- Review EMP Goals/Objectives and implications related to Technology Plan
- Review old draft Tech Plan goals
- Review Current IT works/projects
- Review DE Strategic Plan

• Theme conversation, also using miro

Mind Map Tool, miro

- Identified a list of documents important as input for the LMC Technology Plan
- Reviewed each document and identified relevant goals, topic areas, projects, and initiatives
- Mapped those here to facilitate an easier review and discussion
- Goal of the review is to validate, recognize themes, discuss missing pieces,
- Should evolve with input
- After an initial review we will begin an activity where everyone can provide input

Technology Plan 2020-25 <u>https://www.losmedanos.edu/tag/techplan20-25.aspx</u>

2.3. Across all of the College's instructional sites, increase equitable access to courses, programs and student support services, improved infrastructure, and – technology resources through 2022-23.

Goal 2: Increase and maximize equitable opportunities for students to successfully complete courses and programs. (District Strategic Directions 1 and 2)

2.4. Improve the flexibility in the delivery of programs and services. -

5.1. By 2020-21, develop and implement the Distance Education Plan to include technology and instructional equipment, online student services, and technical — professional development

Goal 5: Effectively utilize institutional resources to meet the needs critical to the College mission. (District Strategic Directions 4 and 5)

5.3. Develop a total cost of ownership policy model by 2021-22 and integrate it into all future institutional plans

Implications for Technology and Facilities

1. To maximize access to programs and services, including any current or future "off-site" instructional locations, enhance facilities and technology:

improve information technology infrastructure, which includes an approach to the total cost of ownership, in accordance with a Technology Master Plan;

develop an integrated contingency and recovery plan, which will enable the College to respond to crises, emergencies, and disruptive events while continuing to execute its initiatives and meet its mission;

consider continued investments in state-of-the-art technologies to respond to an ever-changing technology landscape;

consider deploying artificial intelligence tools, such as chat-bots, which are designed to help students through complex matriculation processes and access critical student support services;

in light of the expansion of remote services and online offerings, include flexible instructional strategies that minimize or mitigate students' needs for technology off campus;

Establish an "Online Academy" or Online Learning Community

Scale online teaching and learning to meet the needs of students and the community

Student facing website that provides online orientation and self-check material

Develop an instrument and process for student self-assessment for online learning.

Develop and conduct online learning student orientation

Embed student success module in all online courses.

Weave Ecosystem components into course design. Implement the following products into instructional design

Survey student technology needs and direct them to the proper resources at least two or three weeks before classes begin

consistent message regarding basic technology every student will need to successfully complete online class.

consistent message around how the college works to solve technology access problems for DE students

Implement quality assurance steps to guide faculty in developing quality and accessibility compliant courses and integrate DE education and training into existing practices.

