

Western New Mexico University  
C2 Campus Evaluation Report  
by Kirk Minnick, NM EPSCoR C2 External Evaluator

## **Introduction**

According to the NM EPSCoR C2 proposal to NSF "Improving Broadband Connectivity for Tribal and Regional Colleges in New Mexico":

"This C2 proposal will improve bandwidth and cyber connectivity for three rural higher education institutions in New Mexico; two Hispanic Serving institutions and one Tribal College. The improved cyberinfrastructure will enable the institutions to enhance education and research, increase participation in research and learning at all levels, and seize opportunities for external engagement, workforce and economic development, and collaboration."

This report is focused on one of these institutions: Western New Mexico University. According to the proposal:

"It is a Hispanic-Serving university located in Silver City in the sparsely populated southwestern corner of NM. The university enrolls approximately 2,900 students on the main campus and, using on-line and ITV technologies, delivers an expanding number of distance learning courses to its extended university sites and several regional end-user sites. WNMU serves as a comprehensive, regional, rural, public and coeducational institution and offers 41 baccalaureate degrees, ten masters degrees, associate degrees, certificate programs while maintaining very affordable tuition and fees.

In order to meet the proposal objectives of improving bandwidth and cyberconnectivity, the proposal stated that:

"WNMU will purchase CISCO routers and switches to upgrade the Silver City campus local area network from 100 Mbps to 1 Gbps. The goal of the upgrade is to enable significantly increased speed and reliability across the network, which is currently both overburdened by network traffic and functioning with outdated network administration software. Three new high performance, expandable switches will enhance the three largest bandwidth distribution points on the Silver City campus: 1) the MECHA Building, which is both central to backbone distribution and the main point-of-presence on campus for the communications providers; 2) the Besse-Forward Global Research Center, which contains computer labs and classrooms; and 3) the Juan Chacon building, which, after renovation, will house all student services. The additional campus switches will increase communication bandwidth to high-demand buildings such as student services, computing labs, and the student engineering lab cluster while upgrade modules for the campus core switch will support the expanded gigabit architecture."

These new capabilities are designed to accomplish the following in enhancing research and education programs.

- E-learning. Using the increased bandwidth, faculty will create and store learning objects, such as lectures, for student review and for reuse in online courses.
- Innovation. Faculty and students will use the new capability to work with large files to create audio and video clips, animations, and visualizations which are especially important for the WNMU graphic and visualization arts program. Faculty will receive encouragement to explore

opportunities to develop new courses that use geographic information systems, large databases, or similar resources.

- **Enhanced research.** Student and faculty researchers will connect with better access to the WNMU library where they will be able to search multiple databases from a single web page. They will have access to the NM Supercomputing Center and its resources and be able to submit code and receive outputs such as visualizations for display locally.
- **Collaboration.** Using the new supercomputer access and collaboration support technologies, faculty will explore opportunities to participate in research projects with other universities, laboratories, agencies, and businesses.
- **Workforce development.** The university will increase the number of online course offerings available to working students and displaced workers. In addition, WNMU will improve the access and resource support it offers to pre-university adult education (i.e. GED, ESL, Citizenship Training) students and to the more than 1,000 welfare recipients enrolled in education and training under the "WNMU Works" program sponsored by the NM Department of Labor.
- **Participation.** WNMU will provide better access to online courses to help high school students who enroll for dual credit through the NM program allowing students to earn high school and college credit simultaneously.
- **Job creation.** Researchers and the local business community will use their new access to the NM Supercomputing Center and its resources to enhance efforts to support the jobs and research opportunities created by the NM spaceport project, the world's first purpose-built commercial spaceport. WNMU will enhance its ongoing effort to improve employment opportunities by moving people in the region to new levels of competence with CI, which can also increase individual and community opportunities to market goods and services worldwide.
- **External engagement.** WNMU will expand its visibility and the visibility of resources in its service area through social network marketing and support, through streaming delivery of on-campus events, and through more efficient delivery of education programs and services to off campus students. To improve student retention and performance in online courses, WNMU will increase what it describes as *presence* and *immersion*. Presence, a feeling of closeness, accessibility or immediacy, can motivate student performance and perseverance. Immersion is the quality of being virtually surrounded in this case by academic opportunities, by supportive faculty, or by the tools needed to be successful can motivate students as well. The improved cyberinfrastructure will enable WNMU to provide the educational resources a student needs, any time and anywhere, thereby increasing its presence for students regardless of where they live and increasing the students' feeling of immersion.

## Evaluation Metrics

While each C2 institution has its own objectives to accomplish using the increased cyberinfrastructure, there are common milestones and metrics to measure the impact of the C2 project as a whole. These are:

- **Technology/Infrastructure Capability:** installation and use of equipment and cyberinfrastructure;
- **Increase in availability of broadband on and off campus;** increase in reliability of networks;
- **Cyberinfrastructure Workforce:** increase in number of students enrolled in and/or graduating with emphasis in technology related careers; increase in reported career interest in STEM/cyberinfrastructure related fields;

- Research Capacity and Competitiveness: increase in STEM faculty reported research collaborations outside the institution resulting from broadband availability, increase in number of proposals submitted by STEM faculty;
- Education/Institution capability: increase in use of technology in STEM courses and e-learning courses offered and number of students enrolled in STEM e-learning courses;
- STEM Pipeline Enhancement: increase in number of high school students concurrently enrolled in college courses, especially in STEM courses.

### **Campus Visit**

The external evaluator conducted campus visits to each of the C2 institutions during the first year of the award. The purpose was to obtain a better understanding of the challenges facing the C2 institutions and collect baseline data onsite. The campus visits included meeting with the IT director, interviewing faculty and administrators, measuring wireless speed/connectivity around the campus, and observing the geographical and physical challenges posed for each institution.

A campus visit to WNMU was conducted on February 14 & 15, 2011. The main campus is located in Silver City, NM, 250 miles southwest of Albuquerque. It takes approximately 4 and one-half hours to reach the campus from Albuquerque. The community is adjacent to the Gila National Forest, and the shortest distance between the campus and Albuquerque or Santa Fe requires taking NM 152 through the Gila national Forest. The road goes over Emory Pass (elevation 8,200 feet), and while scenic can be treacherous in the winter necessitating driving further south through Las Cruces, thus increasing the travel distance from the campus to the Albuquerque/Santa Fe area by 100 miles and an extra hour and a half travel time.

