NMSU Las Cruces Campus
Student Technology Fee
Annual Report
FY 12/13
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II. Main Campus Student Technology Fee

In 2004, the Board of Regents approved the New Mexico State University (NMSU) Las Cruces campus Student Technology Fee (STF) as part of tuition and fees. The funds provided by this fee helped to support the ongoing and growing demand for a robust technology infrastructure while making a variety of technology services affordable for NMSU Las Cruces students. The Student Technology Fee became part of the University fees and tuition at the Las Cruces campus starting in fiscal year (FY) 2005.

In its first year of existence, the Student Technology Fee was set at $20 a semester per student. At this rate, a total of $516,000 was initially allocated to expanding core information technology (IT) services needed for students. The creation and expansion of these student IT services included: computing labs, help desk hours, free modem pool, wireless zones, e-services, web conferencing, components of Banner, software licensing, security and compliance projects, and various networking expenses. By FY 2010, the fee had increased to $67 per semester. Today, the demands for many services, made possible because of the fee, have expanded and continue to grow each year. Some of these services include: campus wireless, printing services, computer equipment rentals, multi-use computing areas, and access to discounted software.

When the Student Technology Fee was implemented, a committee of students was formed to help provide direction and serve as a student governing body that would influence how the appropriated fee funds would be allocated to new projects and services important to students. This committee, known as the Student Technology Advisory Committee (STAC) was formed under the direction of the University’s Chief Information Officer (CIO). STAC is made up of student representatives from each of the NMSU colleges who serve for two years as representatives of the student body for technology related issues. Throughout the academic year, STAC works to ensure student voices are heard on all issues related to technology services used by students at NMSU Las Cruces campus. STAC helps identify and recommend new technology projects, provide insight on students perspectives on their experiences with the available technology services, and assist in the decision making process as it pertains to information technology at NMSU for students.

Since the formation of STAC, its primary focus has been to help drive initiatives in technology across campus, primarily through introducing new projects or improving existing services. NMSU’s Information & Communication Technologies (ICT) Department relies on STAC to advise it on actions that impact new and existing technology services and actively involves the committee on important IT decisions.
III. Introduction

This report describes the activities and functions supported by the main campus Student Technology Fee (STF) funds, which have been instrumental in funding the technological requirements of the University. The total funds from the STF that were allocated to technology services for students totaled $1,915,000 for fiscal year (FY) 2012-2013. Each funded project is categorized under one of four main areas: connectivity, physical infrastructure, virtual infrastructure, and support services.

The funds, received as a result of the Student Technology Fee were appropriated to specific projects and services within these areas, as approved by STAC and the ICT. Background information on the technology projects benefiting from these funds and the outcomes of these investments are reported each year through the Student Technology Annual Report.
IV. Connectivity

ICT is able to monitor usage on the minute with the network monitoring systems in place. Growth for these services is primarily measured by number of connected devices and the bandwidth consumed by devices. Connected devices may range from smartphones, tablets, laptops, gaming consoles, AppleTV, to other video streaming devices. Every year students bring more of the newest internet-enabled devices to campus. This behavior increases the need for a reliable network. See "Figure 1: Network Usage Growth in Mbps (megabytes per second)" and "Figure 2: Connected Devices," which show this growth over the years since the start of STF.

Figure 1: Network Usage Growth in Mbps (megabytes per second)

In "Figures 1: Network Usage Growth in Mbps (megabytes per second)," bandwidth usage by devices connected to the NMSU network has significantly increased over the years. Infrastructure and technology to provide internet services to students, whether wirelessly or wired is justified by the increasing bandwidth consumption. In one year, an increase of 1,100 Mbps occurred between FY 11/12 and FY 12/13. Continued growth is expected into FY 13/14.

Figure 2: Connected Devices
In "Figure 2: Connected Devices," FY 12/13 devices connected peaked at 155,923, an increase of 28,073 devices over a one year period. The number of connected devices has been rapidly growing over the years, while the amount of bandwidth these devices are consuming is out-pacing this growth. Another cause of increased bandwidth consumption is positively correlated to the types of media being accessed on online, such as: rich text, video, and other online content being streamed. Ensuring a reliable network requires that user trends are accurately predicted and funding is available for expansion.

Expanded Wireless Areas

Wireless connectivity continues to be a focus area for students at NMSU. Each year ICT evaluates the newest releases for wireless technology solutions and continuously works toward incorporating these advancements, which have made it possible for NMSU to continue to provide a reliable wireless network. Since the introduction of wireless internet access on campus, it has substantially impacted how people are connecting and has become an essential part of NMSU life. Even though in recent years trends are showing fewer students and staff are arriving on campus, the number of devices owned per individual appear to be growing as students are acquiring the latest and greatest internet enabled devices connecting to NMSU's wireless network.

It is estimated, on average, the number of devices per student has grown from three devices in FY 2012 to four devices in FY 2013. The resulting increase in usage has caused ICT to react by continuing to focus on expanding and improving wireless signal in existing high student usage areas such as lobbies, classrooms, outdoor areas, and many open spaces which include the Preciado Park and parking lots. Each year wireless is extended into new areas where AggieAir (NMSU wireless network) did not exist or areas where wireless signal (AggieAir) does not reach. ICT is concurrently maintaining existing areas services as well as updating outdated wireless access point (AP) technology. Wireless demand continues to outpace the yearly improvements.

