Las Positas College
Technology Plan 2021-2026
DRAFT

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Introduction

The Las Positas College Technology Plan 2021-2026 addresses college-wide technology planning and ongoing support to further the mission, vision, and strategic direction of the College. The Technology Plan reflects the priorities in the Las Positas Educational Master Plan 2021-2026 (EMP) and serves as a guide for the allocation and use of College technology resources. The Technology Plan also reflects the College's role in informing the District-wide Strategic Plan (DSP) and defining the initiatives detailed in the Chabot-Las Positas District (CLPCCD) Technology Plan 2021-2026 (District Technology Plan).

College Mission

Las Positas College provides an inclusive, learning-centered, equity-focused environment that offers educational opportunities and support for completion of students' transfer, degree, and career-technical goals while promoting lifelong learning.

College Vision

Las Positas College strives to support and empower students to develop the knowledge, skills, values, and abilities needed to become engaged participants and leaders in their local and global communities.

Las Positas Technology Vision

Technology initiatives undertaken by Las Positas College (LPC) will promote the priorities detailed in the EMP (see Appendix I), support the ongoing efforts of LPC to sustain a highly functional and secure technology environment including the enhancements recommended in the IT assessment, and advance the technology initiatives outlined in the District Technology Plan.

LPC Technology Environment

LPC maintains a local technology department led by the Manager of College Technology Services who reports to the District Chief Technology Officer. The LPC IT environment includes college server and storage systems, applications, voice system, classroom technology, student computer labs, and faculty and staff systems. Several IT services for LPC students, faculty, and staff are provided by the District including the physical infrastructure supporting technology, data network, cellular distributed antenna system (DAS), servers and storage for enterprise applications, and enterprise applications.

Technology Plan Development Process

CLPCCD engaged the IT consulting firm WTC Consulting, Inc. (WTC) to conduct an IT assessment of the District, Chabot, and LPC IT environments and assist with the development of the technology plans. As part of the assessment process, WTC conducted multiple interviews with the LPC Manager of College Technology Services as well as interviews with individual faculty and staff, and provided LPC students, faculty, and staff the opportunity to respond to short online surveys. The LPC IT Assessment Report appears in Appendix II.

An LPC Working Group was established to work with WTC to identify areas to be addressed during the assessment process, areas to address in the recommendations, and individuals and/or groups to include in the interview process. A Steering Committee to provide oversight was also established.

This plan is intended to be living document. Projects will be identified and completed throughout the life of the plan. The plan will be regularly reviewed and updated to account for the ongoing nature of technology operations.

2021-2026 Technology Initiatives and Projects

In this section, we describe five technology initiatives and 32 related ongoing, in progress, or planned projects. For each project within an initiative, we indicate the role of LPC including who has responsibility within LPC, the role of the District, and the impact on LPC's students, faculty, and staff.

- Initiative #1: Maintain a Current Technical Environment – Ensure that students, faculty, and staff have access to sufficient and properly configured computing resources, effective online resources, and a highly available and secure network in support of, diversity, equity, inclusion, accessibility teaching, and student support and administrative services.

- Initiative #2: Improve the Student Experience – Provide students with easily accessible tools that enable them to effectively use online student services such as advising appointments, course registration, and tracking degree progress to promote diversity, equity, inclusion and accessibility.

- Initiative #3: Advance Teaching and Learning – Use technology to enable the College to continually enhance a diverse, equitable, inclusive and accessible student learning environment by supporting faculty in their efforts to integrate innovative pedagogical methods to address a wide array of learning styles.

- Initiative #4: Improve Operational Efficiency – On a continuous basis, evaluate and improve technology planning and decision-making processes, enhance training for faculty and staff, and use technology that supports diversity, equity, inclusion and accessibility to reduce the reliance on paper and automate manual tasks.

- Initiative #5: Continually Enhance Data Security – Evaluate the College's security posture on a continuous basis, work to mitigate vulnerabilities and reduce security risks, and promote security awareness among students, faculty, and staff through ongoing training that minimizes potential harm in our diverse, equitable, inclusive and accessible community.

