

# LMC Technology Plan 2025

- 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**

# LMC Technology Plan 2025

- 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

<https://www.losmedanos.edu/tag/techplan20-25.aspx>

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.

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

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

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

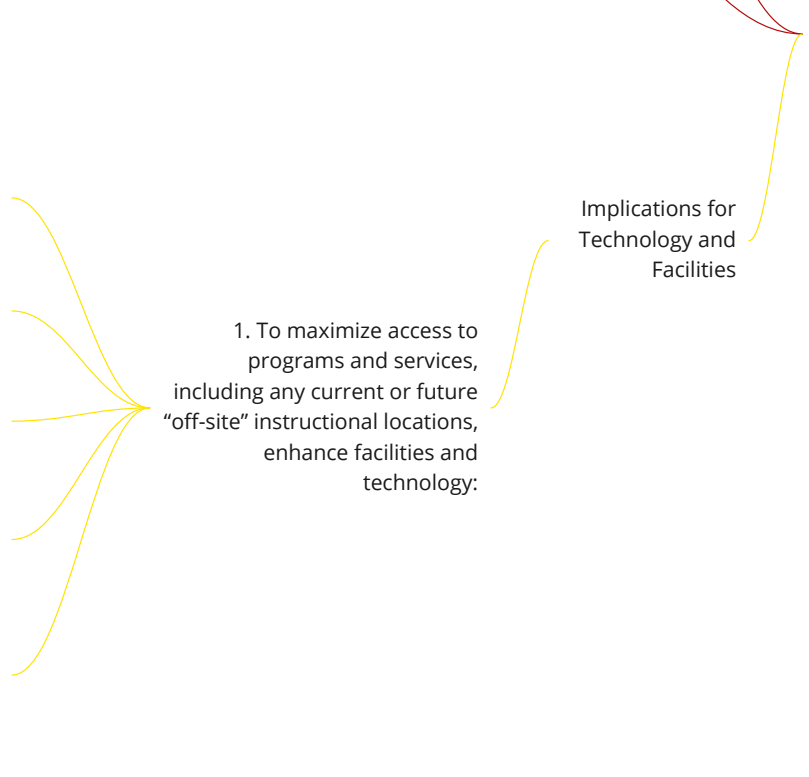
5.3. Develop a total cost of ownership policy model by 2021-22 and integrate it into all future institutional plans

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

- 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;

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

Implications for Technology and Facilities



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.

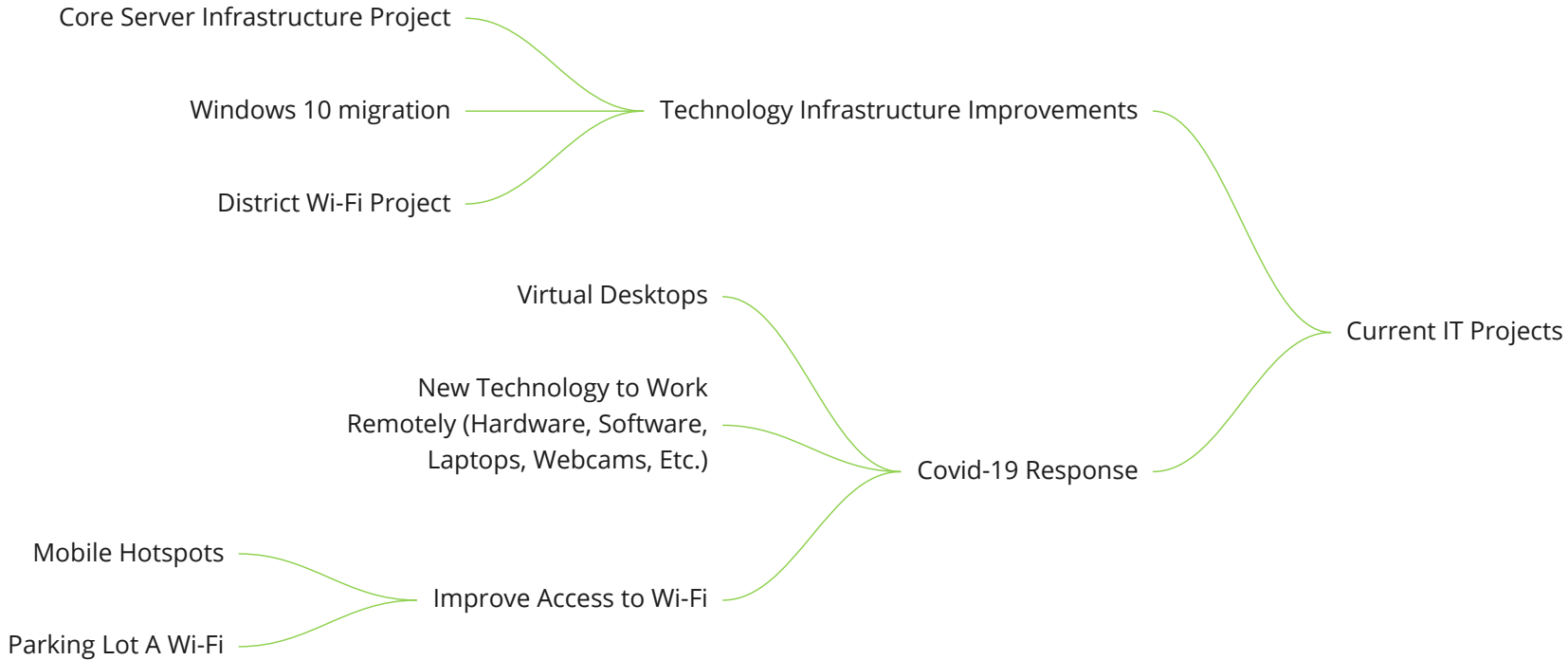
Provide student resources and support for to ensure equitable outcomes in distance education

