SJECCD TECHNOLOGY MASTER PLAN
2017-2024*

September 1, 2017
*Updated May 9, 2019
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SJECCD TECHNOLOGY MASTER PLAN
2017-2024 (Last Updated 2019)

PURPOSE

The purpose of the SJECCD Technology Master Plan 2017 - 2024 is to describe the technology direction and support needed for the District to deliver on its mission and vision. This version of the plan was approved on May 9, 2019 and includes the following revisions: (a) updated Strategic Priorities, (b) new strategic focus, Digital Transformation, (c) updated Initiatives (updated each year), and, (d) updated lists of top 10 technology issues impacting higher education. These updates were done per the work of the District Technology Planning Committee in the spring of 2019.

The SJECCD Technology Master Plan anticipates technology trends in society and higher education and outlines how the District will proceed to leverage Information Technology (IT) to meet student technology needs and enable students to succeed when they transfer to a four-year college or university, enter the workforce, or embark on a path of lifelong learning.

This Technology Master Plan highlights how technology resources are prioritized and applied on behalf of the District, San Jose City College, Evergreen Valley College, District Office and Workforce Institute. The plan anticipates a continuously changing IT environment and the need for maintaining secure and reliable core services while simultaneously implementing new technology tools and solutions to further the mission of the District.

A fundamental organizing structure for the plans is the “People, Process, Technology’ framework. The consideration of these three elements is essential when defining high level strategy where the interaction of people, task structure and technology must align for success. Frequently attributed to Professor Harold J. Leavitt, the People, Process Technology framework was subsequently expanded by Gartner and ITIL, serving as a set of practices for IT service management that focuses first on institutional needs. An understanding of the way in which technology supports the institution can lessen stress, improve productivity and encourage task understanding and teamwork guides all technology planning:
People are at the heart of every institutional initiative. Student success is achieved through collaboration in support of strategic goals within a shared value structure. A shared understanding of technology goals and initiatives serves as a foundation for informed, collective action. Process incorporates the ‘what’ and ‘how’ of essential operations. The best tools cannot make up for broken processes. Understanding of the current state and desired future state, along with how results will be measured enable the institution to prioritize and pursue opportunities for improvement in both efficiency and effectiveness.

Technology is the essential enabler for supporting people and processes. Technology is a tool for achieving student and institutional success. Alignment of people through collaboration, efficient and appropriate business processes leading to the selection and use of appropriate technology tools is the hallmark of the Technology Master Plan.

These institutional building blocks have been used to structure planning observations and recommendations for the District, EVC and SJCC, with validated initiatives incorporated into plan materials.

This Technology Master Plan is built upon a foundation of collegial input and ongoing dialog with students, faculty and staff. Feedback and comments about the plan and IT projects are always welcome. This document presents an overview of the processes we used to align planning with District priorities and how planning activity elicited the needs of each campus location while supporting common district-wide initiatives, priorities and projects.
PLANNING CONTEXT

Throughout late Fall 2016 a series of surveys, onsite interviews and work sessions were held District-wide to focus on IT planning. Survey instruments were used to aggregate experiences and recommendations from students, instructors and staff; 913 surveys were received from students along with 184 surveys completed by SJECCD instructors and staff. Onsite interviews were held during November, 2016, and incorporated participation from 241 individuals, including 65 students, resulting in spirited dialog about issues and opportunities. Peer institutions from the Silicon Valley were interviewed and also completed a budget and resource survey.

Analysis and discussion arising from these activities has been used to develop and distill the SJECCD Technology Master Plan presented here. The strategic priorities that surfaced from this work have been validated and refined through stakeholder and committee review. At the most foundational level, the Technology Master plan is aligned with the overall District Strategic Plan and other strategic drivers that include IT trends in higher education, IT trends in society, local demographic and technology adoption.

The District Technology Master Plan shares a common framework with the College Technology Master Plans that were simultaneously developed for both Evergreen Valley College and San Jose City College. The intention of creating three Technology Master Plans is to coordinate IT planning, project/resource prioritization and decision-making. The outcome of a shared, common framework is to provide a clear and transparent process, enabling all three IT operations to share and leverage individual and collective activities.

The three technology plans are organized around common themes for IT service delivery. The strategic goals and initiative items for each organization are individually defined in collaboration with the respective campus technology committees. Work on the District Technology Master Plan was accomplished in cooperation with the Strategic Planning Project Stakeholders, the District Technology Planning Group, and input from the EVC and SJCC Campus Technology Committees.

Each Technology Master Plan consists of a high level summary view, supported by a descriptive plan narrative. A common set of strategic themes serves as an organizational element shared by each plan. The overall strategic goals responding to each theme are supported by identified initiative action items. This framework is subsequently used to guide consideration of new projects and funding. On an ongoing basis, technology project requests can be submitted and will be evaluated relative to strategic goals and priorities and added to a comprehensive technology project spreadsheet.

Each Fall, the Campus Technology Committees and the District Technology committee will review and update the plans, resulting in addition of new initiatives that address identified themes and strategic goals and cycling off of the plan those projects that have been successfully completed, cancelled or deferred.
SJECCD DISTRICT STRATEGIC GOALS

Outlined below are the new District Strategic Priorities for 2018 – 2025. As future District and College specific Strategic Planning documents are updated, the expectation is that the key themes and drivers identified throughout this IT planning process will continue to resonate and provide a useful structure for support of organizational strategic plans. Additionally, the technology plan will be updated in the future to reflect new strategic goals.

(The Strategic Goals 2013 to 2017 have been replaced below with the Strategic Priorities 2018 to 2025)

SJECCD Vision, Mission, Values

SJECCD Vision: SJECCD is the premier post-secondary education institution in our region for advancing opportunity, equity, and social justice through educational excellence.

SJECCD Mission: As a leading educational institution, the mission of the SJECCD is to meet the diverse educational and workforce needs of our community by empowering our students to become agents of socio-economic change.

SJECCD Values: Our District’s core values are opportunity, equity, and social justice. Each one of these values is incorporated into our strategic priorities and is a part of the foundational commitments we make to our communities.

2018-2025 SJECCD Strategic Priorities

STRATEGIC PRIORITY 1: STUDENT SUCCESS

The San José- Evergreen Community College District will improve student success through a culture of evidence by providing structured educational pathways and continuous support services that align with their educational and career goals and promote responsible global citizenship and civic engagement.

STRATEGIC PRIORITY 2: WORKFORCE & ECONOMIC DEVELOPMENT

The San José- Evergreen Community College District will support economic mobility of our diverse community by responding to the workforce needs of the Silicon Valley region.
STRATEGIC PRIORITY 3: ORGANIZATIONAL EFFECTIVENESS & SUSTAINABILITY

The San José-Evergreen Community College District will develop and utilize systems that promote institutional effectiveness, fiscal sustainability, and accountability.