Student usage trends continue to exceed expectations and are expected to continue to do so as students adopt the newest wireless technologies. In order for NMSU to accommodate these changes, ICT must modify and expand its network offerings. In FY 2013, on average over 7,000 unique users were connected to the wireless network each day. In an effort to keep up with the multitude of devices accessing AggieAir, wireless access points were continuously being added to high usage areas on campus. See "Figure 3: NMSU Access Point Technology Upgrade History with Cisco" for a timeline on Cisco's wireless technology evolution. In order to meet the demand for increased bandwidth, NMSU must continually upgrade its wireless network with the newest wireless technology. This technology, which is based on new standards, often is not compatible with current network equipment, such as the access points that are scattered throughout NMSU; the implementation of new technology requires the continual replacement of existing network equipment.

Figure 3: NMSU Access Point Technology Upgrade History with Cisco
The current goal to replace older access points, which meet the 802.11n standard, with new access points to meet the 802.11n standard and begin the move to the newly introduced 802.11ac standard when it has been accepted by industry.

In FY 2013, as wireless usage continued to increase in known high usage areas, so did the number of newly added wireless locations. See “Table 1: Wireless Locations Improved FY 2013” for those areas where wireless connectivity and speed was amplified or newly installed. A total of 926 APs exist across NMSU campus, providing indoor and outdoor wireless.

Table 1: Wireless Locations Improved FY 2013

<table>
<thead>
<tr>
<th>Area</th>
<th>Proposed By**</th>
<th>Work Type</th>
<th>Status*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astronomy Building</td>
<td>ICT &amp; Other</td>
<td>New Install</td>
<td>Complete</td>
</tr>
<tr>
<td>Breland 3rd Floor</td>
<td>ASNMSU Senate</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Business Complex</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Chemistry Complex</td>
<td>ICT &amp; Other</td>
<td>New Install</td>
<td>Complete</td>
</tr>
<tr>
<td>Corbett Center</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Foster Hall</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Frenger Mall Food Court</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Garcia Hall Rooms</td>
<td>ASNMSU Senate</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Gerald Thomas Hall Lecture Room</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Greek Housing Rooms (Pi Phi)</td>
<td>ASNMSU Senate</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Guthrie Annex Lecture Rooms</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Health and Social Services</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Housing South of Campus</td>
<td>ASNMSU Senate</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Monogale Hall</td>
<td>ASNMSU Senate</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>O’Donnell Hall</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Piñon Hall Rooms</td>
<td>ASNMSU Senate</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Science Hall Lecture Rooms</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Thomas and Brown</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Williams Hall</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Preciado Park</td>
<td>STAC</td>
<td>New Install</td>
<td>Not started</td>
</tr>
<tr>
<td>Garcia Hall Rooms</td>
<td>STAC</td>
<td>New Install</td>
<td>Not started</td>
</tr>
<tr>
<td>Piñon Hall Rooms</td>
<td>STAC</td>
<td>New Install</td>
<td>Not started</td>
</tr>
<tr>
<td>Piñon Hall (outdoor patio)</td>
<td>STAC</td>
<td>New Install</td>
<td>Not started</td>
</tr>
<tr>
<td>English Building</td>
<td>ICT &amp; Other</td>
<td>New Install</td>
<td>Not started</td>
</tr>
<tr>
<td>Animal Care Facilities</td>
<td>ASNMSU Senate</td>
<td>New Install</td>
<td>Not started</td>
</tr>
<tr>
<td>ASNMSU VP Office</td>
<td>ICT &amp; Other</td>
<td>Augment DSL</td>
<td>Complete</td>
</tr>
<tr>
<td>Jett Hall</td>
<td>ICT &amp; Other</td>
<td>Reported Issue</td>
<td>Complete</td>
</tr>
<tr>
<td>Chamisa Village (January)</td>
<td>STAC</td>
<td>New Install</td>
<td>Not started</td>
</tr>
<tr>
<td>Business Complex</td>
<td>ICT &amp; Other</td>
<td>Reported Issue</td>
<td>Complete</td>
</tr>
<tr>
<td>ROTC building</td>
<td>ICT &amp; Other</td>
<td>New Install</td>
<td>WIP</td>
</tr>
</tbody>
</table>

*WIP – Work In Progress  
**ICT & Other – Suggested locations offered by ICT or other colleges and departments. ICT will recommend locations based on the usage results provided by the Cisco monitoring system.

The prioritized budget for wireless projects, as seen in “Table 1: Wireless Location Improved FY 2013,” was $214,124.67 from STF funds. The STF funds allocated each year contribute to approximately 33% of the total cost of expanding the wireless network on campus and 11% of STF funds available each year. Maintenance for existing access points accounts for approximately 10% of the total cost of the wireless network.
Each year, the primary concern raised by students and STAC is the lack of wireless access in the student housing dorm rooms. Wireless is currently prevalent in dorm lobbies and many outdoor areas of student housing. The only reliable internet access in dorm rooms is available by wired connections (Ethernet and DSL). Currently, there are no long-term plans to resolve the issue of wireless accessibility in dorm rooms or a prioritization set by NMSU, due to availability of funds. Meanwhile, limited STF funds are matched with other central IT funds to significantly advance wireless accessibility throughout the rest of the campus.

