INTEGRATED TECHNOLOGY PLAN

Santa Ana College, 2022-2026

Introduction

The mission of Santa Ana College's Technology Advisory Committee (SACTAC) is to serve as a hub for academic and administrative technology planning at the college. The committee works closely with the district's Technology Advisory Group (TAG).

While most technology is managed centrally through the district's Information Technology Services division in accordance with the District Strategic Technology Plan adopted by TAG, Santa Ana College leads digital transformation efforts as the largest college in the district with dedicated resources, local expertise and local planning efforts. SAC's technology plan integrates with and informs the institution's Education Master Plan, as well as district technical planning as outlined in Appendix A – Technology Planning Structure.

Environmental Scan

In addition to information provided in this plan, environmental analysis is available from many resources that inform this technology plan:

- Student Equity Plan 2022-2025
- District Strategic Technology Plan
- District External Environmental Scans
- Education Master Plan
- Enrollment Management Plan

Education Master Plan

Santa Ana College has adopted eight Strategic Goals as part of the Education Master Plan (EMP):

1. Santa Ana College will provide support services that remove barriers for timely completion of educational goals of students.

2. Santa Ana College will provide Career and Academic Pathways (CAPs) to all students together with academic and student support services they need to complete their educational goals in a timely manner.
3. Santa Ana College will increase the number of students transferring annually to 4-year institutions.
4. Santa Ana College will provide services that support student integration into college life, student retention and persistence, and the accumulation of fewer units that will result in the efficient achievement of a chosen educational goal by 50% of our students within 5 years.
5. Santa Ana College will prepare students for successful, livable-wage employment closely related to their field of study.
6. Santa Ana College will develop a comprehensive career education marketing, outreach and recruitment plan.
7. Santa Ana College will develop and offer innovative, high quality, workforce-ready, industry-driven career and technical programs.
8. In order to reduce achievement gaps in all areas by 40% by 2022, Santa Ana College, within the context of its diverse community, will systematically equitize its practices leading to culturally responsive programs and services.

Enrollment

SAC's Enrollment Management Plan details the environment related to registration. In Orange County, 9 out of 10 community colleges have lost headcount since 2010, with the biggest declines in the < 3-unit category (pgs. 7-8).

Demographic Trends

The population of traditional-aged students that make up the majority of SAC's current enrollment is expected to shrink 5.3% by 2024 (pg. 4). In contrast, the following age groups will see the largest increase in population size:

- 35-44: 13%
- 65-74: 15%
- 75-84: 24%

Additionally, 44% of SAC students currently reside outside of the 8 main zip codes that Santa Ana serves (pg. 3).

Online Courses

While SAC has experienced enrollment declines in traditional in-person classes over the last several years, the enrollment trend for courses offered online has increased annually. Overall enrollment increased 117% in online courses from 2015 to 2019 (SAC Fact Book, pg. 32). This trend accelerated during the pandemic, with additional course offerings corresponding to faculty certifications for online teaching increasing by an astounding 82% (Appendix B – Increase in Online Teaching).

New technology was introduced in 2020 that provides access to all student services virtually with capabilities such as real-time chat, file sharing, audio / video conferencing, support for electronic signatures, and online appointments. To ensure continued access to student services in a manner that is equitable to all students, Santa Ana College must ensure that the dedicated resources are scaled to support continued and expanded access to virtual student services.

Concurrently, SAC must support new instructional modalities such as HyFlex instruction. HyFlex is a course modality where a student chooses to attend on campus or fully online live (Zoom). Students can decide their attendance method on a class-by-class basis. Budget and personnel resources as well as hardware refresh cycles and standards must be updated to support growth in this area.

Persistence and Student Success

In classes that have implemented SAC's student success platform, Starfish, persistence has increased an average of 5% and successful course outcomes by 2% (Appendix C – Student Success Increase w/ Starfish). Dedicated personnel and resources would support the Starfish system on a permanent basis to institutionalize and scale this effective practice.

