



Information Technology

Information Technology Department

1. Cerro Coso Community College
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3. 12/5/2016



Information Technology

Executive Summary

The Information Technology (IT) Department provides computer hardware, software, phones, and technical support to the staff, faculty, and students at Cerro Coso. The department also assists with research and best practice recommendations to policy and procedures for the use of technology and makes recommendations to the college on the use and implementation of future technologies. The IT department works closely with our sister colleges, Bakersfield and Porterville, along with the district office IT staff to set standards and purchase and implement common technologies.

The IT staff at Cerro Coso is a highly trained and motivated group that works well together and shares a common goal of student success. It is important that we keep the staff trained and ahead of the technological curve in order to continue to provide the college and stakeholders with the high level of value-added services that they have come to expect.

For the IT department to continue to grow and maintain our high standards of service we must have effective two-way communications. In order to provide core services both in and out of the classrooms, IT must communicate with all campus committees and stakeholders. These communications must be two-way: IT needs to keep the college community informed of changes that will impact our current environment and the college must keep IT informed of changes that will affect our future environment.

The Cerro Coso Community College Information Technology department envisions a learning environment rich with innovative, value-added, reliable standardized systems and trained, efficient, and reliable support staff. The greatest strengths of the IT department are: customer service, flexibility, and collaboration. The department's number one goal is to provide the best level of service to the college community that we can. In addition to customer service the department takes pride in providing technologies that are reliable and current, and that provide value to the college's mission and goals.

The department is always looking for ways to improve in both in the type of technologies that are provided, and the type of services. One area that needs improvement is audio visual support. The department needs expertise in the areas of live streaming and audio equipment configuration. Ideally the department would like to hire a staff member with these skills; however, for now the department is going to look for training for the current staff.

Technology is continually changing, and the IT department must adapt to these changes to ensure our students, staff and faculty have the tools needed to be successful. The department has identified an action plan in the program review that allows to the department to be proactive instead of reactive. This plan includes keeping technology current with a 7-year hardware replacement plan, continued updating of the technology in the classrooms, and keeping IT staff trained and knowledgeable of technology that they support.



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Part 1 - Relevance

1. Department Mission

The department of Information Technology's (IT) mission is to provide a reliable technological environment that allows students, faculty, and staff to efficiently carry out the mission of the college. Our goal is to be a leader in customer service and establish systems, processes, and solutions based on best practices and industry standards. IT provides leadership for effective strategic and tactical planning in the use of technology at the college and facilitates the effective integration of technology throughout the college through planning, programming, training, and other support activities. Finally, it is the mission of IT to promote new uses of information technology through the support for exploratory and innovative applications.

2. Department History and Description

With the emergence of a robust online program, the need for better data, and the use of technology in the classrooms came the need for a fulltime IT Department at Cerro Coso. The IT Department started out with two staff members and a part-time faculty director and has grown to four staff members and a full-time director. The department supports 725 desktop and laptop computers, 54,000 user accounts, and 46 technology enhanced classrooms that are distributed across six sites.

The IT Department is a support and service department. The primary function of the department is to provide technology that supports the completion of the College mission and objectives efficiently. This is accomplished by providing support services including installation, configuration, repair, and replacement of existing technology, along with implementing emerging new technologies that improve student learning and outcomes.

The IT Department strives to provide the highest level of service and satisfaction to the college's students, faculty, staff, and administration in the following areas:

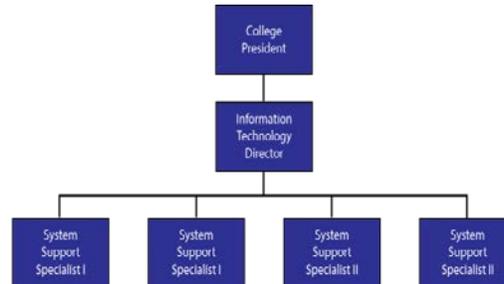
- Desktop and lab computing
- Phone service
- Printing
- Interactive TV / Video Conferencing
- Software support
- Intranet and internet connectivity
- Instructional Technology



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Part 2 – Appropriateness

1. Organizational Chart



2. Determination of Student or Service Recipient Needs

The staff and management of the Information Technology department strive to offer the highest level of customer service and technologies to best serve the students, staff, faculty, and administration. The measurement of the satisfaction and quality of these services and technologies uses AUOs, user satisfaction surveys, and feedback from the College Council’s Technology Resource Team. After review of the data, recommended improvements are incorporated into the department’s annual unit plan.

The department also wants to continue to explore innovative technology solutions that will keep the college current and relevant in the areas of instructional technology. The department would like to explore and offer a lecture capturing solution. This technology could be used to support students in both the on ground and online classes.

3. Department Function

The college Information Technology Department has a staff of four and a director. The staff provide support for both the students and the staff at Cerro Coso. The IT staff at the college provide the following services:

Desktop and Lab Computers

The IT department is responsible for the purchase and configuration of all campus computers. These computers include desktops and laptops for the staff and faculty, along with instructional computers for both the open and classroom labs. The IT department works with the District office and the other two colleges to set the standards for the hardware configuration.

The IT department is also charged with developing a hardware replacement plan that is effective in the areas of providing staff and students with updated computers and extending the life of the computers. This hardware replacement plan is vetted through TRT (Technology Resource Team) and presented to College Council. The current hardware replacement plan is in year five of a five-year plan. The department is looking to extend the cycle to a seven-year plan as part of the new hardware replacement plan in efforts to reduce the amount of resources we are spending on technology.



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Printing

All printing at the college is funded and supported by the college IT department. There are two separate systems for printing depending upon the users' role. All student printing is managed by a pay-per-print system, and staff printing is managed by a local print server.

Phone and Network Services

The college's phone and data network infrastructure and services are maintained and provided collaboratively by the college and district IT departments. These services include phones in the offices and classroom and end-point switches at all of the campus sites. The network for both phone and data also include the fiber between the buildings, the cat6 in the buildings, wi-fi access points, and the WAN network for connecting the sites together and to providing connection to the internet.

Over the last five years there have been some major accomplishments and improvements to the network and phone service area. These improvements include upgrading to the digital 395 fiber for our WAN, allowing us to move from a 20Mbps to a 100Mbps network with the potential to upgrade to 1Gbps as needed. We also upgraded the phone system from an analog PBX to a digital VOIP system that resides on the data network. This upgrade eliminated the need for a separate phone cabling infrastructure. Lastly, we upgraded the wi-fi network. We now use a managed wi-fi system that is transparent between buildings and sites. This upgrade also allowed us to provide wi-fi services to our community members at each site.

