Santiago Canyon College
What happens here matters.

TECHNOLOGY MASTER PLAN (TMP)
2020 – 2023

Prepared by the
Technology Committee (TEC)

Technology Master Plan (TMP) Version/Revision Log			
VERSION	**DATE**	**AUTHOR(S)**	**COMMENTS**
Draft	5/18/2020	Sergio R	Initial draft
Draft	7/1/2020	Sergio R	Updated Funded request table and PC Refresh appendices

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INTRODUCTION

Santiago Canyon College (SCC) is an innovative learning community committed to maintaining standards of excellence and providing accessible, transferable, and engaging education to a diverse community. Within the shared governance framework at the college, the SCC Technology Committee (TEC) is tasked with developing a college-centric Technology Master Plan (TMP) that addresses instructional support and student success. The Rancho Santiago Community College District's (RSCCD) Strategic Technology Plan (STP) will address the networking infrastructure and enterprise systems that serve as the college's information technology (IT) backbone.

Technology is ever-changing so maintaining a high level of hardware and software competency in a competitive academic environment is critical. Investing in a robust learning management system (LMS) and well-developed distance education courses will allow us to make education accessible not only to students with disabilities but also to students of distant communities, and to returning students. Educational technologies utilized inside and outside of the classroom will stimulate a highly collaborative and engaging environment that will meet the needs of a diverse community of learners. The effective use of technology will further help students develop the necessary skills for the jobs of tomorrow. As implicitly expressed in the college mission statement, technology is at the forefront of the modern learning environment; and for our institution to remain competitive, it is necessary to invest time, funds and human resources to maintain its currency.

The goal of this TMP is to establish initiatives that will create a framework for addressing SCC's present and future technology needs. Some of the key initiatives that will be discussed in greater details in later sections of this document are as follows:

- Establishing an annual computer replacement budgetary line-item for the acquisition, maintenance and replacement of aging technology infrastructure (Critical and Urgent)
- Compliance with the Americans with Disabilities Act (ADA) and new-emerging Federal and State laws (Critical and Urgent)

The intended purpose of this document is to clearly identify the central role of technology in providing a learning and working environment that promotes personal and professional growth, as well as serve as a guide for prioritizing the technology initiatives, setting annual technology goals, and making progress toward their implementation.

SCC TECHNOLOGY COMMITTEE (TEC)

Vision:

SCC will integrate technology throughout the classroom and campus to support an innovative learning community that can find, evaluate, use and create content. SCC will identify and utilize existing, emerging and cost-effective technologies that promote positive learning outcomes. The SCC campus will support professional development necessary to deliver curriculum, collaborate, communicate, manage and evaluate information that supports the TMP.

Mission:

The SCC TEC promotes the use of technology to increase efficiency of college operations and to support teaching and enhance student learning.

Responsibilities:

- Maintain a technology plan that aligns with state recommendations
- Assess the technological needs and competencies of faculty, staff, and students
- Provide for staff and faculty technology training
- Make recommendations concerning acquisition, implementation, maintenance, and upgrading of technologies within a secure and robust infrastructure
- Communicate with college and district personnel
- Identify and promote resource procurement to advance technology and its use by students, faculty, and staff
- Recommend allocation of technology resources in accordance with the Educational Master Plan and TMP
- Maintain a website to disseminate technology-related information to the SCC community

Committee Structure:

The SCC TEC structure formally consists of the TEC main body of representatives and one permanent subcommittees: the Website Committee. Other temporary subcommittees (i.e. TMP committee) are created and disbanded as needed. This subcommittees will report to the TEC main body as well as communicate with the SCC College Campus, Academic Senate, and the RSCCD Technology Advisory Group (TAG).

The SCC TEC consists of faculty, classified staff, administrators and a student representative. The Website Taskforce and DEPC consists of members from District, campus faculty, classified and administration.

The SCC TEC structure should reflect constituent groups on campus that support technology and the TMP initiatives. The table below represents the current TEC membership.