Diversity, Equity and Inclusion

Accessibility

SACTAC recognizes that accessibility plays a key part in the achievement of an equitable institution. Additional resources and training are needed to ensure that SAC continues to improve in this competency. Technology products and services must be implemented in a manner that ensures all campus programs, services, and activities are usable by everyone – regardless of disability status.

Pronouns and Chosen Name

The primary business systems used by faculty and staff began supporting the display of chosen names and pronouns in recent years. However, there are many custom reports and systems that require updating by ITS. ITS should allow SAC to eliminate references to a legal name when a chosen name is available unless the legal name is necessary for regulatory compliance.

Likewise, systems that support pronouns should display the pronouns available from the student information system.

Operational Environment

Remote Work, Services, and Instruction

The district is currently facing a recruitment and retention crisis for many positions. This is negatively impacting the operations of the college, as the district has failed to find qualified candidates for technical positions including:

- Applications Specialist III
- Business System Analyst
- Cloud Computing Specialist
- Tech Specialist III

SAC must have a flexible remote work policy to support the recruitment and retention of skilled technical personnel in a highly-competitive labor market. A recent survey of Chief Information Officers by EDUCAUSE showed that only 4% of institutions plan not to allow remote work. Other districts in the State, such as Ventura, Kern, and MiraCosta have adopted remote work policies, as well as every community college in SAC's local region.

Additionally, SAC must provide off-campus availability to systems and processes in support of a flexible work and learning environment to ensure equitable access to services and instruction for all students. With enrollment in online classes and demands on students' time continuing to grow, services that were provided online during the recent pandemic should be maintained and institutionalized.

Locally-Administered Systems

Some business systems are not used district-wide and are thus administered locally by the College. Other district-wide systems, such as Canvas, have local instances that are administered by the College. A partial list of systems used campus-wide that are currently administered locally include:

- Canvas (local instance)
- Cornerstone (local instance)
- CurriQunet
- Nuventive
- Ocelot
- Regroup
- Starfish

As Santa Ana College continues to invest in business systems, the college should ensure that appropriate personnel are put in place to support and administer those systems. Distance Education and Student Information Support are the primary departments supporting local business systems.

Cybersecurity

Cybersecurity threats are growing daily and geopolitical forces are increasing the likelihood of state-sponsored attacks on local governments. In 2021, an estimated 82 colleges and public school districts were victims of cyberattacks and some districts have already been hit in 2022. SAC must reduce its vulnerability to such attacks by adopting best practices and meeting the current California Community College Information Security Standard in accordance with Board Policy 3730. The institution must also ensure compliance with recent updates to the Gramm-Leach-Bliley Act Safeguards Rule, including implementation of multi-factor authentication (MFA).

Technology Refresh

Computers and classroom mediation hardware are currently funded using one-time funds. A recommendation for funding is made every year by SACTAC to the Planning & Budget Committee to fund a refresh of this technology. On May 24, 2023, SACTAC recommended a baseline of $1.5M annually be allocated for technology refresh. The current aging report for computers is available in Appendix D – Computer Aging Report. Mediation needs are forecasted in Appendix E – Mediation Forecast.

Initiatives

SACTAC recommends the following initiatives in alignment with the District's technology goals (referenced in brackets [ ] below) and in support of the Educational Master Plan and other strategic plans of the institution:

Student Experience

1. Scale virtual student support using artificial intelligence and real-time chat technology [District 1.a].
2. Provide technology solutions to ensure online students receive similar services as on campus students [District 1.b].
3. Support SAC Guided Pathways initiatives [District 1.c].
4. Redesign the SAC website to provide a modern experience [District 1.c].
5. Adopt a modern Content Management System (CMS) for SAC websites [District 1.d].
6. Standardize the student experience for online appointment scheduling, meetings, and other online services [District 1.d].

Standardization

1. Hardware: permanently fund a sustainable technology refresh / computer replacement cycle in alignment with adopted district standards [District 2.a].
2. Hardware: establish replacement and distribution guidelines for laptops [District 2.a].
3. Hardware: mediate remaining unmediated classrooms including upgrades and refresh [District 2.b].
4. Software: permanently fund mass messaging, student success platforms, and classroom instruction technology that is currently funded with one-time funds (Regroup, Starfish, Zoom, etc.) [District 2.d].

