Mendocino-Lake Community College District

Technology Action Plan

2020-2023
Approved by the
MLCCD Information Technology Committee
April, 2020

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Since 1973 Mendocino-Lake Community College District has proudly served the many small communities which make up our large counties of Mendocino and Lake. Decades of sustained vision and leadership have evolved the District’s presence from a few portable trailers at the Ukiah Fairgrounds to our current position of three permanent centers and our main campus in Ukiah.

In addition to degree and transfer opportunities, the College offers programs from a nationally recognized nursing program to professional-level theatre, a renowned Agriculture Department to an outstanding Child Development Program, our College continues to grow and excel. None of these achievements would have been possible without flexible, dedicated and participatory planning.

Through the collaborative efforts of the Educational Master Plan in conjunction with the Planning & Budgeting Committee and the Board of Trustees, we adjust our plans in accordance to the needs of not just our students, but of the state and our region. This fluidity enables us to provide our students the tools necessary to succeed in their personal, educational and professional goals. It is through the dedication and good work of many that we are able to provide access to exemplary higher education in our rural community.

This Technology Action Plan is an extension of that work; it focuses on ensuring that students, faculty, staff, and administration have the technology tools they need to reach that vision. The Director of Information Technology and the Technology Committee worked collaboratively to identify the steps needed to have the technology in place to support the great working going on throughout our district. Each committee member brought their unique perspective, knowledge, and experience to the development of this plan.

I am extremely pleased with the results of their work; I hope that you will be too. This Technology Action Plan provides a roadmap for the Mendocino-Lake Community College District to best support our students and our community in the years to come. We look forward to what comes next.

Sincerely,

Eileen Cichocki
Assistant Superintendent / Vice President, Administrative Services
September 4, 2020
To leverage the strategic potential of technology, the Mendocino-Lake Community College District (MLCCD) must align its technology vision and initiatives with national, state and college priorities. This Plan provides a summary of issues the college faces in effective technology use, a roadmap for the future of technology in the college and recommended action steps for getting there. The mission of the Information Technology Department (IT) is to provide the technological proficiency, infrastructure, services and assistance that students, faculty and staff need to advance teaching and learning, regardless of physical boundary, in a diverse and changing environment.

Student success modeling and the analysis of complex data has become essential in higher education for teaching, learning, and community outreach.
TECHNOLOGY ACTION PLAN

To accomplish this, the College has undertaken the creation of this Technology Action Plan. The motivations for creating this plan are multiple:

- Assure that the technology solutions being delivered are the appropriate ones and support the College mission.
- Create an awareness of the strategic potential of technology among the College community and allow for the coordination of technology solutions across the college’s multiple technology providers to assure coordinated vision and effort.
- Ensure technology initiatives are strategic, solving problems, encouraging knowledge transfer, and, most importantly, student-centered.
- Facilitate long term planning via continuous research and development efforts required to stay current with new innovative technology solutions that are available in the industry.
- Advance our “systems thinking” mentality to leverage and utilize technology when appropriate, and to transform inefficient and outdated business processes into strategic, cost-effective and best practice solutions.

GUIDING PRINCIPLES

These principles guide the Information Technology department’s work and serve as basis from which to prioritize that work:

- Services will be delivered in the most effective and efficient manner.
- Solutions delivered will be aligned with the institutional mission and transform the way we do business.
- We will participate in the development of, requirements for, and enhancement of, core administrative system and implement the results.
- We will free College resources to concentrate on providing value-added services by outsourcing technology services and/or collaborating with other entities on non-core administrative systems, when advantageous.
- Institutional priorities, technology directions, client needs, and usage trends will be used to create criteria for the prioritization of technology initiatives and drive the application of technology solutions in a college-wide direction.
- The institution will leverage its investment in administrative and academic systems, data sources, connectivity, and institutional knowledge to provide strategic services.
- IT will support departments and process owners in the development, review, and redesign of their business processes, providing technology and institutional perspectives.
• IT will recognize and respond to the need for appropriate academic, library and support services required to assist with the growth in on-line learning.

• To accommodate projected growth, avoid obsolescence, and maintain competitiveness, we will proactively execute technology initiatives and lifecycle replacements.