To see a complete list of the wireless locations available, visit:
http://ict.nmsu.edu/wireless/

Modem Pool
No cost dial-up access to the NMSU network and internet has been a service funded by STF and is available to any student, staff, or faculty person with a modem. Over the years, modem pool costs have steadily dropped due to a declining number of dial-up users. Funds allocated to continue the modem pool service amounted to a fixed rate of $50,040; a steady decrease compared to FY 2012. On average there are approximately 250 student users who are still accessing the free dial-up internet service. ICT has continued to provide dial-up services, although the usage trend has been declining since AggieAir has been made available across campus. Usage of the modem pool has remained stagnant over the last few years, in comparison to overall users of the rest of NMSU network, which averages over 7,000 unique users daily. Consequently, the costs associated with providing this service to a small number of users does not justify the resources required for maintaining the service. For FY 2014, dial-up service is scheduled to be discontinued.

For information on connecting to the NMSU dial-up service, refer to “Internet and Network Connections” at the Help Desk site: http://ict.nmsu.edu/csc/TechDocs.html.

Student Network Connectivity
At the end of FY 2013, there were more than 155,923 devices connected to the Las Cruces campus network (wired and wireless). Connected devices ranged from lab computers, phones, gaming consoles, coke machines, and any other internet-enabled devices used on campus. Included in the connected devices were 371 public-student lab computers. The amount of STF funding allocated to network connectivity totaled $87,001 to support connected computers in the public-student labs (ICT general labs) for FY 2013. The allocated funding remained consistent with funding allocated from the year before (FY 2012). The allocation is based on a $13.49 per month connectivity service rate, which is charged to college and department labs that are under contract and receive support from ICT.

For general ICT computer lab information and a campus map, visit the Student Technology site: http://studenttech.nmsu.edu/computer-labs/
V. Physical Infrastructure

Student Lab Improvements

Student Lab Improvements are ongoing operational costs of the ICT Computer Labs, which is solely funded by STF. These activities consist of computer equipment repairs and replacements for lab and rental use, software updates on lab computers, lab student staff support, marketing efforts, and security. Each year funds are set aside for further improvements to existing labs and services. This year new projects and much needed technology upgrades were completed in the Pete's Place Computer Lab & Lounge in Corbett Center, Jacob's Hall Computer Lab in room 204, the Wireless Lounge in Jacob's Hall room 128, and the Computer Equipment Rental Program.

The ICT Computer Labs and the Computer Equipment Rental Program continues to be primarily supported by the STF funds within the Student Lab Improvements projects. The total STF funding allocation for these projects for FY 2013 totaled $385,343.

To see a list of all the available computer labs visit, http://studenttech.nmsu.edu/computer-labs.html.

Computer Lab Operations

Pete's Place Computer Lab & Lounge in Corbett Center, once known as the 24X7 lab has now become a 20X7computing area in FY 2013. Adjusting the operational hours from 24 hours a day, seven days a week to 20 hours a day, seven days a week was based on data collected on the number of students accessing this space. Lab usage data obtained over a course of two years showed Pete's Place had the lowest student traffic between the hours of 2:00 am - 6:00 am.

Pete's Place is located on the third floor of Corbett Center Student Union and is still known to be a convenient and well known study area accessible at most times of the day during the semester. Due to increasing student use of this lab and since the renovations that took place in the previous fiscal years, eight new moveable task chairs and one large white board were added to the lounge space. When not in use, the chairs are easily stackable for quick storage and the whiteboard is moveable with an attached storage cabinet, making it functional as a multi-use space.

Another operational change that occurred during the fiscal year was in the position titles of the Lab Monitor and Assistant. These student lab staff titles where changed to one title, now known as Lab Associate. The single title change, which combines two positions into one, made it possible to more easily find shift coverage as well as cross train students in lab-specific operational procedures. All lab student staff (Lab Associates) have the same job functions and responsibilities with regard to upkeep and monitoring of the ICT computer labs. As a result, extra shifts are now no longer needed to take care of the day-to-day tasks of the labs. The Lab Associates also receive monthly training on customer service practices, security procedures, and software enhancements.

Another improvement and focus for FY 2013 in the computer labs was to incorporate more conscious sustainable habits. ICT has started purchasing green cleaning products, recycled paper, and made-use of recycle bins for plastics and paper waste, which are now used for cleaning the labs each day. Shutting down computers at closing time instead of leaving them running overnight is another practice put in place to save energy and associated costs.
**Vista del Monte (VDM) Aggie Convenience Store Computer Lab**

Vista del Monte was another lab modified to accommodate space for an area for students to work on their own personal devices (laptops/tablets). Tables and chairs were placed next to power poles in the center of the room so students could spread out and complete their homework projects on open tables. These changes did not affect the kid's corner with tables, chairs, coloring books, and crayons for the children of the students' working in this lab.

**Wireless Lounge, Jacob’s Hall Room 128 Revamp**

In the Wireless Lounge, in Jacob's Hall room 128, three computer workstations and a printing station were added along with a refresh of new furniture that replaced the older couches and tables. The space was updated with new couches, chairs, tables, lamps, and a new whiteboard table for group work. All of these items are movable to allow students the flexibility to organize the space to accommodate their individual or group needs. The computers in this lab were updated to meet the performance requirements of newly added software releases. Since the conversion of this computer lab space to a Wireless Lounge, this space has become increasingly popular among students. It has become another multi-purpose area on campus to study or meet with groups. This area is equipped with the technology needed for group meetings, studying between classes, individual study time, or printing.