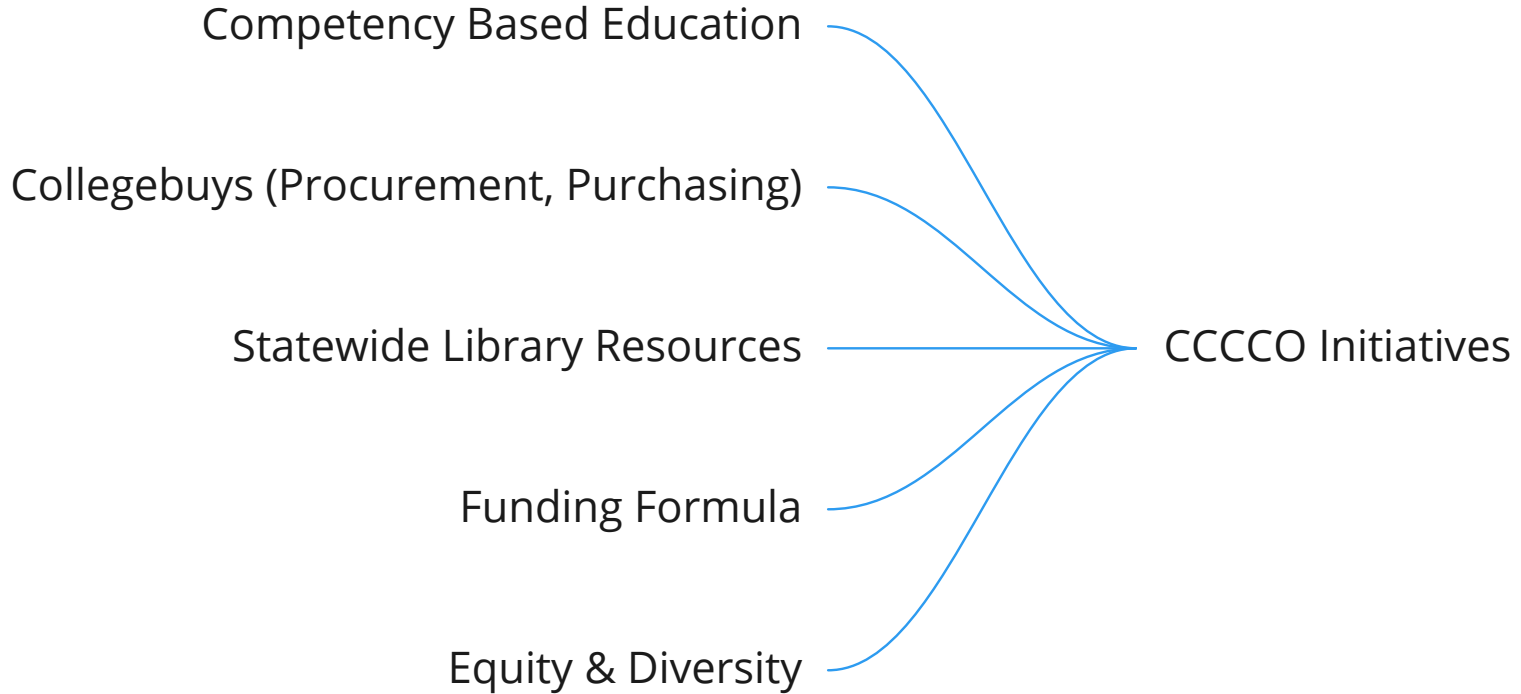
Provide seamless and integrated student services that support online learning