The evaluator met with Duane Elms, Director of Information Technology for WNMU to discuss the status of the hardware upgrades on campus. Duane is also one of the co-PIs for the C2 award. He indicated that the hardware switches had been ordered and will be installed over the course of the next few months. One of the reasons why bandwidth has increased so much on campus is that approximately 20% of credit hours are generated online. This is both from within NM as well as outside the state. WNMU has branch campuses in Deming, Lordsburg, Truth or Consequences and Gallup, as well as a significant dual credit high school program. Many classes are offered through interactive TV and the band-width required for seamless transmission is large. A new video bridge was recently installed which allows inter-campus video conferences from an individual's desk. This was paid for from a USDA grant that the university received. The campus has approximately 30-megabytes of connectivity and reliability has always been pretty good, although the connection speed on campus has been limited by the 100mbs routers. The new 1 gigabyte routers included in the C2 award should alleviate this last bottleneck for faculty and students.

During the campus visit, the evaluator also spoke with Donna Rees the Dean of Extended University. She indicated that online course enrollment has increased dramatically over the years, and that it is always a challenge to keep ahead of the demand. ITV is used extensively and provides students on the remote campuses with access to many of the same classes offered at Silver City. A second ITV classroom was recently added at the T or c campus. Many students from Deming are able to attend their classes at the Deming center and only make the drive to Silver City once a week, thus allowing them to work and be with their families.

The evaluator also spoke with Dr. Camacho in the biology department about his experiences with the campus network and his ability to collaborate with others. He had not had any difficulties with the network, or using it to collaborate with others. He knew about the planned upgrades and felt it would

improve his online experience. Two of his students had participated in the NM EPSCoR UROP program and he felt that was a great opportunity for undergraduates from regional institutions.

### Campus Wireless Speed

The external evaluator took a sample of wireless connection speeds on campus using a HP Probook 5310m and the internet site [www.speedtest.net](http://www.speedtest.net). The results are presented in the following table.

**Campus Wireless Speedtest\* at a Sample of Campus Locations**

Location	Ping (ms)	Download(mbs)	Upload (mbs)
Library (outside)	208	.25	.11
SMC Mall	311	.23	.12
Cetal	113	.25	.15
Mecha	170	.23	.12
PE Department	190	.20	.11
Nursing	130	1.92	.75
Eckles Hall (dorm)	335	.19	.02

\* conducted using [www.speedtest.net](http://www.speedtest.net) and a HP Probook 5310m

The connection speeds were generally fairly low, except for Nursing, for a college campus. The ping was also fairly high and may be contributing to the low connections speeds. The worst location was Eckles Hall, a student dormitory, which is on the outskirts of the campus and built with solid concrete. The nursing school building, which had the best wireless connection speeds on campus, is also the most recently constructed building and has a LEED certification because of its use of green technology. Providing high speed wireless access on college campus such as WNMU, which was founded in 1893, can sometimes be difficult because of the thickness of the older building walls and the use of metal/rebar in the structures. Campus IT does provide wireless routers for students in the dorms that can be checked out to increase their connection speed.

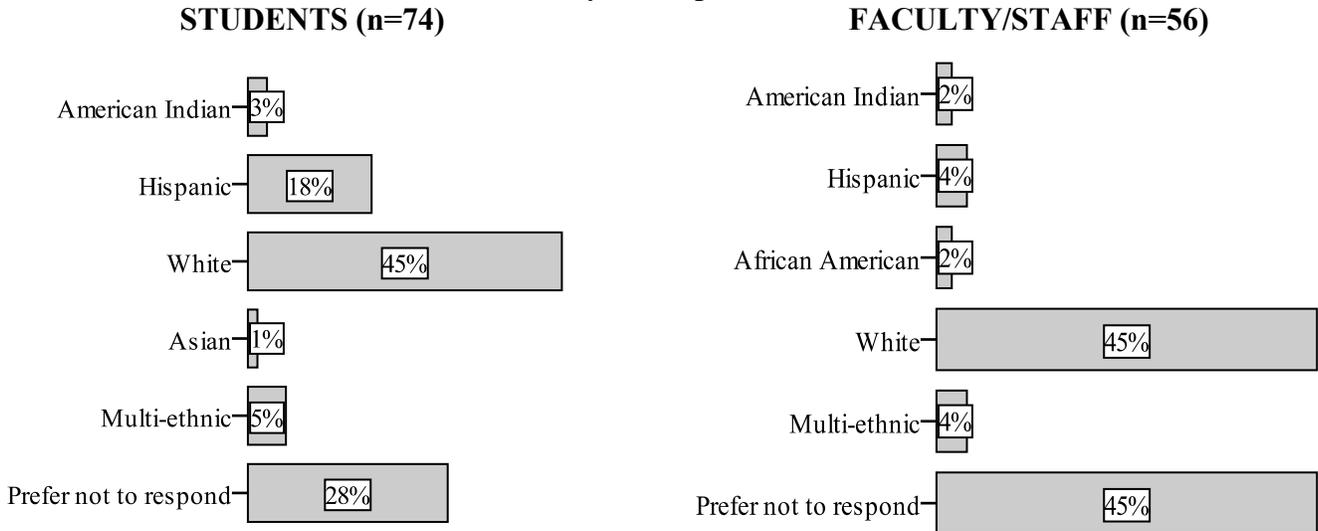
### Survey of Students and Faculty

A survey was made available to the students and faculty of all the C2 institutions. It was designed to collect self-reported data on the use of various computer technologies, software, and satisfaction with IT services, systems and support. Each institution was responsible for distributing the surveys to their students, faculty and staff.

A total of 80 students and 56 faculty/staff responded to the request to complete the surveys. The questions on the surveys were similar but not identical. The results will be presented by question with the student and faculty/staff responses reported separately.