Initiative #1: Maintain a Current Technical Environment

Project: Life-cycle Management of Faculty and Staff Systems – Continue to refresh the faculty and staff computer systems according to the agreed-upon life cycle. Prioritize replacing faculty and staff systems with unsupported operating systems whose scheduled upgrades have been delayed.

LPC Role: Conduct an annual review of faculty and staff system inventory to identify systems to be replaced, create a replacement plan and schedule, and execute the replacement plan.
Primary responsibility: LPC Technology Services.

Impact: Ensure that faculty and staff have access to up-to-date computer systems with supported operating systems.

Expected Completion: Ongoing

Project: Life-cycle Management of Servers – Continue to refresh the LPC servers according to the agreed-upon life cycle and migrate physical servers to virtual servers as physical servers go out of warranty.

LPC Role: Conduct an annual review of the server inventory to identify systems to be replaced or virtualized, create a replacement plan and schedule, and execute the replacement plan. Primary responsibility: LPC Technology Services.

Impact: Ensure that servers are under warranty and are running supported operating systems.

Expected Completion: Ongoing

Project: Migration of Faculty and Staff email to Office 365 (O365) – Initiated a project in September 2020 in response to problems with the District on-premise Exchange servers.

> LPC Role: Participation in the weekly meetings of the Migration Team. Investigation and resolution of LPC user issues during the migration.
> Primary responsibility: LPC Technology Services.
>
> District Role: ITS staff, Chabot Manager of College Technology Services, and LPC Manager of College Technology Services worked with a consultant from SHI International to conduct the migration of O365 and are currently in the final phase of the migration.
> Primary responsibility: District IT System Support.
>
> Impact: Improved reliability in email services for LPC faculty and staff with additional functions and features including integrated online storage.
>
> Expected Completion: October – November 2022

Project: Single Sign On (SSO) with Multifactor Authentication – Implement the OKTA identity and access management system to support single sign on that will allow each user to access online resources (e.g., Class-web, Zonemail) with a single set of login credentials as well as update and reset passwords.

> LPC Role: Investigate and resolve LPC user issues with SSO.
> Primary responsibility: LPC Technology Services.
>
> District Role: Implement system and provide ongoing technical support.
> Primary responsibility: District IT.
>
> Impact: Each LPC student, faculty, and staff member will be able to access computing resources with their single set of login credentials.
>
> Expected Completion Date: October 2022

Project: Distributed antenna systems (DAS) – The District has been expanding cellular coverage by installing DAS for the District and for each college. A system includes a headend used to bring cellular carriers into campus and then the signal is distributed over fiber optic and Ethernet cabling to DAS antennas within buildings. The LPC headend is in production.

LPC Role: Coordinate with the District staff managing the system to investigate and resolve issues. Primary responsibility: LPC Technology Services.

District Role: Oversee preparation of physical infrastructure, system installation, and ongoing system support for new and existing construction.
Primary responsibility: Manager, ITS Bond Projects and ITS staff.

Impact: Provide improved cellular reception within buildings for LPC students, faculty, and staff.

Expected Completion: Ongoing

Project: Core Switch Upgrade – Migrate the network core equipment from older switches to more contemporary switches as part of life-cycle management of the network equipment.

District Role: Configure and install core network equipment.
Primary responsibility: Manager, ITS Bond Projects and ITS staff.

Impact: Ensure core network equipment is supported by the vendor and under maintenance with an appropriate coverage and response level. A network diagram appears in Appendix III.

Expected Completion: Jan 2024

Project: Complete Migration to Banner 9 – Migrate the last remaining custom, local Banner 8 forms in use to Banner 9.

LPC Role: Provide input on creation of the new forms, adopt the new forms, and ensure that staff receive the necessary training on using the new forms.
Primary responsibility: Director of Admissions & Records and Director of Financial Aid.

