

Information Technology NIPR

LASSEN COMMUNITY COLLEGE

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SECTION 1: INSTITUTIONAL EFFECTIVENESS PLANNING

I. Program Overview and Objectives

The Information Technology Office provides support for all technology that is used at Lassen Community College whether hardware or software related. It is the goal of Information Technology to enable LCC to be effective in its use of technology and to utilize its technology resources to enable learning opportunities and promote student success.

Description/Evaluation:

- a. Describe and evaluate the program objectives against the LCC strategic plan, specifically the mission statement and strategic goals [available online or in the current catalog].
- b. Evaluate any changes in the program since last review. Include summary of Annual Updates completed since last review.

The Information Technology (IT) Office is the service area of the college that helps to meet the technology needs for the college. IT handles all aspects of technology: implementation, setup/configuration, and support. IT is in charge of supporting all network and server infrastructure, enterprise applications, websites, desktop/laptop workstations, classroom technology and computer peripheral devices (printers, scanners, etc.).

The objective of the Information Technology Department is to support and enable LCC to live out its Mission Statement and achieve the Strategic Goals. It is the goal of IT to enable employees and students to have access to the information they need by using the technology that has been provided to LCC in an effective manner. Technology that is available at LCC helps to provide more Learning Opportunities to LCC students. Students and employees have technology available to them that assists and supports Student Success. Technology is important and a key part of Resource Management at LCC.

The IT Department now reports to the Vice President of Administrative Services. The department now consists of 4 full-time positions, one Director of Information Technology, and three Information Technology Specialist II positions. Looking back at the 2011 NIPR and the 2013-14 Annual Review, most of the recommendations that were noted have been completed. The Director of Information Technology position was brought on board to fulfill the need to support the Ellucian Colleague system, programming support, and manage all IT projects. The college has now implemented a Technology Replacement Plan for replacing technology equipment on a 5 year cycle. Mainly desktop/laptop computers and servers. With the use of Microsoft

Office365, LCC is now able to provide email to all employees and students. Ellucian Portal has been implemented and allows for easy access to email. Any recommendations that were not completed will be evaluated for relevancy.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Institutional Effectiveness Planning, Student Services Planning, and/or Academic Planning tables at the end of the section for any recommendations requiring institutional action.

None

II Administrative Unit and/or Student Learning Outcomes Assessment

Student Learning Outcome Assessment

AUO and SLO assessment is important to maintain and improve institutional effectiveness and provide an effective learning experience for LCC students. Departments are expected to measure AUO and/or SLO annually; these records are maintained in WEAVE and are available for review at any time.

Description/Evaluation:

1. Identify and evaluate Administrative Unit and/or Student Learning Outcomes including the relationship to strategic goals for AUOs and institutional student learning outcomes for SLOs utilizing information from WEAVE.
2. Attach an AUO and/or SLO assessment summary as provided by Office of Institutional Effectiveness.
3. Provide an analysis of findings of the assessment results may be leveraged to support equipment, facility, staffing, or other budget and planning need and include the justification in your analysis.

IT has identified 2 AUO's to work with. The first AUO is "Provide excellent service to meet the campus demands for technology". The second AUO is "ensure the Colleague Student Information System is maintained with the current patches and updates." With the first AUO our goal is to increase positive perception of IT services. As of the last survey that was completed (2014SP) our overall percentage was higher than the year prior. The ISLO's that this relates to are Critical Thinking and Personal/Interpersonal Responsibility. The IT staff is always needing to analyze situations/problems that come up every day to resolve them in the best method and while doing so must work with all of LCC's Faculty, Staff, and Students in a professional manner with integrity. The IT staff is regularly needing to research and educate themselves with the technology that is being used today. The second AUO our goal is to apply 100% of patches and updates will be

deployed in a timely manner. This AUO was added 2014FA and since then all Colleague software updates have been applied in a timely manner and applicable information has been distributed to the users affected. The ISLO that applies to this is Personal/Interpersonal Responsibility. We must regularly work with others when testing the software updates and communicate any applicable changes and/or train on any new capabilities that have been introduced.