STRATEGIC PRIORITY 4: TECHNOLOGY

The San José-Evergreen Community College District will invest in secure information technology solutions and instructional technology that enhance the learning and working environment and support guided pathways, institutional effectiveness, and student success.

STRATEGIC PRIORITY 5: COMMUNICATION

The San José-Evergreen Community College District will engage in effective communication with internal and external audiences to improve stakeholder satisfaction.

STRATEGIC PRIORITY 6: TOTAL WORK ENVIRONMENT

The San José-Evergreen Community College District will promote a total work environment that contributes to the success and development of its students and employees.

Alignment with the SJECCD Board of Trustees Global Ends Policies and District Strategic Plan:

SJECCD BOARD OF TRUSTEES’ GLOBAL ENDS STATEMENT

San José-Evergreen Community College District exists to ensure all students, especially those with educational and/or socioeconomic challenges, will have the skills and capabilities to be successful in the next stage of their life, sufficient to justify the use of available resources.
SJECCD BOARD OF TRUSTEES’ ENDS POLICIES

Student Success

The San José-Evergreen Community College District will improve student success through enhanced educational services and programs and strengthened community engagement. Included in student success:

• Transferability: All students, especially underprepared students, will achieve academic success sufficient to transfer to a four-year post-secondary institution.

• College Readiness: Students will develop the language skills to succeed in college, the ability to analyze, synthesize, and evaluate information, and will be able to effectively communicate with others and successfully work collaboratively in culturally diverse settings.

• College Experience: Enrichment opportunities will exist to enhance the learning environment and support student success.

• Degree and Certificate Completion: Students will complete degrees and certificates to enter the workforce.

Community Impact

As a leader in the Silicon Valley, the San José-Evergreen Community College District will be an active partner with civic and other community leaders to create a strong economy and foster social-economic equity and social justice. Included in community impact:

• Career Development: Students will acquire skills sufficient to get, keep and progress in jobs with local employers, particularly in high wage/high growth areas, for all students, especially for under-prepared students, older displaced students, and young people at the start of their careers.

• Community, Business, Industry, and Trades Partnerships/Collaborations: The District will collaborate with business, industry, and the trades for high employment in quality jobs through job placement, internships, mentorships, and philanthropic development.
OTHER FACTORS THAT IMPACT THE DISTRICT TECHNOLOGY MASTER PLAN

IT service delivery is comprised of interrelated capabilities that include customer support, access to IT services, applications & software, hardware for computing, printing, scanning, communications and enterprise systems, technology installed in facilities, process and continuity support and security. Over and above the District’s strategic goals are other strategic drivers that affect IT service delivery. These include Higher Education and IT industry trends and individual College, unit and departmental needs. In addition to the District and College Strategic Plans, there are drivers and trends that impact IT service and project activity. The Technology Master planning process elicited student, faculty and staff input to anticipate the ongoing acceleration of expectations for IT services. In particular, the location of the District in the heart of Silicon Valley represents both an opportunity and a challenge to meet the evolving operational needs of the District with current technologies and processes made available by the IT industry to serve our students, faculty and community.

Accreditation Review Feedback - An important element of the strategic planning process is to incorporate references that highlight alignment of the plan with support for ongoing improvements noted by accreditation review process. The strategic plan incorporates the numbering system used in Accreditation Standard III.C by the Accrediting Commission for Community and Junior Colleges (ACCJC). Accreditation Standard III.C has 5 components and these are referenced in the Strategic Goals section of the plan as III.C.1, III.C.2, etc.

III.C.1. Technology services, professional support, facilities, hardware, and software are appropriate and adequate to support the institution’s management and operational functions, academic programs, teaching and learning, and support services.

III.C.2. The institution continuously plans for, updates and replaces technology to ensure its technological infrastructure, quality and capacity are adequate to support its mission, operations, programs, and services.

III.C.3. The institution assures that technology resources at all locations where it offers courses, programs, and services are implemented and maintained to assure reliable access, safety, and security.

III.C.4. The institution provides appropriate instruction and support for faculty, staff, students, and administrators, in the effective use of technology and technology systems related to its programs, services, and institutional operations.
III.C.5. The institution has policies and procedures that guide the appropriate use of technology in the teaching and learning processes.

The following recommendations from the EVC Evaluation Team Report (October, 2016), although not part of Accreditation Standard III.C, are notable candidates for technology-enabled solutions:

- College Recommendation 5 (Compliance): In order to meet the Standard, the team recommends that the College further develop and implement a policy requiring increased regular and substantive contact for DE courses, and subsequently evaluate DE courses for policy compliance. (II.A.2, II.A.7, II.A.16)

- College Recommendation 2 (Improvement): In order to meet the Standard, the team recommends that SLO data be systematically disaggregated by student subpopulations and achievement data disaggregated by delivery modes. These data should be used institution-wide for each of the planning processes, including assessment of student learning, program review, and resource allocation. (I.B.5, I.B.6)

- College Recommendation 6 (Improvement): In order to increase effectiveness, the team recommends that the College develop and implement a plan to further safeguard hard copies of student records by maintaining fireproof storage areas and preserving historical files. (II.C.8)

- District Recommendation 4 (Improvement): In order to meet the Standard, the team recommends that the College establish a process to systematically evaluate District committees and use the results of that assessment as the basis for improvement. (IV.A.7, IV.D.7)

The following recommendations from the SJCC Evaluation Team Report (October, 2016) are notable candidates for technology-enabled solutions:

- College Recommendation 8 (Compliance): In order to meet the standard, the team recommends the College provide electronic access to student support services, including tutoring, distance education technology support, and student educational plan development for online students. The team further recommends all student support programs should establish learning outcomes and complete program reviews. (II.C.3, ER17)
- College Recommendation 11 (Improvement): In order to increase effectiveness, the team recommends that the College regularly review and evaluate the ongoing technology support needs for students. (III.C.4)

**Budget.** The District makes budget prioritization decisions that impact service levels, technology investment rationalization and utilization, leveraging technologies to improve cost effectiveness, process improvement, and productivity, optimizing the use of available resources.

