



**2017-18 ADMINISTRATIVE UNIT PROGRAM REVIEW  
UNIT: LPC Technology Department**

**STATEMENT OF PURPOSE:**

- Review and reflect on the support of student learning, with the goal of assessment and improvement of program effectiveness
- Provide a forum for each unit's findings to be included in institutional planning processes
- Create written records of what is working well, what can be improved, and specific plans for implementing chosen improvements
- Collect information that will contribute to institutional assessment and improvement

**INSTRUCTIONS:** This program review covers the timeframe fall 2016 and spring 2017, inclusive. The planning is identified for spring 2018 and academic year 2018-2019.

**I. MISSION**

A. State the current program mission

To provide the highest quality support services, equipment and technical leadership to the college community: faculty, students, staff and administrators; with current, proven technology solutions that are sustainable.

B. The mission of Las Positas College is,

*Las Positas College is an inclusive, student-centered institution providing learning opportunities and support for completion of transfer, degree, basic skills, career-technical, and retraining goals.*

Discuss how the program/service area supports the college mission.

The Technology Department supports the college mission by providing support and access for faculty, staff and students to hardware and software resources that enhance and encourage teaching and learning; as well as communication as it provides knowledge and skills to be used throughout one's life.

C. List the major functions/duties of your unit.

1. Help desk support services for the LPC campus
2. Classroom Support Services – Including all computer labs and instructional spaces
3. Network Support Services – Network and server resources
4. Audio / Visual Support Services – Learning environments and campus events
5. Desktop Support Services - including hardware and software for all instructional and staff systems
6. Server support / Maintenance and Administration
7. Telecommunications Support
8. Printing and Copy Services – Students and Staff
9. Measure B Coordination as it applies to Technology – Construction
10. Software Licensing and Vendor Maintenance
11. Instructional Systems Standardization and Design

## II. GOALS AND OBJECTIVES

A. Since the last Administrative Unit Program Review, what objectives, initiatives, or plans have been achieved and how?

The following goals and/or objectives have been achieved:

1. Review computer standards and revise if necessary – completed Spring 2017.
2. Develop new Audio Visual Standard and retire old 2008 standard - completed Summer 2016 – As new technologies emerge there are revision being made. Documentation has been completed. First install scheduled for Building 1000.
3. Define staffing shortages due to the facility growth from Measure B - Positions have been identified and sent to RAC. (This will remain an ongoing goal and/or objective.)

Major Goals and/or Objectives	Start Date	Status: Ongoing, date completion anticipated	Need Assistance in order to complete goal or objective (reference applicable resource request page)	EMP Goals or Planning Priorities linked to this Goal/Objective
1. Developing Framework for 5-year Technology Plan – Completed District ITS is working on collecting information for DRAFT document - Ongoing through Spring 2018	Fall 2015	Framework has been developed. Moving towards initial DRAFT Document. Ongoing through 2018		<b>C4. Meet current and future technology needs.</b>
2. Upgrading Older 2003 Windows Servers to Windows Server 2012 – In Progress	Spring 2014	Complete Spring 2018		<b>C4. Meet current and future technology needs.</b>

3. Installing new Telepresence and Lecture capture classrooms through the TEC Grant – In Progress	2016	Completion in spring 2018		<b>C4. Meet current and future technology needs.</b>
4. Approve final plans for the Verizon Cellular Project – In Progress	Spring 2016	District is still reviewing contract 2017. Contact is completed. Moving towards design review.		<b>C4. Meet current and future technology needs.</b>
5. Start to develop schedule and plans for new phone systems – Target date for implementation is Spring 2018	Spring 2017	Ongoing through Spring 2018		<b>C4. Meet current and future technology needs.</b>
6. Identify funding and start planning for 2420 Lecture Hall. Equipment is out of date and failing – Quotes and configurations are being submitted in January	Fall 2016	Budgets have been identified and moving towards design – Completion scheduled for 2018		<b>C4. Meet current and future technology needs.</b>
7. Define staffing shortages due to the facility growth from Measure B - Positions have been identified and sent to RAC	Spring 2016	Complete Spring 2016  Positions have been identified and sent to RAC - Ongoing		<b>C3. Provide Appropriate Staffing Levels.</b>  <b>C4. Meet current and future technology needs.</b>