Ensure equity and inclusivity in DE offering and student services

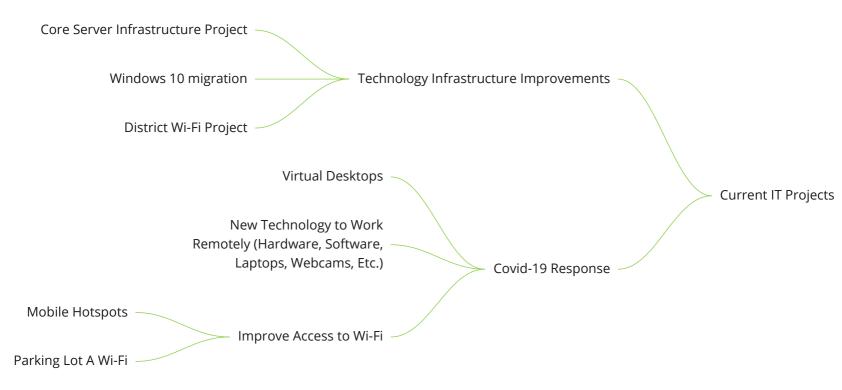
services that support online learning

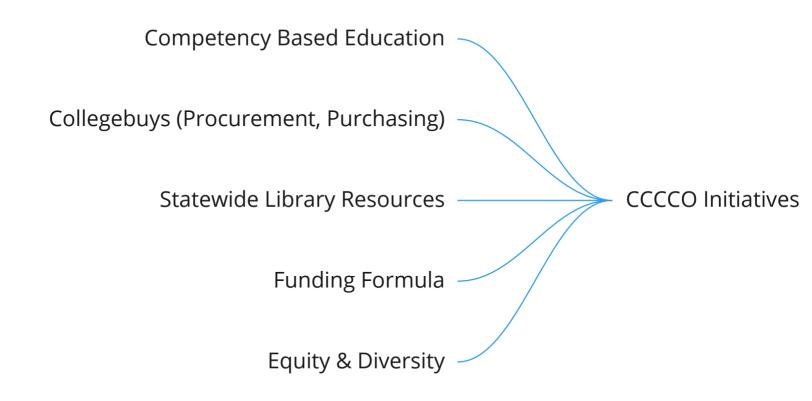
Provide seamless and integrated student

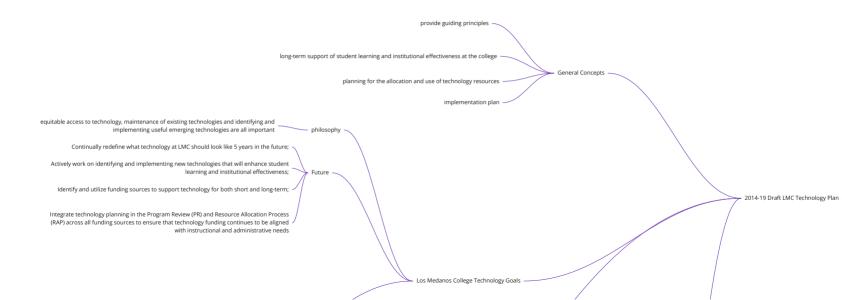
Ensure that the infrastructure supporting teaching and learning is sustainable

DE Strategic Plan

Provide student resources and support for to ensure equitable outcomes in distance education







Identifying and supporting emerging trends in student use of technolog	
Providing and maintaining campus computing resources with up-to-date and releva hardware and software to be used for course-related wor	
Compliance with Section 508 to the fullest extent possib	The goal of providing student access is to provide resources - software, hardware,
Off-campus access to support services such as admissions, registration, financial a counseling, library resources, and transcrip	supporting infrastructure, etc that meet the course-related needs of all students. Student Student Access
Access to a learning management system for fully online and hybrid courses, onlin supplements to face-to-face courses, and course information and grade reporting for course	
Providing and maintaining a robust network, both wired and wireless, that provides acce to computing resources throughout the Pittsburg and Brentwood campuse	
 Planning for the use, maintenance, upgrading and support for the various hardware required to support the instructional activities on both campuses; 	
Identify and investigate emerging technologies with the goal of determining the viability of these new technologies at LMC; $\hfill \sim$	
Support the use of the District-maintained learning management system (LMS) as a	The instructional technology goal's primary function is to assure that technology provided for instructional use at the college is up-to-date and serves the needs of the students and employees of the college. Instructional Technology
Develop and implement processes for the identification and implementation of identified emerging technologies;	
 Develop and maintain policies and procedures to assure that hardware and software used for instruction remain suitable for the purpose for which it is used. 	
Develop and deliver training that is relevant to existing and soon-to-be-implemented	In addition, relevant training on existing technologies and soon-to-be-implemented technologies will be planned for and delivered.
Identify and investigate emerging technologies that have the potential for improving administrative functions; $\fill \$	
Develop processes and procedures for the identification and development of specialized applications to support administrative computing needs;	
Develop and maintain standards and records for technology-related hardware and software used for administrative purposes that include purchasing, installation, support, and replacement;	focus is on providing planning and implementation of technology for administrative purposes and general support of the campus. As with all goals, institutional effectiveness is a primary concern with administrative computing.
 Maintain competitive contracts with outside vendors to assure that the most economic pricing for hardware, software and technology-related services; 	
Ensure that policies and processes are in place to provide reliable service and support of college technology.	