Data-Driven Decision-Making

1. Create testing and training systems that mirror recent data in Colleague, the live Student Information System [District 3.a].
2. Define data owners and data access for each user at the appropriate level [District 3.b].

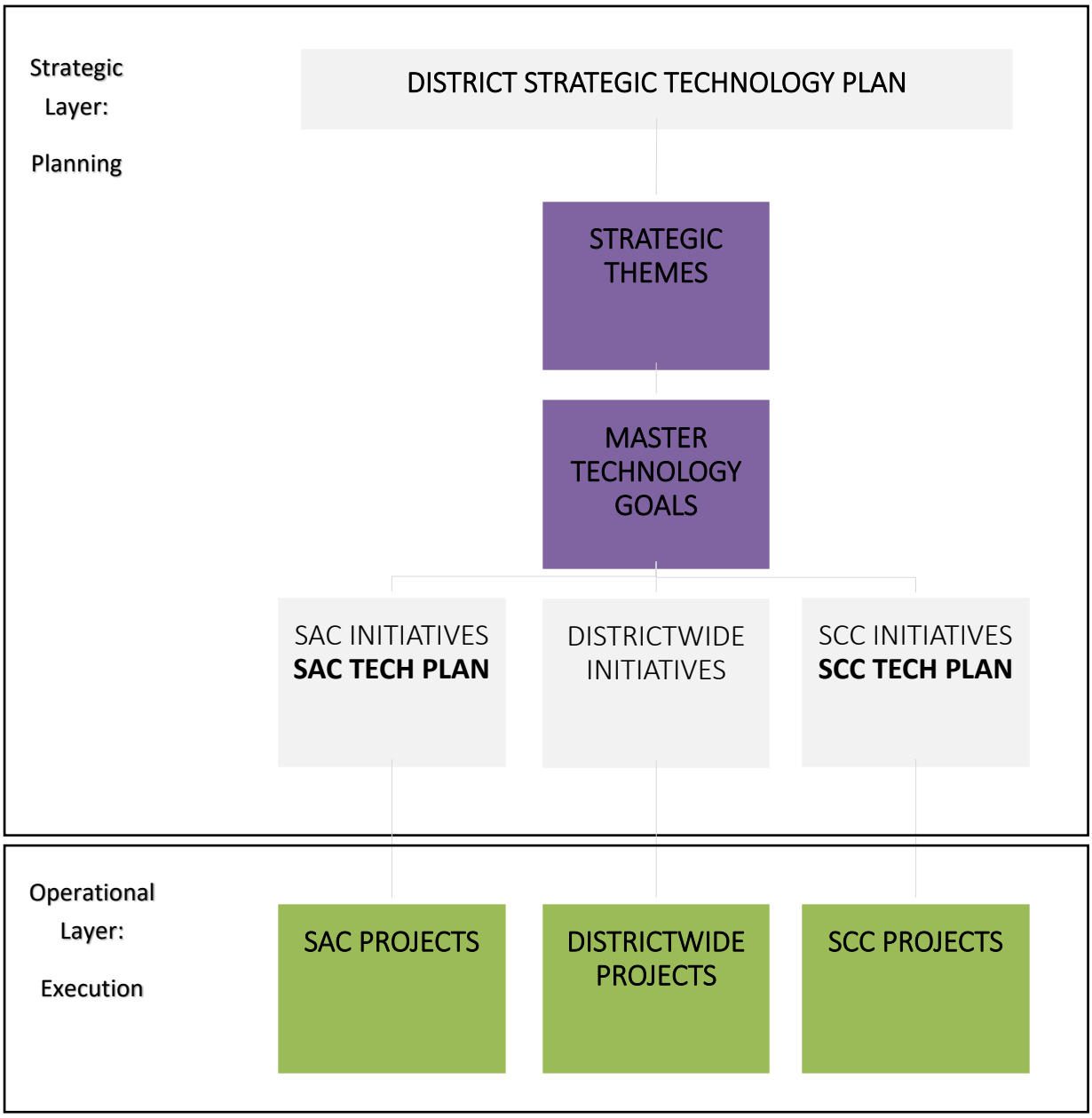
Security

1. Modernize the bookstore website and Point-of-Sale (POS) system [District 4.a].
2. Evaluate supportive frameworks such as the Higher Education Community Vendor Assessment Toolkit (HECVAT) [District 4.b].
3. Implement multi-factor authentication (MFA) [District 4.c].