<p>8. Get a support ticketing system (Software Solution) in place to help streamline and quantify support requests.</p>	<p>Spring 2016</p>	<p>The department is currently evaluating ITSM providers. This will continue through spring 2017- The Service Now system has been purchased and configured. Test groups are currently using the system. Going live in December of 2017</p>		<p><b>C3. Provide Appropriate Staffing Levels.</b></p> <p><b>C4. Meet current and future technology needs.</b></p>
<p>11. GoPrint is the student printing solution that the college has had since the early 2000s. It has been very successful in recouping costs for consumable supplies, supporting annual maintenance costs of the GoPrint equipment and reducing print waste. The GoPrint company was purchased a couple years ago and since have noticed that support has become more complicated. In addition, their solution for wireless printing (from student mobile devices) is an additional cost. Due to the age of the current system; the increased request for printing from mobile devices; and need for regular staff interaction in managing the system; the time has come to evaluate our current system compared to other solutions that are available.</p>	<p>Fall 2017</p>	<p>Ongoing through 2018</p>		<p><b>C4. Meet current and future technology needs.</b></p>

<p>12. Ricoh Business Services is providing multiple services to the campus: They provide all campus convenience copiers and production copiers in the Copy Center; staffing for management of the Copy Center and first level support for the convenience copiers; and software for management of staff printing, copying and scanning at the convenience copier. Recently, a new 3-year contract was approved for continued staffing and management of the campus copy services that contains annual cost increases; the multi-functional and production equipment is nearing its' life expectancy; and Ringdale, the maker of FollowMe software, is no longer a Ricoh partner. As with student printing, faculty and staff printing from mobile devices is also an increasing request. All of these pieces are intertwined and changing one piece may have a significant impact on another.</p>	<p>Fall</p>	<p>Ongoing through 2018</p>		<p><b>C4. Meet current and future technology needs.</b></p>
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### III. STAFFING

#### A. Staff Profile

Position	Staffing Levels for Each of the Previous Five Years					Anticipated total staff needed	
	2013	2014	2015	2016	2017	2018-2019	2019-2020
Administration	0	0	0	0	0	0	0
Supervisory	1	1	1	1	1	1	1
Classified Staff FT	6	6	6	8	8	10	11
Classified Staff PT	0	0	1	0	0	0	0
Confidential Staff FT	0	0	0	0	0	0	0
<b>Total Full Time Equivalent Staff</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>11</b>	<b>12</b>

#### B. Staffing Needs

The staffing needs for the LPC Technology Department have reached a point where systems and services are being compromised. Due to Measure B funding, the college has been fortunate to build some beautiful facilities equipped with a great deal of technology. With each new facility there has been significant increases in computer counts, server counts, and learning environments. These technologies now exceed the staff that are available to support them. Staff levels have been constant for over 10 years. A part-time employee was hired in Nov 2015 to help instructors in the evening hours. However, this only managed to bring back evening hours after they were suspended in 2011 due to budget shortages.

The issue of staffing was discussed in 2008 in the mid-term report for accreditation. However, it was noted that because of the current economic climate at the time, the LPC Technology Department did not describe what the number of increased staff should be. Since staff members were being laid off because of budget deficits, it was clear at that time that all staff were going to have to continue to do a lot more with less resources.

That same conservative approach has continued to date.

**The 2012 accreditation mid-term report went on to include the following:**

“It is imperative that as our campus environment continues to grow, we do not lose sight of identifying the need for permanent support staff. A solid infrastructure plan must include permanent, qualified support staff on a full-time basis. In addition, the department needs the ability to fund and train our existing staff as technology advances.

In 2002 the Technology Department staffed the following positions:

- 1 - Senior Instructional Computer Network Support Specialist
- 3 - Computer Network Support Specialists Series
- 2 - Instructional Systems Technician
- 1 – Telecommunications

Although people may have moved into different titles, and others may have assumed multiple roles, the head count in 2012 remained the same at a count of seven full-time positions.