Technology Infrastructure —

Technology infrastructure includes the campus local area network, servers, wide area network connections to the District Office and other services such as backup and disaster recovery. Reliable function of the college's technology infrastructure is critical to all of LMC's instructional and administrative functions.

 In conjunction with District IT, develop and maintain standards for networking equipment (wireless, local area network, wide area network, and Internet connectivity) and services to ensure that the network connectivity needs of the campus are needed;

 Through network monitoring and management and anti-malware applications and devices, assure that our campus network, Internet connections, servers, workstations and ~ other systems are used efficiently and not open to compromise or malfeasance;

 Assure that server infrastructure, both physical and virtual, meet the needs of the campus and that standards are created, updated and implemented to assure planning, maintenance, and replacement of LMCS servers;

 Assure that student and administrative computer workstations meet the needs of users through the development and implementation of a computer workstation replacement – schedule;

 Develop, implement, and maintain backup and disaster recovery plans and systems to ensure continuity of services in the event incidents ranging from accidental data loss to a major disaster.

> Technology support covers the resolution of day-to-day trouble tickets as well as major projects such as software and hardware updates to student computer labs and computerbased classrooms and deployment of new computers for administrative use based on replacement schedules. Maintenance of the college's technology infrastructure is also the responsibility of the chnical support staff. Adequate support for technology is required for the continued functioning of all instructional and administrative function for the continued functioning of all instructional and administrative functions at the college.

Assure that an effective and responsive Basic Help Desk is maintained in order to deliver timely and efficient support to both college campuses,

Assure that there is a process for the timely escalation for issues that are beyond the ability of the Basic Help Desk;

Staffing levels, both classified staff and management, are evaluated annually and levels are ______ maintained to adequately support current and projected campus needs.

Implement unified communications to integrate voice-mail, e-mail, and emerging technologies;

Continually investigate emerging communications technologies to determine their usefulness for instructional and administrative purposes and implement those that are determined to meet the college's needs;

Centralize communication from the campus using the District's InSite portal, student's InSite e-mail and the Office 365 e-mail accounts that are available for all of the District's active – students and employees;

Maintain the college's web site with current information as a communication tool for providing information about the campus, its services and instructional and administrative departments;

Develop and maintain infrastructure to provide time-sensitive notifications through multiple media channels in the event of emergencies. Digital Communications -

Technology Support

Digital communications play an ever-increasing role in the instructional and administrative functions of the College and are used to facilitate the flow of information between constituencies both on and off-campus. This area is constantly evolving and must be continually assessed and refreshed. Ensure that adequate resources - both staffing and funding – are made available to fulfil the technology-related professional development needs of the College;

 Professional development for faculty and classified staff is critical to the effective delivery of instruction using technology and the functioning of administrative services in both Pittsburg
 and Brentwood. In conjunction with LMC's Professional Development Advisory Committee (PDAC), needs for professional development in all areas related to technology will be assessed, planned and delivered.

Ensure that sufficient training opportunities for faculty on the use of technology resources for the delivery of curriculum;

Ensure that sufficient training opportunities for training all employees in the use of productivity technologies (Microsoft Office suite, CCCCD's InSite portal, Colleague, etc.);

Regularly evaluate and identify training requirements for the use of instructional technologies by both students and faculty and design and implement training programs to meet these needs:

Annually evaluate the need for professional development related to technology.