**Technology trends.** The IT industry is undergoing transformative changes in production and consumer technologies, consumer service and product delivery using such technologies. The growing expectations of students and administrators for ubiquitous wireless and secure system access with ever expanding self-service features across cloud and mobile platforms represent a considerable technical challenge. These changes will evolve and continue to impact District-wide IT service delivery and drive investment decisions in technology infrastructure, cloud service delivery, and security strategies.
TECHNOLOGY TRENDS IMPACTING HIGHER EDUCATION

This Plan incorporates inputs from key industry resources that reflect trends in information technology for higher education; these sources will continue to be monitored to support technology plan updates:

**EDUCAUSE Top 10 issues for higher education (2019)**
1. Information security strategy
2. Student success
3. Privacy
4. Student-Centered institution
5. Digital integrations
6. Data-enabled institution
7. Sustainable funding
8. Data management and governance
9. Integrative CIO
10. Higher education affordability

**IEEE Top 10 technology trends (2019)**
1. Deep learning accelerators
2. Assisted transportation
3. The Internet of Bodies (IoB)
4. Social credit algorithms
5. Advanced (smart) materials and devices
6. Active security protection
7. Virtual reality (VR) and augmented reality (AR)
8. Chatbots
9. Automated voice spam (robocall) prevention
10. Technology for humanity (specifically machine learning)

**Gartner – Top 10 strategic technologies impacting higher education (2019)**
1. Next-generation security and risk management
2. Artificial intelligence conversational interface
3. Predictive analytics
4. Nudge tech
5. Digital credentialing technologies
6. Hybrid integration platforms
7. Career software
8. Student cross-life-cycle CRM
9. Smart campus
10. Wireless presentation technologies

**NMC Horizon Report (2019)**
1. **Short-Term**
   a) Redesigning learning spaces
   b) Blended learning Designs
2. **Mid-Term**
   a) Advancing cultures of innovation
   b) Growing focus on measuring learning
3. **Long-Term**
   a) Rethinking how institutions work
   b) Modularized and disaggregated degrees
1. **Information Security Strategy**: Developing a risk-based security strategy that effectively detects, responds to, and prevents security threats and challenges

2. **Student Success**: Serving as a trusted partner with other campus units to drive and achieve student success initiatives

3. **Privacy**: Safeguarding institutional constituents’ privacy rights and maintaining accountability for protecting all types of restricted data

4. **Student-Centered Institution**: Understanding and advancing technology’s role in optimizing the student experience (from applicants to alumni)

5. **Digital Integrations**: Ensuring system interoperability, scalability, and extensibility, as well as data integrity, security, standards, and governance, across multiple applications and platforms

6. **Data-Enabled Institution**: Taking a service-based approach to data and analytics to reskill, retool, and reshape a culture to be adept at data-enabled decision-making

7. **Sustainable Funding**: Developing funding models that can maintain quality and accommodate both new needs and the growing use of IT services in an era of increasing budget constraints

8. **Data Management and Governance**: Implementing effective institutional data-governance practices and organizational structures

9. **Integrative CIO**: Repositioning or reinforcing the role of IT leadership as an integral strategic partner of institutional leadership in achieving institutional missions

10. **Higher Education Affordability**: Aligning IT’s priorities and resources with institutional priorities and resources to achieve a sustainable future
**EDUCAUSE - The 2017 Top 10 IT Issues and Student Success**

<table>
<thead>
<tr>
<th>IT Issue</th>
<th>What Does the Future Look Like If We Get This Right?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Information Security</td>
<td>Constituents will be able to use their information assets unimpaired to fulfill the missions of the institution.</td>
</tr>
<tr>
<td>2. Student Success and Completion</td>
<td>We’re helping more students achieve the dream of graduation, which hopefully translates into success in their careers.</td>
</tr>
<tr>
<td>3. Data-Informed Decision Making</td>
<td>Our campuses will be efficient, and we will have more student success. All of this will be better for our institutions and for society. Higher education suffers from a bad public image about college completion, so effectively using our data could help combat this.</td>
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<tr>
<td>4. Strategic Leadership</td>
<td>Higher education has major challenges: affordability, effectiveness, even relevance. If IT leadership is contributing positively and continuously to institutional strategy, higher education’s ability to address those challenges will improve. Ultimately, higher education will be helping prepare the next generation affordably, which will make a positive impact everywhere.</td>
</tr>
<tr>
<td>5. Sustainable Funding</td>
<td>IT and institutional leadership will be able to engage in other discussions about using information technology to improve value, competitiveness, and innovation rather than continuing to talk about sustainable funding.</td>
</tr>
<tr>
<td>6. Data Management and Governance</td>
<td>We might be able to bring the cost curve down for higher education if we’re able to apply data effectively to taking better advantage of the resources that we have. At the end of the day, this has to be about reducing the cost and burden that we put on our students, and if we get this issue right, we have a better chance of doing that.</td>
</tr>
<tr>
<td>7. Higher Education Affordability</td>
<td>Institutions will be able to continually make investments, innovate, improve service, and lower costs for students.</td>
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<td>8. Sustainable Staffing</td>
<td>Institutions will be able to do more with less.</td>
</tr>
<tr>
<td>IT Issue</td>
<td>What Does the Future Look Like If We Get This Right?</td>
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<tr>
<td>9. Next-Gen Enterprise IT</td>
<td>Higher education will have modernized its enterprise application infrastructure, offering students and faculty a platform to manage their entire lifecycle—from prospects to graduates to alumni, from grant application to funding to publication. Campus experiences like residential life and parking will be similarly improved. Interactions with the institution will be easier and, advised by analytics, more fruitful. End users will have access to more and better data, which will facilitate better decision making. <strong>Enterprise IT sounds geeky and dull, but it can and should contribute to student success.</strong></td>
</tr>
<tr>
<td>10. Digital Transformation of Learning</td>
<td>Designing education to improve critical thinking and analytical skills in terms of today’s digital learning culture will better prepare students for their personal, professional, and civic lives. At the same time, higher education will be modeling the competencies students need and the world they are entering. <strong>More students will achieve credentials, but just as important, they will be attaining the right learning outcomes.</strong></td>
</tr>
</tbody>
</table>

*Note: Student Success connections are in bolded text.*

*Excerpted from EDUCAUSE, (p. 57, Table 2)*
LISTENING TO STUDENTS, FACULTY, AND ADMINISTRATIVE PERSPECTIVES

A high-level summary of survey and interview insights was generated and used in planning discussions. The general frequency of mention of a topic was used to organize the following lists, the higher an item is in the list, the greater the number of mentions.