Ensure that the infrastructure supporting teaching and learning is sustainable

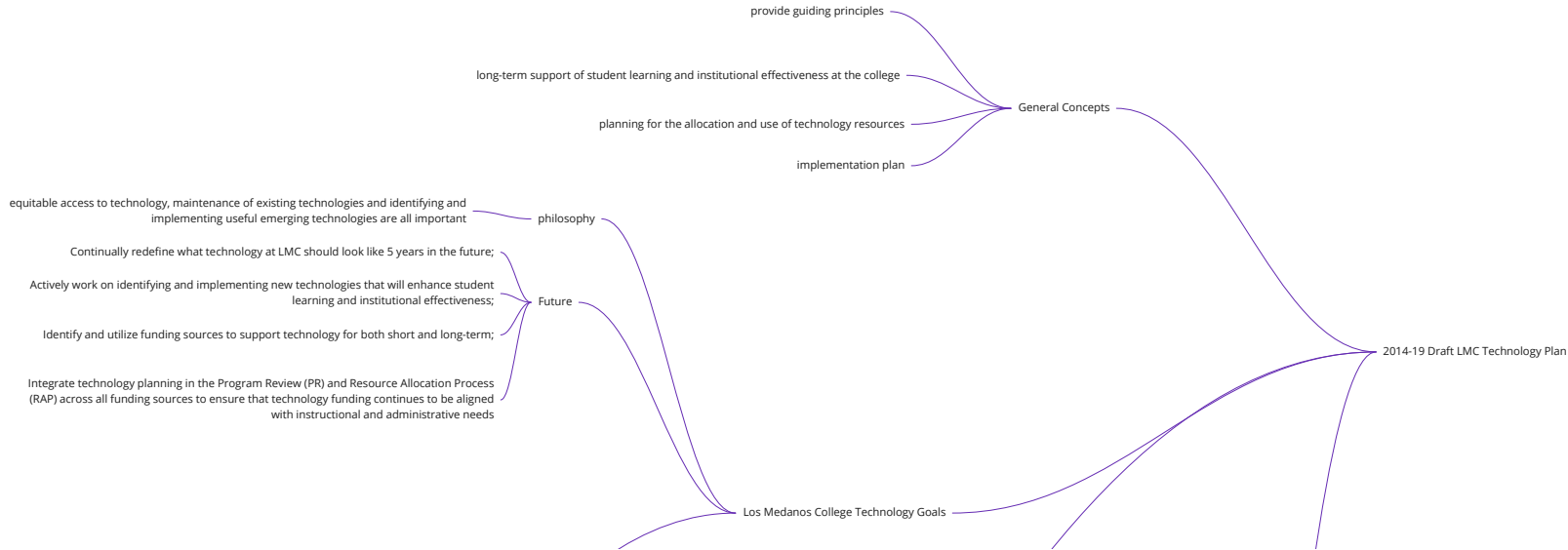
Ensure equity and inclusivity in DE offering and student services