ITV/ Video Conferencing and Instructional Computing

Interactive Television (ITV) and Instructional Computing is a core service of the IT department. We provide the hardware and connectivity support for both the ITV classrooms and the administrative conference rooms. In the classrooms IT is responsible for the audio-visual equipment support.

IT has had two major projects in this area: ITV upgrades and upgrades to smart classrooms. ITV allows for two-way interactive delivery of both audio and visual along with content such as Power Point slides. The ITV system is used to offer classes between the sites and can consist of either between just two sites such as Bishop and Mammoth Lakes, or all the sites. Smart classrooms are classrooms that have technology that allows faculty to incorporate multimedia presentations in to their lectures. These smart classrooms consist of a podium, ceiling or wall mounted projector, sound system, document cameras and interactive panel for switching between the media sources.

The ITV upgrade project includes upgrading the codec and replacing the displays with larger ones. The codec is the core component of the ITV room, the appliance where all of the media sources are input to and then combined in to a single output stream. The old codecs are not supported by the vendor and needed to be replaced to ensure support of the equipment.

The smart classroom upgrade project has two goals: eliminate media carts and replace ceiling mounted projectors with interactive short-throw projectors. The new projectors have the ability for faculty to save their notes and annotations for reuse later. The projectors are user friendly in the fact the faculty is not looking into the light when addressing their class.



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The ITV upgrade project is at the halfway point. We have completed upgrades in two rooms at Bishop and Mammoth Lakes, and two at the Ridgecrest/IWV campus. The classroom upgrade project is in the initial stages. We have upgraded four rooms to short-throw projectors and have eliminated all but six media carts. The department plans to continue working on both projects as resources are available.

Software

Software for both instructional and staff computers is provided and maintained by the IT department. This software includes the desktop operating system, the office suit, Adobe Acrobat Pro, anti-virus software, and various department specialty software.

The biggest challenge in the software area is testing and deploying the OS upgrades. During this past five years, we have upgraded from Windows XP to Windows 7, and are now testing Windows 10 for deployment. In addition, we have gone from Office 2010 to Office 2016, and supporting those who are using Office 365.

4. Department Relationships and Impact

To be effective, service-providing departments like IT need to be good at communicating and collaborating. A continuing goal of the IT department is to improve communications. Communication to the college community about the status of IT services is imperative to both the staff and students at the college. Timely announcements and updates about IT services that are down are important to our users as these outages impact their ability to do their jobs or take classes. Collaboration is another area that is key to the success of the department. This is especially essential in the areas of student services, instructional services, and facilities. It is imperative that IT works closely with the above-mentioned area. Changes in these areas usually have an impact on IT and the services we provide.

One of the key communications that is sent out from the department are the notices about the scheduled downtime of key college and district office core services. The department sends these notices out prior to the upcoming academic year, along with monthly reminders, and the schedule is posted online. One of the greatest changes that affects the scheduled downtime is that we now provide access to Canvas during these outages.

5. Service Recipients

The college IT department serves the staff, administration, and students at all the college sites. The IT department handles all the computers, phones, printers, network, and software needs of the college constituents.

6. Usage and Satisfaction Data

In the spring of 2015, a student experience survey was conducted, and there were 524 responses to the survey. In that survey were two questions about the college IT services and how students felt about those services. **[doc.1]** The questions focused on the students' experience with the IT staff, and the availability and reliability of the equipment on campus. In the first question, the goal was to find out if students thought the IT staff were polite, helpful, accessible, and readily available to help in a prompt matter. The second question focused on the computers and internet services. We wanted to know if the



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students thought there were an adequate number of computers, were the computers reliable, and did the internet work as expected. In both questions, the student's responses exceeded our targets; therefore, we believe that students are satisfied with the level of support they are receiving, and our goal is to continue to meet this high level of satisfaction and quality of service.

The target for students being satisfied about the level of service they were receiving from IT staff was 95%. We asked the student four questions about their interactions with the IT staff. The first question was "Helpfulness of the IT Staff". 96.70% were satisfied with the helpfulness of the staff. The second question was "Politeness of the staff". 98.01% were satisfied with the politeness of the staff. The third question was "Access to assistance". 96.02% were satisfied with the access to the IT staff. The final question was "Timeliness of assistance". 95.61% were satisfied with the timeliness of the assistance by the staff. In all four questions, we exceeded the 95% target that we had set for the department and were very pleased with the results.

The target we set for student satisfaction with the reliability and availability of the computer equipment and access to the internet at the college was 90%. We asked the students three questions about their experience with the computers and internet services at the college. The first question was "Reliability of the equipment". 97.46% of the students were satisfied with the reliability of the college's computers. The second question was "Availability of the equipment". 98.47% were satisfied with the availability of the campus computers. The last question we asked was "Access to the internet". 96.93% were satisfied with the level of access to the internet. In all three questions, we exceeded the target set by the department and we are satisfied that students were happy with the computers and their access to the internet. The department will continue to work to improve these numbers and continue to provide a reliable and available technology to the students.

The department was very pleased with the results of the above-mentioned user satisfaction data; however, the department wanted data that was quantifiable that we were indeed providing timely services. For this we looked to the helpdesk ticketing system. The department set a goal that helpdesk tickets would be closed within 5 days. The department felt that most tickets would be closed sooner; however, the department also thought that 5 days would allow for tickets that required support from outside vendors and district office IT staff. In addition to using the helpdesk tickets as a measurement of level of service, the department uses the helpdesk tickets to monitor types of issues and frequency. For example, if there were an increase in the number of tickets from students on password resets, then the department would need to send out a reminder to students on how to reset their password without having to call the helpdesk. The department also uses the helpdesk tickets to monitor system issues such as banner. If there is one ticket on having trouble signing in to banner, the issue is probably related to the user; however, if there are multiple tickets then it is likely a system-wide issue and needs to be reported to the appropriate district IT team. In the past this process has been informal and mostly comprised of the director noticing patterns from the emails that the system generates. The plan is to formalize this process by running reports against the system to see what are the most frequent issues.