Student Focus Groups
- Website improvements – ease of access, clarity of navigation needed
- Printing capacity and availability
- Electrical outlet availability in classrooms
- Availability of consistent tools/lab/Software Library/supported solutions
- Continuing focus on wireless, service standard/expectations for consistent experience
- Support availability aligned with need (more focus on evening classes)
- Support for instructors so reduced classroom lost time due to projectors, etc.
- Instruction specific training/support so instructors can make better use of Canvas, other supported technologies
- Electronic Signage, way finding – missed opportunities for updated information about what is happening in a specific building or location
- More opportunities to work with local/Silicon Valley employers, internships, lectures
- More Self Service, AND more opportunity to access face to face time with key student service providers
- More mobile collaboration support – meeting rooms, classrooms
- Emergency messaging/emergency notification solution mentioned, students are not clear on how this works

Faculty Inputs
- More technology specific training
- Increased support availability for evening classes, late starts and online
- Instruction specific training/support (including lab software, other specialized software solutions)
- Web site improvements – many faculty spend a lot of time with students helping them locate information
- Consistent classroom technology set up
- Working classroom technology (ex: projector light bulbs)
- Better reporting and data
- Need transparency about status of IT support requests
- More collaboration with other regional and local CC’s, instructors, content sharing
- More orientation and onboarding help – policies/procedures and standards
- More print options for students, faster way for them to submit work (scan?/email?)
- Clearer statement of how technology supports the overall educational master plan,
comprehensive program plans and program review cycles
- Emerging technology center or learning spaces to learn how to gain more innovation
- Dedicate time to leveraging technology for student success, faculty, distance education and administrative efficiency

Student Services
- There are too many systems that are used to supplement Colleague causing multiple data entry points and a lack of overall integration.
- Users feel they are not using the systems as effectively as they could be based on a lack of training and support staff
- Variety of examples of manual systems such as spreadsheets used to process their work
- Not enough training is being offered for staff as part of the onboarding process or on an ongoing basis. This also includes the IT staff to make sure they keep up with new technologies.
- Lack of support staff trained on the use of Colleague at District and Campus level
- Could use more communications from District and Campus IT on project status, budget process, future direction, etc.
- Would like to have additional campus support staff available
- Office 365 with OneDrive has been well received
- Most commented that the hardware works well
- Complaints about MyWeb being slow and inefficient
- Transition to SARS anywhere was not well received
- Would like to see more of a social media presence to communicate with students
- Want to make sure the campus community is involved in the decision making process of how to allocate resources
- Want CTSS to take a leadership role in supporting the campuses

In addition, there were several comments related to Student Services in some of the other meetings:

- Reducing/eliminating phone calls, put more at the fingertips of students, emphasize self-service
- Establish a role for someone who is an ‘integrator’ bringing us together, highlight implications of new software features and how to best use/apply given our needs and situations (particularly with Ellucian/patch process)
- Opportunities to collaborate with other community college districts – share insights and resources. California Community Colleges Datatel user group this needs to be stronger and we need to participate regularly.
Administrative Support Team Members

- Website improvements, navigation and making sense out of content, not just content updating
- Single Sign on so don’t have to jump around
- Equipment Replacement Plan (clarity and standards)
- Ability to check status of IT support requests and see when will be completed
- Procurement process improvements
- Integration across ERP and reduction in number of systems being used
- Electronic forms management
- Electronic Signatures
- Repository for policies and procedures
- Clearer solution for imaging and printing, including solid support
- Ongoing technology based professional development and guidance based on embedded business knowledge
- Compliance training – FERPA, Antivirus, security
- Data standardization/data stewardship to support better reporting
- Staffing levels should be consistent with peers – too few technical support staff
- Better orientation and shared information (today’s process is largely oral knowledge passed from one staff member to successor)
- Appreciation for the technology investments that have been made across the Colleges and District wide

Workforce Institute

- Support crosswalk and ETL between the ERP and Foundation specific applications (Raiser’s Edge, social media tools, etc.)
- Satellite location support for applications, including remote desktop capabilities
- Security leadership
- Electronic signatures
- Document management and electronic storage
- Community Education offerings growth, need efficient solutions to support expansion, including non-degree/non-credit
- Technology to support more integration with K12, regional consortiums
- Business process efficiency improvements
- More technology focused joint planning based on emerging needs and Silicon Valley employers
PEER INSTITUTION EXPERIENCE

Three Silicon Valley institutions were identified as peers for the purposes of Technology Master planning:

- Foothill De Anza Community College District
- San Mateo County Community College District
- West Valley-Mission Community College District

IT Directors from each District office responded to interviews and expressed an ongoing interest in the planning process. A companion document has been created with a side-by-side comparison of IT budgets and staffing to aid in future information exchange.

Collaboration with Peer Institutions. The strategic planning process revealed a rich potential for ongoing sharing and exchange. Each interviewed IT leader expressed an interest in further dialog about mutual opportunities, funding and strategies. Over the coming 5 years there may emerge ways in which the set of nearby District IT organizations can share services, infrastructures and leverage solutions.

Summary observations and insights arising out of the interviews were shared with the Strategic Planning project team and District Technology Planning Group:

- Interest in exchanging inputs – timing is good, all are thinking about strategy
- Supervision and location of IT resources, a shared culture
- Colleges drive the priorities, District responds and provides cohesion
- Strategic Capabilities (Gartner) was used by one District as a planning model – resulting in a shared point of view (who are we, what are we doing?)
- Each District will be investing more time in strategic planning – moving from project and equipment specific “shopping lists” to a true plan
- Equipment replacement plans and technology refresh strategy are key ingredients
- Move from being a competitive situation across colleges to a shared outcomes model based on common needs (and more commitment from colleges to actively seek unifying projects)
- No structure (yet) for key performance indicators, this is a particular area for shared brainstorming and comparison
- Budget tie/connection to Technology Master Plan and project priorities is seen as important, no one declares they have a solution.
San Jose-Evergreen Community College District
Technology Planning – Peer Benchmarking Study Results

Staffing Breakdown - SJECCD

Applications Support: 10%
Network and Infrastructure Support: 30%
Academic/Instructional Support: 15%
Help Desk: 45%
Security: 10%
Other: 3%

Staffing Breakdown - Peer Average

Applications Support: 3%
Network and Infrastructure Support: 35%
Academic/Instructional Support: 29%
Help Desk: 18%
Security: 13%
Other: 3%
COMMON FRAMEWORK

IT Resources are delivered through three coordinating teams: the District Information Technology Services and Support team (ITSS), the EVC Campus Technology Support and Services team (EVC CTSS) and the SJCC Campus Technology Support and Services team (SJCC CTSS). A shared Help Desk and request ticketing solution is used to submit and prioritize assistance requests. The IT managers from the three groups meet for planning and review purposes each month.

IT ORGANIZATION AND SERVICES - INFORMATION TECHNOLOGY SERVICES AND SUPPORT (ITSS)

ITSS STATEMENT OF SERVICE

To advance student success, ITSS provides reliable, relevant and secure IT services, support and resources for academic, administrative and student support services throughout the District.

Information Technology Services & Support (ITSS) provides the following centralized IT services to the San José-Evergreen Community College District. ITSS provides Help Desk support for the Colleges, Workforce Institute and District Office and is responsible for the following district-wide resources and services:

- ITSS Help Desk
- Enterprise Resource Planning System - Colleague, MyWeb, WebUI, CROA Reports
- Network LAN, WAN, Wireless service and support
- Email Services (Office 365)
- Distance Education Platform (Moodle/Canvas)
- Library System
- Telephone System (VoIP) including voice mail
- Third-party applications support: Asset Management, Parking Permits, etc.
- Oracle and MS-SQL service and support
- Custom Programming for ERP and related applications
- Web site hosting for Internet and Intranet
- Emergency Notification System
- Computer server systems maintenance and upgrades
- PC configuration and deployment for District Office operations
- IT Security: Firewalls, Scanning, Change Management, VPN Access, CENIC data gateways
- District-wide general technical consulting
ITSS provides IT services and support for academic, administrative and student support services throughout the district. ITSS encourages as much user independence as is practical, providing support through one-on-one trainings, workshops and internal web resources.