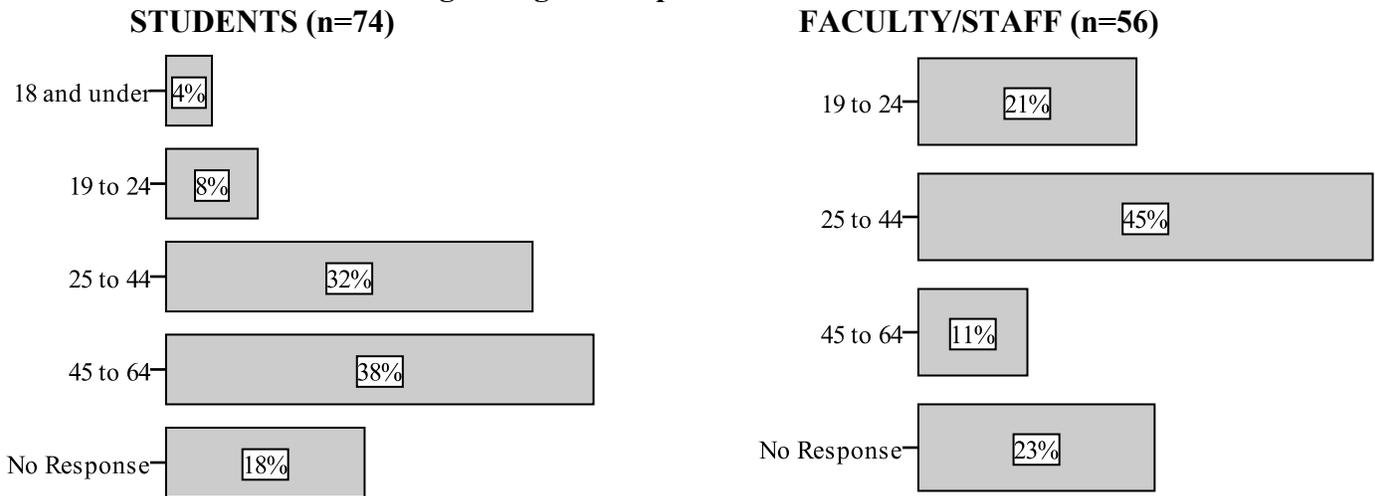
Figure 1 and 2 presents the demographics of the two groups of respondents: Ethnicity and Age.

**Figure 1**  
**Ethnicity of Respondents**



Student respondents were more likely to report being Hispanic than Faculty/Staff (Student: 18%; Faculty/Staff: 4%), while the percentage of other ethnicities were similar. The number of faculty/staff who preferred not to respond or left the question blank was 1 and 1/2 times higher than the student respondents (Students: 28%; Faculty/Staff: 45%).

**Figure 2**  
**Age Range of Respondents**



Student and faculty/staff respondents reported were in a variety of age ranges. More than one-third (38%) of the students reported being 45-64, with 32% reporting being in the age range of 24-44. Almost half (45%) of the faculty/staff that respondent reported being in the age range of 25-44.

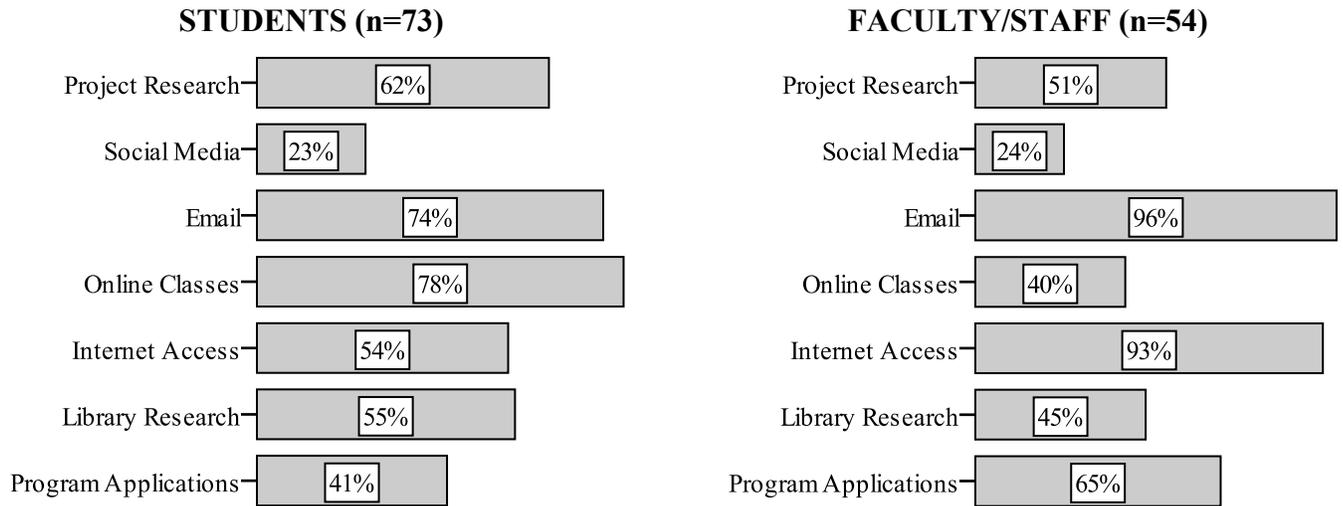
Figure 3 presents the responses to a question on how they access the campus computer network.  
"I currently access the campus computer network from (please select all that apply)"



Figure 5 presents the responses to the following question:

"I currently use the campus computer network for the following (please select all that apply)".