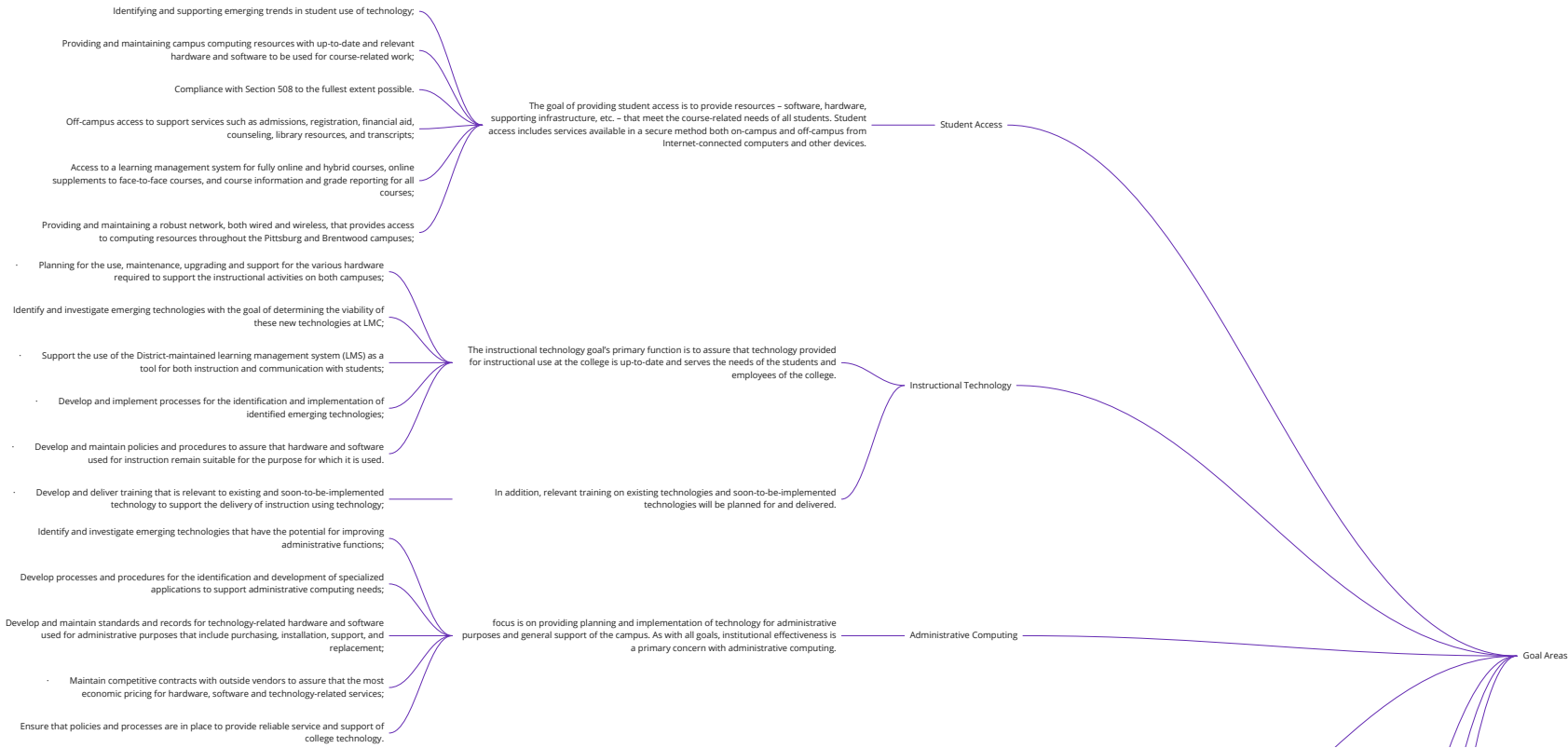
DE Strategic Plan











• 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 LMC's 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 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.

Technology Infrastructure

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.

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 computer-based 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 technical support staff. Adequate support for technology is required for the continued functioning of all instructional and administrative functions at the college.

Technology Support

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;