The ITSS Help Desk is located at the District Office and operates Monday through Thursday from 7:00 a.m. to 7:00 p.m. and Friday from 7:00 a.m. to 5:30 p.m.
STRATEGIC THEMES

The following themes emerged from strategic planning work, and provide the essential framework for IT planning:

**Student Experience** - Technology will help to prepare students with knowledge and skills that elevate their ability to secure opportunity and advancement when transferring and in the workplace. Student employment and learning outcomes are served when we deliver a student centered IT experience where students have access to industry leading tools and technology-supported physical and virtual spaces that enable them to learn, collaborate, and succeed in obtaining their educational goals. Successful student recruitment, retention and outcomes are directly connected to the value that students gain from their campus experience including access to innovative opportunities through the Workforce Institute.

**Security** - The information technology infrastructure is the foundation for providing electronic resources to support current and future learning, instruction, outreach and operations. Cyber-attacks have targeted educational institutions and can cause significant operational disruptions, expose protected data and result in reputational damage. Security includes the protection of data, systems and networks from unauthorized access and attacks. Investments and improvements will be made to bolster information security and deliver a secure, robust, reliable information technology infrastructure. Ongoing investments will assure the implementation of upgrades and improvements to support growth and industry trends. System users will be provided training and guidance to proactively anticipate vulnerabilities and reduce security threats.

**Standardization** - We honor the distinct opportunities pursued by each campus, and we seek ways to standardize a common or shared approach as a pragmatic way to leverage limited resources. Inherent budget limitations require an agile response to deliver IT support and services while enhancing student learning experiences. Standardization encompasses a broad range of activities including sustainable funding, sustainable staffing, business processes, technology, software, purchasing guidelines, ADA compliance and service level agreements. We seek to align our core IT competencies with our strategic priorities. Where feasible, we will seek to use industry standard services to preserve our resources for those tasks that bring added value when performed by our own staff.

**Support** - Student and employee needs drive how we deliver technology services and support. Many students work in a 24/7, online environment and evaluate our support by comparing us to Netflix and Amazon. We will increase the number of support hours, the quality of our support knowledgebase and we will embed our District and Campus policies/procedures into best practice support responses and proactive training delivery. High quality support is delivered by a qualified, committed and caring team. SJECCD is competing with Silicon Valley and other local institutions for skilled IT staff. We seek to be an employer of choice for IT candidates, providing strong career development paths for every IT team member in a work environment that supports opportunity, equity, and social justice.
**Self-Service** - To make the best use of limited resources, we will apply technology systems to boost productivity and automate services where ever possible. Services will be available online and on-demand for students, staff, faculty and administrators. We will increase our capacity to continuously improve access, delivering efficient and well-integrated paths for user self-service, paperless processes and electronic workflows. Usability and accessibility will be improved and we will make services more accessible to those working off-campus and after hours.

**NEW STRATEGIC FOCUS (2019)**

In the spring of 2019, the District Technology Planning Committee approved a new strategic focus, Digital Transformation. According to EDUCAUSE (https://www.educause.edu/focus-areas-and-initiatives/digital-transformation):

> “Digital transformation (Dx) is a series of deep and coordinated culture, workforce, and technology shifts that enable new educational and operating models and transform an institution’s operations, strategic directions, and value proposition.

> Dx is being driven by technology trends and changes that are enabling a new approach to everything from how digital architectures are being incorporated to how campus leaders interact with the IT organization, all targeting improved student outcomes, more effective teaching and learning methods, new research capabilities, and an evolution in business models. Dx requires agile and flexible leaders at all levels who can enable the college or university to rapidly and efficiently achieve its strategic aims.”
PROJECT PRIORITIZATION

A follow-on activity to the strategic planning work will be to formalize and document the process for ongoing project prioritization. A shared project database will be used to record projects underway for District-wide and College project lists to facilitate a review by criteria, supported strategic initiatives and accreditation standards. A sample project item contained in the project database is included below:

<table>
<thead>
<tr>
<th>ID</th>
<th>IS Architecture</th>
<th>Strategic Initiative</th>
<th>PROJECT NAME</th>
<th>Project Status</th>
<th>Accreditation Standard</th>
<th>District Strategic Goal Area</th>
<th>Board Ends Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data and Document Infrastructure</td>
<td>D-01: Migrate from Oracle to MS SQL Server for the underlying Colleague Database</td>
<td>ERP Database Evaluation and Selection</td>
<td>Complete</td>
<td>III.C.2.</td>
<td>Technology</td>
<td>Institutional Excellence</td>
</tr>
</tbody>
</table>

An Annual Report of the District Technology Plan is provided to the Board of Trustees each year. It includes an update on technology plan projects that were completed for the previous year and planned for the following year. These annual reports are published online in the District’s BoardDocs, [https://go.boarddocs.com/ca/sjeccd/Board.nsf/Public#tab-meetings](https://go.boarddocs.com/ca/sjeccd/Board.nsf/Public#tab-meetings).

The budget for bond projects is tracked by the Ann Kennedy Group’s BMET system and transcend annual budget cycles. The Technology Master plans will include funding sources for newly developed projects and bond funding will be identified where appropriate.

**Allocation of resources and sustainability**

The Colleges each engage in a program review cycle that confirms general budget funds, how innovation projects are supported while also maintaining operations, and integration of planning activities across the Colleges and District. The District is currently working to develop a new Resource Allocation Model that will align with the college budgeting processes.
STRATEGIC GOALS AND INITIATIVES

The consensus of leadership and stakeholders involved in the Technology Master planning process was to emphasize a brief, clear set of strategic goals, and to provide a transparent process for eliciting input and dialog related to IT initiatives District-wide. Based on this guidance, the plans are depicted in graphic form, supplemented by the respective Technology Master Plan Initiatives for each entity.

The strategic plans for the District, EVC and SJCC are organized around shared strategic themes: Student Experience, Security, Standardization, Support and Self-Service. Each organizational unit has developed strategic goals for the coming 5 - 7 years that address the shared strategic themes, with one to two year initiatives. A shared project list further details the approach being taken to address the college and district-wide initiatives.