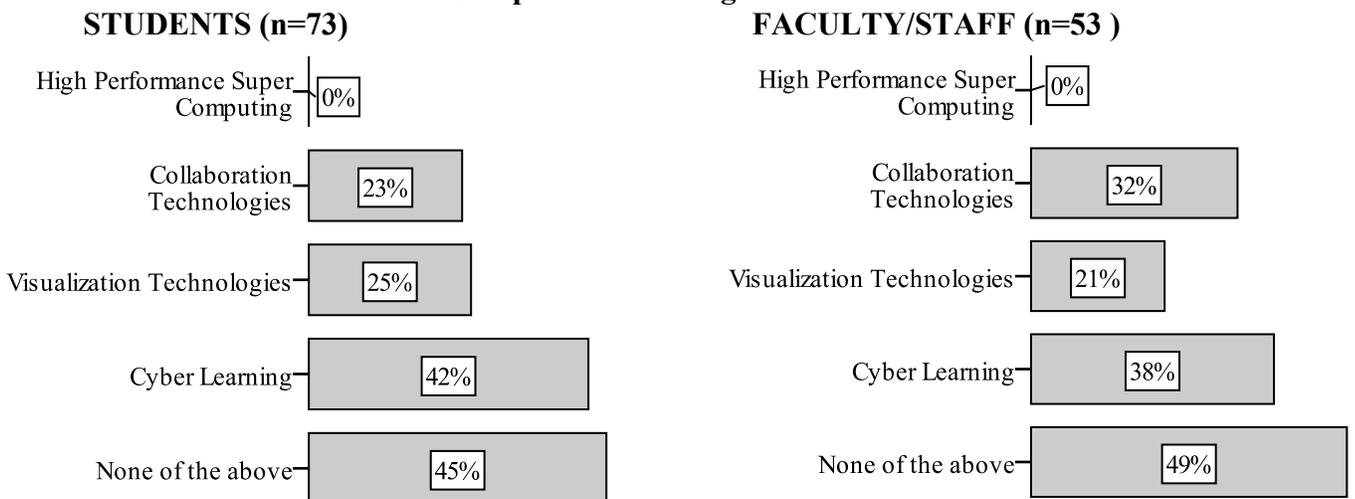
**Figure 5**  
**Use Campus Computer Network for the Following:**



As one would suspect the campus computer network is used for different purposes by the two groups. Almost three-fourths of the students reported using the network for 'online classes' (78%) and 'email' (74%); while the 96% of the faculty/staff reported using it for email and 40% for online classes. Using the network for 'internet access' was reported by 93% of the faculty/staff compared to 54% of the students. About one-fourth (Students: 23%; Faculty/staff: 24%) reported using the campus network for 'social media'.

Figure 6 presents the responses to a question about the use of various computer technologies; including High performance computing, collaboration technologies, visualization and cyber learning.

**Figure 6**  
**Computer Technologies Used**

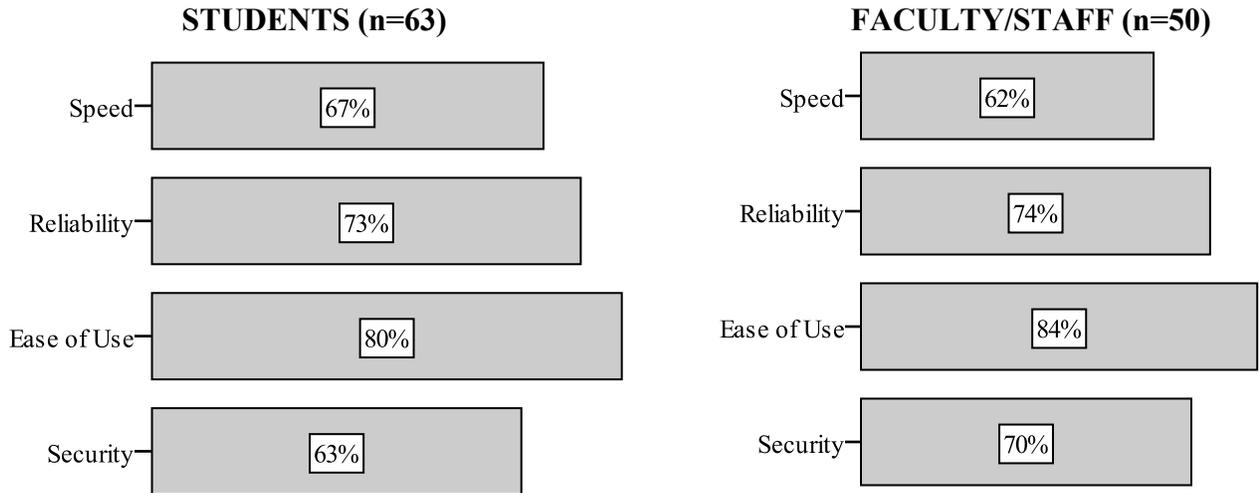


Of the computer technologies presented to respondents, 'Cyber learning' was reported the most used by both groups (Students: 42%; Faculty/staff: 38%). Almost one-third (32%) of the faculty/staff reported using 'collaboration technologies' compared to one-fourth (25%) of the students.

Figure 7 presents the responses to a question about the level of satisfaction with the campus hard wired computer network:

"Please rate your satisfaction of the following when using the campus Hard Wired computer network"