Planning Agenda:

List recommendations and actions by the above evaluation of AUO and/or SLO results. Complete Institutional Effectiveness Planning, Student Services Planning and/or Academic Planning tables at the end of the section for any recommendations requiring institutional action. For any items needing Human Resources Planning, Institutional Technology Planning, or Facilities Planning action, please make sure to include the information within the appropriate section and table later in the program review document.

None

III. Equipment

Description/Evaluation:

1. List capital outlay equipment, age of equipment and replacement schedule.
2. Identify any existing equipment maintenance/service agreements.
3. Evaluate the condition of capital outlay equipment in light of the replacement schedule and available funds.
4. Evaluate the effectiveness of and need for additional maintenance /service agreements.
5. Justify any proposed modification or additions to equipment available for students and/or faculty/instructional assistants within the program.

Equipment supported and/or maintained by IT:

- 16 Servers (physical)
- 2 SAN Storage Devices
- 30 Network Switches
- 193 VoIP Phones
- 33 Wireless Access Points
- 350+ Desktop/Laptop Computers
- 45+ Printers/Copiers

Servers are usually purchased with a 5 year support agreement with planned replacement after 5 years. Desktop/laptop computers are usually purchased with a 3 year support agreement with planned replacement every 5 years. Replacing equipment at regular intervals helps to minimize equipment failure. The time

frames are within best practice guidelines. Current equipment maintenance/service agreements maintained by IT are:

- Development Group – phone system, network switches, wireless access points. \$21,832.74
- CDWG – IBM Bladecenter & servers. \$2,182.72
- Dell – Wyse thin clients. \$3,343.68
- Carbonite – Off-site data backup. \$10,000

Currently our existing maintenance/service agreements are needed and are adequate for maintaining the equipment. We will likely need to increase our Carbonite agreement in the next year or two due to the ever increasing data volume required to back up from the Lassen College server infrastructure.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Institutional Effectiveness Planning, Student Services Planning, and/or Academic Planning table at the end of the section for any recommendations requiring institutional action.

Increase budget for Off-site data backup when necessary.

Increase technology replacement budget.

IV. Outside Compliance Issues (if appropriate for program)

Description:

If appropriate, describe the role of outside compliance issues on the program.

The Information Technology Office has many rolls one of which is maintaining outside compliance. LCC is required to maintain FERPA and HIPPA compliance to protect data for students and employees. This is maintained a couple of ways. One way is through education of employees which is coordinated by Human Resources. Another way is by the protection of our data. The protection of our data is accomplished through several different avenues, user permissions, network firewall, limiting what is available from off campus, and educating users on common scams.

Evaluation:

Assess changes in compliance or identification of compliance-related needs and the impact on the program.

Data breaches are appearing in the news on a semi-regular basis. This just shows that we can never let our guard down and think that we are not vulnerable. Many data breaches happen through an employee in one way or another. Being mindful of this constant threat need to continue as well as education regarding it.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Institutional Effectiveness Planning, Facilities Planning, Technology Planning and Human Resource Planning Forms as appropriate for any recommendations requiring institutional action.

None

VI. Prioritized Recommendations

A. Prioritized Recommendations for Implementation by Program Staff

List all recommendations made in Section One that do not require institutional action (ie. curriculum development) in order of program priority.

None

B. Prioritized Recommendations for Inclusion in the Planning Process

List all recommendations made in Section One that should be included in Lassen College’s planning and budgeting process, specifically in the Educational Master Plan, Student Services Master Plan, or Institutional Effectiveness Master Plan. Separate recommendations into the appropriate plan(s). Items to be included in the Human Resource Master Plan, Institutional Technology Master Plan, or Facilities Master Plan should be addressed in Sections Two, Three or Four in lieu of or in addition to inclusion in the Academic Master Plan. See Attachment C for Master Plan Overview to determine where recommendations are best placed.