The following chart provides a list of the SJECCD Technology Master Plan Strategic Goals in context with the Strategic Themes and in alignment with the SJECCD Strategic Priorities:
<table>
<thead>
<tr>
<th>Strategic Theme</th>
<th>SJECCD Technology Master Plan Strategic Goals</th>
<th>SJECCD Strategic Priorities 2018-2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Experience</td>
<td>1.1. Provide technology infrastructure capacity and technology services to support on-campus and online teaching and learning. (III.C., III.C.1)</td>
<td>1. Student Success</td>
</tr>
<tr>
<td>Student Experience</td>
<td>1.2. Provide technology infrastructure capacity and technology services to support on-campus and online student support services. (III.C.1, III.C.2)</td>
<td>1. Student Success</td>
</tr>
<tr>
<td>Student Experience</td>
<td>1.3. Ensure that all classrooms, labs and study spaces have standardized audio-visual equipment, networking, hardware and software to support collaborations, simulations, presentations, teaching and learning. (III.C.1)</td>
<td>1. Student Success</td>
</tr>
<tr>
<td>Student Experience</td>
<td>1.4. Develop and update policies and procedures that guide the use of technology in the teaching and learning processes. (III.C.5)</td>
<td>1. Student Success</td>
</tr>
<tr>
<td>Student Experience</td>
<td>1.5. Provide scalable technologies, services and staff to fully support online education. (III.C.1)</td>
<td>1. Student Success</td>
</tr>
<tr>
<td>Security</td>
<td>2.1. Continuous improvement of network infrastructure security processes at all locations where courses, programs, and services are implemented and maintained to assure reliable access, safety, and security. (III.C.3)</td>
<td>3. Organizational Effectiveness and Sustainability</td>
</tr>
<tr>
<td>Strategic Theme</td>
<td>SJECCD Technology Master Plan Strategic Goals</td>
<td>SJECCD Strategic Priorities 2018-2025</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Security</td>
<td>2.2. Development and maintenance of information security plans, policies, procedures, practices and projects to assure reliable access, safety, risk management and security at all locations. (III.C.3)</td>
<td>3. Organizational Effectiveness and Sustainability</td>
</tr>
<tr>
<td>Security</td>
<td>2.3. Application of Single Sign-On (SSO) solution for all standardized applications and technology resources to assure reliable access, safety and security at all locations. (III.C.3)</td>
<td>3. Organizational Effectiveness and Sustainability</td>
</tr>
<tr>
<td>Security</td>
<td>2.4. Ongoing information security training to faculty, staff, students, administrators and external stakeholders. (III.C.3.)</td>
<td>3. Organizational Effectiveness and Sustainability</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.1. Regular updates of technology to ensure the quality and capacity to support operations, programs, services and the mission. (III.C.2)</td>
<td>4. Technology</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.2. Continuous improvements of standardized business processes involving technology to improve institutional operations. (III.C.4)</td>
<td>4. Technology</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.3. Institutional support of technology planning and standardized project management including portfolio management, project intake and project prioritization. (III.C.1)</td>
<td>4. Technology</td>
</tr>
<tr>
<td>Strategic Theme</td>
<td>SJECCD Technology Master Plan Strategic Goals</td>
<td>SJECCD Strategic Priorities 2018-2025</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.4. Institutional data management and data governance for data-informed decision making. (III.C.4)</td>
<td>4. Technology</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.5. Development and continuous improvement of internal and external web resources and mobile applications to support operations, programs, services and the mission. (III.C.1)</td>
<td>4. Technology</td>
</tr>
<tr>
<td>Support</td>
<td>4.1. Provide technology infrastructure capacity and services to support operational functions for human resources, fiscal services, student services, academic services, information technology, research, facilities, maintenance, police services, public information, governmental affairs, Workforce Institute and the Board of Trustees. (III.C.1, III.C.2)</td>
<td>6. Total Work Environment</td>
</tr>
<tr>
<td>Support</td>
<td>4.2. Maintain a sustainable funding model and a sustainable staffing model for technology resources and services. (III.C.2)</td>
<td>6. Total Work Environment</td>
</tr>
<tr>
<td>Support</td>
<td>4.3. Improve the effectiveness and efficiency of technology leadership, services and support provided to students, faculty, staff and administrators. (III.C.1)</td>
<td>6. Total Work Environment</td>
</tr>
<tr>
<td>Strategic Theme</td>
<td>SJECCD Technology Master Plan Strategic Goals</td>
<td>SJECCD Strategic Priorities 2018-2025</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Support</td>
<td>4.4. Develop and foster a culture of Information Technology service excellence, performance feedback and assessment. (III.C.4)</td>
<td>6. Total Work Environment</td>
</tr>
<tr>
<td>Support</td>
<td>4.5. Provide training and support for faculty, staff, students, and administrators in the effective use of technology and technology systems related to academic programs, student services and operations. (III.C.4)</td>
<td>6. Total Work Environment</td>
</tr>
<tr>
<td>Self-Service</td>
<td>5.1. Streamline, encourage and support the use of Business Intelligence reports and reporting tools for the effective use of technology systems. (III.C.4)</td>
<td>5. Communication</td>
</tr>
<tr>
<td>Self-Service</td>
<td>5.2. Enhance internal and external web resources and mobile applications to provide self-service resources for District/College programs, services and operations. (III.C.4)</td>
<td>5. Communication</td>
</tr>
<tr>
<td>Self-Service</td>
<td>5.3. Leverage applicable resources for providing professional support and technical self-service for faculty, staff, students and administrators. (III.C.1, III.C.4)</td>
<td>5. Communication</td>
</tr>
</tbody>
</table>

The following table shows the District-wide (DW) and District Office (DO) Initiatives that correspond with the Strategic Goals. Initiatives are for one or two years and are updated each year as old initiatives are completed and new initiatives are listed. Initiatives are the basis of one or more projects. The projects are listed internally.
|------------------|----------------------------------------------------------|----------------------------------------------------------------------|
| Student Experience | 1.1. Provide technology infrastructure capacity and technology services to support on-campus and online teaching and learning. (III.C., III.C.1) | DW 1.1.a. Enhance Wireless Installation at all Interior and Exterior Locations (Revised 5/9/19)  
DW 1.1.b. ITSS Collaboration for Guided Pathways in Learning and Instruction (Added 5/10/18) |
| Student Experience | 1.2. Provide technology infrastructure capacity and technology services to support on-campus and online student support services. (III.C.1, III.C.2) | DW 1.2.a. Improve Student Educational Planning Self-Service  
DW 1.2.b. Improve Student Registration Processes (Revised 5/10/18)  
DW 1.2.c. Deploy Mobile Applications for Standardized Web-resources  
DW 1.2.d. Expand Technical Support Services for Online and On-campus Students  
DW 1.2.e. IT Collaboration for Guided Pathways in Student Services (Added 5/10/18) |
| Student Experience | 1.3. Ensure that all classrooms, labs and study spaces have standardized audio-visual equipment, networking, hardware and software to support collaborations, simulations, presentations, teaching and learning. (III.C.1) |  |