In addition, the Technology Department hired a Dean of Technology on November 13, 2001. This position was vacated in 2005 with the objective of back filling with a Technology / Management position. Because of budgetary restraints at the time, this position was left vacant and the roles and responsibilities of this position were absorbed by the Sr. Instructional Systems Specialist back in 2006. The Sr. Instructional Systems Specialist position has been performing in a management capacity but holding a supervisory title for over 9 years as of 2016.



**2016 Current State of staffing, risk, and increase in hardware support**

In 2016, the LPC Technology Department staffed the following positions:

- 1 - Senior Instructional Computer Network Support Specialist / Managing / Supervising Technology Services.
- 3 - Computer Network Support Specialists Series
- 2 - Instructional Systems Technician – 1 Part-Time evening Support Technician
- 1 – Telecommunications

Since the 2012 mid-term report systems and services have continued to grow in all areas of technology. However, there have not been substantial staffing adjustments to meet the needs of the college. The following table demonstrates how supported resources have increased while staffing has remained constant throughout the growth.

Increases in Technology Resource Support over the past 14 years				
	2002	2012	2016	Increase
<b>Computer Systems</b>	600	1450	1650	175 %
<b>Smart Classrooms, Conference, Theatre</b>	47	95	132	214 %
<b>Instructional, Security and AD Servers</b>	3	20	20	560 %
<b>Wireless Access Points</b>	20	47	84	320 %
<b>Telecom Devices</b>	267	524	524	96 %
<b>Copiers / MDF</b>	12	27	27	125 %

Keeping the current staffing levels as they are will be detrimental to the services and support to our students and faculty at Las Positas College. The following risk matrix identifies some of the most critical issues that have the highest risk.

Staffing Risk Matrix						
Red - High Risk		Orange - Medium Risk			Yellow - Low Risk	
Risk #	Risk Owner	Risk	Probability (L,M,H)	Severity (L,M,H)	Mitigation Approach	Category
1	Technology	Maintenance on Servers is not being scheduled. Resource availability and data loss at risk.	H	H	Need to reassign and balance work load with new employees	Budget
2	Technology	Backups are not being restored to ensure proper data quality. Data loss at risk	H	H	Need to reassign and balance work load with new employees	Budget
3	Technology Staff	No Training has been provided for staff to support newer technologies. Could result in prolonged system outages and data loss.	H	H	Need to identify training deficiencies and bring staffing skills up to meet current systems	Budget
4	Technology / Computer labs.	Images are not being prepared with the same quality because of workload. This impacts all instructional programs across the campus.	H	M	Need to reassign and balance work load with new employees. The desktop ratio is simply to large	Budget
4	Technology / Computer labs.	Cannot sustain imaging and updates each semester. Instructional programs will not have what they need available.	M	M	Need to reassign and balance work load with new employees	Budget

10	Technology	Staffing is limited and customer service complaints are starting to come in after years of high ratings	H	M	Streamline trouble calls with new systems and staff help desk	Budget
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**Critical Staffing Positions and Impact to the College**

The ratio of Computer / Network Support staffing for desktops alone is (550 units to 1). In 2002 the ratio was (200 to 1). This does not include all mobile devices or the newest systems, or projects coming online. The current employees can no longer keep up with the demand of imaging and support. The LPC Technology Department has a history of providing excellent service and support. When looking at the analysis of key performance indicators from the 2010 – 2011 program review, the Technology Department scored well above the college average.

ANALYSIS OF UNIVERSAL KEY PERFORMANCE INDICATORS from 2010 - 2011:

<b>Overall: Unit Score 4.54</b>		<b>College Average 4.03</b>
<b>Evaluation: Exceptional</b>		
<p>The overall response to the survey and the calculation of the mean score for the Technology Department shows that the quality of work that has been provided to the college is of a very high level. The Technology Department staff works very hard and is committed to the support of our students, faculty and staff. The department's goal for this KPI is to maintain the overall quality that has contributed to receiving this rating.</p>		
<b>Responsiveness of Office:</b>	<b>Unit Score 4.48</b>	<b>College Average 3.97</b>
<b>Evaluation: Exceptional</b>		
<p>The Technology Department staff does their best to respond to the end users of the college in a timely manner. The responsiveness rating that was achieved on the survey is evidence that the department has met its goal of being responsive to the needs of the users. The department's goal for moving forward is to maintain the high level of responsiveness.</p>		
<b>Effectiveness of Office/ Services:</b>	<b>Unit Score 4.43</b>	<b>College Average 3.99</b>
<b>Evaluation: Exceptional</b>		
<p>The Technology Department offers many services to the college as a whole. After reviewing the survey responses, it is clear that the department is highly effective in the work that has been provided to the campus community. The department has always strived for a high level of efficiency and will continue to give the best possible service to the campus.</p>		