• The implementation of this plan can have substantial impacts on Mendocino College and its students, faculty, and staff. As the focus of technology moves from operational to strategic, successful projects rely on the understanding and support of the entire institution to integrate advancements into the overall mission, goals, and operation of the College.

KEY SUCCESS FACTORS

Listed below are some of the Key Success Factors required for the successful implementation of Mendocino College’s Technology Action Plan.

• College-wide Support and Ownership
• Executive Management Support
• Communication
• Culture Change
• Appropriate Staffing and Resources
• Willingness to Share and Analyze Data
• Financial Support for Infrastructure and Lifecycle Replacement
• Professional Development and Training
• Technology Standards & Compliance
• Integrate with Planning Efforts and Continually Revise Plan
IMPLEMENTATION

The next step is to implement this plan by doing the following:

• Create awareness and ownership of technology vision – The College community must understand and support this plan for it to succeed. There will be a variety of communication efforts. Solutions delivered will be aligned with the institutional mission and transform the way we do business.

• Develop tactical plans – Technology providers and College departments will use this Technology Action Plan to guide the development of tactical plans, assuring that projects are in line with the technology vision, strategic initiatives, and prioritization criteria.

• Create measurements and a process to review and update the Technology Action Plan.

To assure that projects are supporting the technology vision, and ultimately the College mission and vision, measurements will be developed to assess success. The plan will reviewed and updated annually based on these measurements, and in response to the changing needs and goals of the College.

GOALS OF THE TECHNOLOGY ACTION PLAN (2020-2023)

• Use technology to support student learning and student success
• Use technology to support staff and faculty
• Maximize the sustainability of technology resources with effective planning and budgeting
TECHNOLOGY ACTION PLAN

TECHNOLOGY PLANNING PROCESS

The technology planning process has been driven by a variety of inputs for both administrative and instructional planning.

ADMINISTRATIVE TECHNOLOGY PLANNING

Administrative technology planning is driven by the goals of this plan and the annual program review of the Information Technology (IT) department. Two significant studies have guided IT planning in the last 12 months: the Strategic Alignment Plan for Colleague by Ellucian (see Appendix A) and the Network Assessment by AMS.net (see Appendix B). Both of these occurred in 2018.

Computer inventories are kept to ensure that desktop computers or printers are not out of date in staff offices. In addition, departments have also stated technology needs or initiatives in their individual program reviews.

The Technology Committee reviews and ranks technology related requests and reports to executive management on the priorities.

INSTRUCTIONAL TECHNOLOGY PLANNING

Instructional technology planning is accomplished by the executive instructional staff after careful review of the instructional program reviews and computer replacement plans.

In addition, instructional technology planning uses the Board of Trustees adopted Educational Master Plan as the foundation for the Technology Action Plan and the Facilities Master Plan.

MAIN POINTS FOR BOTH ADMINISTRATIVE AND INSTRUCTIONAL TECHNOLOGY PLANNING:

Technology planning input is primarily provided through institution-wide program reviews. Program reviews, as they are developed, are part of the overall college strategic planning process and use the Educational Master Plan and the Facility Master Plan as a foundation.

The Technology Committee, which has members representing management, faculty, and classified staff, provides guidance and input on the direction of technology for the college. In April 2020, the committee added a representative from the Associated Students of Mendocino College (ASMC) as a regular member of the committee. Drafts of this technology plan were
shared with the Academic Senate and Classified Senate and their input was incorporated into the plan.

Beginning in spring 2021, the Director of Information Technology will conduct an annual student technology survey to ensure that the voice of students is part of the technology planning process. An annual staff technology survey will be used beginning in fall 2020 to provide feedback on how well the Information Technology department is meeting staff needs and to identified additional areas of support that are needed.

A Cyber Security Internal Control Survey Report was conducted by ePlace Solutions in 2017 which has guided IT planning for both administrative and instructional technology decisions (see Appendix C) but some findings have not yet been implemented due to resources constraints.

While funding for the administrative desktop refresh is provided annually, all other administrative and instructional technology are funded from one-time or department funds without a consistent annual funding source.