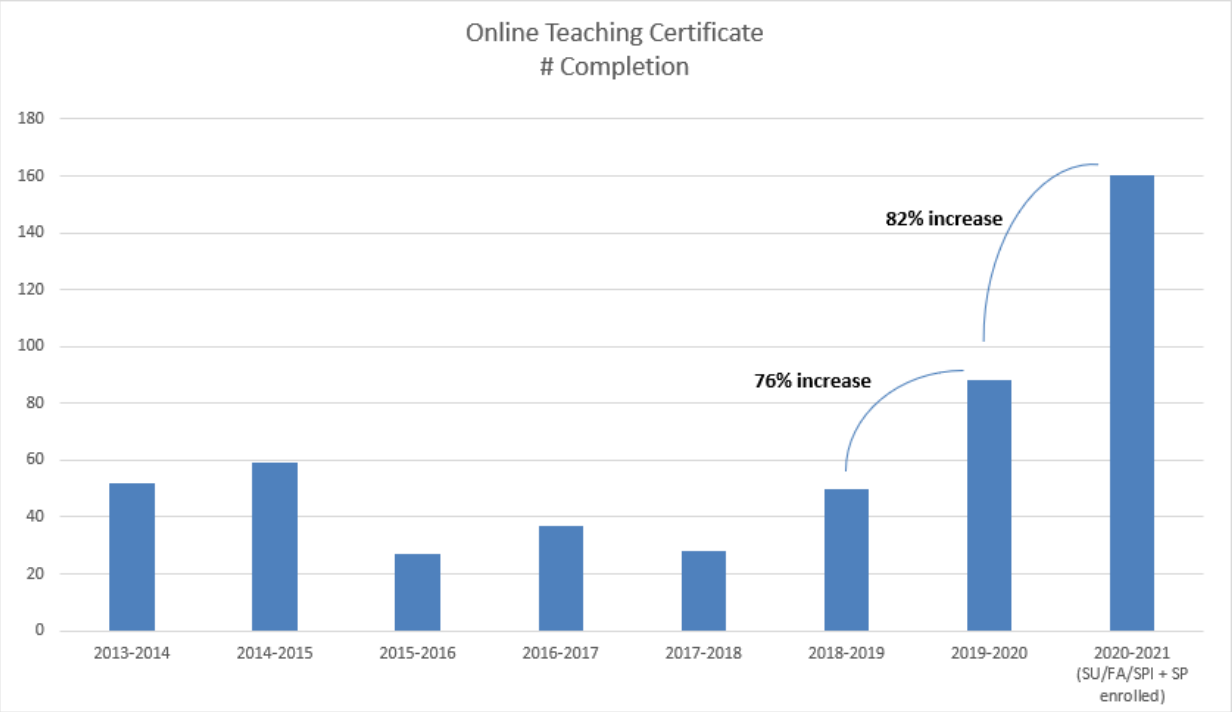
Support

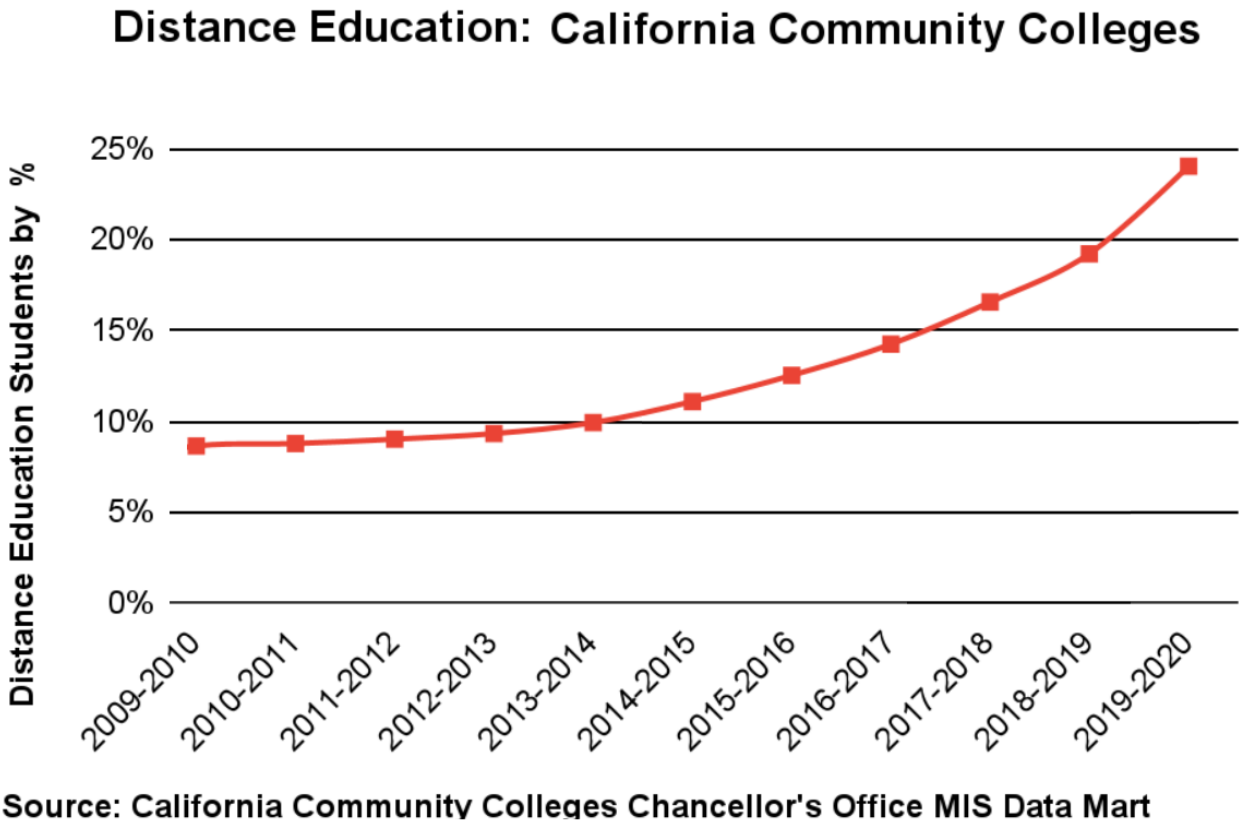
1. Survey stakeholders, aggregate, analyze and act on results [District 5.a].
2. Permanently fund the Student Help Desk and service areas that provide end-user support to students [District 5.b].
3. Provide training opportunities for Self-Service [District 5.b].
4. Expand software applications available to students, potentially through Virtual Desktop technology [District 5.c].
5. Modify processes and systems to support work-from-home and flexible-schedule work modalities. [District 5.c].
6. Improve infrastructure to support accessibility in all institutional operations [District 5.d].