To see a list of all the available computer labs and for more information, visit: [http://ict.nmsu.edu/scs/labs/labs.html](http://ict.nmsu.edu/scs/labs/labs.html)

**ICT Computer Equipment Rental Program**

The Computer Equipment Rental Program was created to provide a low cost alternative to owning a personal computer. Equipment rentals may be checked out for short term or long term use. Short term rentals range from one day to one month and long term rentals last one semester.

The types of equipment available for short term and long term rentals include: desktop personal computer, laptop personal computers, digital projectors, digital camera, and digital camcorder. In fiscal year 2013, 10 laptops were added to the main equipment rental program located in Jacob's Hall and a total of 10 laptops were purchased for the Zuhl Library and Branson Library check-out program. Additionally 10 iPads were purchased. Later in the year, a mobile management software program known as Airwatch was purchased to pilot with the new iPads. This software was intended to help manage the iPad apps installed on the rental iPads and track iPad usage.

Most equipment can be rented for one day free of charge to students. For extended periods of time, rental charges range from $10 a week to $100 a semester. This program was started as a result of the implementation of the Student Technology Fee, which funds this program. The rental program has also been made available to NMSU staff and faculty at a nominal charge. The funds allocated to continue the rental program each year help with equipment replacement costs and other operational expenses related to equipment maintenance.

Over time the number of times equipment is rented from the ICT Computer Equipment Rental Program is tracked and helps determine equipment needs each year. In “Figure 4: Short Term Equipment Rental Program Summer 2010 – Spring 2013,” the trends in number of times each equipment type is rented remains mostly consistent. The most change occurs in the recent semesters where laptops are becoming a more popular checkout. Summer rental numbers drop significantly with fewer students renting from the program.
In "Figure 5: Long Term Equipment Rental Program for Summer 2011 – Spring 2013," laptop rentals continued to exceed desktop rentals over the semesters and the gap between the two types of computers is growing, evidently mobility is becoming increasingly important to students.

An extension of the ICT Computer Equipment Rental Program is the Library Laptop Checkout Program. This short-term equipment checkout program began as a pilot in fiscal year 2011. Due to the increased number of checkouts, the program has grown from five laptops in the initial pilot to 10 laptops and now has expanded into the Branson Library. In fiscal year 2013, five iPads were added to the pool of equipment in Zuhl Library. Refer to “Figure 6: Number of Laptop Checkouts Spring 2011, 2012 & 2013” for a snapshot of the upward trend of number of times laptops are checked out each month. The ICT Computer Equipment Rental Program and the Library Equipment Checkout Program have proven to be a mainstay service of the Student Technology Fee projects.
Aggie Print

In Spring 2007, NMSU implemented a print management program, now known as Aggie Print, which was started as part of the University's sustainability projects. The new printing management system made it possible to create accounts with free printing. These accounts are recharged with the start of every semester.

The allotment amounts for full-time students start at $20 and $10 for part-time students. Students with NMSU Student ID cards, also known as Aggie IDs, may use allotted funds for printing at any of the Pharos printing stations or the newly introduced WEPA (Wireless Everywhere Print Everywhere) print kiosks.

WEPA print stations were installed in high traffic computing areas to provide addition printing features and flexibility, not provided by Pharos. As result of the overall print system, students have shown to be more conscientious of their printing habits and have increased their use of the printing system by an estimated 75%. More students are starting to add more money for printing on their Aggie IDs, which is additional funds going back into the overall Aggie Print program. This past Spring (2013) semester students printed 318,603 pages, an increase from Fall 2012 of 241,852 pages. By using the print stations, students save money on printing and NMSU saves on paper, toner, and maintenance costs.

ICT currently has 23 different print stations across campus. The most popular printing stations are in Pete's Place, Zuhl Library, and Jacobs Hall. It is expected that more print stations will be added in the future. The initial cost for Aggie Print Pharos and WEPA printing was $21,209.59. Later in the fiscal year additional funds were approved by STAC for the full implementation of WEPA. The dedicated funding for the year to Aggie Print totaled $118,210.

For a list of Aggie Print stations visit, http://studenttech.nmsu.edu/aggie-print.html
Classroom Technology Improvement

Classroom Technology plays a vital role in the overall quality of the academic experience for students on campus. With support from the Student Technology Fee funds and matching college/department funds, 35 classrooms were built and upgraded with computing and other technology. In FY 2013 a total of 292 technology classrooms with technology built in on NMSU’s main campus. The Student Technology Fee each year continues to fund approximately 75% of the total costs for Classroom Technology projects for the University in FY 2013.