Continuous planning and review to ensure that goals related to technology infrastructure and professional development will be met;

Ongoing planning

Implementation

Evaluation

Examination of emerging technologies for use in instructional and administrative areas and planning to implement those to be adopted;

Providing forward-looking cost projections to ensure that funding is available to support the regular evaluation and updating of campus technology;

The continual evaluation of staffing levels to ensure that technology support, training and planning can be provided in a stable and reliable manner;

implementation of this Technology Plan will be executed through Program Review (PR) and the Resource Allocation Process (RAP) and coordinated through the IT&S Department

LMC has limited resources and must balance the use of those resources for the greatest benefit of the students and college.

New and emerging technologies can be identified at the instructional program or administrative department level. Implementation of these new technologies will be coordinated between the program or department, the IT&S Department, and the Technology Training and Development Coordinator/Office of Instruction

Evaluation of the total cost of ownership of the various technologies (continued hardware and software updates, etc.) will be monitored through the PR process

Completion of tasks identified in the Grid

Annual PR and RAP;

Customer satisfaction surveys administered by TAG/LMC's IT&S Department; -

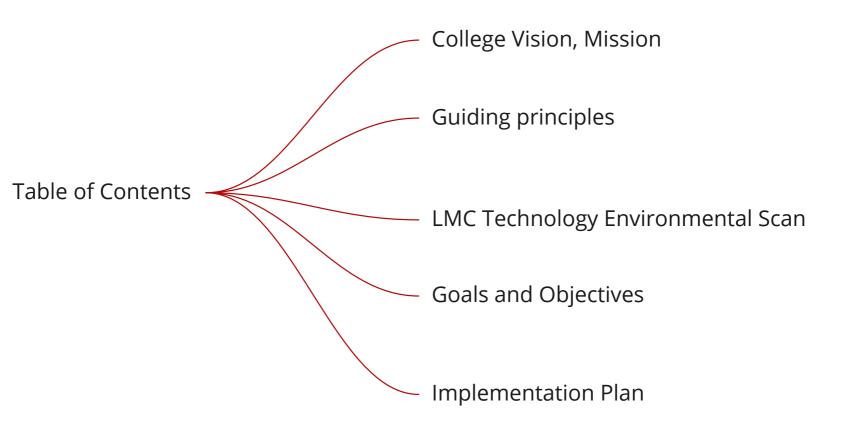
Feedback collected through campus constituencies and daily interactions between users and the IT&S Department staff

Surveys conducted by the District; 🗸

— Professional Development

a cycle of planning, implementation, and evaluation will be followed. ——— Ongoing Planning, Implementation and Evaluation —



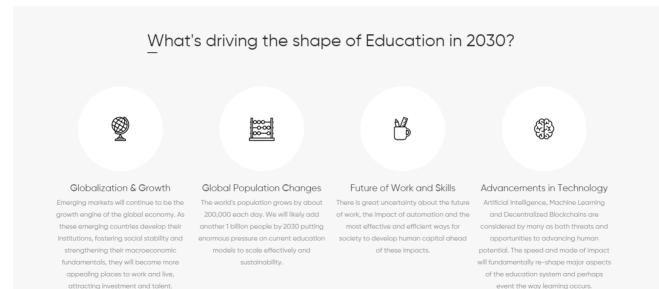


- Looking here are the things that were introduced in the last 10 years
- Apple iPad, 2010
- Smart Assistants, like Amazon Alexa and Nest, Siri
- Meal Kits: Hello Fresh, Plated, and Blue Apron
- Instagram
- Snapchat
- Uber and Lyft
- The first Avenger's Movie
- Netflix Originals
- The Selfie Stick, 2014
- Whatsapp
- Instant Pots
- Grubhub and DoorDash
- AirBnB and Chrome both started in 2008/2009 but didn't take off until after 2010

- Planning Horizon, 2025 a step towards 2030
- Let's start with imagining what 2030 looks like?
 - Are we back on the moon? Mars?
 - Are all cars sold, electric? (as proposed by the Governor)
 - Are smartphones still a thing? or is there something newer/different?
 - Do Brain/Computer interfaces become next must have gadget?
 - What about robots and Al?
 - Is there still a pandemic concern? (not just Covid-19)
 - Are we working remotely?
 - Will I be able to buy an Iron Man suit?