**Documents Used for the Plan:**

The following documents were reviewed prior to developing the Technology Action Plan:

- **Strategic Plan 2009-2015**
- **Integrated Plan 2017-2019**
- **Educational Master Plan 2010-2018**
- **Educational Master Plan Extension for 2018-2022**
- **Student Equity Plan 2019-2022**
- **Facilities Master Plan 2020-2025**
- **Program Review Equipment and Information Technology Sections**
- **Institutional Self-Evaluation Report December 2019**
- **Ellucian Realignment Plan for Colleague**
- **AMS Network Assessment and Upgrade Plan**
- **Technology Inventory for both Administrative and Instructional Areas**
The Technology Plan contains the following goals:

GOAL 1 - Use technology to support student learning and student success.

GOAL 2 - Use technology to support staff and faculty.

GOAL 3 - Maximize the sustainability of technology resources with effective planning and budgeting.
The Technology Action Plan was developed keeping the College’s technology systems and structure in mind. This section will describe the current technology environment and the key challenges faced by the IT Department.

ADMINISTRATIVE TECHNOLOGY ENVIRONMENT

Ellucian Colleague is the system of record for all employees and students. The system has been updated regularly since the installation in 2009 and there have been very few customizations.

The college maintains the inventory of all staff and administrative computers. Staff computers are annually updated on a refresh cycle. Nearly all computers are purchased with educational pricing from Dell. Hewlett Packard printers are provided in offices. The district leased copiers/scanners from Kyocera and with the end of the lease acquired ownership of those units.

The basic Microsoft and Adobe software used on administrative computers is through subscription administered by ComputerLand on behalf of the Community College system. These products are cloud versions and the agreements extend to use by students and staff home computers.

Other software that is used at the college includes Filemaker Pro which is used by many departments for their own adhoc databases. It is under a yearly maintenance contract. The fiscal system, ESCAPE, is web-based and is maintained by the Mendocino County Office of Education (MCOE). This system was implemented in 2018.

Currently Single Sign On (SSO) is done using Shibboleth and Unicon is used to manage the server in the cloud. Grant funds will pay for this until 2020. The Unicon solution does provide the college with the SSO Proxy for access to CCCApply, MyPath, and exLibras.

Emergency notification via text/email is provided by Regroup. In 2018, the college renewed the contract until 2021.

The college website uses the open source Drupal Content Management System. It was last refreshed in 2014 and went live in 2015. The college is working with a vendor on revamping the CTE portion of the website using Drupal. The college uses SitelImprove to monitor the website to keep it current and for checking ADA compliance.
The servers in the data center are due for a refresh. Besides their age, we have reached the capacity of our current servers in processing and storage to support our existing applications. Some applications are moving to the cloud and that will impact the server/data storage requirements for this critical upgrade. The IT Department is currently reviewing upgrade proposals.

INSTRUCTIONAL TECHNOLOGY ENVIRONMENT AND SUPPORT OF STUDENT SERVICES

The College currently has approximately 350 computers for instructional technology. The main campus in Ukiah and the three centers have SMART and Audio/Visual technology in the classrooms as well as at least one dedicated computer classroom. Academic departments have specialized technology hardware and software to support their instructional programs and students. The Library and Learning Center has thin client technology in addition to some high-end computers to support instructional programs in Computer Science (CSC), Graphic Design, Nursing, and Recording Arts. In 2019, the CTE classrooms and the graphics lab were refreshed and upgraded.

In support of student success and Guided Pathways, implementation of the Strategic Alignment Plan for Colleague by Ellucian is underway and includes Self Service and Ellucian Mobile. This initiative will result in better technology for students to access and engage with the college. The college has been very successful with its implementation of the online learning platform, Canvas, and has begun expanding its use to in-class instruction. Other statewide projects include the OEI (online education initiative) which has many components to enhance online education. Currently the college is implementing Cranium Café, which is an online counseling conference system. The college recently implemented ExLibris, the statewide library system. The online orientation system is being updated using the Comevo platform. In spring of 2019, MyPath was implemented for student onboarding and has a Career Planning component that is essential for the college’s Career Hub that opened in fall 2019.
SUPPORTED SYSTEMS

Below is a chart which shows all the systems supported by the IT department at the college. The department currently supports Ellucian Colleague, thirty-three (33) integrations with Colleague and fifteen (15) other systems have contract support only. These systems must be maintained on a regular basis.