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7. Department Costs/Revenues

The college IT department is funded from general funds and varies each year depending upon the hardware replacement plan and the funding of instructional equipment at the state level. Components of the technology provided by the IT department are funded centrally by the district. These components include bandwidth, phones, Banner, campus Microsoft licenses and other core services. This model saves the local college budget hundreds of thousands of dollars per year. All local computer hardware such as printers and toner, desktops, laptops, and phones are provided to college departments by the IT department and are part of the IT budget. Other items that impact the IT budget include instructional classroom technology upgrades, ITV upgrades, and local campus network equipment upgrades. These have a life cycle and need to be replaced as they age and are no longer supported by the vendor. The IT budget also includes local campus software and equipment maintenance contracts. The average IT budget over the past 5 years has been \$225,000 not including labor.

The current salary and benefit costs for the IT department is \$523,562. This provides the college with the following positions: two System Support Specialist II positions, one for ESCC to provide support for the Bishop and Mammoth Lakes sites; two System Support Specialist I positions, one to provide support for the computer and classroom labs and all instructional computing, and one to provide support for staff and faculty at the Ridgecrest/IWV campus and one day a week at the Kern River Valley/Tehachapi sites; and one director who oversees the staff and provides direction and recommendations in the areas of technology to both the department and the college.

Part 3 – Currency

1. Staffing

The college IT department has five staff members:

- IT Director - Reports to the College President. Major duties include overall responsibility for the effective and efficient operation of information systems for the college and coordination of efforts with the Information Technology Directors and Managers across the Kern Community College District. The IT director oversees the day-to-day operations of the IT department including supervision of the IT staff and provides best practice recommendations to the college president and administrators.
- System Support Specialist II (2) - Under the direction of an assigned supervisor, perform a variety of technical duties to troubleshoot, repair, and optimize the college's information technology systems and applications. These systems include the data and voice networks, servers, workstations, printers, software and applications used by college employees and students; provide technical leadership for streamlining the support and delivery of technology services at the college; work collaboratively with district-wide IT resources in support of core standardized services such as networks, servers, voice, storage, power management, security and applications.



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- System Support Specialist I (2) - Under the direction of assigned supervisor, install and support desktops, laptops, application software, printers, computer labs, and related technology for faculty, staff, and administrators in person, via telephone or with the use of remote access tools. Assist with the support of the college's information technology systems and applications. These systems include the voice and data networks, servers, computers, printers, software, and applications used by college employees and students.

The current level of IT staff works well for the department's current size and duties and should continue to do so for the next five years, barring a change in direction by the college. The only shortfall in staffing needs is providing support for campus events, especially the ones that happen after hours and on weekends. This need has been identified in the department's annual unit plan for the past two years. The department feels that with the addition of a nineteen hour a week, nine-month employee that we could support the increasing need for audio visual support for campus events.

2. Professional Development

The need for professional development for the IT staff is ongoing and essential for the success of the department. As technology changes and with the emergence of new technology, IT staff must be the first to be trained and brought up to speed. This professional development is outside of the common professional development that is provided to the college staff, and in many cases the training that the department provides to the IT staff is training that the IT staff will deliver to the rest of the college staff.

The type of professional development that the IT staff receive is often very specific to a new software or hardware appliance that is being implemented. The need and type of training are determined at both the department level and collaboratively with district IT staff. The department is currently getting enough funding for professional development to keep the staff up to date.

3. Physical Resources

Three years ago, the IT department moved from upstairs in the LRC to the library work room. This move provided the department with a larger work/staging area and ground level access for receiving shipments. All the equipment and work areas for both the staff and the director are adequate to meet the department's needs.

The one resource that the department needs is storage space. We have a small area of secure storage in the warehouse; however, this area is too small to store both the new equipment that needs deployed and the old equipment that is waiting to be disposed of or repurposed. The department is working with facilities to either have more space allocated in the warehouse or purchase a storage container.

4. Technology

The staff computers are replaced on the same rotation as other college staff. The only difference is that the amount of memory is increased to support the virtual desktop software. IT staff technology needs are being met, however, as future changes come and/ or the demand for new or alternative technology is required, we may need additional support.



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IT staff computers are configured and loaded with software that is not made available to other staff members. We are always testing what software is going to be needed next, especially with the operating systems. The decision as to what software is going to be tested and possibly deployed is a collaborative effort between the three colleges' IT departments and the district office IT staff.

5. Marketing

The IT department does not use any marketing media to promote the department. We do push out the link to the helpdesk service on both the student lab computers and staff desktops so that if they are having issues they do know how to get support. Other than a large sign on the outside of the IT area we do not do any other marketing.

Part 4 – Achievement of Administrative Unit Outcomes

1. Achievement of Administrative Unit Outcomes

AUO 1:	Students and staff will report that IT staff were helpful and polite.
Target:	95% satisfaction
Assessment Method:	Student Experience Survey
Assessment Date:	SP 2015
Recent Results:	96% of the students we satisfied
AUO 2:	Data from the helpdesk system and staff reporting will show that issues are resolved in a timely fashion.
Target:	5 days
Assessment Method:	Data from helpdesk system
Assessment Date:	Jan 2015 through Jan 2016
Recent Results:	6 days
AUO 3:	Students and Staff will report that the technology at Cerro Coso was reliable and available
Target:	90% satisfaction
Assessment Method:	Student Experience Survey
Assessment Date:	SP 2015
Recent Results:	94% reliable 98% available
AUO 4:	Staff and faculty will report that the training provided by IT was effective and timely.
Target:	80% satisfaction
Assessment Method:	Staff Experience Survey
Assessment Date:	TBD
Recent Results:	TBD

Assessment History Summary

SLO #	Target	Semester	Met?	Semester	Met?	Semester	Met?
AUO 1	95%	SP15	Yes				
AUO 2	5 days	SP16	No				



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SLO #	Target	Semester	Met?	Semester	Met?	Semester	Met?
AUO 3	90%	SP15	Yes				
AUO 4	80%	TBD	TBD				

Gaps and Improvements Made

The target for AUO 2 is five days. The data in the helpdesk system shows the average time to complete a ticket is six days **[doc.2]**. After visiting with the staff, one reported cause of the delay in closing tickets was due more to record-keeping then not getting to the issue. The IT staff agreed to work on keeping their ticket progress updated and closing the tickets as soon as the issue was resolved. The department will reassess the data again in the spring of 2017.