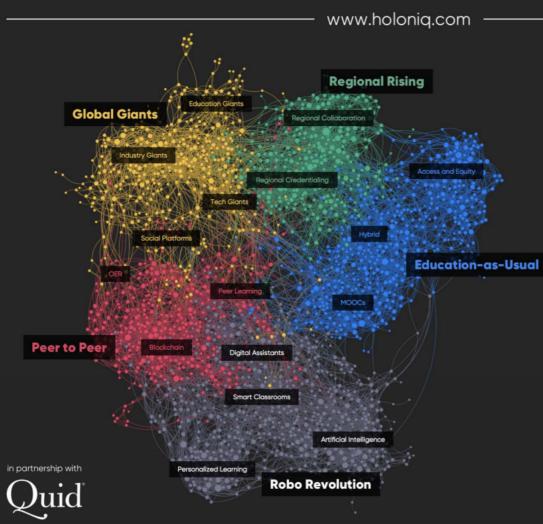


• What are some main themes?



Holon IQ

Education in 2030. Global Scenarios



Education-as-Usual

Traditional education institutions remain the trusted source of learning and the most effective vehicle for jobs and prosperity. Higher Education consolidates, global talent platforms emerge and government remains the core source of funding around the world.

Regional Rising

Regional alliances dominate the competitive education landscape, supported by strategic and political cooperation. Cooperative blended delivery and regional talent hubs cross-load labor supply and demand to strengthen regions.

Global Giants

This global free market environment has fostered the emergence of 'megaorganisations' with ubiquitous brand recognition and the scale to achieve significant efficiencies and industry power

Peer to Peer

Learning online through rich, personalized human to human experiences dominates the post-secondary and skills training sectors. Blockchain technology fundamentally reconfigures credentialing and unlocks the collective creativity and IP of teachers.

Robo Revolution

Al drives a complete reversal in 'who leads learning', with virtual tutors and mentors structuring learning paths, providing assessment tasks, giving feedback, adjusting according to progress and organizing human tutoring when needed.

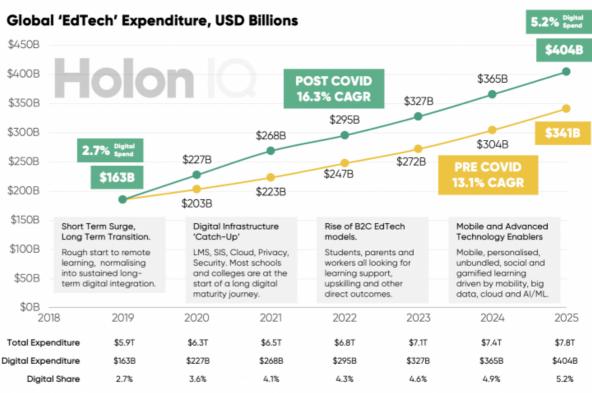
2.5x Global 'EdTech' Expenditure Growth

\$63B upgrade to 'Pre-COVID' EdTech expenditure outlook, now expected to reach \$404B by 2025. The short-term surge in EdTech spend transitions to a long-term digital transformation.

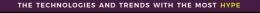
Education Technology spend to grow 2.5x from 2019 to 2025, still only representing 5.2% of total spend in global education and training.

2020 digital surge offset by 'freemium' phase through lockdown in an effort to secure share of school and institution demand.