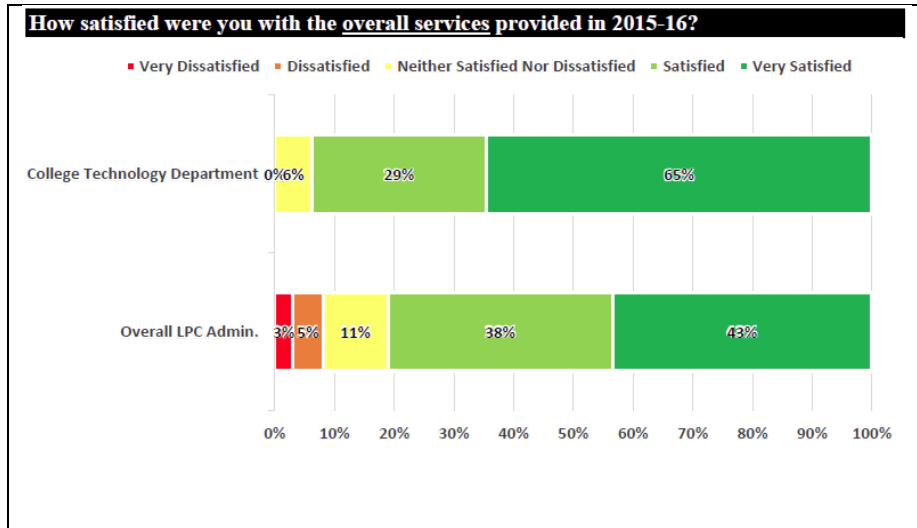
<b>Advancing College's Mission/ Goals:</b>	<b>Unit Score 4.47</b>	<b>College Average 4.03</b>
<b>Evaluation: Exceptional</b>		
The mission and goals of the college have always been a high priority of the department. The department continues to review and test emerging technologies that help to advance the teaching and learning environments of the college. The survey results show that the department is successful in this area.		

**Why are these indicators important?**

It is important to understand that the LPC Technology Department may no longer be able to sustain this level of support. Over the past 5 years the department has received feedback that some customers' requests and equipment maintenance is suffering. This equates to more systems being out of service, and software updates not being handled in a timely manner. Some Faculty members who have realized the impact have offered services to relieve administrative duties on desktops. The LPC Technology Department is committed to keeping our customer satisfaction at its highest level and will need to make improvements in staffing and resources to accomplish this.

## Update from Current Administrative Offices User Survey.

In the Fall of 2016 an Administrative Offices User Survey was collected. The purpose of the survey is to improve services offered by our offices.



The results of the Administrative Offices User Survey are as follows:

### How satisfied were you with the overall services provided in 2015-16?

94% - Satisfied (29%) or Very Satisfied (65%)

0% Dissatisfied

### How satisfied were you with timeliness of the services in 2015-16?

90% - Satisfied (26%) or Very Satisfied (43%)

6% Dissatisfied

The department believes that these numbers will continue to move in a negative direction if we do not start assigning the proper resources to support the growth of the college. These resources include staffing, training, and management tools and software. Management tools and software are needed to quantify data in order to make informed decisions about where resources are needed the most.

### **Recommendations - Critical Staffing Positions**

(Computer Network Support Specialist II) - Ratio of Computer / Network Support staffing for desktop systems alone has increased from (200 Units to 1) to (550 units to 1). This does not include all mobile devices or the newest systems or projects coming online. The current employees can no longer keep up with the demand of imaging and support. Hiring 1 additional Computer Network Support Specialist II will allow the department to re-assign the workload to a more balanced ratio. This would bring the ratio of desktop support down to (400 to 1). At (400 to1) this is still well over a reasonable threshold. The college should be trying to reach a ratio of (300 to 1) at a minimum. An additional 270 systems will be added to the workload by 2018 and will also require additional staffing.