Summary of Administrative Unit Outcome Achievement

One of the core goals of each staff member within the IT department is to provide the best customer service possible. The department also takes pride in the work they do; therefore, having technology that works and is seen as reliable is important to everyone within the department. The department is very pleased and humbled with the results of the student experience survey and that we not only met but exceeded the targets we set for ourselves.

A key component of providing high quality customer service is responsiveness; therefore, when we did not achieve the target of resolving issues in a timely manner, the department staff were disappointed. In our department staff meetings we reviewed the data and the tickets that had not been resolved within the 5 day target.

The helpdesk system (Blackboard) is comprised of queues and tickets are assigned to queues based upon ticket key words. For example, if the ticket includes the word “banner” it is assigned to the Banner support team queue that is at the district office. However, this assignment process is not always accurate. Therefore, sometimes tickets that are placed in the wrong queue. The Cerro Coso IT staff (Level 2) do not have the ability to resolve and close these tickets. Another example is student tickets. Most all student helpdesk tickets fall into one of two types: password resets or Learning Management System (LMS) issues. The only time a password reset issue is ever escalated to a level 2 queue is when a student does not remember their security question and the student then needs to be referred to the Admissions and Records office to have their security question reset. LMS issues are assigned to the LMS queue, which are resolved by the distant learning department. However, there are numerous LMS tickets that are wrongly assigned to the level 2 queue instead.

Not all unresolved tickets were due to being assigned to the wrong queue. We did discover that some staff would wait until the end of the week to close tickets instead of closing when the ticket was resolved. We also discovered that we had tickets that were not issue related, but more research related and those would be worked on during less busy times of the year, yet they were reflected in the data averages. The staff agreed to work on closing tickets as they completed the work, and that tickets that were not issue related would be assigned as a task instead of a ticket. The department also agreed that 5 days was not good enough and felt that issues could be resolved sooner. The director would also work with the Blackboard account representative to ensure that tickets are assigned correctly.



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The department is looking forward to the results of the staff experience survey, and will continue to strive to provide the highest level of customer service possible.

2. Achievement of Course Student Learning Outcomes

N/A

3. Assessment Schedule for Next Program Review Cycle

AUOs	Year 1	Year 2	Year 3	Year 4
AUO 1	X		X	
AUO 2	X		X	
AUO 3	X		X	
AUO 4		X		X

The IT AUOs are currently being assessed every two years in conjunction with the college-wide student and staff satisfaction surveys. The 2016 – 2017 IT AUO goals [doc.3] will be the next set of goals to be accessed. In addition to the assessment done every two years by the satisfaction surveys, the department will annually continue to assess helpdesk tickets for both completion and needs assessment.

Gaps and Improvements Made

N/A

Summary of Student Learning Outcome Achievement

N/A

Part 5 – Action Plans

1. Effectiveness and Efficiency

Assessing the effectiveness and efficiency of the IT department is always a challenge as we are a service department. The only feedback we have is through word of mouth and satisfaction surveys. We can access internally how long our services go without a failure or issues; however, this does not measure the effectiveness of the service. Another method is to monitor helpdesk tickets for recurring issues. This is something we currently do. We have also made it a point as a department to try and interact with the students more who are using the labs and to gather their feedback on how well the technology is working. During the next AUO assessment cycle we plan to do targeted student focus groups to try and capture a wider perspective.

Currently the greatest opportunities for feedback and recommendations for change come from the TRT committee. The TRT committee is a subcommittee of College Council, and has representation from all areas of the college. The committee meets once a month during the academic year. At these meetings, we discuss upcoming changes and technological issues that are of concern to both the departments and the college as whole. This is also a time to get feedback from the other campus areas and committees such as the Academic Senate’s Pedagogy and Technology Committee.



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2. Current Strengths

The greatest strengths of the IT department are customer service, flexibility, and collaboration. The department's number one goal is to provide the best level of service to the college community that we can. We also know that we need to be flexible. Needs and demands change rapidly and sometimes the need for IT support is last minute. We believe that we are very responsive and flexible and do a good job of providing last minute IT support. Finally, we believe that the IT department and staff work well and collaborate with other departments. The IT department works closely with M&O on construction projects to ensure technology needs and standards are being met. We have staff members on the TRT committee and College Council, and the director sits on the president's cabinet. Staff is the key to continuing these areas of strength; hiring and retaining staff who believe customer service is their number one priority.

3. Improvements Needed

The area that the IT department struggles with is audio visual (AV) support for campus events. In the past departments would check out equipment from IT and additional support was not needed. Events have changed in complexity and now need multiple wireless microphones, livestreaming, and other multimedia feeds. In addition, there is an increased number of events and an increased number of events that take place during the time when no IT staff are scheduled.

The IT department wants to fully support these events and wants the AV component of the event to be high quality. To do so the department needs a staff member who has the expertise and who is assigned to support these events. The department does understand that resources are limited and will continue to provide the best service they can with the current staff until a time we can hire someone.

4. Response to Previous Strategies

This is the IT Departments first program review; therefore, there are no previous strategies from a previous program review.

5. Two-Year Department Strategies

Implement 7-year hardware replacement plan – The college allocates significant resources for technology, and the goal is the maximize the effectiveness of those resources. In the past computers, and laptops were replaced on a 5-year cycle. The department believes we can extend this by two years, therefore a 7-year plan was developed and approved by TRT.

Action Plan for Achieving Two-Year Strategies

- 5.4.4 – Keep technology current
- IT Staff
- Funding from the budget development committee to purchase computers
- Implement year one of the new 7-year plan in FY 18-19.



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Replace remaining unsupported ITV rooms – The goal is to get all of the current ITV rooms updated to vendor supported codecs. There are currently four rooms remaining that are still using the unsupported codecs. Over the past two years we have upgraded two rooms per year.

Action Plan for Achieving Two-Year Strategies

- 5.4.4 – Keep technology current
- IT Staff
- Funding to purchase the equipment and labor for installation.
- Two rooms during each of the next two academic years.

Upgrade all college computers to Windows 10 – Starting January of 2020, Windows 7 will no longer be supported by Microsoft. To ensure the security of our data we must migrate to Windows 10 to ensure that vulnerabilities are patched.

Action Plan for Achieving Two-Year Strategies

- 5.4.4 – Keep technology current
- IT Staff
- Time to complete testing of software compatibility and implementation of the update
- Starting in the fall of 2017 we will have upgraded the academic labs and instructional computers to Windows 10. Over the next 18 months we will finish testing software compatibility and upgrade the staff and faculty computers.