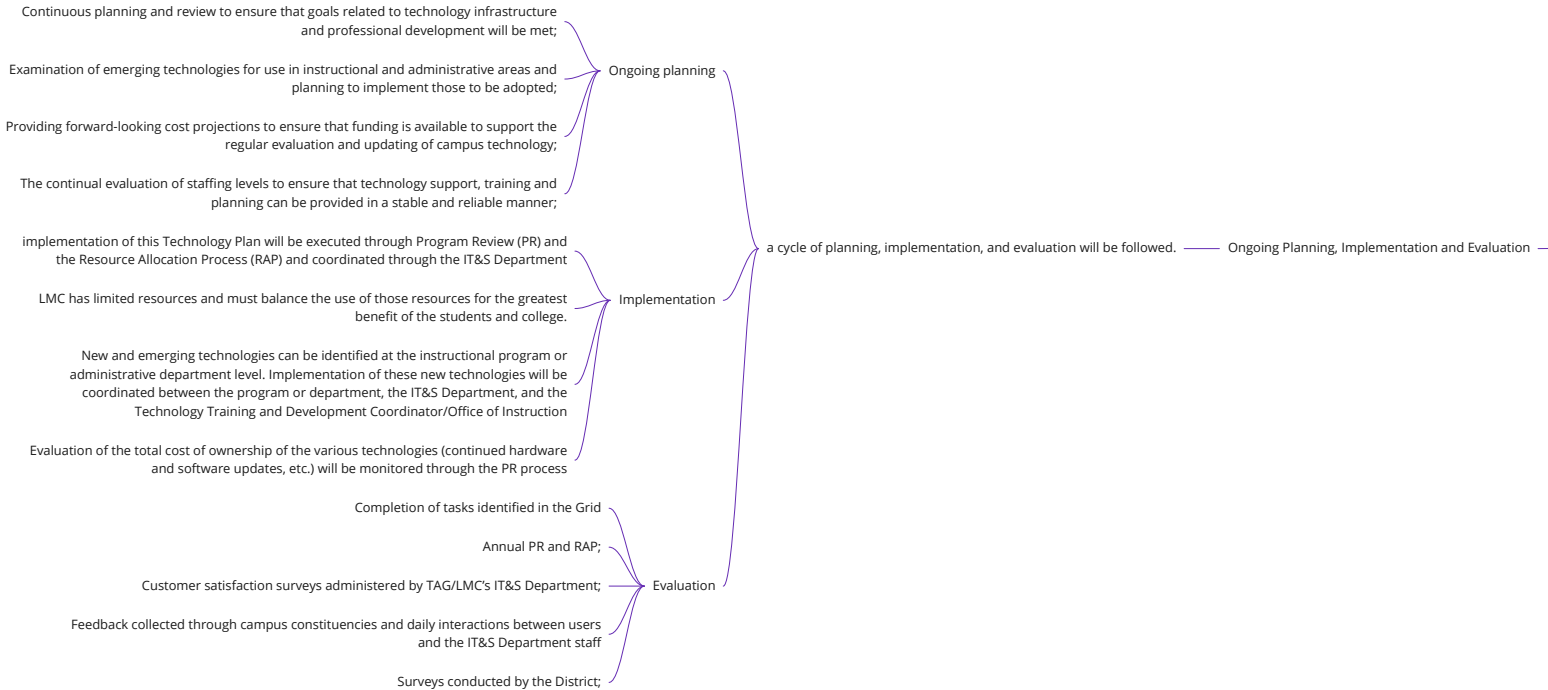
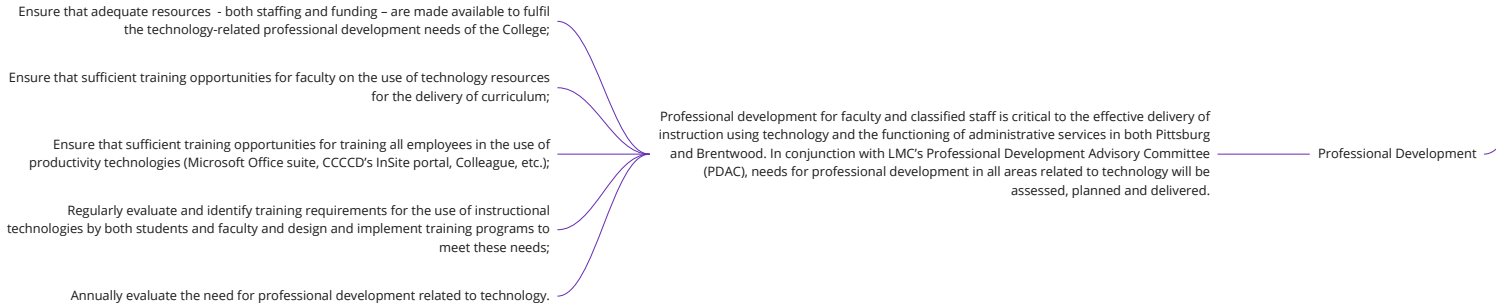
Centralize communication from the campus using the District's InSite portal, student's InSite e-mail and the Office 365 e-mail accounts that are available for all of the District's active students and employees;

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 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.

Digital Communications



LOS MEDANOS  
COLLEGE

**Technology Plan 2020-25**

<https://www.losmedanos.edu/tag/techplan20-25.aspx>

Theme 1

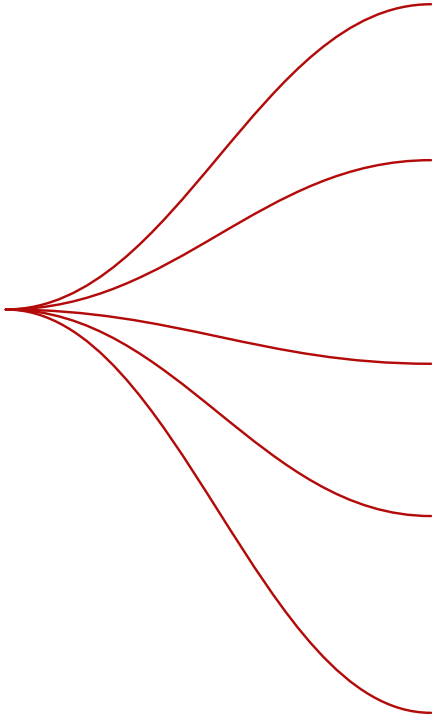
Theme 2

Theme 3

Theme 4

Theme 5

Table of Contents



College Vision, Mission

Guiding principles

LMC Technology Environmental Scan

Goals and Objectives

Implementation Plan

# LMC Technology Plan 2025

- 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

# LMC Technology Plan 2025

- 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 AI?
  - Is there still a pandemic concern? (not just Covid-19)
  - Are we working remotely?
  - Will I be able to buy an Iron Man suit?





# LMC Technology Plan 2025

- What are some main themes?