Prioritized Recommendations for Inclusion in Institutional Effectiveness Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost (implementation & ongoing)	Expected Outcome
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Prioritized Recommendation for Inclusion in Student Services Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost (implementation & ongoing)	Expected Outcome

Prioritized Recommendations for Inclusion in Educational Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost (implementation & ongoing)	Expected Outcome

Section Two: Human Resource Planning

I. Program Staffing

Description/Evaluation:

1. List the current staffing for the program include: managers, faculty positions, and classified staff.

David Corley, Director of Information Technology, Manager

Logan Merchant, Information Technology Specialist II, Classified

Jacob Freitas, Information Technology Specialist II, Classified

Mathew Montgomery, Information Technology Specialist II, Classified

2. This section provides an opportunity for analysis and justification of projected staffing needs to support the program. Work-study student needs may be included.

Current staffing for IT is well matched for the technology used at LCC.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation.

Complete Institutional Effectiveness Planning and Human Resources Planning Forms as appropriate for any recommendations requiring institutional action.

None

II. Professional Development

Description/Evaluation:

1. Describe the professional development and professional activities of the program staff relevant to program improvements that has occurred during the period under review. (workshops, conferences, staff development, work experiences, etc.)

Annually the IT staff participate in online trainings with several vendors and many times it can be dictated by new software that is being implemented. We also strive to do additional trainings on top of what has been dictated such as keeping current with some of the latest software releases by Microsoft. David Corley also participates in the bi-annual 3CDUG conferences to keep updated on what is happening at other CCC schools.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Institutional Effectiveness Planning and Human Resources Planning Forms as appropriate for any recommendations requiring institutional action.

Allocate \$10,000 annually for training for IT staff.

III. Administrative Unit and/or Student Learning Outcome Assessments

Description/Evaluation:

1. Describe any results from assessment of administrative units and/or student learning outcomes that affect human resource planning

None

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Institutional Effectiveness Planning and Human Resources Planning Forms as appropriate for any recommendations requiring institutional action.

None

IV. Prioritized Recommendation

Prioritized Recommendations for Implementation by Program Staff

List all recommendations made in Section Two that do not require institutional action in order of program priority.

Training times need to be scheduled for IT staff to utilize the online training packages that have already been purchased.

Prioritized Recommendations for Inclusion in the Planning Process

List all recommendations made in Section Two that should be included in Lassen College's planning and budgeting process. See Attachment C for Master Plan Overview to determine where recommendations are best placed.

Allocate \$10,000 annually for training for IT staff.

Prioritized Recommendations for Inclusion in Human Recourse Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost (implementation & ongoing)	Expected Outcome
1, 3	Training Budget for IT		\$10,000 ongoing	IT Efficiency

Section Three: Facilities Planning

I. Facilities

Description/Evaluation:

1. Describe and evaluate the Lassen Community College facilities available to the program.

The IT Office is located in HU103/104 and is where all our desks are located. The IT server room and work/storage room is located in VT109. There are also 20 network closets (IDFs) in all the buildings across campus that house the campus network equipment.

With the IT Office and work/storage room being located in different buildings it naturally creates some inefficiencies when doing our work. Our spaces need to be evaluated for better and more efficient places and/or location to work from.

LCC currently has all multi-mode fiber that connects all the buildings and allows the network switches to communicate. The multi-mode fiber has distance limitations for the data capacity and speed that it can handle. This fiber is also about 23 years old. Some of our buildings have a lot of computers/users in them and the users will saturate the network connection for that building. Technology today is demanding more and more data constantly. In order for our network to be able to handle more data at faster speeds our fiber infrastructure needs to be replaced with single mode fiber. This will allow our network to communicate more data at a faster rate over longer distances. Buildings can be prioritized and not everything has to be done at one time.

Moving computers/equipment around campus can be challenging at times without having some sort of vehicle to carry them. The equipment can be very heavy, and when the weather is bad there is no way to move it without possibly getting wet or damaged. Even moving tools needed is not possible at times (e.g.: getting a ladder to the room where it is needed).