Table 1 – TEC Membership

Member	Representing	Classification
Carpenter, Amanda	Distance Education	Classified
Collins, Jeremy	Academic Support - OEC	Classified
Vacant		Classified
Batth, Navanjot	Biology	Faculty
Breeden, Emma	Psychology	Faculty
Fletcher, Erin	Library	Faculty
James, Scott (Co-Chair)	Distance Education	Faculty
Martin, DeAnna	Accounting	Faculty
Martin, Linda	Library	Faculty
Mettler, Mary	DSPS	Faculty
Oase, Daniel	OEC	Noncredit Faculty
Aqsa Sarfraz	Student Body	Student
Brown, Thurman	Academic Support	Classified Management (non-voting)
Rodriguez, Sergio (Co-Chair)	Student Info. Support	Administrator
Stringer, Martin	Academic Affairs	Administrator
Scott, Randy	Math	Guest/Senate Secretary

EXECUTIVE SUMMARY

To develop the SCC TMP, a temporary TEC subcommittee was formed. Each member of the subcommittee researched and developed materials pertinent to his or her area of expertise, which were then used to create a cohesive document. After multiple revisions the TMP was presented to all of the members of the SCC TEC, and with some additional refinements, the final edition was crafted. A vote to approve the final TMP was held at TEC.

Throughout the development process of the TMP, one clear message emerged – the need to call attention to the critical and urgent technology needs of our institution without which SCC will not be able to adequately support student learning programs, provide competitive a learning environment, or improve institutional effectiveness. Briefly outlined in the introduction, these critical and urgent needs are discussed in greater detail below.

Computer Replacement Budget:

A permanent Computer Replacement Budget has been listed in the TMP for nearly 10 years. It remains a critical initiative even more so now as the number of PCs continue to grow, so do the number of out of warranty machines. TEC has always supported a five-year (20%) computer replacement cycle given the five-year warranty purchased on all machines (See Appendix B), but that maybe unrealistic given the budgetary constraints of a small college. At this point just getting a permanent budgetary line item would be a major accomplishment and acknowledgement of its need.

Currently, there is no dedicated computer replacement budget so many funding sources play a role to create a patchwork of a working budget. Many departments, special grants, and vocational programs at the college receive funding to buy new computers. In October, technology requests are submitted to the TEC for ranking. The ranking takes place at the November meeting and are promoted to the SCC Planning Institutional Effectiveness (PIE) committee for consideration, reranking, and consideration for funding. Other times, District ITS allocates surplus funding to the college to assist with such replacement. Academic Support then proceeds to replace the oldest computers in priority order whether for classrooms or offices.

Consideration should be given to retiring machines that are older and out of warranty. These machines lack the performance that students are accustomed to and are more a hindrance than a useful tool. A PC Retirement Policy could be established to reduce the number of machines that would have to be replaced. This could aid in reducing the number of out of warranty machines that could create an insurmountable older PC inventory needing to be replaced.

Americans with Disabilities Act (ADA) Compliance:

American's with Disabilities Act compliance affects the entire college. We are required by law to present our public with an ADA Accessible website and online classes before they are offered to the public. Since all of our communications and materials need to be formatted appropriately, we need support specifically related to ADA Compliance because very few employees know how to best meet our legal ADA expectations.

To achieve a level of competence at our institution in regards to ADA compliance, we need support and we need a lot of consistent and varied training opportunities. In short, an Instructional Designer with a background in ADA would be an ideal resource to help SCC with Instructional Design strategies, technology innovations, and ADA considerations.

TECHNOLOGY PLAN ALIGNMENT

Outlined below are the Accrediting Commission for Community and Junior Colleges (ACCJC) technology standards and the RSCCD Master Technology Goals. The goals provide a framework for organizing the IT planning process and aligning SCC technology initiatives with RSCCD and ACCJC strategic themes.

ACCJC TECHNOLOGY STANDARDS

Accreditation Standard III.C has five components that specify the technology standards the college should strive to maintain:

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.

RSCCD MASTER TECHNOLOGY GOALS:

The RSCCD Master Plan defines its goals under the umbrella of strategic themes. The mapping of themes to detailed goals to Accreditation standards are displayed in the table below. The SCC TMP will utilize the strategic themes to help classify its technology initiatives for planning purposes.

Table 2 – District and Accreditation Technology Mapping

STRATEGIC THEMES	RSCCD MASTER TECHNOLOGY GOALS	ACCREDITATION STANDARDS
1. Student Experience	1.A. Provide technology infrastructure capacity and technology services to support on-campus and online student support services.	III.C.1 III.C.2
1. Student Experience	1.B. Provide scalable technologies, services and staff to fully support online education.	III.C.1 III.C.4
1. Student Experience	1.C. Provide technology services to align student experience with the pillars of guided pathways	III.C.1
1. Student Experience	1.D. Enhance internal and external web resources and mobile applications to enhance ease of use for students, programs, services and operations.	III.C.4
2. Standardization	2.A. Establish an ongoing plan to ensure all technology equipment is replaced on a regular basis to support operations, programs, services and district and college missions.	III.C.2
2. Standardization	2.B. 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
2. Standardization	2.C. Develop and update policies and procedures that guide the use of technology and support teaching and learning processes.	III.C.5
2. Standardization	2.D. Continuously improve and establish standardized business processes involving technology to enhance institutional operations.	III.C.4
2. Standardization	2.E Institutionalize technology planning framework and standardize project management including portfolio management, project intake and project prioritization.	III.C.1
3. Data Driven Decision	3.A. Plan regular updates of technology	III.C.2