**Figure 7**  
**Satisfaction with Campus Hard Wired Network**  
**Percent 'Satisfied' or 'Very Satisfied'**

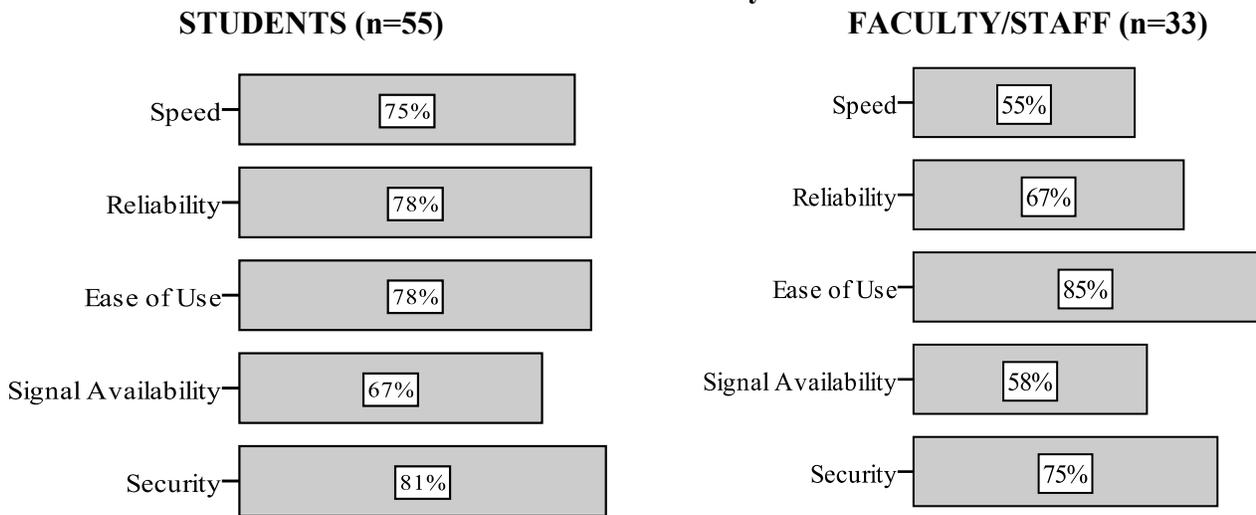


Ratings of satisfaction are subject to a person's interpretation of what satisfaction means to them. It is not necessarily based on objective criteria, but it is still meaningful to them and should be considered when making upgrades to the campus computer network. The ratings of the campus hard wired network were similar between the two groups of respondents. The highest degree of satisfaction was for 'Ease of use' (Students: 80%; Faculty/staff: 84%). Almost three-fourths (Students: 73%; Faculty/staff: 74%) were 'satisfied' or 'very satisfied' with the 'Reliability' of the hard wired campus network. The hardwired networks perceived 'Speed' and 'Security' were rated slightly different by the two groups, with two-thirds of the students being satisfied with the 'speed' compared to 62% of the faculty/staff whereas 63% of the students were satisfied with the 'security' and 70% of the faculty/staff.

Figure 8 presents the responses to a question about the level of satisfaction with the campus wireless computer network:

"Please rate your satisfaction of the following when using the campus Wireless computer network"

**Figure 8**  
**Satisfaction with Campus Wireless Network**  
**Percent 'Satisfied' or 'Very Satisfied'**



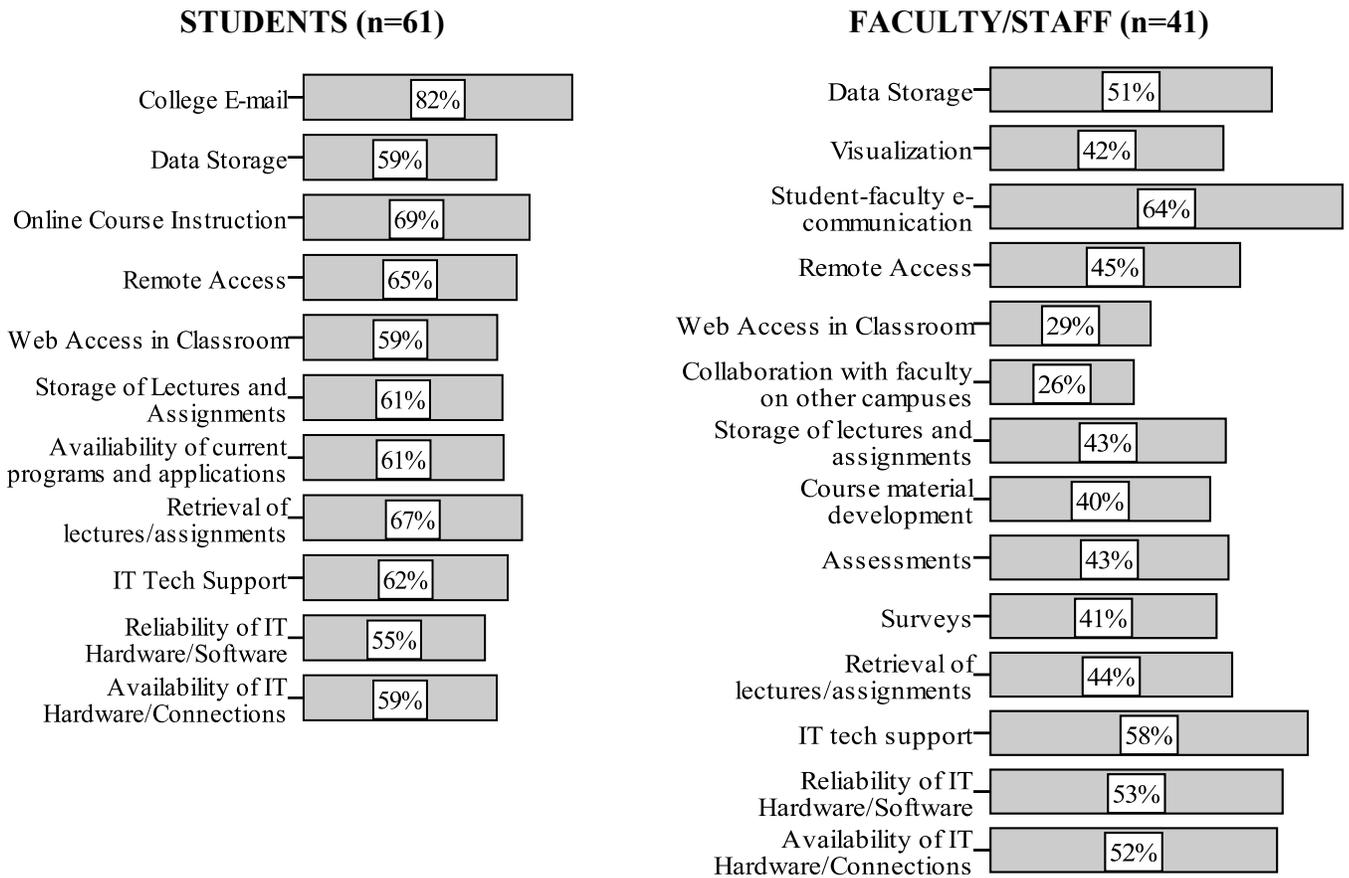
The ratings of the campus wireless network were not as similar between the two groups of respondents as the ratings of the wired network. Again the highest degree of satisfaction was for 'Ease of use' (Students: 78%; Faculty/staff: 85%). Almost three-fourths (78%) of the Students and two-thirds (67%) of the Faculty/staff were 'satisfied' or 'very satisfied' with the 'Reliability' of the wireless network. The wireless networks perceived 'Speed' and 'Security' were rated vastly different by the two groups, with three-fourths (75%) of the students being satisfied with the 'speed' compared to 55% of the faculty/staff whereas 81% of the students were satisfied with the 'security' and 75% of the faculty/staff.