District Role: Work with Chabot-LPC-District Team established to create new forms on the structure of the new forms and implement the new forms in Banner 9.
Primary responsibility: District IT Banner Support.

Impact: Increase the efficiency of the LPC staff members who currently are working in both Banner 8 and Banner 9.

Expected Completion: April 2023

Project: AIX Infrastructure – Upgrade AIX to Version 7.2 together with related firmware.

District Role: Complete required testing prior to upgrade, identify a window when Banner system can be offline, communicate upgrade window to campus community, and apply the upgrade. Primary responsibility: District IT Systems Support.

Impact: Improve system performance and provide the AIX platform required to support the upgrade to Oracle 9C.

Expected Completion: October – November 2022

Project: Upgrade to Oracle 9C – Upgrade the Oracle database management platform that supports the Banner databases.

District Role: Complete required testing prior to upgrade, identify a window when Banner system can be offline, communicate upgrade window to campus community, and apply the upgrade. Primary responsibility: District IT Systems Support.

Impact: Maintain Banner certification and Oracle support.

Expected Completion: February – April 2023

Initiative #2: Improve the Student Experience

Project: Ellucian CRM Advise – Integrate system with existing Banner system to enhance student success and retention strategies.

LPC Role: Engage student services areas in redesigning their work processes and workflows to effectively integrate the functionality and features of the system. Primary responsibility: LPC Student Services Leadership.

District Role: Implement system and provide ongoing technical support.
Primary responsibility: District IT Banner Support.

Impact: Enable LPC to strengthen student success and retention strategies, customize communication and outreach to students, track student performance and support timely intervention efforts, and measure performance and retention results.

Expected Completion: October 2022

Project: Ellucian CRM Recruit – Integrate system with existing Banner system to enhance student recruitment and admissions processes.

LPC Role: Engage recruitment and admissions staff in redesigning their work processes and workflows to effectively integrate the functionality and features of the system. Primary responsibility: LPC Student Services Leadership.

District Role: Implement system and provide ongoing technical support.
Primary responsibility: District IT Banner Support.

Impact: Enable LPC to streamline and enhance the College's recruitment and admissions processes by automating previously manual tasks and incorporating effective reporting and measurement tools.

Expected Completion: November 2022

Project: Ellucian Degree Works – Migrate the existing Chabot and LPC instances of Degree Works to a single instance to enable integration with CRM Advise.

LPC Role: Work within a Chabot-LPC-District team to resolve the differences between the two existing instances of Degree Works and migrate to a single instance. Primary responsibility: LPC Student Services Leadership.

District Role: Implement system and provide ongoing technical support. Primary responsibility: District IT Banner Support.

Impact: Enable integration of Degree Works with CRM Advise.

Expected Completion: January 2023

Project: Upgrade Self-Service Banner (SSB) – Upgrade self-service Banner to Banner 9 SSB, including the student self-service ClassWeb.

LPC Role: Ensure LPC staff who work with students during the registration process are provided the training needed to assist students who may have questions on using the new ClassWeb interface. Coordinate and provide focus groups for input on new functionality and usability. Primary responsibility: LPC Student Services Leadership.

District Role: Implement system and provide ongoing technical support. Primary responsibility: District IT Banner Support.

Impact: Provide LPC students with a substantially improved and user-friendly interface for the registration process.

Expected Completion: August 2023

Project: Portal – Implement Ellucian Experience Portal with integration of Okta SSO to provide students with a single entry point to their general online hub including ClassWeb and Zonemail.

LPC Role: Ensure that LPC staff working with students are provided training on the portal so they are prepared to assist students who may have questions on using the portal. Primary responsibility: LPC Student Services Leadership.

District Role: Implement the Ellucian Experience Portal and provide ongoing technical support. Primary responsibility: District IT Banner Support.

Impact: Enhance the experience of LPC students when accessing and using their online resources including course registration.

Expected Completion: December 2022

Project: Analyze Student Registration Processes and Technologies – Engage an external consulting firm to assist the District, Chabot, and LPC with conducting an end-to-end review of registration processes.