Move the data center back to the main building – Upon completion of the main building renovation project, the data center will need to move back to the main building. In order to maintain campus services during the construction process the data center was moved to the LRC.

Action Plan for Achieving Two-Year Strategies

- 5.4.4 – Keep technology current
- IT Staff
- Funding to either purchase a new battery backup system or batteries for the current system and labor to move and reconnect.
- As soon as construction has completed

6. Five-Year Department Strategies

Upgrade remaining classrooms to smart classrooms – We have upgraded six rooms; however, we have twenty-five rooms remaining that need to be upgraded. This will bring all the rooms to the same standard and allow faculty to utilize multimedia content as part of their lecture.

Action Plan for Achieving Five-Year Strategies

- 5.4.4



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- IT Staff
- Funding to purchase equipment
- We are currently upgrading two rooms per year. To complete this goal in five years we need to be upgrading five rooms per year.

Develop and purchase a lecture capture system – The IT department should facilitate and present an option to the college for doing lecture capturing. This would allow for our online classes to have additional content, it would also provide a review process for students attending classes or those who have missed classes.

Action Plan for Achieving Five-Year Strategies

- 5.4.4
- IT Staff
- Funding to purchase equipment
- During the first-year research lecture capture solutions and best practices. Year two present findings to faculty and gather input. Year three secure funding and purchase equipment. Year four test and deploy.



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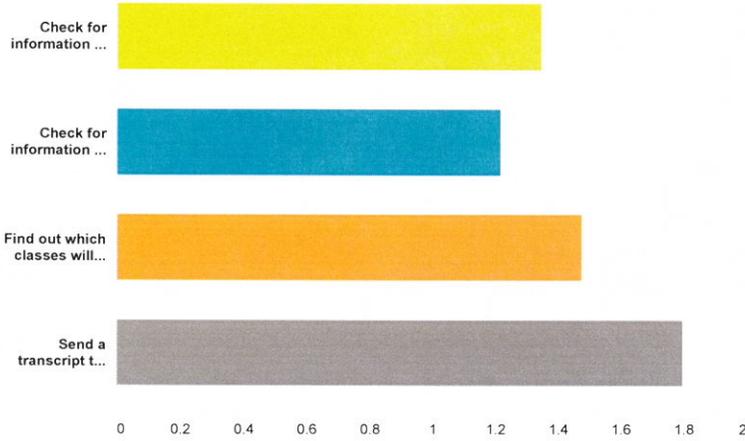
Part 6 – Supporting Documentation

1. **Doc.1 – Survey Questions**
2. **Doc.2 – Helpdesk ticket closed screen shot**
3. **2017-2018 AUP.**
4. **IT Department AUO**
5. **Doc.3 - IT 2016 – 2017 AUO**

Q14

When you perform the activities below, what mode/method would you most likely use?

Answered: 522 Skipped: 2



	Online	In person	By phone	By email	Regular mail/US Postal	N/A	Total	Weighted Average
Check for information on my financial aid.	62.86% 325	11.22% 58	6.19% 32	1.35% 7	0.19% 1	18.18% 94	517	1.35
Check for information on my classes.	86.56% 451	7.87% 41	1.15% 6	3.65% 19	0.19% 1	0.58% 3	521	1.22
Find out which classes will apply to me degree/certificate.	56.05% 292	35.12% 183	2.50% 13	1.92% 10	0.00% 0	4.41% 23	521	1.48
Send a transcript to another college for transfer purposes.	43.16% 224	17.92% 93	3.47% 18	4.05% 21	5.59% 29	25.82% 134	519	1.80

Q15

Reflecting on your interactions with the technology and computer support staff at Cerro Coso Community College, please rate your satisfaction with the following:

Answered: 524 Skipped: 0

Helpfulness of staff

Politeness of staff

Access to assistance

Timeliness of

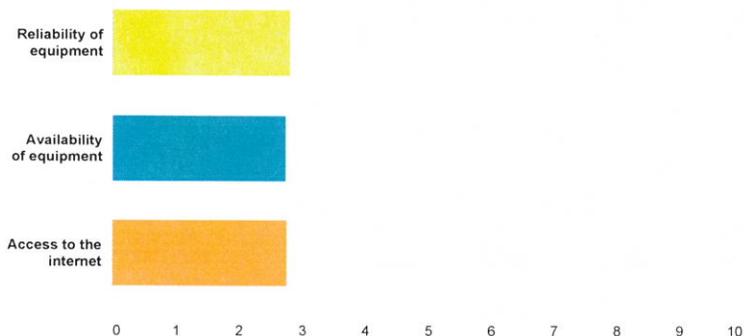


	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Not Applicable	Total	Weighted Average
Helpfulness of staff	49.81% 261	30.73% 161	2.29% 12	0.95% 5	16.22% 85	524	2.03
Politeness of staff	54.21% 283	27.39% 143	1.15% 6	0.96% 5	16.28% 85	522	1.98
Access to assistance	47.32% 247	31.23% 163	3.83% 20	1.15% 6	16.48% 86	522	2.08
Timeliness of assistance	43.95% 229	31.67% 165	6.72% 35	0.77% 4	16.89% 88	521	2.15

Q16

Reflecting on your experience in the classrooms and the open computer labs, please rate your satisfaction with the following:

Answered: 524 Skipped: 0



	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Not Applicable	Total	Weighted Average
Reliability of equipment	34.29% 179	25.10% 131	2.49% 13	1.15% 6	36.97% 193	522	2.81
Availability of equipment	39.66% 207	21.26% 111	1.15% 6	0.38% 2	37.55% 196	522	2.75
Access to the internet	38.58% 201	21.11% 110	2.11% 11	0.96% 5	37.24% 194	521	2.77

Q17

Please reflect back on becoming a student here at Cerro Coso Community College and indicate how helpful the following enrollment tools/steps were:

Answered: 524 Skipped: 0

College application

Blackboard Student Services L2 - Mike Campbell

Support My Portal My Settings Log Off

Desktop Knowledgebase Download Customer Ticket Survey Reports

Reports

CC L2 Closed Report (0)

Date Field: Created Show: Last 1 year Starting: 1/1/2015 Ending: 1/1/2016 Run Query