(Server Administration Support Similar to Network Support Specialist II Series) - In addition to the desktop systems, the local college supports 20 servers that provide a number of resources to the college. These systems have no dedicated staff for maintenance or administration. These support services are currently being supplemented by the of Computer / Network Support staff. Systems are many months out of maintenance and upgrades for a number of servers is needed. In addition, the everyday maintenance and backup services are not being properly handled. This will lead to service outages and possible data loss

**UPDATE: Positions have been identified and submitted to the Resource Allocation Committee.**

### **Help Desk Staffing Needs**

Help Desk Technician / Desktop Support) - Back when the college only had 600 desktops and only a few servers the department could adequately sustain the calls and support without the need of dispatch or first level support. We are now dealing with support on a much larger scale as the previous data has shown. In order to fully streamline our support services and meet the needs of our students, faculty and staff the LPC Technology Department is proposing that we not only staff the critical areas, but also identify a more appropriate process for service. These services would include a more tiered support staff approach and provide the college with a much needed help desk. Customers should have the ability to put in a service request from anywhere and have that request processed and updated automatically. Customers should also have the ability to call the help desk and get phone support, and remote desktop support as needed. This first level of support would help identify the

issue and then prioritize and dispatch these calls. Currently all Help Desk support, answering trouble calls or dispatch is being supplemented by other staff members within the department.

**NEW OR REPLACEMENT STAFF (Administrator, Faculty or Classified)**

<p><b>List Staff Positions Needed for Academic Year 2017-2018</b></p> <p>Place titles on list in order (rank) or importance.</p>	<p><b>Indicate (N) = New or (R) = Replacement</b></p>	<p><b>Estimated Annual Total Cost</b></p>	<p><b>EMP Goals or Planning Priorities Linked to Position</b></p>
<p><b>1. Computer / Network Support Specialist II</b></p> <p><u>Reason:</u> The desktop services have increased to over 154%. We have not added a Computer / Network Support Specialist since 1999. It is critical that we have the correct ratio of staff in order to support the continued growth here. This one position will not be sufficient for the projected amount of systems coming online in 2018, however it will relieve some of the backlog we currently have balancing the support areas across the campus. Details have been outlined in the staffing section.</p>	<p>N</p>		<p><b>C3. Provide Appropriate Staffing Levels. C4. Meet current and future technology needs.</b></p>
<p><b>2. Server Support and Administration Similar to Network Support Specialist II</b></p> <p><u>Reason:</u> We have had over a 500% increase in server maintenance and administration. Systems are out of date and experiencing failures because the workload is too great for the amount of staff that we currently have. There is no dedicated technician to keep up with Maintenance, backups and administration of these services. Details have been outlined in the staffing section.</p>	<p>N</p>		<p><b>C3. Provide Appropriate Staffing Levels. C4. Meet current and future technology needs.</b></p>
<p><b>3. Tier 1 Support / New Position</b></p> <p><u>Reason:</u> In order to fully streamline our support services and meet the needs of our students, faculty and staff the LPC Technology Department is proposing that we not only staff the critical areas, but also identify a more appropriate process for service. These services would include a more tiered support staff approach and provide the college with a much needed level 1 support. Details have been outlined in the staffing section.</p>	<p>N</p>		<p><b>C3. Provide Appropriate Staffing Levels. C4. Meet current and future</b></p>



			<b>technology needs.</b>
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## **Technology Services Manager**

The LPC Technology Department hired a Dean of Technology on November 13, 2001. This position was vacated in 2005 with the objective of back filling with a Technology / Management position. Because of budgetary restraints at the time, this position was left vacant and the roles and responsibilities of this position were absorbed by the Sr. Instructional Network Systems Specialist back in 2006. The Sr. Instructional Network Systems Specialist position has been successfully performing in a management capacity for over nine years as of 2016. These roles been documented in accreditation and personnel evaluation.