LPC Role: Work within a District-Chabot-LPC-consultant team to complete an end-to-end review of registration processes.
Primary responsibility: LPC Student Services Leadership.

District Role: Work within a District-Chabot-LPC team to complete an end-to-end review of registration processes. Primary responsibility: District IT Banner Support.

Impact: Identify process and technology changes and upgrades that enhance the student experience in and level of satisfaction with the enrollment and registration process.

Expected Completion: January 2023

Projects: Identify Projects Based on Results of Review – Identify new process development and technology projects based on the results of the end-to-end review of the registration processes described in the previous project.

Initiative #3: Advance Teaching and Learning

Project: Technology Loan Program for Students – Provide ongoing support for the Technology Loan Program for LPC students who do not have adequate access to a personal computer to do their coursework.

LPC Role:	Provide students who are enrolled in classes and in good standing with the college and do not have adequate access to the technology needed to complete their coursework with loaner technology. Systems are built and maintained by the LPC Technology Services staff. Primary responsibility: LPC Library and LPC Technology Services.
Impact:	Makes it possible for students without adequate access to technology to continue their academic program.

Expected Completion: Ongoing

Project: Hybrid-Flexible (HyFlex) Classrooms – Configure classrooms with the technology required to support HyFlex courses that integrate in-class instruction and online a/synchronous video sessions.

LPC Role:	Participate on the HyFlex Committee to address classroom design District wide, work internally to determine the subset of classrooms to configure to support HyFlex instruction, configure the classroom technology, and provide training for faculty to teach in HyFlex mode. Primary responsibility: Instructional Services & Technology (IST) Committee and LPC Technology Services.
District Role:	Coordinate a District-wide HyFlex Committee with leadership from the Vice Chancellor for Educational Services & Student Success and faculty membership from both colleges to address the classroom design for HyFlex courses. Primary Responsibility: Vice Chancellor for Educational Services & Student Success.
Impact:	Provide LPC students with the option to either attend class in person or participate remotely depending on their circumstances.

Expected Completion: Ongoing

Project: Life-cycle Management of Computer Lab Systems – Maintain the computer lab systems according to the agreed-upon life cycle and conduct an annual review of the lab system inventory to identify systems to be replaced.

> LPC Role: Conduct an annual review of computer lab system inventory to identify systems to be replaced, create a replacement plan and schedule, and execute the replacement plan. Primary responsibility: LPC Technology Services.

> Impact: Ensure that students have access to up-to-date systems in the computer labs to complete their coursework.

> Expected Completion: Ongoing

Project: East Bay College Agile Network (EBCAN) Partnership – Increase student-focused equity pathways and adopt an innovative model that increases certificate and degree attainment for students across all three campuses (Las Positas, Chabot, and Cal State East Bay).

> LPC Role: Provide list of technology needs and specifications to define the solutions needed in support of the program goals and objectives.
> Primary responsibility: Academic Services Leadership.

> Impact: Remove barriers and knowledge gaps for students seeking transfer to and from CSU East Bay.

> Expected Completion: Ongoing

Initiative #4: Improve Operational Efficiency

Project: Enhance LPC Strategic Technology Planning Processes – Undertake an initiative led by College leadership to develop a comprehensive approach to ongoing strategic technology planning that includes the following processes:

- An annual assessment of College needs with College-wide participation.
- Maintaining a prioritized list of College technology projects.
- Documentation of technology-related processes and procedures.
- Regular communication to faculty and staff on the status and priority of College projects.

LPC Role: Establish the ongoing strategic technology planning processes. Primary responsibility: LPC College Leadership.

District Role: Work with LPC leadership to integrate their College strategic technology planning process with their role in ongoing District technology planning. Primary Responsibility: Senior Leadership Team.

Impact: LPC will have more comprehensive technology planning processes making LPC priorities more visible in the District decision-making processes and enabling the work of the Technology Committee to integrate more fully with LPC academic and administrative goals. See Appendix IV for Technology Committee charter.

