

NON-INSTRUCTIONAL POSITION REQUEST 2017-2018

Internal Use

#: 2017-19

Requester Name: Steve Gunderson

SUMMARY INFORMATION

Title of Position Being Requested: (Note: Please also attach a current or proposed district [job description](#))
Computer/Network Support Specialist II

Position Will Reside in Division/Unit:
LPC Technology Department

Indicate To Whom this Position Reports:
Steve Gunderson

Indicate if this position or a similar position has been presented to RAC previously and in what years:
Presented in 2016-17 and 2015-16.

The position is:

New

Number of Hours per Week: 40

Number of Months per Year: 12

Increase for an existing funded position

From: 9 10 11 Months

To: 10 11 12 Months

OR From: _____ % to _____ %

New Categorically funded position (information only; position not ranked)

Number of Hours per Week: _____

Number of Months per Year: _____

SECTION 1: PROGRAM NEED

What key responsibilities would this person assume?

Provide timely and effective technical support to administrative and instructional users of computer and related resources; perform a variety of technical and analytical duties in support of campus network users including the installation of computer and hardware, peripheral equipment and software applications; and provide assistance in the installation of campus network connections and other routine network support tasks.

Support Specialist II:

Journey-level technical support position; high degree of interaction with campus personnel is required relative to ordering, using, and maintaining computer, software, and related network technology; moderate knowledge of mainframe and campus staff applications and a high degree of knowledge of computers, peripherals and network equipment and software in terms of operations, installation, troubleshooting and training.

List other Personnel in the Unit (i.e. with shared or similar responsibilities):

Haywood Beard
Ethan Castor
Andres De La Cruz

Give a historical perspective of the changing demands on your unit's staff over the past 3-5 years (look to your program review). Please describe the metric you use to determine staffing needs in your program:

Example:

$$\text{Metric} = \frac{\text{Students Served per semester}}{\text{Full-Time Equivalent Employees}} \quad \frac{2010}{2015} = \frac{900/1}{1000/1}$$

Increased demand over the past 5 years is: = 11%

Metric = SEE BELOW AND ATTACHED DOCUMENT _____ = _____

Increased demand = _____

And/or provide additional information supporting a need for this position and resulting impact on students or program:

Increases in Technology Resource Support over the past 14 years:

	YEAR:	2002	2012	2016	Increase
Computer Systems		600	1,450	1,650	175%
Smart Classrooms, Conference, Theater		47	95	112	138%
Instructional, Security and AD Servers		3	20	20	560%
Wireless Access Points		20	47	84	320%
Telecom Devices		267	524	524	96%
Copiers/MDF		12	27	27	125%

Computers: This increase is attributed to Measure B campus expansion projects and requests for laptops and tablets.

Servers: The department has been supporting 20 servers for some time and many are past their life expectancy and need to be replaced. Some of the critical server applications include college web sites, SARS for student tracking, user authentication, data/file storage, license servers, back-up systems, etc.

With each new facility at the college, 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 November, 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 ratio of computer/networking 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 supporting. Hiring one additional Computer/Network Support Specialists 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 to 1" 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.



SECTION 2: STUDENT LEARNING AND SUCCESS

Explain how this position will contribute to and/or support student learning and success:

The central mission of Las Positas College is its commitment to student learning. Technology is a powerful tool for transforming learning. According to John King, the U.S. Secretary of Education, "One of the most important aspects of technology in education is its ability to level the field of opportunity for students." Without the appropriate level of Technology Department staff to support the significant increase in technology levels outlined in the above section, students may be at an increased risk of not achieving the level of success to meet their own goals, let alone the goals of the College.

The Technology Department supports every aspect of technology across campus. Without this position, regular tasks of maintenance and upkeep of existing systems will continue to be delayed and system failures will be more common place. Students, faculty, and staff will not receive software and hardware upgrades and installations in a timely manner in order to achieve learning and program objectives. Over the past 5 years, the Department has received feedback that some customers' (faculty and students) 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.

Explain how this position will have a positive impact on Accreditation or strengthen the college's adherence to the ACCJC standards:

One of the recommendations from the 2015 Accreditation Site Visit is "To improve institutional effectiveness, the college should evaluate its faculty, staff, and administrative needs at all areas of the college and use the results of these evaluations to ensure an administrative structure, faculty, and classified staffing level that focuses on program needs and reflects the institution's purpose, size, and complexity... (III.A.2, IV.B.S.A)." Although the Computer/Network Support Specialist II will not completely resolve the support issues the Technology Department is currently experiencing, it will help to reduce some of the high-risk issues and contribute to institutional effectiveness.