2. Describe and evaluate additional facilities utilized off-campus by the program (attach any relevant rental agreements)

N/A

3. Describe any facilities needs identified by assessments of administrative unit and/or student learning outcomes

N/A

4. Justify any proposed modifications or additions to existing facilities that would better serve the program planned for the next five years.

Should the IT office need to be relocated it would be best if the IT office was located closer to VT109. The current space that IT utilizes in HU103/104 and in VT109 needs to be evaluated so that IT can best utilize the space that it has. IT needs a larger space to work on multiple computers at a time while at the same time needs space to store new equipment until it is deployed. At times the new equipment can be a lot.

Every year LCC has to deal with power outages and some are short while others are long. Although we do have Uninterruptable Power Supply (UPS) to help protect the data center at LCC we do not have the battery capacity to power the data center for long periods of time. One hour at most. When the data center has to be shut down it takes about 6 – 8 hours to get everything back up running and all the bugs worked out. Having a generator to power the data center in the event of a power outage would alleviate these issues and would allow LCC to continue to provide online services during a power outage.

Each network closet on campus needs a dedicated circuit and a UPS that will provide at least 1 hour of power for the IDF. This is so that in the event of a power failure the campus will still have working phones and emergency PA system for at least 1hour.

For efficiency, it is recommended to consolidate some IDF closets. Currently Humanities has 4 IDF locations and the building is small enough that it could be served by 1 IDF location. It is recommended to consolidate to the new IDF closet that was built during the Academic Resource Center renovation. Creative Arts building is another that can have 2 IDF closets consolidated. The two 1st floor IDFs can be combined into CA124. This will reduce the number if UPS's needed for IDF closets and get networking equipment in proper locations.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Institutional Effectiveness, Facilities Planning, and Technology Planning Forms as appropriate for any recommendations requiring institutional action.

Evaluate IT spaces for efficiency.

Ensure that all IDFs have a dedicated circuit and UPS.

II. Prioritized Recommendations

Prioritized Recommendations for Implementation by Program Staff

List all recommendations made in Section Three that do not require institutional action in order of program priority.

None

Prioritized Recommendations for Inclusion in the Planning Process

List all recommendations made in Section Three that should be included in Lassen College’s planning and budgeting process. See Attachment C for Master Plan Overview to determine where recommendations are best placed.

Prioritized Recommendations for Inclusion in the Facilities Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost (implementation & ongoing)	Expected Outcome
3	Ensure that all IDFs have a dedicated circuit and UPS		\$40,000	Network dependability and campus safety
3	Single-mode fiber for campus		\$75,000	Faster network backbone
3	Generator for data center		unknown	Data center dependability and efficiency
3	Evaluate IT spaces for efficiency		unknown	Efficient work environment
3	IDF Consolidation		\$20,000	Efficiency
3	Electric cart for moving computers/equipment		unknown	Efficiency

Section Four: Technology Planning

I. Institutional Technology

Description/Evaluation:

1. Describe and evaluate technology and technology support provided for instruction and instructional support.

Technology is a critical part of education at LCC. Both hardware and software technology is required by all at LCC. Software licensing is a large expense within the IT budget. Some annual software agreements can stay the same from year to year while others will go up from year to year. The addition of new software modules will also cause software agreements to increase from year to year. Some examples are Ellucian's Colleague and Lexmark's Perceptive Content, we can plan on about a 5% increase every year to the annual maintenance for the software as well as any new modules purchased the year before. These types of increases need to be incorporated into budget planning process to augment the IT budget.

For the last couple years the Title III grant has paid \$22,470 annually towards the Ellucian annual maintenance for software modules that were purchased with Title III funds. Now that the Title III grant has ended the IT budget will need to be increased to pay the full annual maintenance.

In the summer of 2011 LCC replaced its legacy phone system with a Cisco Voice of IP (VoIP) phone system. This VoIP phone system has performed very well for the last 5 years. The annual maintenance for the phone system was prepaid for that 5 years. Summer 2016 the IT budget had an \$11,000 increase to the annual Cisco maintenance agreement. This consumed any leeway the IT budget had for absorbing other software increases. As part of the annual Cisco renewal it was discovered that the server that the phone system runs on is no longer supported by Cisco. Our current phone system is several major versions behind the last software. With the latest software we would be able to operate our phone system within our existing VMware server infrastructure and so we would not need to purchase a new server. The phone system needs to be upgraded so we can operate in our existing server infrastructure and be able to incorporate new capabilities.