Expected Completion: May 2023

Project: District-wide Vaccine Mandate – Provide a system to enable students to upload their proof of vaccination and allow the District to track vaccination status and incorporate compliance to the vaccine mandate into the registration requirements process.

LPC Role: Serve as a point of first contact for students who cannot register due to vaccine card issues. Primary Responsibility: Student Services Leadership.

District Role: Implement the vaccine mandate system and provide ongoing technical support. Primary Responsibility: District IT.

Impact: Provide students with an efficient process to upload their proof of vaccination and integrate their compliance with the registration process.

Expected Completion: Ongoing

Project: Update Information Technology Total Cost of Ownership (TCO) Plan – Update the 2017 Information Technology TCO plan (see Appendix V) based on the Gartner model using the IT Key Metrics Data (ITKMD) to reflect current infrastructure and operational costs and recommended staffing levels.

LPC Role: Perform analysis to update the College's portion of the information technology TCO. Primary Responsibility: Manager of College Technology Services

District Role: Perform analysis to update the College's information technology TCO. Primary Responsibility: Chief Technology Officer

Impact: Updated information to use for information technology planning and budgeting.

Expected Completion: May 2023

Project: Training Materials for New Faculty and Staff – Work with the District and Chabot to develop shared training materials for new faculty and staff such as online videos.

LPC Role: Establish a team to work jointly with District and Chabot to develop shared technology training materials for new faculty and staff, supplement shared training materials with LPC-specific training materials, and incorporate training requirements into the onboarding process for new faculty and staff. Primary Responsibility: LPC College Leadership.

District Role: Establish a team to work jointly with Chabot and LPC to develop shared technology training materials for new faculty and staff, supplement shared training materials with District-specific training materials, and incorporate training requirements into the onboarding process for new staff. Primary Responsibility: District IT.

Impact: Technology training for new faculty and staff will facilitate their access and use of campus technology and reduce the number of requests for one-on-one assistance.

Expected Completion: May 2023

Project: Zonemail Storage Requirements – Implement the new Google limitation on the amount of free storage (15GB) that can be used by an account including Google Photos and Google Drive.

District Role: Implement the new free storage limitation on student Google-based Zonemail accounts. Primary Responsibility: District IT.

Impact: Brings the District into compliance with Google's data storage limit of 100 TB.

Expected Completion: December 2022

Project: Online Forms – Implement Online Form Tools to facilitate workflow and completion of online forms and electronic signatures.

LPC Role: Help identify high value targets for use with Adobe and adopt solutions as they are available. Primary Responsibility: LPC College Leadership.

District Role: Develop and deploy Adobe Sign forms as agreed upon with the colleges. Primary Responsibility: District IT.

Impact: Improve efficiency and time to complete common forms currently handled and routed in hardcopy.

Expected Initiation: October 2022

Project: Implement Social Media Procedure – Create organizational structures and processes in support of Administrative Procedure 3725 (see Appendix VI) allowing the District, Chabot, and LPC to manage social media posts more effectively with respect to content, accessibility, and risk.

LPC Role: Work with District ITS, Public Relations, and Marketing and Government Relations departments to identify social media channels, accounts, and account owners. Attend relevant social media training and professional development opportunities.
Primary Responsibility: Will be either Vice President for Academic Services or Vice President for Student Services.

District Role: Work with LPC Public Relations, and Marketing and Government Relations departments to identify social media channels, accounts, and account owners. Attend relevant social media training and professional development opportunities. Primary Responsibility: Public Relations, Marketing, and Government Relations (PRMG).

Impact: Enable LPC to comply with public records requests and district-wide administrative procedures.

Expected Initiation: December 2022

Initiative #5: Continually Enhance Data Security

Project: Security Awareness Program – Establish an ongoing security awareness program for faculty and staff that includes at least the following elements:

- • Responsible user practices
- • Protection of sensitive information
- • Phishing and social engineering awareness
- • Periodic simulated phishing campaigns

LPC Role: Help ensure compliance with participation requirements.
Primary Responsibility: LPC College Leadership.