Matching funds for technology enhanced classrooms, referred to as "standard classrooms,” helped fund for each classroom a teacher station, laptop connection, document camera, wired and wireless network connections, DVD/VCR combo, and desktop computer. Beginning late FY 2012, classrooms requiring maintenance had new control panels and more energy efficient Casio LED projectors installed. With the equipment upgrades, maintenance frequency will be reduced for classrooms and will be reflected in lower maintenance cost per classroom. In the few rooms upgraded toward the end of the year, cameras with a microphone were added as part of the standard build for these classrooms. This year 22 classrooms were upgraded with equipment (recording camera and microphone) that will be used with the new video lecture capture known as Panapto. Panapto is a software based solution that is lower cost solution compared to Mediasite, which was the previous video capture system in place. Minimal equipment is required for video capture and streaming, which can take place anywhere with little to no setup. Panopto can be accessed in classrooms in Hardman Hall, Science Hall, and Jacob’s Hall Computer Lab classroom 204.

In “Figure 7: Increase in Standard Classrooms” shows the growth in the number of standard technology equipped classrooms built from the time Student Technology Fee was adopted to present day (FY 2004-2012). Starting in fiscal year 2013, any new classrooms with the standard build will be equipped with cameras, microphones, green projectors, and upgraded control panels.

Figure 7: Increase in Standard Classrooms

“Figure 8: Standard Classrooms by College” shows the breakdown of technology enhanced classrooms by college. The College of Arts & Sciences remains to be the most active in enhancing classrooms, which may be the result of many degree program options available in the college. The category “Other” in the graph includes smaller rooms and conference rooms which are not funded by STF funds, but may be used as teaching spaces.
Classrooms benefiting from the STF Classroom Technology funds each year are those classrooms where the department/college or any other University funds are matched in order to address the computer technology needs of a classroom. Those classrooms classified under the “General” category are defined classrooms located in buildings where general courses are conducted, such as: Hardman Hall, Monogale Hall, and Garcia Hall and are associated with a department other than the colleges shown on the graph below. These classrooms are used by multiple colleges and departments and may be scheduled by the Registrar’s Office or by a college/department.

**Figure 8: Standard Classrooms by College**

For more information on Classroom Technology, contact ICT Classroom Technology at: 646-2360.

### VI. Virtual Infrastructure

**myNMSU Student Portal Services**

The myNMSU portal allows students, faculty, and staff to access their respective student and employee information online. It is also the central location for students to access class registration, email, and personal NMSU student information. Yearly promotional activities occur to inform students of the services and features of myNMSU that will be beneficial for their college experience at NMSU. Efforts to communicate these services include: weekly information tables, special group and department presentations, disbursement of flyers and other marketing materials, and news releases.

In March 2013, the myNMSU portal (Campus EAI) was upgraded. The homepage was updated with a fresher look while keeping all the same functionality. Later in the year, a plan was developed to upgrade the email system and the online Microsoft products (calendar, contacts, Skydrive). This second part of the myNMSU upgrades are expected to take place in FY 2014.

With all of the changes planned to myNMSU, a plan to develop an NMSU mobile application that would encompass many of the same functionality within myNMSU online was also created. Campus EAI, the provider
of the myNMSU portal, was contracted to develop the first official NMSU campus mobile app. The app would enable students to access mobile friendly NMSU sites and student account information. App development and support were contracted in FY 2013. An allocation for myNMSU portal services for FY 2013 amounted to $131,895 for these projects.

Learn more about myNMSU, visit: http://studenttech.nmsu.edu/mynmsu-office-365/ or http://my.nmsu.edu

**Learning Management System Support**

ICT, in collaboration with the, Learning Management System (LMS) Team, and the Instructional Innovation and Quality (IIQ) department, which provides technology support for faculty, implemented a course evaluation solution. The solution was integrated directly into NMSU's learning management system known as Canvas. The new LMS went into full scale production starting Fall 2012.

During the FY 2013, the primary activities supported by the STF funds included: training for administrators, added application features such as SoftChalk, a course evaluation tool kit, open labs for help in Canvas, and other help sessions conducted by the ICT Technology Advisor to provide one-on-one help for students. During FY 2013, 10 open labs (help sessions) were conducted and prize drawings for students who participated in help sessions were held. Through ICT assisted open lab sessions, 165 students with learn.nmsu.edu. The Technology Advisor worked with the University 150 courses to provide information about the new features in Canvas, the basic navigation, and where to go for help. There were 75 students who attended lab sessions and 147 students who participated in the presentations by the Technology Advisor. The Technology Advisor also had other opportunities to meet with students during other NMSU events, such as the Check-in Check-up event, Popcorn Day, Snow Cone day, and scheduled information tables at Corbett Center.

Outreach by the Technology Advisor extended to the Community College technology support groups. Packages of marketing materials were sent to each site, faculty and student tip sheets and other documentation were printed, and links to videos and online documentation were created by the Technology Advisor. In this fiscal year, $82,000 was allocated to these activities that relate to promoting, technically supporting, and maintaining the learning management system Canvas. Remaining funds were reallocated to wireless projects.

For more information on NMSU’s learning management system, visit: http://learn.nmsu.edu or http://studenttech.nmsu.edu/learnnmsuedu.html

**Student Lab Software**

Each year, software in the computer labs is evaluated by reviewing requests and recommendations from various departments and resources. In fiscal year 2013, STF Fee funds were allocated to pay for specific software licenses for the ICT Computer Labs. These funds helped with maintenance of the computer lab software. This included maintenance for Adobe Photoshop, SAS, SPSS, Keyserver, Labstats, and Mountain Lion.

Student Technology Fee funds allocated to new and ongoing costs for software licenses and applications totaled $48,000 for FY 2013. Funds allocated to software were increased to help with renewal costs and upgrades for software currently available in the computer labs.