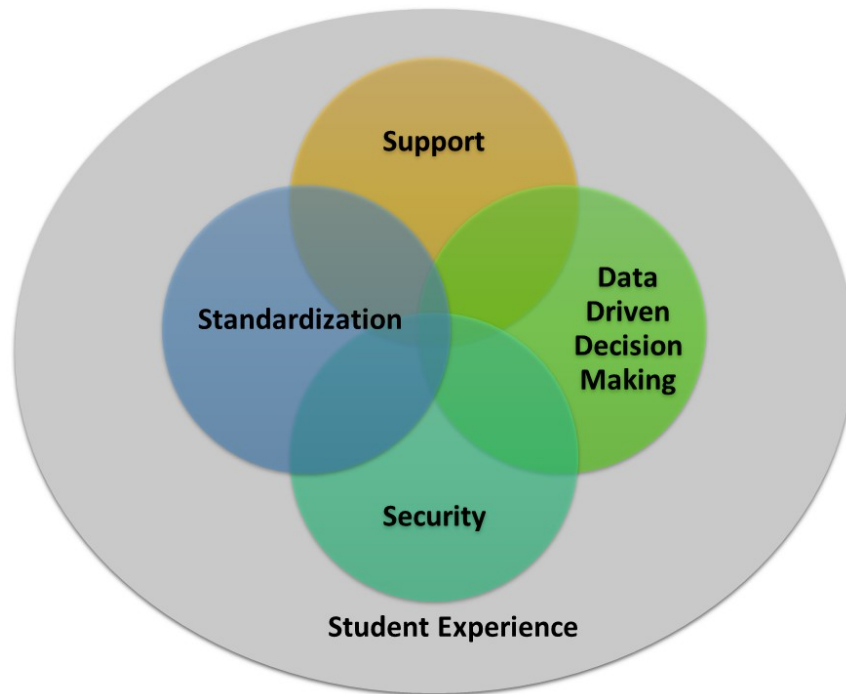| STRATEGIC THEMES	RSCCD MASTER TECHNOLOGY GOALS	ACCREDITATION STANDARDS
Making	to ensure the quality and capacity to support operations, programs, services and the mission	
3. Data Driven Decision Making	3.B. Institutionalize data management and data governance for data-informed decision making	III.C.4
3. Data Driven Decision Making	3.C. Streamline, encourage and support the use of Business Intelligence reports and reporting tools for the effective use of technology systems.	III.C.1
4. Security	4.A. Continuously improve 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
4. Security	4.B. Develop and maintain information security plans, policies, procedures, practices and projects to assure reliable access, safety, risk management and security compliance at all locations.	III.C.3
4. Security	4.C. Deploy 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
4. Security	4.D. Perform ongoing information security training to faculty, staff, students, administrators and external stakeholders.	III.C.3
5. Support	5.A. Develop and foster Information Technology service excellence, performance feedback and assessment.	III.C.4
5. Support	5.B. 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
5. Support	5.C. Improve the effectiveness and efficiency of technology, services and support provided to students, faculty, staff and administrators.	III.C.1
5. Support	5.D. Ensure that technology resources at all locations are implemented and maintained to assure system accessibility.	III.C.3

2020 HIGHER EDUCATION IT TRENDS

The EDUCAUSE Review (https://er.educause.edu/) is a highly regarded publication that takes a broad look at current developments and trends in information technology, how they may affect the college/university as an institution, and what these mean for higher education and society. These trends serve as reference when assessing initiatives to adopt in the context of what technology issues are transforming the high education industry.