**DISTRICT INFORMATION SYSTEMS**

**COLLEAGUE INTEGRATIONS**

- **Scheduled DOWNLOAD from Colleague**
  - AwardSpring
  - BankMobile
  - Canvas
  - Data Warehouse
  - Follett
  - Ex Libris (In Process)
  - NeoGov
  - Cranium Café

- **Scheduled UPLOAD to Colleague**
  - Orientations (Internal App)
  - Comevo (replacing existing Orientation system)
  - CCC Apply
  - Project SuperGlue

- **Bi-Directional**
  - Colleague
  - Ethos Identity
  - Project SuperGlue
  - Self-Service

- **Active Directory SSO**
  - Ellucian Mobile
  - Portal
  - SSRS
  - Barracuda
  - O365
  - Portal

**CONTRACT ONLY**

- **InCommon Certificates**
- **Nursing Simlab Software**
- **PaperCut**
- **FormPort Server**
- **Domain REG - Educause**
- **GoDaddy External DNS (In Progress)**
- **Site Improve**
- **VEEAM**
- **VMWare**
- **Filemaker**
- **Devolutions Software**
- **CoTOP**
- **CDV Software**
  - Vicon v6.x (moving to Avigilon)
- **Datacove**
  - (being replaced by Barracuda)
HUMAN CAPITAL

The IT Department has gained two positions over the last several years. However, turnover and increases in the use of and dependency on technology provide a significant challenge for IT to meet the needs of the college community at the current staffing level. At the time this plan was created, there was a vacant position. Traditionally IT positions have been difficult to fill at the college because of its rural location and the difficulty in matching the salaries of larger colleges or other employers. A recent review of the IT Project list included 125 pending projects. In order to help better track requests for assistance, IT has implemented a Help Desk system to allow users to submit their requests and track the progress online.

CYBERSECURITY

Government agencies and educational institutions specifically have become a frequent target of cybercriminals and nation state cyber attackers. These organizations typically have three things that make them attractive targets:

- Significant amounts of personally identifiable information (PII) for students and staff
- High-speed connections to the Internet
- Small IT Teams with minimal (if any) staff dedicated to computer or network security

Phishing, sending carefully crafted emails to get a user to open an infected attachment or click on a link to a compromised/fake website, is the most common vector in recent data breaches [Verizon Data Breach Investigation Report 2019]. It is critical that staff and faculty learn to recognize phishing attempts and respond appropriately. On any given day, the college is just one opened malware attachment or one bad link click away from a cybersecurity incident.

To help address this challenge, the Human Resources department has incorporated basic cybersecurity awareness training into the new employee onboarding process. The college’s email firewall adds the “[EXTERNAL]” tag to the subject line of emails originating outside the college’s email system in order to help staff recognize emails that purport to be from other college employees. In January 2020, IT began sending monthly phishing emails to staff to demonstrate how easily one can fall victim to these attacks. The email provides staff who open the attachment or click on the link with information on how they could have recognized that the email was a phishing attack. The January phishing email was sent to 600 college staff. Eighteen percent of the recipients opened the email and 4.3% clicked on the link.

The IT Department is using the findings of the ePlace Solutions review and the CIS Controls as a framework for improving the security of college systems over time.
DISASTER RECOVERY

With the fires experienced in Northern California in recent years, it is critical that the College have a disaster recovery plan outlining how it can return technology systems to operation in the event that the existing data center is damaged or destroyed. With the ever-expanding capabilities of cloud providers such as Microsoft and Amazon Web Services (AWS), the cloud is an important part of most disaster recovery plans. The College currently backs up its data to AWS on a nightly basis. This backup would be available in the event of a disaster. The college needs to create a disaster recovery plan to address server and network infrastructure needs as well as the replacement of end user devices.