For a complete list of software and lab locations, visit: http://studenttech.nmsu.edu/lab-software/
VII. Support Services

ASNMSU Elections
The Associated Students of New Mexico State University (ASNMSU) is a student organization recognized by the University. All students on the Las Cruces campus who have paid an activity fee are represented by this student governing body. For this reason, ASNMSU leadership is represented on STAC and is involved in decision making for STF funded projects approved through the committee. In support of these student activities, ICT provides elections support services for the online electronic elections form and the equipment for the laptop polling stations on campus. Each year $2,500 is dedicated to the three election events that occur throughout the year. The ASNMSU Elections Office also is permitted to advertise the event with flyers in the computer labs. The ICT Computer Labs are referenced in the ASNMSU Law Book as official polling stations for ASNMSU Elections.

To learn more about ASNMSU and any elections coming up, visit http://asnmsu.nmsu.edu/

Help Desk Hours
The ICT Help Desk, located in room 141 of the Computer Center, provides technology assistance to students, including computer problem diagnosis, anti-virus installation, password resets, and issues with accessing online services, such as: myNMSU, learn.nmsu.edu (Canvas), and AggieAir. Although the Help Desk Services was opened to assist students from the Las Cruces campus, it is also known as the touch point for faculty, staff, and students from other campuses and other NMSU departments.

The commonly reported issues the Help Desk encounters are myNMSU username and password resets, software and desktop computer issues, and problems with network connections. This year, the ICT Help Desk recorded 7,085 trouble ticket reports, approximately 52% fewer issues reported as compared to FY 2012. Each year the number of trouble tickets logged continues to decline. For a complete list of the commonly reported issues, see “Appendix A. Help Desk Troubleshooting Tickets.”

The ICT Help Desk employ's eight students and three staff members who provide assistance on computer technology issues students are experiencing. STF partially funds the three student employee positions, in which two student employees are dedicated to providing technical help assistance. The other student is dedicated to designing advertisements and providing technical assistance for the digital signage screens across campus. The funds are also used to support the extended Help Desk hours at the beginning of the academic semesters.

During the start of each semester (Fall and Spring) the Help Desk will station mobile locations at the Educational Services building and in the student housing area in Garcia Hall. Since there is increased activity on campus during these times with new student orientations and special sessions for new students, the Help Desk is invited to participate in these activities. Extended hours for the ICT Help Desk include operating hours beyond the 8:00 am – 5:00 pm business week; the hours consist of Monday thru Friday, 8:00 am-8:00 pm and Saturday, 10:00 am-3:00 pm.

The total funding allocated to helping students through the ICT Help Desk for the 2013 fiscal year amounted to $58,690. For ICT Help Desk services and helpful guides, visit: http://help.nmsu.edu.
Student Government Computing Support
Throughout the year, ICT works with NMSU Associated Students of NMSU in a continuing effort to reach out to students and inform them of the benefits they receive from their investment in Student Technology Services. Student Technology Fee funds assigned to these projects known as Student Government Computing Support totaled $2,000 for fiscal year 2013. These funds were applied toward trouble tickets charges for office computer equipment and maintenance in the ASNMSU offices.

Student Technology Communication
Student Technology Fee funds are allocated to promotional activities and communications projects for existing and new services. These projects are referred to as Student Technology Communications. In FY 2013, $10,000 was reserved for print and online advertising, marketing materials, and other promotional activities to disseminate support and technology related information for students of NMSU Las Cruces.

One ongoing form of communication developed through this project, which has gained recognition from university departments, is the Student Technology Guide and Technology Day event. The guide is revised and printed several times throughout the year and requested by departments who assist and help students on a regular basis -- from the Libraries, college advising centers, to the community college departments. Included in the guide are helpful technology resources for students, faculty, and staff.

Other marketing materials and activities include weekly advertisements in the Roundup student news, KRUX radio announcements, give-a-ways, and other technology incentives, such as, hand-outs through the information tables held year round. The ICT student representative who attends these events provides information to students and assists with answering questions.

Emerging Technology Support
Emerging Technology Support funds are the most flexible of the Student Technology budget. These funds are used for adopting new and upcoming technologies that students, through STAC, would like to see introduced to NMSU. In fiscal year 2013, STAC approved a total of $62,709 of emerging technology funds to be allocated to help existing projects and pilot new technology services across campus. Every year proposals are submitted by department and college driven initiatives and presented the Student Technology Advisory Committee (STAC) for review and approval. These funds may be reallocated to other growing projects such as, wireless projects, labs and computing improvements, classroom technology, Aggie Print, and software licenses in student labs.

The primary emerging technology projects that received funding in fiscal year 2013 included: digital signage, Wordpress (Website Management System), and the Milton Hall Multi-Media Center and Video Equipment Checkout.
Digital Signage
Digital signage (TV screens located in common areas) across campus run the channel known as "The Feed" are part of an agreement between ICT and ASNMSU. This agreement was established to unify digital signage software and equipment standards campus-wide. Since the start of this partnership in 2008, digital signage has grown each year and has reached 47 screens across campus. Screens dedicated to The Feed and managed by the ASNMSU Public Relation Director total 36 screens.