<p>| 30 |</p>
<table>
<thead>
<tr>
<th><strong>Student Experience</strong></th>
<th>1.4. Develop and update policies and procedures that guide the use of technology in the teaching and learning processes. (III.C.5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Experience</strong></td>
<td>1.5 Provide scalable technologies, services and staff to fully support online education. (III.C.1)</td>
<td>DW 1.5.a. Expand Utilization and Integration of Standardized LMS (Canvas) (Revised 5/10/18)</td>
</tr>
</tbody>
</table>
| **Security**           | 2.1. Continuous improvement of network infrastructure security processes at all locations where courses, programs, and services are implemented and maintained to assure reliable access, safety, and security. (III.C.3) | DW 2.1.a. Secure the Physical Network Infrastructure  
DW 2.1.b. Comprehensive Physical Network Infrastructure and Security (Revised 5/10/18) |
| **Security**           | 2.2. Development and maintenance of information security plans, policies, procedures, practices and projects to assure reliable access, safety, risk management and security at all locations. (III.C.3) | DO 2.2.a. Cyber-Security Manager and Staff Roles  
DW 2.2.a. Comprehensive Information Security and Data Protection Plan  
DW 2.2.b. Data Loss Protection and Prevention  
DW 2.2.c. Administrative Procedures and Guidelines for Information Security  
DW 2.2.d. Risk Management Framework Development and Application (Revised 5/10/18)  
DW 2.2.e. Network-based Security Camera |
| **Security** | 2.3. Application of Single Sign-On (SSO) solution for all standardized applications and technology resources to assure reliable access, safety and security at all locations. (III.C.3) | DW 2.3.a. Single Sign-On (SSO) and Two-Factor Authentication Identify Management Solution (Revised 5/10/18) |
| **Security** | 2.4. Ongoing information security training to faculty, staff, students, administrators and external stakeholders. (III.C.3.) | DW 2.4.a. Security awareness programs for faculty, staff and administrators |
| **Standardization** | 3.1. Regular updates of technology to ensure the quality and capacity to support operations, programs, services and the mission. (III.C.2) | DW 3.1.a. District-wide Phone System Upgrades and Enhancements (Revised 5/10/18)  
DW 3.1.b. Annual Computer Replacement Process  
DW 3.1.c. Annual Update of District-Wide Technology Standards  
DW 3.1.d. Update District Library System (Added 5/10/18) |
| **Standardization** | 3.2. Continuous improvements of standardized business processes involving technology to improve institutional operations. (III.C.4) | DO 3.2.a. Implement Business Process Improvements with technology at the District-Office (Added 5/11/19)  
DO 3.2.b. Develop Digital Transformations of Business Processes at the District Office (Added 5/11/19) |
<table>
<thead>
<tr>
<th>Standardization</th>
<th>3.2. Implement Business Process Improvements with technology District-Wide (Revised 5/11/19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardization</td>
<td>3.2.b. Develop Digital Transformations of Business Processes District-Wide (Revised 5/11/19)</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.2.c. Process Improvement: Electronic Signatures</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.3. Institutional support of technology planning and standardized project management including portfolio management, project intake and project prioritization. (III.C.1)</td>
</tr>
<tr>
<td>Standardization</td>
<td>DO 3.3.a. Prioritization Process for Technology Plan Projects</td>
</tr>
<tr>
<td>Standardization</td>
<td>DO 3.3.b. IT Project Management Resource for IT Bond Projects</td>
</tr>
<tr>
<td>Standardization</td>
<td>DW 3.3.c. Annual Update of Technology Plan Initiatives</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.4. Institutional data management and data governance for data-informed decision making. (III.C.4)</td>
</tr>
<tr>
<td>Standardization</td>
<td>DO 3.4.a. New Institutional Metrics and Online Dashboards for Institutional Effectiveness</td>
</tr>
<tr>
<td>Standardization</td>
<td>DO 3.4.b. Data and Electronic Document Retention Policies and Procedures</td>
</tr>
<tr>
<td>Standardization</td>
<td>DW 3.4.a. Data Governance for Institutional</td>
</tr>
</tbody>
</table>
| Standardization | 3.5. Development and continuous improvement of internal and external web resources and mobile applications to support operations, programs, services and the mission. (III.C.1) | DW 3.5.a. Ellucian Mobile Application (Moved to Project List 5/9/19)  
DW 3.5.b. New Web Design Standards (Mobile, Responsive, ADA, Navigation)  
DW 3.5.c. District-Wide SharePoint for Committee Notes, etc.  
DW 3.5.d. Student Portal (Self-Service) to Replace MyWeb  
DW 3.5.e. Continuous Improvement of Emergency Communications  
DW 3.5.f. Technology-enhanced Collaborative Meeting Rooms |
| Support | 4.1. Provide technology infrastructure capacity and services to support operational functions for human resources, fiscal services, student services, academic services, information technology, research, facilities, maintenance, police services, public information, governmental affairs, Workforce Institute and the Board of Trustees. (III.C.1, III.C.2) | DO 4.1.a. Disaster Recovery and Business Continuity Plans  
DO 4.1.b. Hybrid-Cloud Infrastructure Development  
DW 4.1.a. Ongoing Integrations and Enhancements with Multi-Function Printers and Copiers (Revised 5/11/19)  
DW 4.1.b. ERP System Process |
| Support | 4.2. Maintain a sustainable funding model and a sustainable staffing model for technology resources and services. (III.C.2) | DW 4.2.a. Sustainable IT Funding Model  
DW 4.2.b. Sustainable IT Staffing Model  
DW 4.2.c. Annual Review of Outdated IT Job Classifications |
| Support | 4.3. Improve the effectiveness and efficiency of technology leadership, services and support provided to students, faculty, staff and administrators. (III.C.1) | DO 4.3.a. Increase Efficiency and Effectiveness of Help Desk  
DW 4.3.a. Online Print Management Enhancements for Reprographics (Revised 5/11/19)  
DW 4.3.b. IT Professional Development Opportunities  
DW 4.3.c. Comprehensive Workstation Management - Physical and Virtual |
<table>
<thead>
<tr>
<th>Support</th>
<th>4.4. Develop and foster a culture of Information Technology service excellence, performance feedback and assessment. (III.C.4)</th>
<th>DO 4.4.a. Continuous Improvement of IT Support Services (Revised 5/11/19)</th>
</tr>
</thead>
</table>
| Support | 4.5. Provide training and support for faculty, staff, students, and administrators in the effective use of technology and technology systems related to academic programs, student services and operations. (III.C.4) | DW 4.5.a. Expand Help Desk Support Model for LMS  
DW 4.5.b. Provide Training and Support Resources for Standardized IT Systems |
| Self-Service | 5.1. Streamline, encourage and support the use of Business Intelligence reports and reporting tools for the effective use of technology systems. (III.C.4) | DW 5.1.a. Continuous Improvements to Reports and Reporting Infrastructure (Revised 5/10/18, 5/11/19) |
| Self-Service | 5.2. Enhance internal and external web resources and mobile applications to provide self-service resources for District/College programs, services and operations. (III.C.4) | DW 5.2.a. Develop Online Self-Service Forms and Workflows (5/11/19)  
DW 5.2.b. Provide Way-finding Support using Technology |
| Self-Service | 5.3. Leverage applicable resources for providing professional support and technical self-service for faculty, staff, students and administrators. (III.C.1, III.C.4) | DO 5.3.a. Leverage Vendor Self-Services