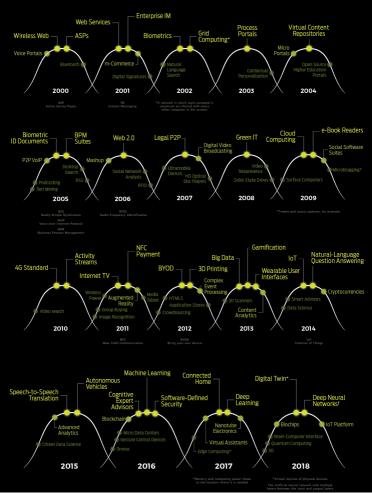
Hardware, software and services all expected to accelerate as consumer preferences shift while government and corporates adjust to new learning models and modes.



Holon 🖸



2000 - 2018



Theme (Student Needs & Equity)

Theme (IT Infrastructure & Support)





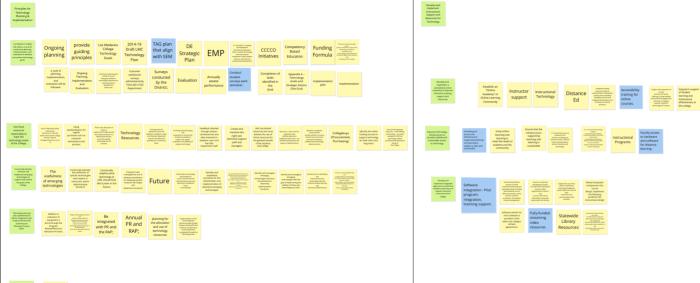
s that t online	Peer-to- peer student IT helpdesk	Launch Artificial Intelligence Charbotts to provide 24/7 general advising in Student Services	Live Chat feature for student services departments	Online learning and support services:	Al support during closed hours	unnider stepping artificial intelligencerunds, sub-tare ofactioner, adult-are dissigned in help complete interfaced and processors and access control adultion und access control adultion uppers services;	Off-camposi Access to Support Sendors Such as Admosters, registration, financial adi, currenting, Binny resilience, and Damariptic
Use technology to improve student support tools such as orientation, self- deck material, and resource access	Ability to serve students after hours without relying on outside sources.	Provide seamless and integrated student services that support coline learning	Embed student success module in all online courses	Student Support	Resources with tutorials and text instructions to support "how to" guides.	Instructings meets a direct them to the proper resources at	Ocelot chat
	Develop and conduct online learning student orientation	Student facing website that provides online orientation and self-check material	Develop an instrument and process for student self- assessment for online learning.	identifying and supporting emerging trends in student use of technolog			

Utilize Technology to Improve Student Access and Success by increasing SexUsity, collaboration, and available resources in streamlined solution	Grant with online course	2.4. Improve the flexibility in the delivery of programs and services.	Applications that are functional on all applications, students, cannas do all functions, or Canvas or phones.	Student Services Software that allows mudents to pick their pronouns discretify and have enployee use those	Online lectures	Software applications that provide more apportunity for asynchronous & synchronous & callaboration for callaboration for caudeots
	Student Access	easy access to all students	Technology lending services covering basic and emergining technologies	Region for each of the second	A-1 - Student Assess Provide universal and social dualent access to bearing resources and support centure for all college transmiss	