2020 Top 10 IT Issues

1. *Information Security Strategy:* Developing a risk-based security strategy that effectively detects, responds to, and prevents security threats and challenges

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

3. *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

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

5. *Student-Centric Higher Education:* Creating a student-services ecosystem to support the entire student life cycle, from prospecting to enrollment, learning, job placement, alumni engagement, and continuing education

6. *Student Retention and Completion:* Developing the capabilities and systems to incorporate artificial intelligence into student services to provide personalized, timely support

7. *Improved Enrollment:* Using technology, data, and analytics to develop an inclusive and financially sustainable enrollment strategy to serve more and new learners by personalizing recruitment, enrollment, and learning experiences

8. *Higher Education Affordability:* Aligning IT organizations, priorities, and resources with institutional priorities and resources to achieve a sustainable future

9. *Administrative Simplification:* Applying user-centered design, process improvement, and system reengineering to reduce redundant or unnecessary efforts and improve end-user experiences

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

INITIATIVES:

The TMP subcommittee researched and consolidated the high impact technology initiatives it established as goals for the college to accomplish in the forthcoming years. Many of these initiatives require institutional commitment with respect to budget allocation and implementing best practices that may not always be feasible. Regardless, we strive to identify those technology initiatives that will most benefit our students with a modern learning environment and our faculty in providing a first-class education.

The SCC Strategic Initiatives are classified under one of the RSCCD Strategic Technology Themes and RSCCD Technology Goals in parenthesis.

SCC Student Experience Initiatives

Technology initiatives that 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 physical and/or virtual campus experience.

Table 3 – SCC Student Experience Initiatives

STUDENT EXPERIENCE		
SCC Initiatives	**Department**	**Description**
1.1 New COMEVO Online Orientation	Counseling	Implement COMEVO online orientation software to replace Cynosure.
1.2 Online Proctoring Center	Distance Education	Evaluate online proctoring software for implementation.
1.3 Colleague's Self-Service Module	A&R/ITS	Replace WebAdvisor with Colleague's Student Self-Service module that contains new registration, student billing, add codes, and faculty functionality.
1.4 Guided Pathways Web Site Redesign	Academic Affairs	As part of the State's Guided Pathways initiative, redesign the SCC web site to facilitate student academic and career pathway discovery.
1.5 Guided Pathways Student Success Software	Academic Affairs/Counseling	Evaluate Student Success software for on-boarding/off-boarding tracking, academic intervention, and analytics.
1.6 Go-Print Printing Stations	Library	Implement Go-Print account system to allow students to print remotely.
1.7 Cranium Cafe	Distance Education/Counseling	Implement Cranium Café for online tutoring or one-on-one virtual counseling.

SCC Standardization Initiatives

Standardization encompasses a broad range of activities including sustainable funding, sustainable staffing, business processes, technology, software, purchasing guidelines, ADA compliance and service level agreements. Where feasible, industry standard software/services will be prioritized as they bring added value and conserve IT resources.

Table 4 – SCC Standardization Initiatives

STANDARDIZATION		
SCC Initiatives	**Department**	**Description**
2.1 Web Site ADA Accessibility	All	Continue addressing web site accessibility issues and training.
2.2 Mobile Friendly	All	Redesign or implement software that is mobile friendly since most students access college online resources on a mobile phone.
2.3 Data Governance	District-wide	Implement policy and procedures that ensure the quality of MIS and student success data.
2.4 Standardize the use of a student "Preferred" or "Chosen name" across all systems.	ITS	Implement the functionality to allow students and staff to provide a name they prefer to use rather than their legal name. Update systems and reports with that name.

SCC Support Initiatives

Student, staff, and faculty technology needs drive how technology services and support are delivered. Many students work in a 24/7, online environment and compare our support services to private sector companies like Google. SCC strives to increase the number of support hours, the quality of our support knowledgebase and incorporate District and college policies into best practice support responses and technology training.

Table 5 – SCC Support Initiatives

SUPPORT		
SCC Initiatives	**Department**	**Description**
3.1 PC Replacement Budget	Cabinet	Continue to advocate for a line item budget to replace aging computers.
3.2 Audio/Video Media Replacement Budget	Cabinet	Continue to advocate for a line item budget to replace audio/video equipment in mediated rooms.
3.3 WiFi Improvements	Academic Computing/ITS	Continue to expand WiFi coverage across the campus and improve performance.
3.4 Student Help Desk	Student Services	Provide a student staffed help-desk to assist students with level one technical support with Canvas, WebAdvisor, Microsoft, or Adobe products.
3.5 Reduce PC Tech Support Ratio	Academic Computing	Continue to advocate for increased staffing in Academic Computing to achieve a reasonable PC to Tech support ratio.
3.6 Online Teaching Certificate Program	Distance Education	Continue to provide and improve the Online Teaching Certification Program.
3.6 Instructional Design Center (IDC)	Distance Education	Continue to provide and improve the IDC provided services.