PROFESSIONAL DEVELOPMENT AND TRAINING

With the ever changing nature of technology, its increased use, and the difficulty for staff to be away from their assigned duties during their work day, it makes providing technology professional development and training challenging for the College. Staff in-service days have included technology training components, but those are infrequent opportunities that are also used for other critical training and development. Many staff members are not aware of features of the technology systems they use every day that could potentially make them more efficient. While there is a wide variety of online training available through the Vision Resource Center, most staff members do not take advantage of it.

In an effort to increase the use of online resources, IT has highlighted the resource in recent newsletters, created a short training video to show staff how to get started, and is creating a web-page of online training resources that staff can access on their own schedule.

In December 2019, the department distributed a technology training survey to all staff. The results of the survey were shared with the Technology Committee. Monthly technology trainings were scheduled during the spring 2020 semester. The COVID-19 pandemic required the cancellation of most of those in-person sessions, but work has begun to create video versions that will be available to staff, even if they are working remotely. Monthly technology training will resume in the fall via Zoom. In-person training will resume when staff return to campus.
DEVICE LIFECYCLE

Technology devices such as desktop or laptop computers and printers have a limited lifespan before they need to be replaced. The College has implemented a refresh process for administrative computers, including full-time faculty computers with a regular budget item each year to replace the oldest of the machines still in use. Unfortunately, there is not yet a matching resource for instructional computers in classrooms or computer labs. Those computers, along with their related peripherals such as projectors, printers, etc., have typically been replaced using one-time grant funding or from department general funds. Those devices, principally used by faculty and students, would also benefit from a regular refresh cycle. The College has been fortunate to have been able to make some progress in replacing instructional computers from Career Technical Education (CTE) funds in recent years.

One current challenge in this area is that support for Windows 7 ended in January 2020. There are still over 100 computers running Windows 7 on the college network. While the college already owns licenses for Windows 10 for those computers, the challenge is for time for IT staff to perform the upgrades.

INFRASTRUCTURE LIFECYCLE

As with the technology devices mentioned previously, network infrastructure and servers have a similar need to be refreshed on a regular basis. The majority of the college’s network infrastructure equipment was purchased as part of Measure W Bond Program. Since that one-time influx of resources, limited funding has been available to replace aging network switches, firewalls, and servers. The College received a Rural Technology Grant from the Chancellor’s Office in 2018, 2019 and 2020. A remaining portion of that funding is available to begin replacement of the network infrastructure.

AMS performed a Network Assessment in 2018 to identify the needs and to propose potential solutions. Among the findings were that nearly all network equipment has passed the manufacturer’s end of life date. Much of the equipment is limited to 100 Mbps, while
industry standards call for ten times that speed (1Gbps) to each desktop or laptop computer. Network cabling in McMillan Hall and other older buildings needs replacement in order to be able to support those needed higher speeds. The College’s wireless network has far too few access points, connected at too slow a speed, and is simply unable to meet the demand of today’s students and staff, who frequently have multiple devices that they wish to connect to the network. The network lacks standard security features that are essential in today’s environment. Network servers in production use are running Windows Server 2003 and Windows Server 2008 versions that are no longer receiving feature and security updates.

The Director of Information Technology worked with four vendors to develop proposals for a network upgrade. The proposals included leasing components in order to transition the upgrades from a capital expense to an operational expense and to build in a routine replacement cycle for these critical network components. IT Management from Santa Clara was selected as the vendor for the project and the intent is to complete the network upgrade in January 2021.

**TECHNOLOGY STANDARDS**

Technology Standards allow an organization to establish boundaries for their technology use. Those standards typically address the types of products, their configurations, and how they’re used. Some of these standards are outlined in the organization’s policies. For example, BP 3720 – Computer and Network Use and AP 3720.1 – Computer and Network Use form the College’s acceptable use policy that staff and students must abide by while using technology resources. Most technology standards are less formal and are the organization’s standard practices regarding technology use.

While there are some standard IT practices that have developed over the years, most are only known by IT staff and other college staff who have learned them as a result of their interactions with IT. For example, the college purchases Dell desktop computers for administrative and instructional use. College systems run Windows 10 and utilize the Microsoft Office suite for productivity software.