Edit Report Hide Details

ID	Campus	L2 Agent	Start Time	End Time	Status	Device	Category
64463	Cerro Coso IWV Campus	L2 - Paul Kuttig	PST	PST	Closed	Desktop/Laptop/Mobile Device	Computers/printers/peripherals/mobile
8171-64474	Cerro Coso IWV Campus	L2 - William Velasquez	12/15/2015 8:23 AM PST	12/20/2015 11:42 AM PST	L2: Closed	Desktop/Laptop/Mobile Device	Computers/printers/peripherals/mobile
8171-64505	Cerro Coso IWV Campus	L2 - William Velasquez	12/15/2015 2:06 PM PST	12/20/2015 2:38 PM PST	L2: Closed	Not Listed - Other	
8171-64552	Cerro Coso IWV Campus	L2 - William Velasquez	12/17/2015 7:38 AM PST	12/22/2015 9:12 AM PST	L2: Closed	Desktop/Laptop/Mobile Device	Computers/printers/peripherals/mobile
8171-64563	Cerro Coso IWV Campus	L2 - Paul Kuttig	12/17/2015 11:08 AM PST	12/23/2015 7:57 AM PST	L2: Closed	Not Listed - Other	
8171-64585	Cerro Coso IWV Campus	L2 - Paul Kuttig	12/19/2015 11:20 AM PST	12/28/2015 11:12 AM PST	L2: Closed	Desktop/Laptop/Mobile Device	Software/Application Support - Employee
8171-64602	Cerro Coso IWV Campus	L2 - Paul Kuttig	12/21/2015 9:56 AM PST	1/12/2016 8:45 AM PST	L2: Closed	Desktop/Laptop/Mobile Device	Computers/printers/peripherals/mobile
College: Cerro Coso College (628) Avg Age: 6 day							
Report Totals: (628) Avg Age: 6 day							

Blackboard Student Services CRM Powered by Parature

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**Cerro Coso Community College Assessment Plan
Administrative Unit/Service Department Outcomes**

Program: Information Technology

Year: 2013/2014

Contributors: Mike Campbell

Administrative Unit/Service Department Outcome	Detailed Description of Assessment Plan	Rubric Used³?	Results	Plan for Improvement and Reassessment⁴
<p>Students and staff will report that IT staff were helpful and polite.</p> <p>Target: 95% satisfaction</p>	<p>Student Experience Survey: Reflecting on your interactions with the IT staff at Cerro Coso, please rate the helpfulness and politeness of the IT staff.</p> <p>Staff Experience Survey: Reflecting on your interactions with the IT staff at Cerro Coso, please rate the helpfulness and politeness of the IT staff.</p>			
<p>Data from the helpdesk system and staff reporting will show that reported issues are resolved in a timely fashion.</p>	<p>Ticket Data from July of 2013 to July of 2014: Extracting information from the helpdesk ticketing system, that shows when a ticket is created and</p>			

1. Be very specific here. Describe how you will assess the outcome in some detail.
2. If applicable. Best practice is 30 responses, but it's recognized that it's not possible in many cases. If so, report results of all students/employees. If a sampling method is used, explain it here.
3. If a rubric was used to assess a qualitative measure, check this box and attach the rubric to the back of these sheets.
4. Describe your response to the results. Did the results match your target performance? If not, how might the outcome assessed be better achieved? Is there an adjustment needed to the assessment strategy? Is the target performance possible to achieve or does it need to be adjusted?

Administrative Unit/Service Department Outcome	Detailed Description of Assessment Plan	Rubric Used ³ ?	Results	Plan for Improvement and Reassessment ⁴
<p>Target: 5 day average from the time a ticket is created till it has been resolved and closed.</p>	<p>when it is closed.</p> <p>Staff Experience Survey: Reflecting back on any times that you had issues with your computer. Was the issue resolved in a timely matter?</p>			
<p>Students and staff will report that the technology at Cerro Coso was reliable and available.</p> <p>Target: 90% satisfaction</p>	<p>Student Experience Survey: Reflecting on experience in the classrooms and the open computer labs, please rate the reliability and availability of the equipment.</p> <p>Staff Experience Survey: Reflecting on your overall experiences at Cerro Coso. Has the technology equipment in either the classroom or your office been reliable and adequate to allow you to perform your job?</p> <p>Climate Survey: Staff will report that technology on the campus is reliable.</p>			
<p>Staff and faculty will report that training provided by IT was effective and timely.</p> <p>Target: 80% satisfied</p>	<p>Staff Experience Survey: Please rate the training sessions that you attended that were offered by IT for effectiveness and relevancy.</p>			

1. Be very specific here. Describe how you will assess the outcome in some detail.
2. If applicable. Best practice is 30 responses, but it's recognized that it's not possible in many cases. If so, report results of all students/employees. If a sampling method is used, explain it here.
3. If a rubric was used to assess a qualitative measure, check this box and attach the rubric to the back of these sheets.
4. Describe your response to the results. Did the results match your target performance? If not, how might the outcome assessed be better achieved? Is there an adjustment needed to the assessment strategy? Is the target performance possible to achieve or does it need to be adjusted?

Administrative Unit/Service Department Outcome	Detailed Description of Assessment Plan	Rubric Used ³ ?	Results	Plan for Improvement and Reassessment ⁴
	Sampling method ² : See survey data			
	This was assessed by ¹ Sampling method ² :			

1. Be very specific here. Describe how you will assess the outcome in some detail.
2. If applicable. Best practice is 30 responses, but it's recognized that it's not possible in many cases. If so, report results of all students/employees. If a sampling method is used, explain it here.
3. If a rubric was used to assess a qualitative measure, check this box and attach the rubric to the back of these sheets.
4. Describe your response to the results. Did the results match your target performance? If not, how might the outcome assessed be better achieved? Is there an adjustment needed to the assessment strategy? Is the target performance possible to achieve or does it need to be adjusted?

Information Technology Department
Annual Unit Plan for Academic Year 2017-2018
October 2016

Describe Department/Unit

Mission/Connection to College Mission

The department of Information Technology's (IT) mission is to provide a reliable technological environment that allows students, faculty, and staff to efficiently carry out the mission of the college. Our goal is to be a leader in Customer Service and establish systems, processes, and solutions based on best practices and industry standards. IT provides leadership for effective strategic and tactical planning in the use of technology at the college and facilitates the effective integration of technology throughout the college through planning, programming, training, and other support activities. Finally, it is the mission of IT to promote new uses of information technology through the support for exploratory and innovative applications.