CO) process for all choology wedgements	Appendix D – Total Cost of Ownership Philosophy	improve internation softwaring industriant public industriant public for mainform of an analysis in an analysis for accordance with a Tachnology klasser Fact	consider continued investments in state-of-the-art technologies to respond to an ever- changing technology Landscape;	Implications for Technology and Facilities	Total Cost of Ownership	5.3: Develop a social cost of ownership policy model by 2021-22 and integrate it into all future institutional plans	Parliastor of the total even of neuroscips of the sectors technique, persistant hardware and unharer optister, etc.) will be reactored through the Mignesen						
mplement a fechnology whenho plan that dentifies ongoing revestments	Normanity Activities, subsets, the activities and activities and subsets and activities and register factors and activities and the activities and activities and the activities and activities and neuropage activities and managements.	Appendix B - 5-phase Technology Refresh Cycle	Prioritize the replacement or update of computer lab or classroom hardware	Easy guide for any Technology upgradation.	each year 1 phase of technology is replaced	Installation of new equipment is performed is a network Block movement dorquitten to Instruction or services	5 year cycle	Ne-equipment used to support instructional or administrative functions becomes obsolete or unusable;	The refresh cycle presented must be implemented in a planned and canistant manner that ensures that:	Develop plant for the replacement of camput technology resource on a regular schedule	Renning for the use, measurement, regranding and support for the unitian bacimism may be for a support for instructional antilation on both surrowing and strategies on	Anner throtolens and anter the state of the	
Develop and maintain standards and resports for tachonology-reland hardware and schoarts uned account the college	hardware and software standards	Computer lab and computer-based classroom hardware and software	Development of baseline software inventory	Scandurdiaing on computer tableaine guide ar Microsofth Office Suite and Adden's Creative Salas.	Applications required for college operations have been identified.	Provide and support additional audio and video conferencing resources as identified.	Maintain a database of computer lab and classroom hardware	Providing and maintaining samples samples on outer and software barlanese and software barlanese and software barlanese and software software software software	Technology Resources	Computer lab operations	Video conferencing	Smart classrooms	Mac U Plan: N AirPl capabil
	Creating specifications for equipment used in Smart classrooms;	New Technology to Work Remotely Plandware, Software, Laptops, Webcarm, Etc.]	AV integration with Telepresence system	Geneloy and maintain sacrolatik and monoich to subweight related interfaces and welling and the personal that include personal that include personality insulation, support, and optionments	Virtual Desktops	College wide software warehouse management							
Consisting and improve millings information and surfiniting containance to provide second efficiency semplating systems	A.1. Advices also Comparing Density and imposing to the second memory of the second second of the second second second advices and second second second advices as second second second second second second second second second second second second second	Infrastructure	Network Infrastructure standards:	Network management	Identity management	Administrative server virtualization	Administrative Computing	Core Server Infrastructure Project	Nationago di serve in a sinare fue ingeneratione antenet in anten de meneratione antenet in antenet de meneratione antenet in antenet de meneratione antenet de	Network storage	Disaster recovery	Windows 10 migration	Techni Infrastri Improve
	Future dirven IT insfrastucture	MDM/Endpoint Management via Cloud platform	Data integrity: Disaster Recovery Plan, Security	Density, implement, and material harding and diseases receiving plans and spaces to sense waterially of services in the acceleration single from antidential data into an a major disease.	A.I. Nanasi influencince Uppek and Research Massin Influence is support and an another and an another and an an another and an a	Custom application development	Wough search montaining with frequences and with search and and the search and and the search and and search and	Analigue impress interpretation and interpretation and interpretation and interpret and interpretation and interpretation and interpretation and interpretation and interpretation and interpretation interpretation and inter- tional and inter-	District portal (InSite):	Develop and implement emergency response procedures for network outget or attacks.	Assure that wanty of contention, but, approved and orbital, many the second of the compare and the memory ophical and replacements, with approximation of the parameters of the second optical memory of the second optical optical memory optical opti	Technology Infrastructure	
Implement Improvements to the If legip Desk to support the growing needs of the college community	Improve Help Desk	prosible god reaction release if aqueity to suggest the name of the solinge	Dedicated trainer position in IT	Enhance Technical Support Availability for Macintosh Computers	denser that an effective and expression functively limit is materialized in order on advance for the definition support of the definition support of the definition	Antipation of the state of the	Assure that there is a process for the simely escalation for issues that are beyond the ability of the Basic Heip Deck;	Sadleginah, kesh sizolizi sadi ani mugamen, an boak zer antakana ie desparity sepan sansa adiputeti senata sansa adiputeti sansa rank.	Take into account the addity of DACS individualizing both scaling and physical plant, in-support excling and tw expanded individige	Technology Support	Appendix C - Technology Staffing Plan	Decontinual realization of scaling leads to an use that scaling a support to an up of the scaling provided in a stable and reliable manage	