In order to provide information to the wider college community, IT should create a public document outlining the College’s technology standards that can be shared with staff. Additionally, IT needs to create internal configuration standards documentation for its own use.
COVID-19 PANDEMIC

While this plan was in development, the college faced an unprecedented need to move teaching and learning online as a result of shelter-in-place orders from public health officials. Over a three week period in March 2020, employees transitioned to working remotely and classes transitioned to remote instruction. The Information Technology department played a crucial role in that rapid transition. With the entire nation transitioning simultaneously to remote working, teaching, and learning, some technology items such as laptops and Chromebooks were in short supply. Through repurposing existing laptops and Chromebooks, as well as some acquisitions of new devices, the IT department was able to get staff and students the technology they needed to make the transition.

With the uncertainty regarding a “return to normal” the response to this emergency will continue to dominate the work of the IT department and the college community for the foreseeable future. The need for a reliable and secure network and server infrastructure is only increased by its central role in meeting the needs of students and staff at this time.

IT PLANNING AND DECISION-MAKING PROCESS

The decision-making process used for IT planning begins with the annual program review requests. Then the Technology Committee reviews, ranks, and makes recommendations to the Planning and Budgeting Committee, who in turn makes recommendations to the Superintendent/President. The Superintendent/President then moves the recommendations forward to the Board of Trustees.

The Director of IT directs and manages the Information Technology Department and works with the Technology Committee to advance Information Technology efforts at Mendocino College. The Director of IT reports to the Vice President of Administrative Services and uses the Technology Action Plan as the primary governance document for Information Technology along with the Educational Master Plan, the Strategic Plan, and the college’s mission, vision, values and goals.

The Educational Master Plan, Program Review, the Technology Committee, the Director of IT and a review of the previous Technology plan are all initial, foundational sources that help establish the structure from which the Technology Action plan is formed. The Technology Committee and the Director of IT work from those initial sources to develop and update the Technology Action Plan, working to ensure that it aligns with the Educational Master Plan, the Strategic Plan and the college’s mission. Once formulated, the Technology Action Plan then goes to the Planning and Budgeting Committee for approval.

Once approved, the Technology Action Plan becomes the primary governing document for Information Technology at Mendocino College along with the Educational Master Plan, the Strategic Plan, the Facilities Master Plan and the college’s mission, vision, values and goals. The Technology Committee and annual Program Review are then used to further direct and evaluate Information Technology efforts at Mendocino College.
CORRELATION OF THE TECHNOLOGY ACTION PLAN TO OTHER DISTRICT PLANS

Below is the correlation of the District Strategic Goals with the other District plans that were used in the development of this plan:

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<td>3. Success Rates in English/Math</td>
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</tr>
<tr>
<td></td>
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<td>4. Students on Probation/Dismissal</td>
<td>#9 - Non-Credit</td>
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<td>5. Access, Success, Completion for Native Americans</td>
<td>#11 - Cross-Campus Collaboration</td>
</tr>
<tr>
<td><strong>Community Relationships</strong></td>
<td>3. Sustainability</td>
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</tr>
</tbody>
</table>

This indicates that the various plans have been developed with each other in mind. The Technology Action Plan 2020-2023 does align with the other plans of the District.
The following pages contain the activities to support the Technology Action Plan 2019-2023. The plan is organized into three sections, one for each of the Technology Action Plan Goals.

Each Technology Action Plan Goal has Initiatives, Most Responsible Party and Target Completion presented in a columnar fashion for easy understanding. The definition for each is:

- **Objectives** describe the outcome that will address the Technology Action Plan Goal and District Strategic Goal.
- **Initiatives** describe the actions that are undertaken to move the institution towards meeting the Goal.
- **Most Responsible Party** identifies the individual or group assigned the responsibility to launch, oversee and complete the Initiative. The Responsible Party may complete the Initiative or collaborate with others to complete the Initiative.
- **Target Completion** is a date or timeframe within which the institution strives to initially complete the Initiative. Some Initiatives will be ongoing.