Appendix A – Technology Planning Structure



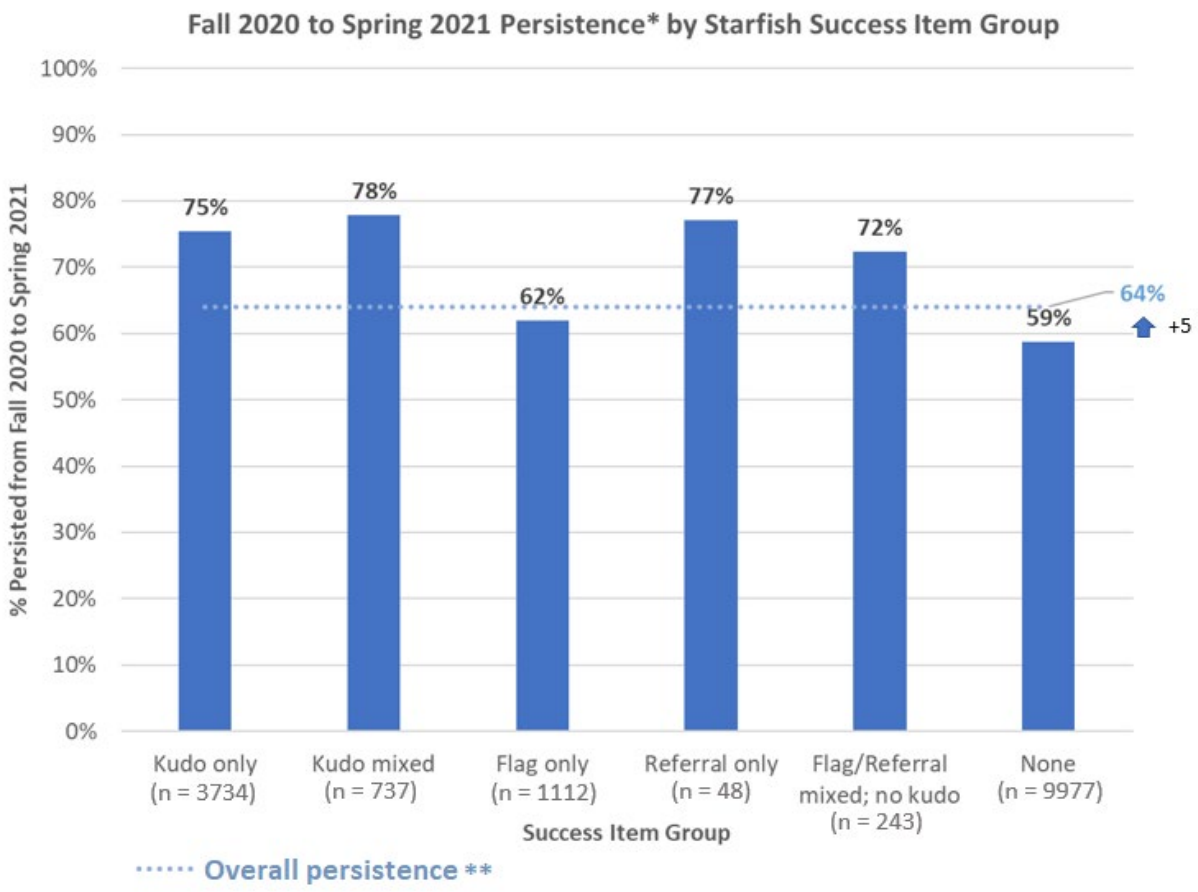
Appendix B – Increase in Online Teaching





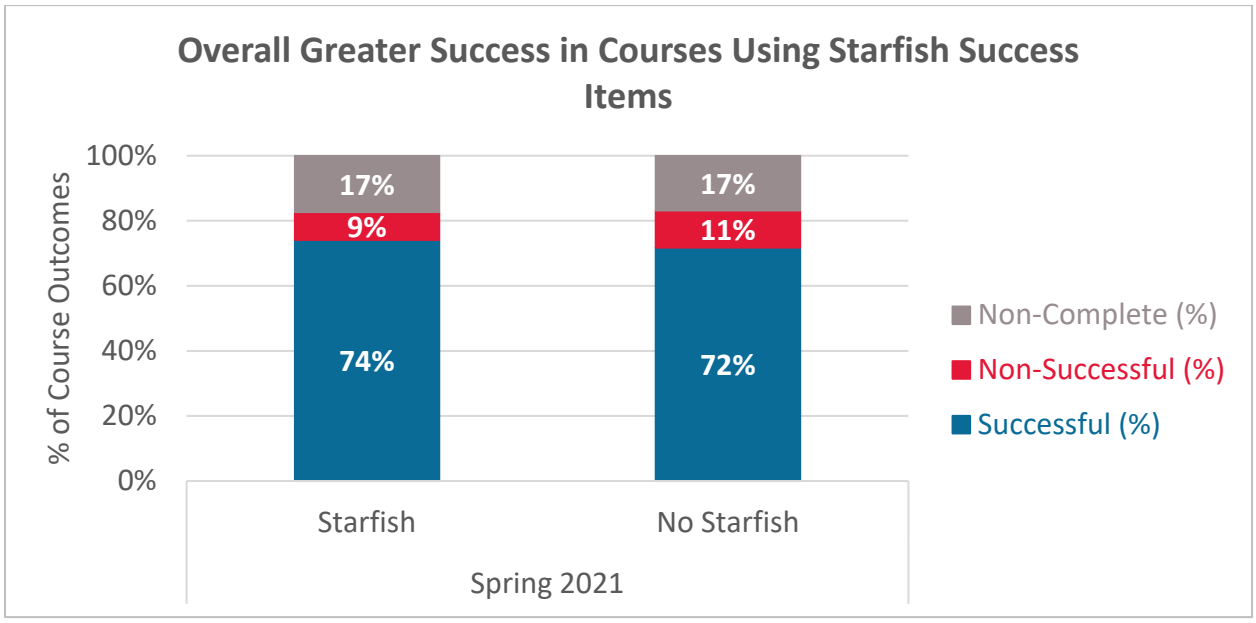
Source: California Community Colleges Chancellor's Office MIS Data Mart