Figure 9 presents the responses to a question about the level of satisfaction with IT support:

Students: "Please rate your satisfaction regarding the campus IT support of each of the following with respect to your studies"

Faculty/Staff: "Please rate your satisfaction regarding the campus IT support of each of the following"

**Figure 9**  
**Satisfaction with IT support for the Following**  
**Percent 'Satisfied' or 'Very Satisfied'**



Respondents were asked to rate their level of satisfaction regarding the campus IT support for a variety of typical network activities for each group. Although there were some similar items on the lists of the two groups, the lists were designed to capture the unique network uses of the different groups. Satisfaction ratings for items included in both lists were: 'Data Storage' (Students: 59%; Faculty/Staff: 51%); 'Remote Access' (Students: 65%; Faculty/Staff: 45%); 'Web Access in Classroom' (Students: 59%; Faculty/Staff: 29%); 'Storage of Lectures and Assignments' (Students: 61%; Faculty/Staff: 43%); 'Retrieval of lectures/assignments' (Students: 67%; Faculty/Staff: 44%); 'IT Tech support' (Students: 62%; Faculty/Staff: 58%); 'Reliability of IT hardware/Software' (Students: 55%; Faculty/Staff: 53%) and 'Availability of IT Hardware/Connections' (Students: 59%; Faculty/Staff: 52%). The items 'Remote Access' and 'Web Access in the Classroom' had the largest difference in ratings between the two groups.

The two items that were unique to the student survey both has satisfaction ratings higher than two-thirds: 'College E-mail' (82%) and 'Online Course Instruction' (69%).

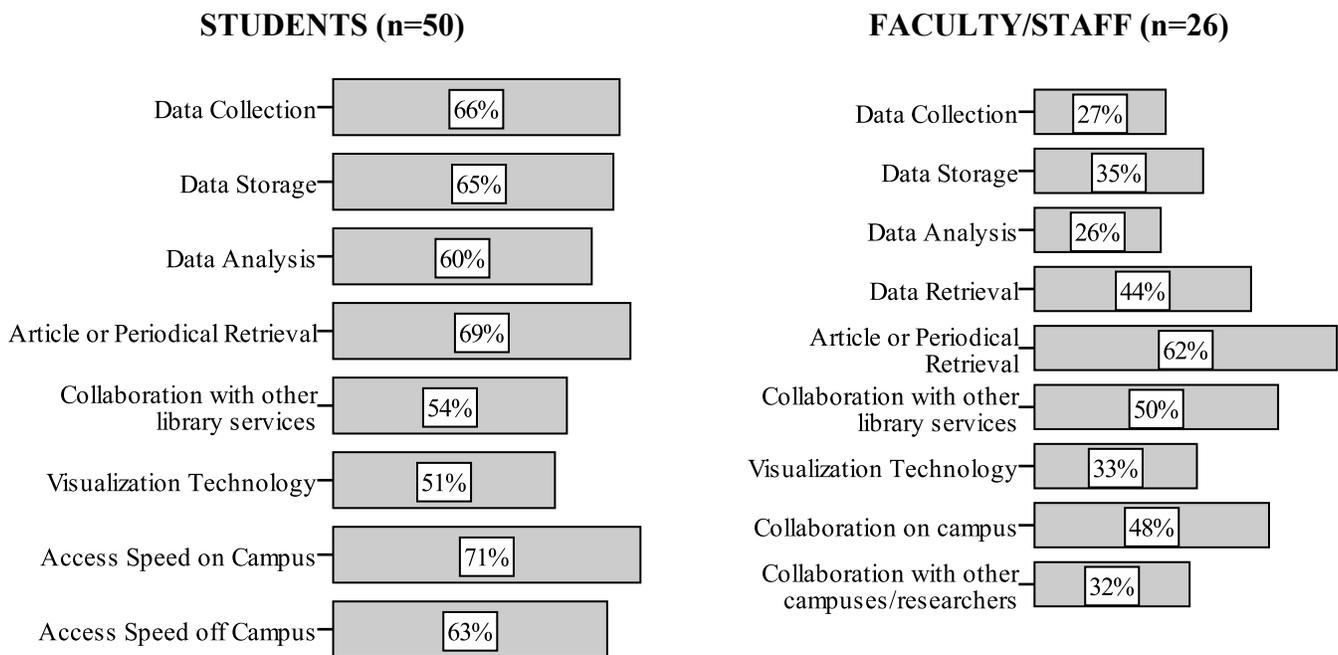
The faculty/staff survey included the following additional items with respect to satisfaction of IT support for: 'Visualization' (42%); 'Student-faculty e-communication' (64%); 'Collaboration with faculty on other campuses' (26%); 'Course material development' (40%); and 'Assessments' (43%).

Figure 10 presents the responses to a question about the level of satisfaction with IT support with respect to library research and/or teaching or research:

Students: "Please rate your satisfaction regarding the campus IT support of each of the following with respect to library research"

Faculty/Staff: "Please rate your satisfaction regarding the campus IT support of each of the following with respect to your teaching or research"

**Figure 10**  
**Satisfaction with IT support of the Following**  
**Percent 'Satisfied' or 'Very Satisfied'**



Respondents were asked to rate their level of satisfaction regarding the campus IT support for a variety of network activities related to 'library research' in the case of students or 'teaching or research' for the faculty/staff. There were many similar items on the lists of the two groups. These included: 'Data Collection' (Students: 66%; Faculty: 27%); 'Data Storage' (Students: 65%; Faculty: 35%); 'Data Analysis' (Students: 60%; Faculty: 26%); 'Article or Periodical Retrieval' (Students: 69%; Faculty: 62%); 'Collaboration with other library services' (Students: 54%; Faculty: 50%); and 'Visualization Technology' (Students: 51%; Faculty: 33%). For many of these items, faculty rated their satisfaction 30 percentage points lower than the students.

Survey respondents were also asked to respond to four open response questions. Those questions and selected responses from both survey groups are presented in the following pages.