Three columns have been provided for use during the annual review of the plan. They include a column for How to Measure the Result, Yearly Outcome and Implications for Next Year’s Plan to be completed each year by the institution to provide for continuous review, evaluation and revision of the plan. The definition for each is:

- **How to Measure Results** identifies what assessment will be used to measure progress
- **Yearly Outcome** is a brief statement describing the results for the year in completion of the Initiative.
- **Implications for Next Year’s Plan** describes adjustments that may be needed if the outcome described in the previous column requires changes.
### TECHNOLOGY ACTION PLAN

#### DISTRICT STRATEGIC GOALS

**Goal #1:** Use Technology to support Student Learning and Student Success

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>INITIATIVE</th>
<th>MOST RESPONSIBLE PARTY</th>
<th>TARGET COMPLETION</th>
<th>HOW TO MEASURE RESULTS</th>
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<th>IMPLICATIONS FOR NEXT YEAR’S PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a</td>
<td>1.a.1 Evaluate the following statewide initiatives and implement/sustain the use of these systems:</td>
<td>Director of IT</td>
<td>2021</td>
<td>Completion of the implementation and sustained use of these programs. Results of Staff Technology survey.</td>
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<tr>
<td></td>
<td>• Canvas for online and hybrid learning</td>
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<td></td>
<td>• Online Education Initiative for online learning</td>
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<td></td>
<td>• Ex Libris Library System for student support</td>
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<tr>
<td></td>
<td>• Cranium Café for student services (including replacement of SARS)</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>• MyPath for career guidance</td>
<td></td>
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<tr>
<td></td>
<td>• CCCApply (re-implement) for student application</td>
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</tbody>
</table>
### Goal #1: CONTINUED

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</thead>
<tbody>
<tr>
<td>1.b Provide the best possible classroom environment</td>
<td>1.b.1 Identify changes needed in classrooms and meeting rooms to support remote and hybrid instruction</td>
<td>Technology Committee</td>
<td>2020</td>
<td>Minutes of Technology Committee discussions.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1.b.2 Upgrade Math and English programs with adequate computer labs</td>
<td>Director of IT</td>
<td>2021</td>
<td>Accomplishment of lab upgrades, Staff Technology survey results, Program Review requests.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1.b.3 Develop a refresh plan for instructional computers (do this in conjunction with 3.a.4)</td>
<td>Technology Committee</td>
<td>2021</td>
<td>Creation of the refresh plan</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1.b.4 Re-evaluate the Audio Visual and SMART classroom configurations and upgrade as needed</td>
<td>Director of IT</td>
<td>2021</td>
<td>Accomplishment of classroom updates, Staff Technology survey results, Program Review requests.</td>
<td></td>
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</tbody>
</table>
Goal #1: CONTINUED

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</thead>
</table>
| 1.c Provide improved administrative systems to support instruction and student services | 1.c.1 Implement improved integration between Colleague and other systems including:  
• Canvas for grade processing  
• Cranium Café for appointments  
• Others as identified | Director of IT | 2020 | Accomplishment of integrations, Staff Technology survey results. | | |
<p>| | 1.c.2 Develop a comprehensive accessibility plan for the college | Technology Committee | 2021 | Technology Committee minutes, development of the Accessibility Plan. | | |</p>
<table>
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<tbody>
<tr>
<td>2.a Provide technology support</td>
<td>2.a.1 Create and publish online knowledgebase for staff to resolve their own technology issues.</td>
<td>Director of IT</td>
<td>2020</td>
<td>Availability of the knowledgebase, Staff Technology survey results.</td>
<td></td>
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</tr>
<tr>
<td>2.b Provide adequate training</td>
<td>2.b.1 Inform staff and promote use of online technology training</td>
<td>Director of IT</td>
<td>2020</td>
<td>Technology training evaluation forms, Staff Technology survey results.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>2.b.2 Develop and implement a plan for regular on-going cyber-security training for all employees (including advanced training for IT) in addition to the training provided during the on-boarding process</td>
<td>Technology Committee</td>
<td>2021</td>
<td>Creation of the plan, records of staff completing training, Staff Technology survey results.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>2.b.3 Provide on-going training in Colleague functionality as upgrades are provided</td>
<td>Director of IT</td>
<td>2020</td>
<td>Colleague training evaluation forms, Staff Technology survey results.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.c Improve reporting</td>
<td>2.c.1 Investigate, select and implement reporting tools for end users</td>
<td>Director of IT</td>
<td>2022</td>
<td>Implementation of new reporting tool, Staff Technology survey results.</td>
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</tbody>
</table>
### Goal #3: Maximize the Sustainability of Technology Resources with Effective Planning and Budgeting