A second recommendation from the Accreditation Site Visit is "In order to improve, the team recommends the Library develop and implement a collection development plan to ensure print, media, and electronic resources to provide the quantity, currency, depth, and variety of resources to meet the needs of the College curriculum. (II.C1)." The Technology Department supports all aspects of technology across campus and will be needed to assist the Library in implementing this recommendation.

SECTION 3: LPC MISSION AND PLANNING PRIORITIES

LPC MISSION STATEMENT:

LPC is an inclusive learning-centered institution providing educational opportunities and support for completion of students' transfer, degree, basic skills, career-technical, and retraining goals.

LPC PLANNING PRIORITIES:

- ❖ Establish regular and ongoing processes to implement best practices to meet ACCJC standards.
- ❖ Provide necessary institutional support for curriculum development and maintenance.
- ❖ Develop processes to facilitate ongoing meaningful assessment of SLOs and integrate assessment of SLOs into college processes.
- ❖ Expand tutoring services to meet demand and support student success in Basic Skills, CTE, and Transfer courses.

Indicate how this position supports the College's mission and/or planning priorities:

The Technology Department supports every aspect of technology across campus. We support the college mission by providing faculty, staff, and students the support and access to hardware and software resources that will enhance and encourage teaching, learning, and communication which will provide knowledge and skills to be used through one's life.

One will be hard pressed to find a college student, faculty, or staff that does not use some kind of technology in their day-to-day learning or teaching here at Las Positas College. From curriculum development, assessment of SLOs, expanding tutoring services, or supporting student success, all areas are dependent on some level of technology and technology staff. Without the appropriate Technology Department staffing levels, LPC's Planning Priorities may be difficult to achieve.

In today's world of digital information, everyone needs to be able to use, create, communicate, research, retrieve, send, save, etc., electronically. LPC's students, faculty, and staff are dependent on computers and technology resources in all aspects of teaching, learning, and successful completion of tasks. This position will help to reduce the backlog of technology projects so that the College and Departments at LPC can move forward with new initiatives currently being planned.

SECTION 4: PROGRAM OUTCOMES, INITIATIVES, and PLANS

Please check one.

- This need was described explicitly in a Program Review (Year 2016-17).
- This need was implied in a Program Review (Year _____).
- This need was not included in a Program Review, but has become a need since that time.

Explain, including language from Program Review (if available):

The purpose of LPC's Technology Department is to provide service and support as well as technical leadership to the college. This position will serve to maintain core functions such as:

1. Support for student computer labs;
2. Desktop computer support for faculty and staff;
3. Network and server support and maintenance; and
4. Software maintenance.

It will also allow the department to proceed with initiatives such as:

1. Upgrade servers to current software versions;
2. Review and update equipment standards; and
3. Return to regular equipment replacement per the Life-Cycle Plan.

SECTION 5: SAFETY (if applicable)

Explain how this position will improve safety on campus or within your unit:

The Technology Department supports every aspect of technology across campus including safety. We currently support access and backups for the security server system that Campus Safety relies on for access controls, videos, and security monitoring on the campus. During the past couple of years (including as recently as last week) the servers have been going down. Due to insufficient Technology Department staffing, the safety and security of staff and students on campus are being put in a potentially unsafe situation as AMAG doors cannot be automatically locked during a shelter-in-place or lock-down. The server still has not been rebuilt from last week because of a lack of Technology staff. We are unable to recover quickly. The staffing needs for the Technology Department have reached a point where systems and services are being compromised. Our servers are potentially at risk of being hacked. The biggest risk to college networks is malware. Malware like trojans and spyware may read data and transmit it across the internet or wipe it out completely. Ransomware is now a common threat where hackers steal vital data and issue a ransom for its safe return. Some computer viruses erase files. Failed hardware can result in the loss of crucial files. Keeping the current staffing levels as they are will be detrimental to the services and support to our students and faculty at the College. Below is a list of some of the most critical Technology Department issues that currently have the highest risk:

1. Maintenance on services is not being scheduled. Resource availability and data loss is at risk.
2. Backups are not being restored to ensure proper data quality. Data loss is at risk.
3. Training has not been provided for staff to support new technologies. This could result in prolonged system outages and data loss.

LPC Technology Department Staffing Needs - 2016

Major functions and duties of the LPC Technology Department that have a direct campus-wide impact on students, faculty, and instructional programs.