**Is there a particular area on campus where you would like to see Wireless access added or enhanced?**

Students	Faculty/Staff
Hallway of Miller Building where Mustang Deli Cafe is. It is almost always impossible to get any reliable connection there and when there is a connection it is so slow it is not usable. The cafeteria has slow connection. The PE Building Social Work Lab is very very slow. It seems that the entire campus needs to speed up connectivity and increase signal strength. It is ALWAYS frustrating to try to use a computer at WNMU.	New Juan Chacon remodel
I would like to see the wireless access enhanced in the dormitories. I currently live in a dorm room and do all of my schoolwork there or in the dormitory computer lab, so enhancing the access there would be very helpful.	Watts Hall
Western New Mexico University - Gallup Graduate Center	Some checks in above questions would not stay marked. Wireless on campus would be terrific.
Wireless should be all over campus. You should be able to access the wireless while outside sitting in the grass or at a table, and inside in all buildings. Except for the computer labs nothing should be wired, and maybe not even there. All staff should be wireless. It will make their workspace less crowded and they can be more productive.	Not all campuses have wireless. Of course part of the issue then from survey is that IT is out of touch - not in touch with conditions at EU sites
In all the dorms because it is really slow and sometimes doesn't work at all	Watts Hall
My firm opinion is that it should be everywhere and consistent. It's not.	PE Complex
James Stadium	JCB
Broadband available in Gallup classrooms	Well, things don't seem to work very well in SMB meeting rooms, although I have NO idea whether that has anything to do with wireless.
Last semester it was really weak and unreliable in Light Hall.	Yes, at the WNMU GGSC site. We have poor internet connection speed and we do not have access to a wireless network.
I spend almost all of my time in one building, the nursing building now that I'm at this point in my studies. I have no problem with gaining wireless access, but it is useless if I want to go onto blackboard or mustang express as the wireless network blocks me from the https pages for logging into mustang express and blackboard. I actually have to use my droid to link my laptop to and download presentations and other documents from ME/BB if I want to use them on my laptop in that building.	Student Service Areas
Watts Hall	It needs to be faster downloading video.
	Juan Chacon Building
	Between 12th st. and college ave.
	I know that Wireless is accessible in and around the SMB, but I don't know other locations that have Wireless access. The entire campus should be Wireless.

<b>What is the one thing IT Services could do that would make it easier for you to work or study?</b>	<b>What is the one thing IT Services could do that would make it easier for you to work or teach?</b>
Students	Faculty/Staff
Y'all do an amazing job keeping the IT services running smoothly---it's a complicated and daunting task, at times! If it was possible to go directly into the Blackboard section when I am logged into Mustang Express checking grades or paying my bill, what have you, that would be a tremendous help. Presently, I just log out of Mustang Express, then re-enter www.wnmu.edu into my browser and click on the 'Blackboard' link on the lower left side of the WNMU web page.	Visit my classroom each semester to explain how students can use/access IT services.
new computers and faster internet service at t or c campus	Provide expanded Help Desk hours and personnel.
I wish the computer lab had newer better machines	Provide Help desk coverage weekends and evenings.
In the Global Resource center, the students who work in the lab are sometimes the loudest people in the room. I can forgive them if they are afraid to ask football players to shut up, but it bothers me when the people hired to make things run better have such a low standard and are laughing and playing around in the lab when we are trying to get our work done. Most of the support people are excellent. Some are just here to play.	Be available when help is needed--this includes calls to help desk that take weeks to be responded to.
Speedy response to problems with BBoard. Sometimes the trouble-shooting is delayed...or the problems are not easy to identify so they can be fixed. More in-depth assessment from IT end.	Mustange Express email capacities stink. Get a more robust, reliable email platform if you want to keep trying to force faculty to use it
Accessible friendly individuals on the Help Desk line.	Be more available to help
Currently I have no complaints.	Need a permanent projector installed in Watts Hall Computer Lab.
Have more tutorials	Faster help with a computer getting fixed.
Many times there aren't enough licenses for everyone in the class to use one of the Adobe software products at the same time.	The IT window in the library is worthless. They do not know what equipment they have, what resources they have, or what is available.
Have an IT person available or on-call during ITV classes so that our professors don't have to struggle with the technology. It eats at least 1/3 of our class time and usually the department secretary has to come and figure out the cameras. It is frustrating.	I'm not sure what IT does for me beyond keeping the network going.
Make it easier to access the library databases from an off-campus location.	Hire more IT staff in order to allocate one person each department or area. Better knowledge of BANNER
Have continuous services available in all buildings at all times.	Keep the system running and reliable, increase system speed, increase email storage
Our IT service is satisfactory enough for me to work and study in for now.	Hire more Help Desk staff (which is contingent on adequate funding to do so, I realize).
Connect to the Fiber Optic, update the backbone, move into the 21st century.	Make Banner accessible from home.
Have better access to help regarding Blackboard	Have more techs available to solve immediate problems!
Be available on week-ends, Customer service training	Better speed downloading video.
The wireless internet should be better because throughout campus you don't get a very good signal.	Install the equipment that is purchased in a timely manner.
Upgrade to office '11	I've been waiting since we came back from Christmas holidays to have the new Office Suite installed. Maybe we

What is the one thing IT Services could do that would make it easier for you to work or study?	What is the one thing IT Services could do that would make it easier for you to work or teach?
Students	Faculty/Staff
	need more techs.
Increase file storage allowance for students; more computers and evening access available for students	More end user training, and IT is off to a good start with the slate of professional development opportunities.
I keep getting kicked off Blackboard to soon. More time on Blackboard.	Provide a consistent desk-top across campus - provide consistency that would reduce the number of different things the help desk staff needs to support.
fix the log on tech	FASTER internet connection
allow for longer hours at computer labs	Speed up the connections
I don't know if it is my computer or the school system but I always have to log back in even when I'm log in my online courses.	
make blackboard available from Gallup campus, not just silver city	
Either getting rid of ME features that duplicate BB features, or merging the two sets so I only have to deal with one interface. Providing calendar functions that link with industry standards so we can link the calendar in ME with one on google and access it from the cloud.	
Have evening or weekend tech support; clear out the voice mail box for the HELP desk it always says it is full when I call in and cannot leave a request if I want to.	
Every service, class and program that I have tried to participate in that has anything to do with WNMU's technology/online services or classes/IT support has been a horrible nightmare and I will NEVER TAKE AN ONLINE CLASS AGAIN!	
"Facebook" for online only classes -- but not on Facebook. Knowing other students and collaborating with them online is challenging without some sort of system to help build those connections.	