These screens are located in various lobbies and student populated areas, such as near advising centers, food courts, and in buildings where scheduled classes are hosted. In FY 2013, ICT began to explore newer systems through piloting software and hardware improvements because most players that distribute the digital signage feed had warranties that had expired and were becoming more costly to maintain. Software and equipment failures became more frequent over time, requiring a system wide change. A plan for a new digital signage solution began underway and by the end of FY 2013, a new service had been selected for upgrading the existing locations. TV screens and computer content players were purchased for upgrading the current system in place. The upgrade was scheduled for the Summer and Fall time frame. Full implementation is scheduled to occur over FY 2014.

For more information on the digital signage partnership between ASNMSU and ICT, "The Feed," visit: http://digitalsignage.nmsu.edu

Milton Hall Multi-Media Center and Video Equipment Checkout
In 2012, the Department of Journalism and Communications approached the Student Technology Advisory Committee (STAC) with a request for Student Technology Fee funds for an emerging technology project they were naming the first Multi-Media Center for NMSU, provided by the Department of Journalism & Mas Communications. This lab was being designed to house students working with high-end video recording and editing equipment, photography, for creating and distributing media through television, radio, newspaper magazine, internet, and digital media. Much of the funding for the construction and equipment came from the College of Arts & Sciences departmental funds. The requested from STAC was for funding of classroom sets of iMac computers, broadcasting video cameras and other video camera kits, printers, iPads, digital cameras, special software, and technology installation costs; all the technology needed for a complete multi-media center. After careful review, STAC approved funding for a classroom set of digital cameras to be used for an equipment checkout program for students needing special cameras to complete class projects. STAC also approved the purchase and installation of Final Cut Pro licenses and additional Adobe Creative Suite licenses for the computer lab stations in the multi-media lab. The installed software is part of the software available in all ICT General Computer Labs.

For more information about the Journalism & Mass Communications Multi-Media Center, visit: http://journalism.nmsu.edu/
NMSU Online Course Improvement Program (OCIP)

The NMSU Online Course Improvement Program (OCIP) continues into its fourth year in offering professional development for NMSU faculty. OCIP focuses on improving the quality of online teaching and learning, by providing workshops offered through The Teaching Academy, Distance Education Department, and the Instructional Innovation and Quality Departments.

An incentive program designed to train committed faculty to improve online teaching was developed. A select group off faculty participated in a year-long fellowship program. The program for FY 2013 was made up of 15 faculty members, each of whom submitted an online course to be evaluated by the "Quality Matters" rubrics. The faculty members committed to a number of training hours to help them redesign their online course in order to improve delivery for students. The faculty members who completed the program agreed to mentor their respective department’s and college's faculty. Additionally, they received a stipend of $1,000 at the end of the year.

Since the beginning of the program special training sessions have been developed and conducted by standout faculty and staff leaders who are improving the quality of teaching at NMSU. Each year, the staff and faculty that lead these programs provide a report to the Student Technology Advisory Committee (STAC) on their yearly activities. Along with the reports, a request for continued support is submitted to STAC. The STF funding provided to OCIP partially funds trainer positions, subscriptions to resources, and 12 faculty stipends.

In FY 2013 a total of 45 events were hosted by the program, which included webinar, hybrid, lab, and special speaker sessions. There 22 courses impacted by the one year fellowship that went under revision. The number of students enrolled in these course combined was 1,430. In the online courses, described as secondary impact are an estimated 2,600 students that were affected.

The overall incentive for investment in this startup program for STAC was to promote improved online learning and the use of online learning resources such as e-textbooks, reduce educational costs for student and improve the overall the quality of learning. The Student Technology Fee funds allocated to this program amounted to $89,250. Other funding for this program was approved during FY 2013 and applied through the Course Delivery Fee, to students enrolled in courses identified as online courses. Although the OCIP program is minimally funded by Student Technology funds, the program would not exist without STF support.

For more information on professional development for faculty, visit: http://ocip.nmsu.edu
Student Services Support

Student Services Support was created to fund staff positions that support student technology fee funded projects. It further provides employment opportunities for students where they can gain experience working in an academic technology related field. Funding the Student Services Support positions totaled $326,764 for FY 2013. The job duties for these positions are described below.

**Student Help Desk Support Coordinator**

The Student Help Desk Support Coordinator position was created to oversee all aspects of the ICT Help Desk functions, which include: troubleshoot computer related and networking issues, connect devices to NMSU’s AggieAir, assist with software installations, and serve as an interface for all technical related problems encountered by students, staff, and faculty for NMSU. Professional job related duties for the Student Help Desk Support Coordinator also include the following:

- Ensures a quality experience for the NMSU community who has IT related problems.
- Manages and hires new ICT Help Desk student employees (ICT Help Desk Technicians).
- Manages electronic mailing lists.
- Administers the special project known as digital signage, which entails motion graphic designing, networking, and maintenance.
- Trains other departmental staff on addressing frequently reported Help Desk issues.
- Performs administrative and general user account maintenance and creation (Banner unlocks, myNMSU password resets).
- Manages the NMSU domain known as ACN. Related duties include: managing purchases, and transference of URLs for various University departments.
- Develops site designs and layouts for monitoring system (noc.nmsu.edu) as well as the branding of other web applications used by NOC. These include domain.nmsu.edu and previous versions of video.nmsu.edu.