DW 5.3.a. Colleague Self-Service Development (5/11/19)

DW 5.3.b. Integrate California Community College Resources for Self-Service

DW 5.3.c. Self-Service Print-job Requests |
IT SERVICE DELIVERY CAPABILITIES

ITSS SERVICE LEVEL AGREEMENT

ITSS has initiated a service listing that will be further refined as a service catalog and will be further described on the ITSS website as it evolves. The ITSS website provides a general statement of the spectrum of supported ITSS services. The extent and limitations of support will be further outlined on a case by case basis through specific service level agreements that are developed.

IT SERVICES DELIVERY CAPABILITIES

Outlined below are brief descriptions of the ITSS service delivery capabilities.

**Customer support.** The ITSS team is committed to serving and supporting students and users through technical support, access to knowledge, help to leverage technology to meet individual/unit/department goals, and a quality of service the meets or exceeds target service levels. The ITSS SLA records a common understanding about services, expectations, priorities and responsibilities, and service-level goals where the "level of service" communicates a measurable level of organization performance for students and District users. The service level agreement is an important input into defining the IT organization, resource levels, support processes, and investments.

**Access to IT services.** Access to IT services through remote or on premise secure access to online student services, enterprise systems, software, voice and data from either District/College provided or personal devices. ITSS services and their access methods are defined in the ITSS Service Level Agreement.

**Applications & software.** Applications and software supported by ITSS include enterprise-wide, department and individual use. Enterprise application software (EAS) include tools such as Colleague, CROA, Office 365, MyWeb, etc. Learning Management Systems include Canvas and Moodle. Department or individual use software is typically specific to the instructional program, function or service being performed by that department. A list of current applications and software will be maintained on the ITSS website.

**Communication infrastructure.** Communication infrastructure and devices are the cornerstone of access to IT services. Communication infrastructure includes fiber optic cables, copper cables, wireless communications and service provider connections to broadband and telephone service providers. Communication devices include network core and edge switches, firewalls, packet-shapers, routers, access points, VoIP telephone system, telephone handsets, headphones, audio and video conferencing equipment and the software applications that allow users access to these systems. Components of an IT facilities plan are being defined that convey common standards for communication devices and equipment for new and existing facilities.
**Computing devices.** Devices provided and supported District-wide include physical servers, virtual servers, storage area networks, desktop computers, laptops, tablets, smartphones, and eReaders. The District supports devices from vendors such as Dell and Apple. Each device has a purpose, acquisition cost, maintenance cost, support cost, useful life and financial obligation - Total Cost of Ownership (TCO). A list of currently supported computing devices is outlined in the SLA.

**Printing and scanning devices/reprographics.** ITSS and CTSS support the installation and troubleshooting of a variety of printing and scanning devices that support instructional and administrative support needs. A list of currently supported printing and scanning devices is outlined in the SLA.

**Classroom and office facilities.** ITSS supports the use of facilities that include computer labs, offices, conference rooms and auditoriums. We provide a tiered service approach to facility technologies.

**Information management.** Information management entails organizing, retrieving, acquiring and maintaining information. It is closely related to and overlapping with the practices in support of Institutional Effectiveness and of Data Management. Data Management, as defined by DAMA (Data Management Association) International is the development and execution of architectures, policies, practices and procedures that properly manage the full data lifecycle needs of an enterprise. Business Intelligence (BI) is a business management term referring to applications and technologies used to gather, provide access to, and analyze data and information about an organization’s operations and performance. BI systems help organizations have a more comprehensive knowledge of the factors affecting their business, such as metrics on production and internal operations assisting organizational decision-making. Three main components of BI are reporting, data mining, and predictive analytics.

**Business continuity.** Business continuity is the activity performed to ensure that critical business functions will be available to customers, suppliers, regulators, and other entities. Disaster recovery is a subset of business continuity. Disaster recovery is the process, policies and procedures related to preparing for recovery or continuation of technology infrastructure critical to an institution after a natural or human-induced disaster. While business continuity involves planning for keeping all aspects of a business functioning in the midst of disruptive events, disaster recovery focuses on the IT or technology systems that support business functions.
Security. The objective of technology security includes protection of information and property from theft, corruption, or natural disaster, while allowing the information and property to remain accessible and productive for intended, authorized users. The term technology security includes the collective processes and mechanisms by which sensitive and valuable information and services are protected from publication, tampering or collapse by unauthorized activities or untrustworthy individuals and unplanned events respectively. The strategies and methodologies for ensuring District security outcomes is even more challenging given the educational objective of being accessible while preventing unwanted computer behavior and threats. A technology security policy defines the goals and elements for District computer systems. Security policies are enforced by organizational policies and security mechanisms.
COMPANION DOCUMENTS

- District Technology Plan Active Projects/Portfolio SharePoint site. The documents projects planned for the fiscal year that support the District and College Strategic Plans.

- (Recommended) ITSS Service Level Agreement (SLA). The SLA documents a common understanding of ITSS services, expectations, priorities and responsibilities, and service-level goals where the "level of service" communicates a performance measure.

- [Evergreen Valley College Education Master Plan 2030](#)
- [San Jose City College Education Master Plan 2030](#)
- [Evergreen Valley College Facilities Master Plan 2030](#)
- [San Jose City College Facilities Master Plan 2030](#)
- [Delineation of Functions Map](#)
- [SJECCD Strategic Information Technology Plan, October 2012, updated June 2014](#)
- SJECCD District, EVC and SJCC Strategic Plan Opportunities documents, Reviewed with Technology Committee, February 2017
ACKNOWLEDGEMENTS

This comprehensive planning document encompasses the input and participation of many members of the SJECCD community. From initial survey participation, through planning kickoff and work sessions to the many iterations and versions that were reviewed and debated, the investment of time and energy highlighted the extraordinary partnership across our community.

Guiding that involvement from initial stages through to the development of this plan has been a rewarding challenge for the project steering committee. Committee members are particularly thanked for their leadership. The process of identifying needs and opportunities for the District, EVC and SJCC has been transformational, focusing our energies in a productive and forward looking way.

Special recognition to the work of the District Technology Planning Group, 2016-2017!

Special recognition to the work of the District Technology Planning Committee, 2018-2019, for updating the SJECCD Technology Master Plan in May 2019.