Report on Improvements Made and Gaps Identified in the Prior Year

Student Equity

Outcomes Assessment: Overall Report

The AUO survey questions were asked in the spring of 2015, therefore, there were no improvements made based upon assessment of outcomes.

Outcomes Assessment: Gaps Identified in Prior Year's Assessments

Student Satisfaction Survey was not run this past year.

Type:

AUO

Target Missed/Gap Detected:

Type of Gap:

Analysis and Plan:

Progress Made on Program Review

IT Strategic Plan

Year of Last Program Review:

2012

Progress in the last year on two-year strategies:

The 2012 – 2015 Information Technology Strategic Plan identified five goal as priorities over the next three years. 1.) Improve student learning with modernized technology enabled classrooms. 2.) Improve communications with the campus community. 3.) Build a core of network of IT services that aid in fulfilling the mission of the college. 4.) Develop and implement a data management plan, 5.) Provide training to staff and faculty on campus technologies and applications.

Goal 1 - During the summer of 2015 we replaced two ITV rooms at ESCC and this provided us with two spare codecs. During the 15/16 academic year we had to use both of those spares. We are scheduled to replace two rooms during December of 2016 and will again have two spares to use as needed.

Goal 2 - This is an ongoing process. Communications is something that never should stop. The IT department has strived to provide the campus community with timely communications about any changes or adoption of new technology on campus. During the summer of 2016 the IT department purchased a digital signage, system to provide announcements about campus events to the students and staff of Cerro Coso. We currently have two digital signs at the IWV campus and two at ESCC, with plans to purchase additional units as funding becomes available. An issue that has been identified is communication about the scheduled downtime of key support systems. This spring an email was sent out to the faculty for the upcoming academic year, however this was not adequate and therefore additional communications will need to be sent out. One change that has been implemented during the fall of 2016 is we are now providing detailed time lines as to how long each service will be impacted by the maintenance window. This change has been well received by the faculty.

Goal 3 - This goal is completed.

Goal 4 - This goal is 99% completed. The college G drive has been redefined and organized in a logical structure, and permissions are granular and assigned as needed. The last stage to complete the project is a data retention policy. This is not currently pressing however will become more so in the future as the applications that read the data change and the formats that are supported.

Goal 5 - This is ongoing as technologies change. In an effort to provide additional training resources, the college now has a site license for Lynda.com. This web based service provides tutorial based training on a number of software applications and educational systems such as Canvas and Moodle.

Progress in the last year on five-year strategies:

Progress Made on Prior Year Initiatives

Hardware replacement plan for campus staff and labs

This project was completed during the 2015/2016 academic year.

East Wing classroom technology update

This was completed during the summer of 2015 and faculty have made numerous comments how nice the update has been.

Core network and infrastructure upgrade

The core network switches were upgraded; however, we are still working on battery backup units at all sites.

Plan Initiatives for Next Year

Initiatives for Next Academic Year

Replace two ITV rooms at ESCC and one at KRV

Action Plan:

This past year we replaced two rooms at the IWV campus. We had planned to replace the final two rooms at ESCC but because of the equipment failures at IWV and the room load we did those rooms first. We have three rooms remaining: two at ESCC and one at KRV, then all of the codecs in our ITV rooms will be under a support contract. Replacement includes replacing the unsupported Codecs and upgrading the monitors. The cost for this project is \$113,000.00.

Measure of Success:

The success of this initiative will be measured by having ITV rooms that are supported by the manufacturer, thereby providing us with assurance that if there are issues with the hardware in the future that it will be covered by our maintenance agreements.

Person Responsible:

IT Staff

It directly addresses a college Strategic Goal or Objective

College goal 5.4 - Keep technology current

Classroom AV upgrade

Action Plan:

To upgrade the classroom in the GYM and we one room at KRV to short-throw projectors and replace the white boards and podium equipment. Cost is \$27,000.00 for both rooms.

Measure of Success:

Faculty have really appreciated the upgrades and have had numerous requests to have the other classrooms upgraded. The plan is to have all of our classrooms at all sites configured the same.

Person Responsible:

IT Staff

It directly addresses a college Strategic Goal or Objective

Faculty have really appreciated the upgrade we did in the East Wing classrooms last year and have we had numerous requests to have the other classrooms upgraded.

Battery Backup for Main building MDF

Action Plan:

As we get ready to move back to the main building we will need to replace the batteries and have the 50KVA UPS serviced and moved back to in to the main building. This unit will provide battery backup in to the event of a power outage for our core network equipment. The cost for this project is \$17,000.00

Measure of Success:

To have a reliable backup power source in the event of a power outage.

Person Responsible:

IT Staff

It directly addresses a college Strategic Goal or Objective

College goal 5.4 - Keep technology current

Run network out to the baseball field

Action Plan:

Run fiber optic or Wi-Fi network from the gym to the broadcast booth at the baseball field. This will allow us to provide both phone and data/Wi-Fi to the baseball field. This will also allow for a future smart water metering system and power management, along with resolving a liability of not having a phone at the field. Estimated project cost \$9,000.00 for the Wi-Fi solution and \$52,000.00 to run fiber. This project is currently part of the bond projects; however, I have kept it in the unit plan in case the bond measure does not pass.

Measure of Success:

Having phone and network at the baseball field available for use by Cerro Coso coaching staff and the community.

Person Responsible:

IT Staff

It directly addresses a college Strategic Goal or Objective

College goal 5.4 - Keep technology current

Expand Wifi Coverage to outdoor gathering areas

Action Plan:

We have areas on campus where either students congregate or we hold campus and community events. These areas have been identified as areas that need wifi coverage. The three areas are: the sculpture garden, the gym quad area, and the quad area between the east wing and the LRC. The cost for each area is \$5000.00; the total cost for all three area is \$15,000.00.

Measure of Success:

Person Responsible:

IT Staff

It directly addresses a college Strategic Goal or Objective

Strategic Plan Goals Address: College goal 5.4 - Keep technology current

Upgrade Broadcast Equipment

Action Plan:

We need to upgrade our cameras and technology for broadcasting campus events such as graduation, motivational speakers, board meetings, campus meetings and others. We have begun streaming many of these events live to remote sites and online students, and in order to provide an acceptable quality that properly represents our college we need to upgrade our existing cameras, tripods, and encoding hardware. The cost for this project to purchase 3 cameras, 3 tripods and encoding hardware is \$12,500.00.