## What's driving the shape of Education in 2030?



### Globalization & Growth

Emerging markets will continue to be the growth engine of the global economy. As these emerging countries develop their institutions, fostering social stability and strengthening their macroeconomic fundamentals, they will become more appealing places to work and live, attracting investment and talent.



### Global Population Changes

The world's population grows by about 200,000 each day. We will likely add another 1 billion people by 2030 putting enormous pressure on current education models to scale effectively and sustainability.



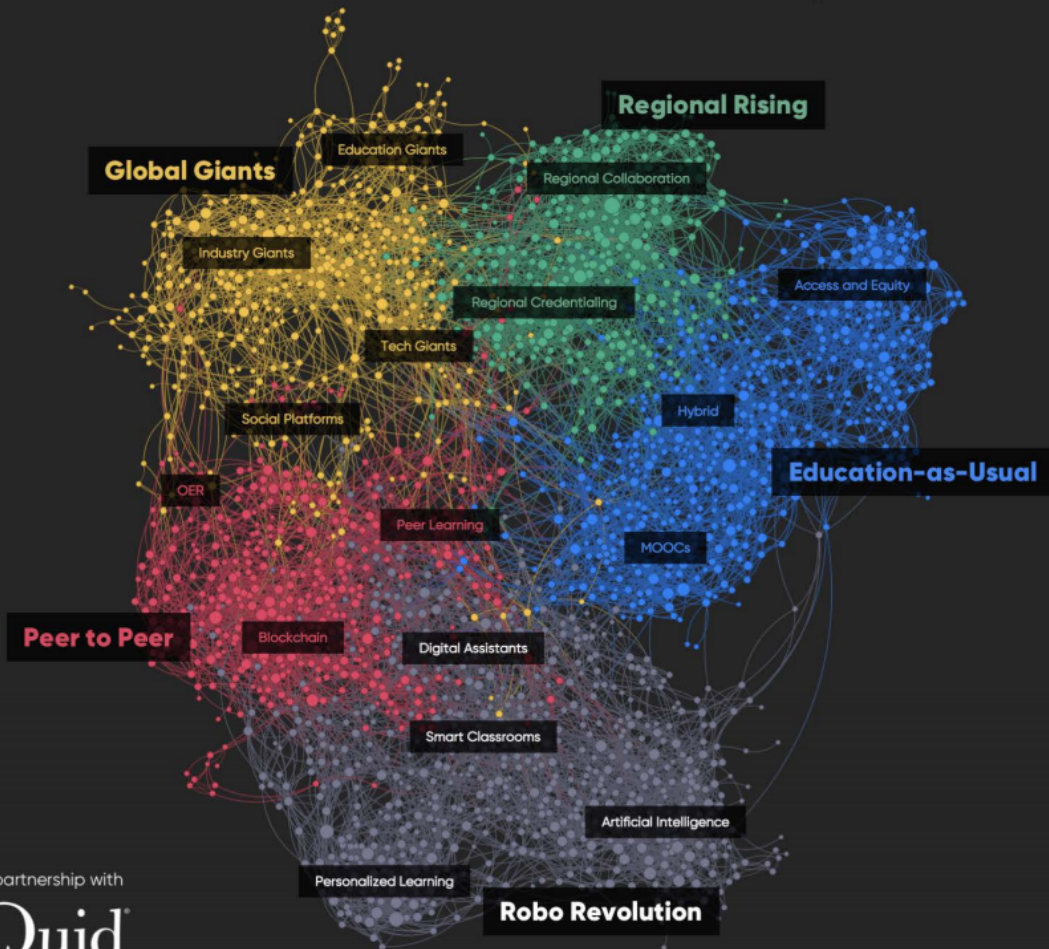
### Future of Work and Skills

There is great uncertainty about the future of work, the impact of automation and the most effective and efficient ways for society to develop human capital ahead of these impacts.



### Advancements in Technology

Artificial Intelligence, Machine Learning and Decentralized Blockchains are considered by many as both threats and opportunities to advancing human potential. The speed and mode of impact will fundamentally re-shape major aspects of the education system and perhaps even the way learning occurs.