**Student Customer Service Assistant (Technology Advisor)**

The Student Customer Service Assistance, better known as the Technology Advisory, serves as a point of contact for students who need special assistance with using technology services and is a liaison between the students and other Information Technology technicians, administrators, and the faculty support groups on technology. The types of services offered by this position include:

- Provides customer assistance to students who are seeking one-on-one help with myNMSU, learn.nmsu.edu, and is a resource for students struggling with other NMSU technologies.
- Creates documentation and helpful videos for commonly used services for students.
- Administers the Computer Equipment Rental Program.
- Manages the inventory, maintenance, and contracts of the equipment for the Computer Equipment Rental Program and computer equipment in the ICT Computer Labs.
- Schedules five computer lab training rooms for general use.
Lab Coordinator
The Lab Coordinator oversees the operation of the ICT Computer Labs and the student employees referred to as Lab Associates. The functions overseen by this position include: maintaining supplies in stock for computer lab, cleaning, submitting work orders for printing and compute maintenance, help for students in the labs, and computer lab assistance for contracted labs managed by other NMSU departments. The Computer Lab Coordinator offers the following professional services as part of being responsible for the operations of the in the ICT computer labs:

- Coordinates with the Technology Support department for year round technical assistance and maintenance of the equipment in the computer labs.
- Supervises the Lab Associates who work in the ICT computer labs, contracted labs (departmental labs), and ICT computer training rooms.
- Acts as the Building Monitor for Jacob’s Hall computer labs.
- Performs student employee performance evaluations and provides feedback to improve the lab setting for students and services.

Student Computing Support Technician
The Student Computing Support Technician works within the ICT Technology Support Department and was added to the technical staff support to address computer lab specific issues, in addition, assists with work orders for other departmental computers. This position ensures software and updates are packaged and ready to be built onto computer lab machines on the ACN domain. This technician provides other professional assistance for Student Technology services:

- Installs, configures, and maintains network hardware and software.
- Directs, evaluates, trains, and supervises the work of assigned student technicians.
- Assists in recommendations and purchases of new personal computers, printers, and other computer equipment.

Project Coordinator for Student Technology
The primary role of the Project Coordinator for Student Technology is to facilitate the budgeted activities from the Student Technology Fee funds and to coordinate the implementation of projects from students, STAC, and ICT. This position is the primary contact for the Student Technology projects and handles the initial stages of project management and money allocation among the priorities set by NMSU student representatives through STAC. This position also handles other documentation and promotions of student technology services to prospective and current students of NMSU. This position provides professional support for students and creates connections between students who need help with IT (information technologies) and service providers.
**Student Technology Coordinator**
The Student Technology Coordinator cooperative position was updated from the Student Liaison cooperative position to better represent the duties and activities assigned to this student position. The Student Technology Coordinator facilitates communication between students and IT (information technology). This position is the ICT interface for students and student organizations and coordinates monthly information tables to inform students of services and availability of resources on campus. This position also creates presentations focused on informing NMSU student groups and organizations about services and resources on campus.

Through this position, ICT participates in other NMSU events to include New Student Orientation, Check-in and Check-up Week during mid-terms week, and other student targeted events. Participation in events to connect students with technology resources are coordinated by the Student Technology Coordinator. This position is responsible for all marketing efforts and maintains a student technology website, Facebook, and Twitter page.

**Marketing Communications Writer**
The Marketing Communications Writer position was changed from the once Project Aid position. The Marketing Communications Writer works closely with the Project Coordinator on researching new and upcoming technologies by students. This position assists with editing proposals and research documents as well as drafts short reports for the Student Technology and other ICT. This student works in collaboration with the Student Technology Coordinator on preparing promotional items, flyers, website content, and provides additional assistance at events providing information about Student Technology Services.
ICT Leadership Team

Dr. Norma Grijalva  
Interim Chief Information Officer & Associate Vice President  
ICT Computer Center

Shawna Arroyo  
Student Relations & Planning Manager  
Jacob’s Hall

Randey Bamford  
Planning Officer  
ICT Computer Center

Celeste Bernal  
Business Affairs Officer  
ICT Computer Center

Pam Jeffries  
Enterprise Application Services Director  
ICT Computer Center

Carlos Lobato  
IT Compliance Officer  
ICT Computer Center

Piyasat Nilkaew  
Telecommunications & Networking Services Interim Director  
ICT Computer Center

John Roberts  
Chief Information Security Officer & IT Enterprise Director  
ICT Computer Center
Appendix A. Help Desk Troubleshooting Tickets

The ICT Help Desk tracks the most common issues reported through their homegrown trouble ticketing system. Every year the most commonly reported issues are related to myNMSU password resets. Efforts are made every year through various student attended venues to promote setting up the secret questions in myNMSU and educate students on how this feature is useful for self-help in retrieving their username and password. A self-help approach is promoted for faster response time in password resets and is helpful in minimizing the number of calls to the Help Desk. The myNMSU username/password is used to access many internal systems for NMSU since the adoption of single sign-on function. The table, “Help Desk Issues Reported FY 2013” is organized by the trouble tickets recorded by the Help Desk through the duration of FY 2013. Total number of issues reported for the year was 7,085.

Help Desk Issues Reported FY 2013

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<th>Type</th>
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<th>Type</th>
<th>Ticket Count</th>
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