*Management responsibilities that are being performed by the Sr. Instructional Network Systems Specialist.*

- Manages all LPC Technology Department Staff: Computer Network Support, Instructional System Support, and Telecommunication Support.
- Collaborates with Architects, Consultants and Contractors on all new facilities as it relates to the planning, designing and implementation of the campus technology infrastructure.
- Serves on the executive facility committee for planning and implementation.
- Software Licensing and vendor management.
- Learning environment design, budget and implementation.
- Manages technology projects, scope, budget, plans, and deliverables.
- Provides standardization and evaluation for technology purchases and requests.
- Research available technologies and makes recommendations on planning, implementation and maintaining these systems.
- Manage, plan and direct the deployment / installation of all Life-Cycle related equipment.
- Research products, obtain and negotiate quote pricing and prepare requisitions.
- Determine long-term strategies, plans and designs to meet those requirements
- Forecast and manage the department annual operational budget, to include supply, maintenance, and upgrade of equipment. This includes all Hardware and software as it relates to Campus-Wide Technology.
- Collaborates college and district staff to establish long-range technology goals, strategies, and plans.
- Management of all Measure B Technology projects for instructional systems on the LPC Campus.

### *Expectation and Recommendation*

Update: This issue is currently under review by the senior leadership.

## IV. FACILITIES

### A. Facilities Needs

#### FACILITIES NEEDS

<b>List the Facilities Need and the Reason</b>	<b>EMP Goals or Planning Priorities Linked to Position</b>
1. <u>Reason:</u>	
2. <u>Reason:</u>	
3. <u>Reason:</u>	
4. <u>Reason:</u>	
5. <u>Reason:</u>	
6. <u>Reason:</u>	

## V. TECHNOLOGY AND EQUIPMENT

### A. Technology and Equipment Needs

#### TECHNOLOGY AND EQUIPMENT NEEDS

<p><b>List the Technology and Equipment Needs</b></p> <p>Place titles on list in order (rank) or importance.</p>	<p><b>Indicate (N) = New or (R) = Replacement</b></p>	<p><b>Estimated Annual Total Cost of Ownership</b></p>	<p><b>EMP Goals or Planning Priorities Linked to Position</b></p>
<p><b>1. PBX / replacement telecom system for the college.</b></p> <p>Reason: The current system does not have any further capacity. In addition, it is legacy equipment that is no longer being supported. This system has been tied to the new academic building for funding but as of this date there has been no line item identified. The new system will need to be in place six months prior to the new academic building coming online.</p>	<p><b>N</b></p>	<p><b>TBD</b></p>	<p><b>C4. Meet current and future technology needs.</b></p>
<p><b>2. Technology Service Tracking System. ITSM</b></p> <p>Reason: Identified - Help Desk Staffing Needs: Tracking tools, and data management.</p>	<p><b>R</b></p>	<p><b>TBD</b></p>	<p><b>C4. Meet current and future technology needs.</b></p>

## **VI. PROFESSIONAL DEVELOPMENT**

### **Professional Development Needs**

The LPC Technology Department supports a number of different technology services on the Las Positas Campus. These services include networking, desktop systems, telecommunications, audio/visual, and instructional systems to name a few. It is critical that the Technology Department staff are provided the opportunity for training to properly do their jobs. Over the past 14 years there has not been proper funding or a plan to ensure that skills and competencies levels are appropriate for today's technologies. These are technologies that are currently being utilized on the LPC campus. New server operating systems, desktop operating systems, and instructional systems are being installed without the assurance of proper skills to support these systems. This is a critical issue that is already being realized through system outages that the campus has not experienced in the past.

As the college has grown, employees have been expected to discover proper procedures and the most efficient ways of doing things on their own. There is an obligation of the institution to not only keep staffing levels in line with the amount of support needed, but to also keep their staff trained in order for them to be effective. The lack of proper training has led to stress and frustration among the current staff and a training plan will need to be identified, budgeted and implemented.