## 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 'mega-organisations' 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

AI 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

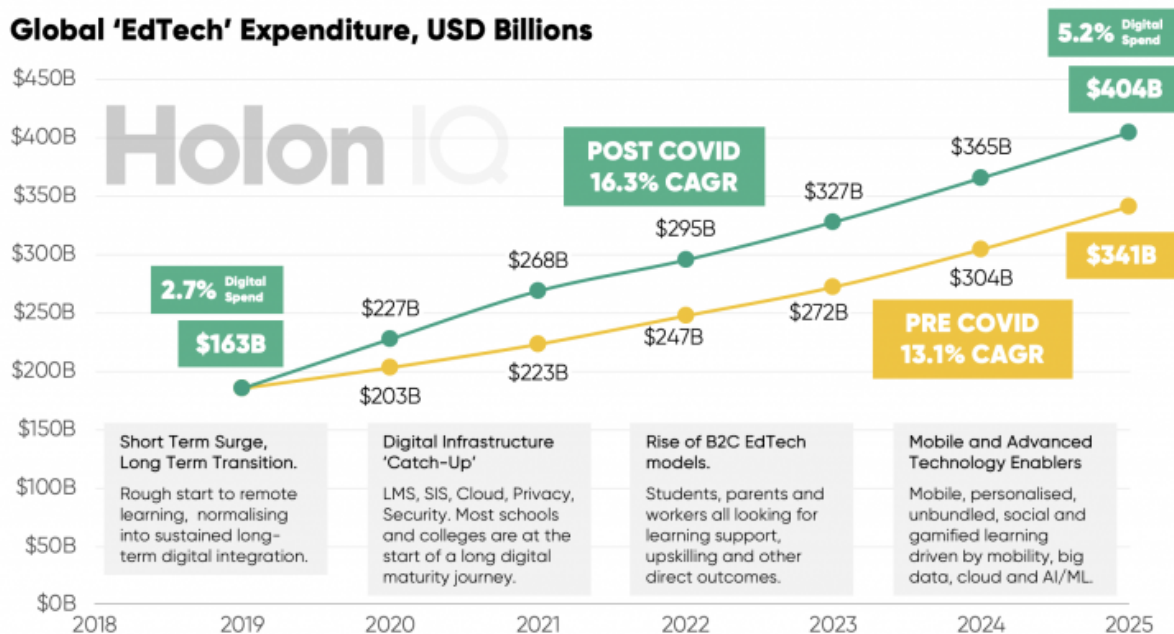
\$63B upgrade to 'Pre-COVID' EdTech expenditure outlook, now expected to reach \$404B by 2025. The short-term surge in EdTech spend transitions to a long-term digital transformation.

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.

Global 'EdTech' Expenditure, USD Billions

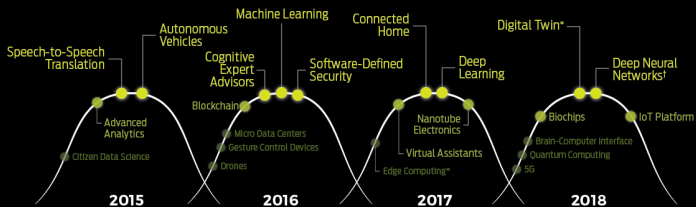
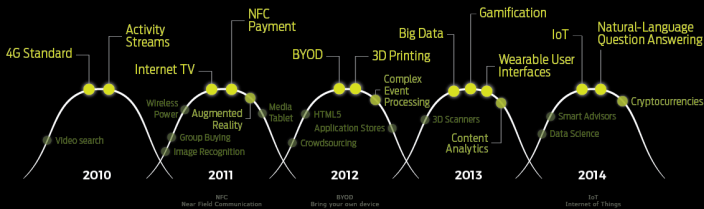
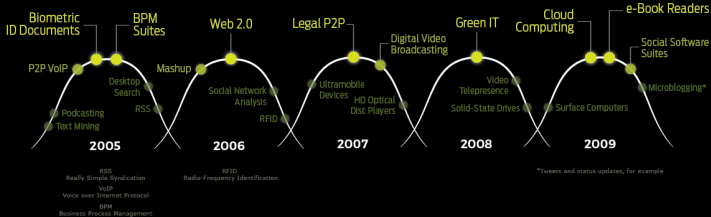
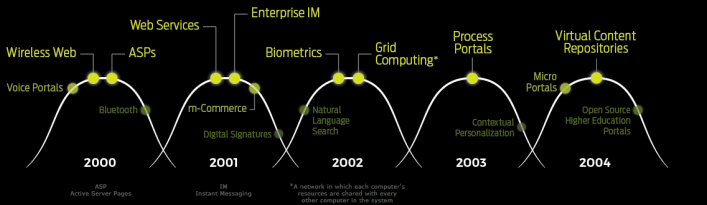


Total Expenditure	\$5.9T	\$6.3T	\$6.5T	\$6.8T	\$7.1T	\$7.4T	\$7.8T
Digital Expenditure	\$163B	\$227B	\$268B	\$295B	\$327B	\$365B	\$404B
Digital Share	2.7%	3.6%	4.1%	4.3%	4.6%	4.9%	5.2%