Theme (Planning & Implementation)

Theme (Instructional Support & Resources)

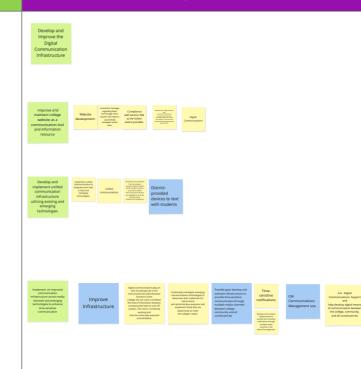


Continue to develop-clear and consistent policies and procedures to achieve technology goals.	Policies and procedures	Online proctoring guidance language	constituent mercage ansard how the callege works to cohe technology access problems for DB chaderos	Camera use guidance language for synchronous class sessions.	Ensure that policies and processes are in place to provide reliable sorvice and support of callege bichnology.	Density process and procedures for the interdistion and densityment of specialized applications to support administrative computing match	Densing and implement process for corrections instantional perificación and perificación anterna perificación anterna solver solvera	Density and maintain policies and prostdown a source that herebases anti-othears used for becoming manual solubities for the purpose for which is to used.	
--	----------------------------	--	---	--	---	---	---	--	--

Theme (Training & Professional Development)

Theme (Digital Communications)





Draft Technology Plan Themes

Draft Principles: Technology Planning and Implementation

- 1. Los Medanos College will utilize a cycle of continuous planning, implementation, and evaluation to develop and achieve technology goals.
- 2. Use fiscal resources responsibly to meet the technology needs of the College.
- 3. Continually identify, evaluate, and implement emerging technologies to support and achieve the goals of the College.
- 4. Technology planning and implementation will be integrated in the Program Review (PR) and Resource Allocation Process (RAP).
- 5. Continue to develop clear and consistent policies and procedures to achieve technology goals.

Draft Themes and Objectives:

1. Student Needs & Equity: Deploy Technology to address student needs and improve equitable access

- a. Ensure equity and inclusivity are incorporated in the implementation of technology for students
- b. Provide seamless and integrated student services that support online learning
- c. Use technology to improve student support tools such as orientation, self-check material, and resource access
- d. Utilize technology to improve student access and success by increasing flexibility, collaboration, and available resources in streamlined solution

2. IT Infrastructure & Support: Implement ongoing improvements to IT infrastructure and support services in a sustainable method

- a. Develop and implement a Total Cost of Ownership (TCO) process for all technology investments
- b. Implement a Technology refresh plan that identifies ongoing investments
- c. Develop and maintain standards and records for technology-related hardware and software used across the college
- d. Develop and improve college information and technology infrastructure to provide secure, efficient, and recoverable computing systems
- e. Implement improvements to the IT Help Desk to support the growing needs of the college community
- f. Improve and expand Wi-Fi access to support the growing number of devices accessing the college network
- g. Develop and Implement a refined printing solution for students

3. Instructional Support & Resources: Develop and implement instructional support and resources for technology

- a. Develop and implement a centralized online academy to improve Instructor training support and resources
- b. Improve technology infrastructure to provide scalable and sustainable access to technology
- c. Develop and implement integrated approach to streamline software, licensing, and support resources across the entire college
- 4. Technology Training & Professional Development: Improve professional development for technology implementation
 - a. Improve training and support for technology tools of students, instruction and administration
 - b. Develop and implement training for technology to enhance Instructional delivery
 - c. Improve methods and frequency of technology training

5. Digital Communications: Develop and improve the digital communication infrastructure

- a. Improve and maintain college website as a communication tool and information resource
- b. Develop and implement unified communication infrastructure utilizing existing and emerging technologies
- c. Implement an improved communication infrastructure across media channels and emerging technologies to enhance time-sensitive communication