### **Recommendations:**

There are specific certifications and skill sets that are required in all areas of the Technology Department. The computer network specialist may need different training than the audio visual specialist. The Technology Department is reviewing industry certifications that fall in line with the current support needs at the college. These certifications may include training from vendors such as Microsoft, Apple, CISCO, and Info Comm. Third party applications are also being reviewed. Third party training and/or certification may include SARS, VMWare, Storage and Backup solutions, and any future Telecom Support needs. The Technology Department supports a diverse selection of different technologies and in order for us to move forward there needs to be investment into our staffing and training.

Included in the recommendation is an initial round of training for the most critical areas that have the most inefficiencies. These need to be followed up with an annual review of skills needed to adequately fulfill the work that is required of the department staff.

### **Computer / Network Support Staff**

Through discussions and observation, the computer support staff have identified a training path that will bring their skill levels up to meet the needs of the current environment. In addition, this training will be able to scale each year as we bring on newer technologies.

The training plan will include the following certification path for the computer / network support staff.

### **MCSA - Solutions Associate**

Installing and Configuring Windows Server 2012 – Exam 410  
Administering Windows Server 2012 – Exam 411  
Configuring Advanced Windows Server 2012 Services – Exam 412



### **MCSE - Solutions Expert**

Designing and Implementing a Server Infrastructure – Exam 413  
Implementing an Advanced Server Infrastructure – Exam 414



### **System Center 2012 Configuration Manager**

Deploying System Center 2012 Configuration Manager - Exam 243  
Administering System Center 2012 Configuration Manager Exam 243

### **Server Virtualization with Windows Server and System Center**

Server Virtualization with Windows Server Hyper-V and System Center - Exam 409

These are certifications that have been identified as critically needed for the current state of the environment. In addition, any training program identified will also need to include the needed training for CISCO systems, VMWare, CompTIA, Desktop Support, and other critical systems that are supported on the campus.

### **Instructional Systems Support Staff**

The instructional Systems support staff will also benefit from the Microsoft training that has previously been outlined. In addition, there are more specific training needs that the staff may benefit from that aligns with the everyday tasks here at the college. The Certified Technology Specialist (CTS) certification is a great option for training and to be current in today's audio / visual environment. This is an entry level certification and some of our seasoned employees may already be prepared to take the test.

### **CTS — General**

A Certified Technology Specialist (CTS) performs general technology solution tasks by creating, operating, and servicing AV solutions as well as conducting AV management activities that provide for the best audiovisual resolutions of the client's needs, both on time and within budget.



### **CTS-D — AV System Design Specialization**

A Certified Technology Specialist — Design (CTS-D) is an AV systems designer who assesses client's needs, designs AV systems, prepares AV design documents, and coordinates and collaborates with other professionals to create AV systems that satisfy clients' requirements.



### **CTS-I — AV System Installation Specialization**

A Certified Technology Specialist — Installation (CTS-I) installs and maintains audiovisual systems by following specifications, schematics, codes, and safety protocols; administering installation process logistics; troubleshooting and problem-solving systems; maintaining tools and equipment; and communicating with clients, designers, other trades, installers, and staff to provide the best audiovisual solutions for client needs, on time and within budget.



The training path for these areas is in addition to any training from Microsoft, CompTIA, CISCO, or any industry certifications.

### **Telecommunication Coordinator**

The Telecommunications Coordinator has a number of duties that could benefit from training in the previously mentioned Microsoft Training path. The skills can further be enhanced through Industry Certification in fundamental networking and telecommunications. The college is currently pursuing a new telephone system for the Las Positas Campus. It is the intent that the training for this system for all users and staff will be included, and part of the telephone system deliverable through the implementation process. Depending on the technology implemented there may need to be supplemental training after the initial deployment. This area will be reevaluated in the first half of 2017.

<p><b>List Professional Development Needs.</b> Reasons might include in response to assessment findings or the need to update skills to comply with state, federal, professional organization requirements or the need to update skills/competencies. Please be as specific and as brief as possible. Some items may not have a direct cost, but reflect the need to spend current staff time differently. Place items on list in order (rank) or importance.</p>	Annual TC		
	Cost per item	Number Requested	Total Cost
<p><b>1. Training and Certification for current staffing according to the training plan.</b></p> <p><u>Reason:</u> All requirements have been noted in the previous paragraphs.</p>	TBD	6 -7	Estimated at \$ 7,000 Annual