Source: HolonIQ, August 2020

# THE TECHNOLOGIES AND TRENDS WITH THE MOST HYPE

2000 - 2018



\*Memory and computing power closer to the location where it is needed

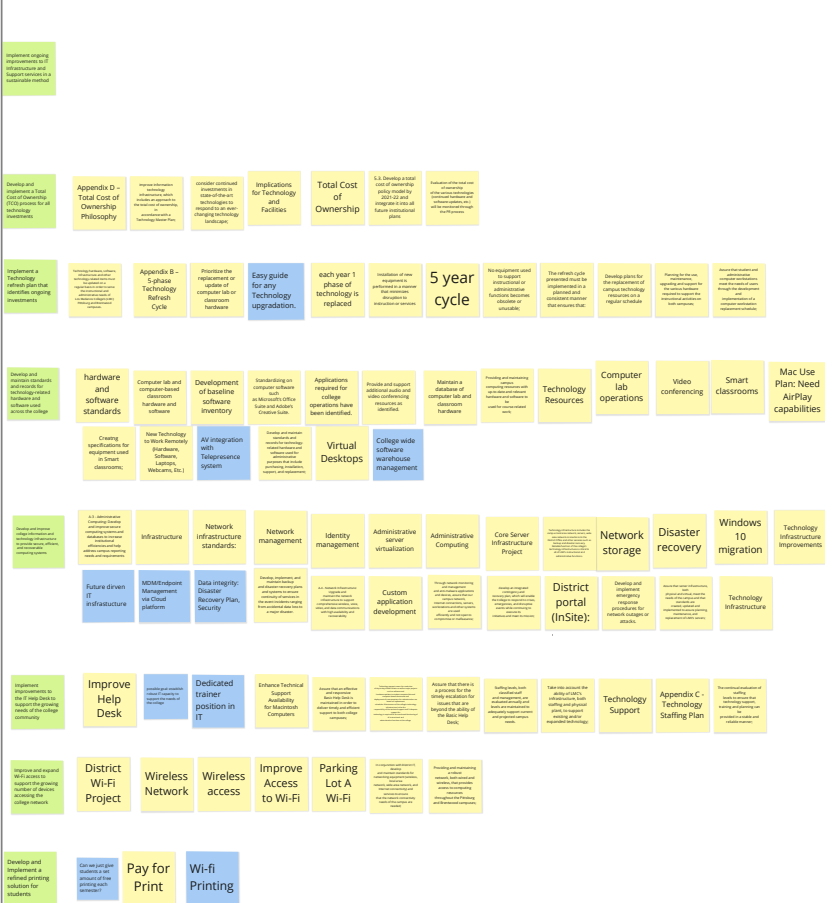
†Virtual replicas of physical devices

‡An artificial neural network with multiple layers between the input and output layers

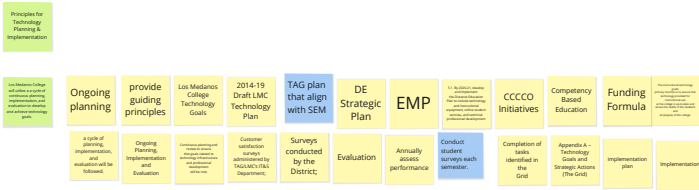
# Theme (Student Needs & Equity)



# Theme (IT Infrastructure & Support)



# Theme (Planning & Implementation)



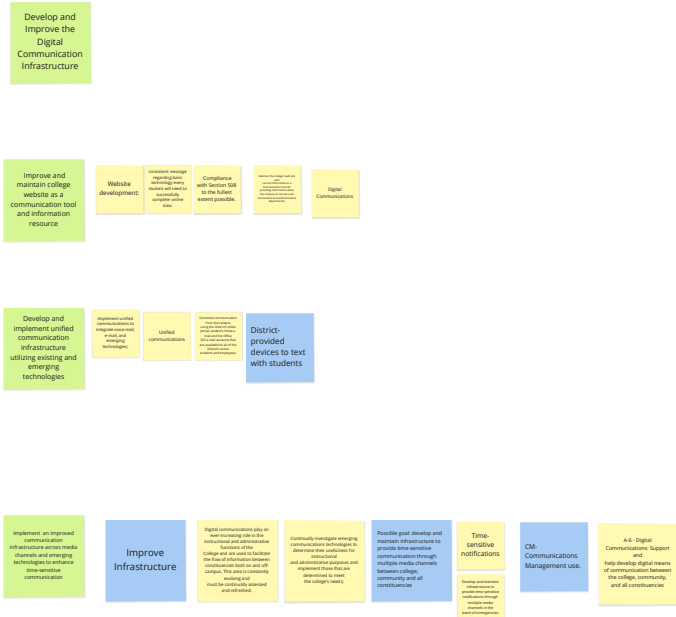
# Theme (Instructional Support & Resources)



# 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