District Role: Identify and make available appropriate security awareness training to the college community. Primary Responsibility: District IT.

Impact: Meets compliance goals for system security.

Expected Initiation: August 22, 2022

Project: Acceptable Use Policies and Administrative Procedures (3720 and 3725) – Revise these policies and procedures to reflect the current range of technologies and incorporate relevant legal statutes. See Appendix VI.

LPC Role: Provide input on the changes to the policies and procedures.
Primary Responsibility: LPC College Leadership and constituent groups.

District Role: Conduct review and update process consulting with appropriate groups and committees, create updated policies and procedures, and present to Board of Trustees for approval. Primary Responsibility: Chief Technology Officer.

Impact: Updated policies and procedures reflecting the current range of technologies and relevant legal statutes.

Date Completed: June 2022

Project: Office 365 Training – Provide Office 365 training to faculty and staff including encouraging the use of OneDrive as the preferred option for file storage.

LPC Role: Encourage faculty and staff participation in Office 365 training sessions. Primary Responsibility: LPC College Leadership.

District Role: Providing training sessions. Primary Responsibility: District IT.

Impact: Improved data protection awareness among faculty and staff and increased use of OneDrive for data storage.

Expected Completion: Ongoing

Project: Server Hardening – As part of a broader program to enhance IT security, the District conducts a weekly vulnerability scan of District and LPC servers.

LPC Role: Investigate and resolve any issues discovered during the scan. Primary Responsibility: LPC Technology Services.

District Role: Investigate and resolve any issues discovered during the scan. Primary Responsibility: District IT System Support.

Impact: Enhanced security of District and LPC servers to reduce the chances of a security breach and enable District and LPC staff to respond in a timely manner to resolving any issues found.

Expected Completion: Ongoing

Project: Cloud Storage for Server Backup System – Expand the Unitrends backup systems of non-Banner District servers and College servers at Chabot and LPC to include cloud-based storage.

LPC Role: Work with the District and Chabot to develop and implement a plan and schedule for expanding the server backup system to include cloud-based storage. Primary Responsibility: LPC Technology Services.

District Role: Work with the Chabot and LPC to develop and implement a plan and schedule for expanding the server backup system to include cloud-based storage. Primary Responsibility: District IT System Support.

Impact: Remove the data loss risk of having only on-premise storage of server backups.

Expected Completion: January 2023

LPC 2021-2026 EMP Goals Mapped to 2021-2026 Technology Initiatives

Table I illustrates the mapping of the LPC 2021-2026 EMP Goals to the 2021-2026 technology initiatives.

Table I: Mapping of LPC Goals to Technology Initiatives		
Goal	**Goal Description**	**2021-2026 Technology Initiative**
Goal A Educational Excellence	Ensure excellence in student learning through quality academic programs and support services.	Initiative #1 Maintain a Current Technical Environment Initiative #2 Improve the Student Experience Initiative #3 Advance Teaching and Learning
Goal B Community Collaboration	Ensure excellence in student learning by collaborating with community partners to provide educational opportunities that best serve the needs of our students and our community.	Initiative #1 Maintain a Current Technical Environment Initiative #3 Advance Teaching and Learning
Goal C Supportive Organizational Resources	Ensure excellence in student learning by strengthening fiscal stability, providing appropriate staffing levels, meeting evolving technology needs, and expanding or updating facilities.	Initiative #1 Maintain a Current Technical Environment Initiative #2 Improve the Student Experience Initiative #3 Advance Teaching and Learning
Goal D Organizational Effectiveness	Ensure excellence in student learning by improving organizational processes, promoting safety and wellness, and fostering professional development.	Initiative #2 Improve the Student Experience Initiative #4 Improve Operational Efficiency Initiative #5 Continually Enhance Data Security
Goal E Equity and Anti-Racism	Ensure excellence in student learning by prioritizing equity and anti-racism.	Initiative #2 Improve the Student Experience Initiative #3 Advance Teaching and Learning