staff Assessment of Understanding of IT Governance

	Faculty Mean (N=179)	Std. Deviation	Staff Mean (N=392)	Std. Deviation
I am sufficiently informed about the role of the IT Governance groups.	2.50	1.078	2.46	0.998
I am sufficiently informed about how technology decisions are made that affect my work.	2.36	1.074	2.44	1.020

Scale: 1- strongly disagree, 2 - disagree, 3- neither disagree of agree, 4 - agree, 5 - strongly agree

Conclusions and Next Steps

We take away from these results several important conclusions regarding CSUN technology and support services.

- Respondents were generally satisfied with the performance of CSUN technology and there are no areas of severe weaknesses.

- Additionally, there are certainly opportunities for improvement in the areas of wireless networking, faculty email, support for on-line learning and learning technologies, the learning management system and self-help user support.

- The results validate some recent decisions and confirm the priority of proposed projects.

  o The decision to expand faculty email quotas should alleviate some of the concerns expressed in the survey responses.

  o The need to define requirements for a new learning management system is confirmed by the relatively lower levels of satisfaction expressed by faculty with WebCT. However, it will be important as we strive to meet faculty requirements we understand and not sacrifice the aspects of WebCT that drive students' satisfaction with it.

  o The need to work collectively on a unified help desk strategy that better leverages self-help along with departmental and central IT staff is further validated by the survey results.

- In addition, the results point to areas that warrant further investigation and monitoring,

  o We need to better understand the pockets of concern expressed by faculty and students about the availability and capacity of the wireless network and determine if it maps to known or unknown access issues in particular zones of campus.

  o We must work closely with faculty performing computing intensive research and determine what aspects of the network and/or other infrastructure may need to be addressed to better support their current and future research.

  o We need to step back and better understand our IT training needs as an institution and determine how to better align in-house and outsourced offerings with those needs.

- o We need to engage students in a dialogue to better understand their expectations surrounding email and assess how these needs can be most effectively met.

- Finally, the results issue a clear challenge to University and IT leaders to re-introduce the purpose and role of the governance groups to the institution and continue to strive to create greater transparency in IT decision-making.