<table>
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<tr>
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<tbody>
<tr>
<td><strong>3.a Refresh systems and infrastructure</strong></td>
<td><strong>3.a.1</strong> Evaluate alternatives and refresh the network to meet new needs of faculty, staff and students and support cloud migration of systems including wireless (see Appendix B)</td>
<td>Director of IT</td>
<td>2020</td>
<td>Accomplishment of network upgrade, Student and Staff Technology survey results.</td>
<td></td>
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<tr>
<td></td>
<td><strong>3.a.2</strong> Complete refresh of CTE programs and once completed evaluate refresh of college website</td>
<td>Director of IT</td>
<td>2020</td>
<td>Completion of website refresh.</td>
<td></td>
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<td></td>
<td><strong>3.a.3</strong> Research, select and implement password reset for enhanced security</td>
<td>Director of IT</td>
<td>2020</td>
<td>Implementation of password reset system.</td>
<td></td>
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<tr>
<td></td>
<td><strong>3.a.4</strong> Develop a refresh plan for administrative desktop computers (do this in conjunction with 1.b.3)</td>
<td>Director of IT</td>
<td>2021</td>
<td>Creation of Administrative computer refresh plan.</td>
<td></td>
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<td></td>
<td><strong>3.a.5</strong> Evaluate, select and implement a replacement product for Single Sign-on</td>
<td>Director of IT</td>
<td>2020</td>
<td>Successful implementation of SSO solution.</td>
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### Goal #3: CONTINUED

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<tr>
<td>3.a.6</td>
<td>Evaluate, select and implement and Emergency Notification system which works with MITEL phone system when current contract ends</td>
<td>Director of IT</td>
<td>2021</td>
<td>Successful implementation of Emergency Notification system.</td>
<td></td>
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</tr>
<tr>
<td>3.a.7</td>
<td>Evaluate, select and implement data center refresh using cloud technology to the extent possible</td>
<td>Director of IT</td>
<td>2020</td>
<td>Successful implementation of data center refresh, results of Student and Staff Technology surveys.</td>
<td></td>
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</tr>
<tr>
<td>3.a.8</td>
<td>Re-evaluate the use of Thin-Client technology and implement best alternative</td>
<td>Director of IT</td>
<td>2022</td>
<td>Implementation of replacement for Thin-Client technology, Student and Staff Technology Survey results.</td>
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</tr>
<tr>
<td>3.b.1</td>
<td>Conduct a Staffing review for the IT department to best meet the needs of the college in the areas of security, network, systems and support</td>
<td>Director of IT</td>
<td>2021</td>
<td>Completion of the staff review with a final report.</td>
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### Goal #3: CONTINUED

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<tbody>
<tr>
<td>3.c Provide safe and secure systems</td>
<td><strong>3.c.1</strong> Develop a comprehensive Disaster Recovery Plan</td>
<td>Technology Committee</td>
<td>2021</td>
<td>Creation of the Disaster Recovery plan.</td>
<td></td>
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<tr>
<td></td>
<td><strong>3.c.2</strong> Implement the findings of the Cyber Security Internal Controls Report by ePlace Solutions (see Appendix B) works with MITEL phone system when current contract ends</td>
<td>Director of IT</td>
<td>2020</td>
<td>Implementations of the Cyber Security Internal Controls report, Staff Technology survey results.</td>
<td></td>
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</tr>
<tr>
<td>3.d Monitor the Technology Action Plan</td>
<td><strong>3.d.1</strong> Annually evaluate the Technology Action Plan 2020-2023 to provide continuous evaluation and improvement</td>
<td>Technology Committee</td>
<td>Annually</td>
<td>Minutes of Technology Committee, annual summary report and update of the plan.</td>
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</tbody>
</table>
Questions or Comments about this Technology Action Plan?
Contact: Dave Johnston, Director of Information Technology
djohnston@mendocino.edu • (707) 468-3091