- Help Desk Support Services for the LPC campus
- Classroom Support Services – Including all computer labs and instructional spaces
- Network Support Services – Network and server resources
- Audio / Visual Support Services – Learning environments and campus events.
- Desktop Support Services - including hardware and software for all instructional and staff systems
- Server support / Maintenance and Administration
- Telecommunications Support
- Printing and Copy Services – Students and Staff
- Measure B & A Coordination as it applies to Technology – Construction
- Software Licensing and Vendor Maintenance
- Instructional Systems Standardization and Design

The staffing needs for the LPC Technology Department have reached a point where systems and services are now being compromised. Due to Measure B funding, the college has been fortunate to build some beautiful facilities equipped with a substantial increase in technology. With each new facility there has been a significant increase in computer counts, server counts, and learning environments. 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, servers, or the newest systems, or projects coming online. The current employees can no longer keep up with the demand of imaging and daily support for campus-wide technology. Staffing 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 satisfied the return of evening hours after they were suspended in 2011 due to staffing shortages.

The 2012 accreditation mid-term report included 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
- In 2016 the current state of staffing remains the same staffing 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

Risk, and the increase of support in all campus areas

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 resource have increased while staffing has remained constant throughout the growth.

Increases in Technology Resource Support over the past 14 years				
	2002	2012	2016	Increase
Computer Systems	600	1450	1650	175 %

Smart Classrooms, Conference, Theatre	47	95	112	138 %
Instructional, Security and AD Servers	3	20	20	560 %
Wireless Access Points	20	47	84	320 %
Telecom Devices	267	524	524	96 %
Copiers / MDF	12	27	27	125 %

Consequences of not funding this position

Keeping the current staffing levels as they are already having a detrimental impact 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 are not being scheduled. Resource availability and data loss at risk.	H	H	Need to reassign and balance work load with new employees	Budget / staffing
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 / staffing
3	Technology / Computer labs and classrooms	Images are not being prepared with the same quality because of workload. This impacts all students and instructional programs across the campus.	H	H	Need to reassign and balance work load with new employees. The desktop ratio and workload is simply to large	Budget / staffing

4	Technology / Computer labs and classrooms.	Cannot sustain imaging and updates each semester. Instructional programs do not have what they need available.	H	H	Need to reassigned and balance work load with new employees	Budget / staffing
5	Technology Staff	Equipment installs and delivery for Instructional Equipment Requests and other purchases are many months behind.	H	H	Need to reassigned and balance work load with new employees	Budget / staffing
6	Technology Staff	No Training has been provided for staff to support newer technologies. Could result in prolonged system outages and data loss.	M	M	Need to identify training deficiencies and bring staffing skills up to meet current systems	Budget / staffing
7	Technology	Staffing is limited and customer service complaints are starting to come in after years of high customer service ratings	H	M	Streamline trouble calls with new systems and staff help desk	Budget / staffing

Critical Staffing Positions

The Educational Master Plan Priorities Linked to these Position

- C3. Provide Appropriate Staffing Levels.
- C4. Meet current and future technology needs.

It is important to understand that the LPC Technology Department will no longer be able to sustain an acceptable level of support. Over the past few years the department has received feedback that customers' requests and equipment maintenance is suffering. In addition, instructional programs are suffering without adequate support. This equates to more system being out of service, and software updates not being handle in a timely manner. Some Faculty members who have realized the impact have offered services to relieve administrative duties on desktops. This should not be happening. 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. As more construction and Measure A projects continue to expand the college services, we need to provide the resources to support our mission.

Recommendations - Critical Staffing Positions

2 (Computer Network Support Specialist II) - Hiring 2 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 (380 to 1) while bringing on new project systems. These positions will help to relieve some of the backlog we currently have, balancing the support areas across the campus. These positions will be assigned to specific buildings and areas of the campus providing more collaboration and support for our students, faculty and their programs.

Increase half-time (Instructional Systems Technician) – In 2015 we brought back night support for 4 hours in the evening by hiring a part-time Instructional Systems Technician. This has made a significant impact for both students and faculty to get the support they need. However, the workload throughout the day is still challenging. These positions specialize in helpdesk response, audio visual, and the first level of support across the campus. These positions directly respond and assist instructors for all planned and unplanned events and issues.

CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT

COMPUTER/NETWORK SUPPORT SPECIALIST I COMPUTER/NETWORK SUPPORT SPECIALIST II

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

SUMMARY DESCRIPTION

Under supervision (Computer/Network Support Specialist I) or general supervision (Computer/Network Support Specialist II), provide timely and effective technical support to administrative and instructional users of computers and related resources; perform a variety of technical and analytical duties in support of campus network users including the installation of computers and hardware, peripheral equipment and software applications; and provide assistance in the installation of campus network connections and other routine network support tasks.