Appendix C – Student Success Increase w/ Starfish



*Fall 2020 end of term to Spring 2021 end of term persistence.

**Overall persistence excludes exclusively academy students.



Appendix D – Computer Aging Report

Current 5-year aging report:

	22-'23	23-'24	24-'25	25-'26	26-'27	27-'28
Instructional Desktops	$686,930	$404,643	$144,872	$42,462	$382,163	$686,930
Instructional Laptops	$51,144	$347,216	$534,282	$375,478	$302,805	$51,144
Lectern computers	$225,211	$48,902	$34,746	$5,147	$20,590	$225,211
Non-instructional Desktops	$278,702	$22,296	$105,906	$177,253	$99,217	$278,702
Non-instructional Laptops	$29,989	$14,994	$34,486	$4,498	$271,391	$29,989
Total	**$1,271,976**	**$838,051**	**$854,292**	**$604,838**	**$1,076,166**	**$1,271,976**

Detailed aging report by device type:

	22-'23	23-'24	24-'25	25-'26	26-'27	27-'28
Instructional Desktops	550	324	116	34	306	550
Instructional Laptops	38	258	397	279	225	38
Lectern computers	175	38	27	4	16	175
Non-instructional Desktops	250	20	95	159	89	250
Non-instructional Laptops	20	10	23	3	181	20
Total	**1033**	**620**	**658**	**475**	**817**	**1033**

Appendix E – Mediation Forecast

2023-2024 Credit Forecast:

	Scope	Cost
I-Building classrooms	16 Classrooms	$400,000
Replace old equipment at F-102, F-103, and F-126, V-150, V-151, V-Conf Room.	6 Rooms	$150,000
Replacement / Spare Parts **- Projector Lamps, A/V Components**	Replacement Spares	$19,988
Total		**$569,988**

2023-2024 Noncredit Forecast:

	Scope	Cost
Projectors, projection boards, and document cameras (refresh)	A, B, D, E, F, buildings	$162,600
Speakers, microphones, and amps (new)	A, B, D, E, F, buildings	$170,128
Extron IN1608 Presentation controllers, TX/RX, network switches, PDU's (new)	A, B, D, E, F, buildings	$110,328
Lecterns, cabling, mounts, EPSON control switches, (refresh)	A, B, D, E, F, buildings	$188,030
Programming / Utelogy (new)	A, B, D, E, F, buildings	$154,102
Replacement / Spare Parts (new)	A, B, D, E, F, buildings	$23,576
Total		**$808,764**

Appendix F - Acknowledgements

Special thanks to the members and guests of the SAC Technology Advisory Committee for contributing to this plan:

Jodi Coffman	Tammy Cottrell	Jorge Forero	Jennifer Hoeger	Charles Jang
Cherylee Kushida	Jose Lopez Mercedes	Mark McCallick	Angel Michael	Adam Morgan
Monique Moreno	Luis Pedroza	Mary Steckler	John Steffens	Pilar Traslavina
John Tran	Mark Turner	Dane Clacken	Adam Howard	Jesse Gonzalez