**What is the one thing IT Services could do to improve the way it communicates about its services?**

Students	Faculty
Post in emails to students. Many are unaware of the range of services offered or how to access them.	Incorporate an easily accessible information box listing their services.
You're doing a good job with communication.	Email notices/reminders about services; offer workshops regarding updates; Help Desk personnel carry cell phones so students/staff do not get voice mail or no answer.
Collaborate with instructors	Come to departmental meetings, talk with us about our needs, and follow through
Show us how to find you. Put "Call IT at # if you have problems" stickers or signs at technology centers and ITV classrooms. Give us on - call numbers.	More accessible on the webpage.
Put up announcements either on the campus homepage or around the school.	Let us know what's going on.
Email is the best communication service available for me.	Put up poster around campus and in labs.
Pretty good	Do you have a website?
Tutorials	When the systems are slow or not responding, find a way to let us know when it will be running correctly again.
training on customer service plus realizing not all students are familiar with how computers work	It's not what IT needs to do to communicate its services: folks need to open and read their emails!
Do a 'work order' or some small report when someone reports a problem with a mouse or something. Sometimes problems seem to get ignored.	Have the Gallup campus attend IT training and be included in the availability of IT services and information.
Make it more easy to navigate to find grades.	Recent emails with trainings available is a good step in improving communication across campus. Good Job! Please keep them coming....
IT service has always been good when I needed it.	Being more timely on communicating developments.
give a more timely notice when IT services are going to be serviced and or upgraded	Communicate
make sure all computers have Adobe	less surveys, more action-
Faster response when campus messages are published. I.e. if the campus is closed, I should see that at www.wnmu.edu in less than 5 minutes. It's not that hard to put a 'breaking news' bulletin on a website. Also, provide more granularities on the types of messages I would get and the delivery options. I want to receive messages (via text or email or both) about closings, police emergencies, and messages from professors to students in my classes, but I don't want to receive messages about upcoming campus events, or tee shirts that are being sold to raise funds for.... blah, blah, blah. Let me filter the spam that is sent so I can select to have text or email messages when a campus wide or specific announcement is put into ME.	
When there are problems with Bb announcing it on Bb is not intelligent.	
N/A -- appreciate the advanced warning on server maintenance downtimes, etc.	

**Anything else you would like to add with respect to accessing or using the campus computer systems?**

Students	Faculty/Staff
They have been very helpful and polite when needed	IT seems understaffed.
Having earned my BS degree back in 1984, I have to say that I am positively astounded at the availability of research materials via the online Miller Library and EBSCO Host access!	In teaching evening classes, it is frustrating that the help desk isn't available after 5 pm. It would be helpful if computers were better maintained, as often my students have had problems with printing or other operations, when moving to another computer solved the problem.
Continuing to improve the appearance and usability of the website and its contents would be great.	Access from off campus is very poor, especially using Mustang Express.
The network here is so slow it is excruciating. Please increase the network speed and signal of the campus-wide internet. It is impossibly slow at the library, around campus, in the labs, there is no excuse for a university to not have the fastest possible internet speed and signal strength. And please help professors with ITV!!!!!!! the ITV classes are a joke because the whole time is spent playing with the cameras and working as a group (teacher and students/secretary) to figure out the technology. We need a technical person for our ITV classes!!!! Thanks!	None - we take network "up time" and other niceties for granted.
It would be nice if the computers in the dormitory computer labs were able to access mustang express and the professor's folders.	I hope this survey gives the feedback that IT needs to know and improve. Overall, I satisfied with the services provided by IT due to our university's funding limitations.
It's hard to study in the library and do school work when it is so crowded. Usually the students are quiet, but I have had public patrons talk to me, play loud music, and bother me when I am trying to work. I have also inadvertently seen, as I walk by, some men looking at very inappropriate web sites and it makes me uncomfortable. It would be nice if the college library computers could be for college students only, or maybe set up a separate area for the public.	We just need better speed for our staff and for the students in Eckles.
The bandwidth has to be expanded.	We need to have one central calendaring/e-mail program. Microsoft Outlook would eliminate a lot of the "manual" work done on campus to set up and cancel meetings; take surveys; solicit opinions; etc.
A help system that is available on the weekend.	Systems need more flexibility more computers available to students/faculty in public/collaborative environment, NOT computer lab...
Climate control, it was 82 degrees in the Mac lab the other day, this is winter and it's wasteful and unnecessary.	
In truth, I do realize that probably 90% of what goes on is unavoidable, given the lack of resources. In many ways, IT is to be commended for doing as much as it does with the limitations.	
After a recent BB upgrade, we appear to have lost the ability to sign into BB off the Mustang Express page. You are given another round of sign in boxes which then do nothing more than loop back. you wind up leaving Mustang Express re-entering the WNMU home page and highlighting Blackboard. Then you have to sign in anew. It is time taking and annoying.	
The Deming IT staff is great and makes each and every problem workable and easy to fix.	
Quit having the Blackboard kicking me off so soon.	
Why do you have to log onto the blackboard twice? This is time consuming and ridiculous!	

<b>Anything else you would like to add with respect to accessing or using the campus computer systems?</b>	
<b>Students</b>	<b>Faculty/Staff</b>
strengthen the wireless access signal	
Does the ICT office offer computer rentals for the semester?	
we should not be charged for paper on top of our semester fee for the computers	
Please fix the nursing wireless so we can access ME/BB from it!!!	
I have requested help twice. Response time has been good and fixes have been effective.	

### **Findings & Recommendations**

The campus visit and the surveys have provided a lot of information which can be used to make improvements in campus cyberinfrastructure. Many of the survey respondents offered specific suggestions for improving the campus network and other IT services. Many also complimented IT for what they have accomplished with their limited budget and personnel. However, the campus IT director and staff are the only ones who will be able to allocate their budget in ways that best meet the needs expressed by students and faculty on their campus to enhance the learning environment provided by the technology available.

I recommend that the IT Directors from each C2 campus discuss with each other the survey results and possible ways to address student and faculty needs. They may benefit from each others' experience and expertise and develop innovative solutions for their own campus as a result of this collaboration.