DISTINGUISHING CHARACTERISTICS

Computer/Network Support Specialist I – The Computer/Network Support Specialist I is the entry level technical support class in the Computer/Network Support Specialist series providing routine user support and assisting in the installation of computers and peripheral equipment. Positions at this level are not expected to function with the same amount of program knowledge or skill level as positions allocated to the Computer/Network Support Specialist II level and exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. Advancement to the Computer/Network Support Specialist II is based on demonstrated proficiency in performing the assigned functions and is at the discretion of higher level supervisory or management staff.

Computer/Network Support Specialist II - The Computer/Network Support Specialist II is the journey level technical support position. A high degree of interaction with campus personnel is required relative to ordering, using, and maintaining computers, software, and related network technology. This classification requires moderate knowledge of mainframe and campus staff applications, and a high degree of knowledge of computers, peripherals, and network equipment and software in terms of operation, installation, troubleshooting, and training. The Computer/Network Support Specialist II works in coordination with the District networking staff.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Respond to user requests for assistance with campus hardware or software problems, such as malfunctions, modifications needed in software, or determination of user needs and requirements.
2. Assist users and potential users in defining campus computer needs, software, peripherals and network equipment; aid in the evaluation of software and hardware; assist in preparing specifications for purchases.
3. Configure and troubleshoot College servers.

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Computer/Network Support Specialist I/II (Continued)**

4. Maintain, configure, and repair College network cabling and equipment.
5. Set up and maintain detailed inventory records of computer hardware and software purchases, maintenance requests, supplies and similar operational details.
6. Install new campus computers, applications, operating system software, terminals and related hardware; install network connections to equipment.
7. Establish priorities for responding to requests for maintenance and other user requests.
8. Coordinate and perform maintenance of campus computers and related equipment under warranty or requiring service calls.
9. Order and store supplies and parts required to maintain computers and related equipment.
10. Perform routine network support tasks, including server backup, server configuration and client software installation and configuration; assist with network user support and other tasks as directed.
11. Provide backup support and assistance to District network staff as needed.
12. May provide support to the campus telephone system and associated equipment, including troubleshooting and maintaining the voicemail system and call accounting, and performing installations and changes.
13. Prepare and distribute general technical tips and advice to users.
14. Plan and implement procedures to help maintain instructional network security and copyright compliance; report copyright compliance violations to management.
15. Perform related duties as required.

MINIMUM QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

1. Basic systems analysis and design concepts and alternative programming approaches.
2. Data communication methodologies between computers, peripherals, and network devices.
3. Modern computer and network operating systems, shells and interfaces.
4. Basic principles of computer programming as well as operating system batch files and scripts.
5. Current equipment and applications.
6. PC and Macintosh network setup, maintenance and repair.
7. Principles and practices utilized in providing support to the campus telephone system and associated equipment may be required for some positions.
8. Information sources to remain current in field.

Ability to:

1. Troubleshoot, configure, and maintain servers, computers, and communications equipment and cabling.
2. Instruct, communicate with, and assist non-technical users in software and basic system operations.
3. Document program modifications and technical fixes performed for users.
4. Plan for future hardware and software installations.
5. Understand and follow oral and written instructions.

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Computer/Network Support Specialist I/II (Continued)

6. Install and troubleshoot terminals, printers, modems, computers and network equipment.
7. Keep records and control inventory for equipment, supplies and budget.
8. Install, use, and configure computer server software.
9. Construct cables between computers and peripheral devices using various technical standards.
10. Communicate clearly and concisely, both orally and in writing.
11. Establish and maintain effective working relationships with those contacted in the course of work.
12. Work with and exhibit sensitivity to and understanding of the varied racial, ethnic, cultural, sexual orientation, academic, socio-economic, and disabled populations of community college students.

Minimum Education & Experience - Any combination of the following would provide a typical way to obtain the required knowledge and abilities.

Computer/Network Support Specialist I

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by college level course work in computer science or a related field.

Experience:

Experience troubleshooting and maintaining computer and network hardware and software is desirable.

Computer/Network Support Specialist II

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by college level course work in computer science or a related field.

Experience:

Two years of experience comparable to that of a Computer/Network Support Specialist I with Chabot-Las Positas Community College District.

License or Certificate:

Possession of, or ability to obtain, MCSA, MCP, or MCSE certification is desirable.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Work is performed primarily in a standard office setting with some travel within campus.

Physical: Primary functions require sufficient physical ability and mobility to work in an office and classroom setting; to stand or sit for prolonged periods of time; to stoop, bend, kneel, crouch, reach, and twist; climb ladders and work on ladders for extended periods of time; to lift, carry, push, and/or pull light to moderate to heavy amounts of weight; to operate office equipment requiring repetitive

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Computer/Network Support Specialist I/II *(Continued)*

hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

Adopted by Board of Trustees on October 20, 2015
Effective: October 21, 2015
Job Family: Management Information Services