Beginning with the 2015-16 budget year the IT budget has been given \$70,000 annually to use towards the refresh of computers, network switches, and servers. These funds were originally placed in budget from the Cisco and Dell leases that have been paid off. These funds have gone a long way towards updating computers on campus. The Institutional Technology Master Plan calls for key

technology equipment being replaced every 5 years. The current funds provide a lot of momentum to achieving this goal. However to achieve a 5 year replacement cycle of all equipment across the board additional funds will be required. Some equipment like printers and network switches can usually go longer than 5 years, but other equipment when you go longer than 5 years you start to encounter more problems with the equipment.

There are two Ellucian modules that LCC owns that have not yet been implemented, Intelligent Learning Platform (ILP) and Ellucian Mobile. The ILP module was purchased when Canvas was implemented. Ellucian announced plans to integrate Canvas into their supported online learning management systems. When implemented, this will provide real-time integration of Canvas with our Colleague student information. Early 2017 Ellucian plans to release a version of ILP that will support Canvas. Implementation will begin at that time.

Ellucian Mobile will provide students an app that they can load on their phone that will allow them to register for classes, look at their class schedule and more. This app has matured enough that it should be implemented.

2. Describe any technology and technology support needs identified by assessment of administrative unit and/or student learning outcomes.

None

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Institutional Effectiveness Planning, Facilities Planning, Technology Planning and Human Resource Planning Forms as appropriate for any recommendations requiring institutional action.

Upgrade phone system

Increase phone system annual maintenance

Increase IT budget for software paid for by Title III

Increase technology replacement budget.

II. Prioritized Recommendations

Prioritized Recommendations for Implementation by Program Staff

List all recommendations made in Section Four that do not require institutional action in order of program priority.

Implement Ellucian's Intelligent Learning Platform

Implement Ellucian Mobile

Prioritized Recommendation for Inclusion in the Planning Process

List all recommendations made in Section Four that should be included in Lassen Community College's planning and budgeting process. See Attachment C for Master Plan Overview to determine where recommendations are best placed.

Prioritized Recommendations Inclusion in Institutional Technology Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost (implementation & ongoing)	Expected Outcome
3	Increase IT budget for software paid for by Title III		\$22,470 plus annual increase - ongoing	
3	Increase phone system annual maintenance		\$10,000 ongoing	
3	Upgrade phone system		\$70,000 Implementation	Keep current with technology and dependability
3	Single-mode fiber for campus		\$75,000	Faster network backbone
3	Increase technology replacement budget		\$50,000 ongoing	Keep current with technology and dependability

Lassen Community College Master Plan Overview

Six master plans comprise the Comprehensive Institutional Master Plan. Recommendations from program reviews will be input into the selected master plans as determined by faculty in the prioritized recommendation spreadsheets. To better understand which master plan might be most appropriate for each program recommendation, a summary/objective of each plan is included below. More information can be found in the Shared Governance and Consultation Council Handbook and the Comprehensive Institutional Master Plan.

Institutional Effectiveness Master Plan (IEMP): the IEMP addresses college needs not addressed in other plans. These needs include research, governance, outcome assessment, and administrative operations.

Educational Master Plan (EMP): The EMP addresses the instructional planning needs of the college.

Student Services Master Plan (SSMP): The SSMP highlights the services needed to maximize the student experience through a variety of key student support services.

Institutional Technology Master Plan (ITMP): The ITMP addresses the technology needs of the campus.

Facilities Master Plan (FMP): The FMP addresses the physical infrastructure, facility, and maintenance needs of the campus.

Human Resources Master Plan (HRMP): The HRMP identifies and manages the administrative functions of recruitment, selection, evaluation, and professional development needs of the College to ensure a fully-staffed and highly functioning team of employees.