Measure of Success:

To be able to broadcast high quality video for campus events and functions

Person Responsible:

IT Staff

It directly addresses a college Strategic Goal or Objective

Strategic Plan Goals Address: College goal 5.4 - Keep technology current

Replace Campus Computers

Action Plan:

This is the fifth year of the five year hardware replacement plan. This year we will be replacing 25 nursing program laptops, 10 classroom instruction stations, 9 staff and faculty computers and laptops, lab printers, projectors, two servers at IWV. The cost of this year's hardware replacement plan is \$73,240.00

Measure of Success:

When the campus computers are updated and able to efficiently run the latest software and operating system and provide students with technology for completing their educational goals.

Person Responsible:

IT Staff

It directly addresses a college Strategic Goal or Objective

College goal 5.4 - Keep technology current

Digital Signage Project

Action Plan:

Last year the college purchased 4 digital signage players and one display to use as a communication tool for promoting campus events. This has been a very effective method of communicating what is happening on campus. We would like to expand this project to the GYM, KRV, and other campus locations. This year we will only need to purchase the players as we have existing displays that we can use from the ITV replacement project. The cost of this project is \$2,600.00.

Measure of Success:

When staff and students have a greater knowledgeable of all of the campus events.

Person Responsible:

IT Staff

It directly addresses a college Strategic Goal or Objective

College goal 5.4 - Keep technology current

Evaluate Resource Needs

Facilities

IT needs more storage space, Non-climate-controlled space is acceptable. The space needs to be secure and it would be ideal if it was dedicated to the storage of IT equipment. This space would be used for storage of both used and new equipment that is waiting to be deployed.

Information Technology

4313 Category - Supplies and Equipment

Location: College-wide

Priority: High

Strategic Plan Goals Addressed:

College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$43,500.00**, Ongoing from General Fund.

Detailed Rationale: This covers all printing supplies, equipment, and replaces minor equipment as they fail.

5220 Category - Travel

Travel and professional development funds

Location: College-wide

Priority: Medium

Strategic Plan Goals Address: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$5000.00**, Ongoing from General Fund.

Detailed Rationale: Training and professional development is needed by both the department manager and IT staff to stay current in the IT field.

5650 Category - Software and equipment support maintenance renewals

Location: College-wide

Priority: High

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$35,000.00**, Ongoing from General Fund.

Detailed Rationale: This is to keep the software and equipment support contracts current, this provides support for our servers, core network infrastructure, and keeps our software current. This amount increased this year to pay support for ITV rooms and additional switches.

6412 Category - Upgrade media in LRC classrooms

Location: Ridgecrest and KRV

Priority: Medium

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$27,000.00**, One-time from General Fund.

Detailed Rationale: This is part of an ongoing project to upgrade and standardize the classrooms across all of the college sites. We are moving away from media carts and ceiling mounted projectors to interactive short-throw projectors that allow for greater functionality of the presentations. This year we would like to do two additional rooms.

6412FA Category - Replace ITV Equipment

Location: ESCC and KRV

Priority: High

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$113,000.00**, One-time from General Fund.

Detailed Rationale: Replace two rooms with older hardware that are no longer supported by the vendor.

6412FA Category - Replace MDF UPS Batteries

Location: Ridgecrest

Priority: High

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$17,000.00** One-time from General Fund.

Detailed Rationale: Replace the batteries, service, and move 50 KVA UPS to the main building MDF. This project has become increasingly important now that we have moved to the new network phone system.

6412FA Category - Network and Phone to Baseball Field

Location: IWV

Priority: High

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$12,000.00** One-time from General Fund.

Detailed Rationale: To provide network to the baseball field so we can provide both phone and network services to that area. This is a safety issue, as we need to be able to quickly reach emergency services during an event.

6412 Category - Computer tech equipment

Location: College-wide

Priority: High

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$40,000.00**, Ongoing from General Fund.

Detailed Rationale: These funds provide the necessary equipment to maintain the core network services for all sites. This equipment includes replacing servers, upgrading memory, and replacing edge switches. These funds also provide additional resources as needed for expansion or renovations.

6412 Category - Computer tech equipment Wi-Fi Expansion

Location: College-wide

Priority: Medium

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$15,000.00**, Onetime from General Fund.

Detailed Rationale: These funds provide the necessary equipment to expand Wi-fi to three outdoor areas on the IWV campus. This will provide Wi-Fi for student gatherings, campus events, community members.

6412 Category - Computer tech equipment AV Broadcast

Location: College-wide

Priority: Medium

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$12,500.00**, Onetime from General Fund.

Detailed Rationale: These funds provide the necessary equipment to provide high quality live stream broadcast for campus events.

6412 Category - Computer tech equipment Digital Signage Project

Location: College-wide

Priority: Medium

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current

Estimated Amount of Funding Requested: **\$2,600.00**, Onetime from General Fund.

Detailed Rationale: This provides the funds to continue the digital signage project that the college started last year. This will allow us to add four additional digital signs.

6412 Category - Computer tech equipment: Staff computers, IWV nursing laptops, Instructor stations in the classrooms, classroom projectors and printers.

Location: College Wide

Priority: High

Strategic Plan Goals Addressed: College goal 5.4 - Keep technology current.

Estimated Amount of Funding Requested: **\$73,230.00**, Ongoing from General Fund.

Detailed Rationale: This is year 5 of the 5-year adopted hardware replacement plan.

Marketing

none needed

Professional Development

We need to send IT staff to training for Windows 10, specifically covering how to image and deploy Windows 10 workstations throughout the college.

Staffing Requests

1000 Category - Certificated Positions

IT

Location:

College-wide

Justification:

None needed at this time.

2000 Category - Classified Staff

Audio/Visual Technician

Location:

Ridgecrest/IWV

Salary Grade:

39

Number of Months:

9

Number of Hours per Week:

20

Salary Amount:

\$14,335.20

Justification:

Due to the large number of on campus events that are now requiring audio and visual equipment as part of the event, the college needs a AV Tech. The IT staff are currently covering these duties however this is becoming a challenge as most of these events happen after-hours and on weekends and these events require assistance from a technician. If the position is left vacant there will be events that require audio-visual equipment and support that we cannot provide, these events may not be able to take place. At this time there is not a temporary employee assigned to this job, the IT staff have provided limited coverage. This position will be a 20 hour 9-month position.