SCC Data Driven Decision Making Initiatives

Data Driven Decision Making initiatives foster an informed decision-making process that is supported with data. Creating an information infrastructure, in the form of reports, business analytics, database infrastructure, and ad-hoc querying capabilities, will promote informed decisions. A critical component of campus decision-making is SCC's Institutional Effectiveness and Research.

Table 6 – SCC Data Driven Decision Making Initiatives

DATA DRIVEN DECISION MAKING		
SCC Initiatives	**Department**	**Description**
4.1 Enterprise Data Warehouse	ITS	Develop database infrastructure to support a common data dictionary for the district's reporting needs.
4.2 Enterprise Reporting Framework	ITS	Implement a scalable reporting framework that eliminates the need for custom coding.
4.3 Ad Hoc Querying Capability	ITS	Implement a query tool that college departments can utilize for every day operational needs that eliminates the need to write SQL.
4.4 PowerBI Analytics	Institutional Research	Continue to augment the college's Power BI capabilities.
4.5 Enhance Enrollment Management Tools	ITS/Institutional Research/SIS	Continue to improve upon existing tools to provide Deans and department chairs with data to optimize scheduling and enrollment.

SCC Security Initiatives

Student, staff, and faculty technology needs drive how technology services and support are delivered. Many students work in a 24/7, online environment and compare our support services to private sector companies like Google. SCC strives to increase the number of support hours, the quality of our support knowledgebase and incorporate District and college policies into best practice support responses and technology training.

Table 7 – SCC Security Initiatives

SECURITY		
SCC Initiatives	**Department**	**Description**
Ongoing Security Training	ITS	Continue with the Security training through videos and email phishing reminders.

APPENDICES

APPENDIX A - PIE Technology Funding, 2015 – 2019

TECHNOLOGY FUNDING	
Requested Resource	**Amount**
2019 - 2020	
OEC Projectors document cameras 2019	$9,234.65
Doc Cam Replacement SC110, SC111 and D205.	$2,200
TOTAL	**$11,434.64 (one-time)**
2018 - 2019	
Spartan Software	$4,500.00
Math Printer D203	$450.00
TOTAL	**$4,950.00 (one-time)**
2017 - 2018	
Printers for Chemistry Laboratories	$2,400.00
Tech_Class PC Tablets and Storage Unit	$63,000.00
TOTAL	**$65,400.00 (one-time)**
2016 – 2017	
Accounting Technology Center student computers	$50,000.00
Geographic Information Systems (GIS) software site license	$2,000.00
Chemistry Audio/Video upgrade teacher stations	$10,000.00
Library Articulate Storyboard software	$2,000.00
Mathematics iMAC computers	$10,000.00
Chemistry faculty iMAC computers	$4,000.00
TOTAL	**$76,000.00 (one-time), $2,000.00 (ongoing)**
2015 – 2016	
Computers for credit classrooms	$ 231, 800.00
Computers for non-credit classrooms	$70,600.00

Projectors for credit and non-credit	$30,800.00
Computer replacements in library	$246,000.00
Tablet replacement for Math	$9,805.35
Video camera for Communication	$1,995.00
Audio-recording microphone for Communication	$377.50
TOTAL	**$591,377.85 (one-time)**

APPENDIX B – SCC Computer Refresh Budget Annual Costs

Location	Type	Use	Cost	Out of Warranty			Refresh Cost		
				2018/2019	2019/2020	2020/2021	2019/2020	2020/2021	2021/2022
SCC	PC	Instructional	$1,200.00	147	454	55	$176,400.00	$544,800.00	$66,000.00
SCC	Mac	Instructional	$2,500.00	2	2	5	$5,000.00	$5,000.00	$12,500.00
SCC	Mobile	Instructional	$950.00	2	2		$1,900.00	$1,900.00	$0.00
SCC	PC	Non-Instructional	$1,300.00	34	6	17	$44,200.00	$7,800.00	$22,100.00
SCC	Mac	Non-Instructional	$2,500.00	6	1		$15,000.00	$2,500.00	$0.00
SCC	Mobile	Non-Instructional	$950.00	4	2		$3,800.00	$1,900.00	$0.00
Total SCC				195	467	77	$246,300.00	$563,900.00	$100,600.00
OEC	PC	Instructional	$1,600.00	69	146	42	$110,400.00	$233,600.00	$67,200.00
OEC	Mac	Instructional	$2,500.00				$0.00	$0.00	$0.00
OEC	Mobile	Instructional	$950.00				$0.00	$0.00	$0.00
OEC	PC	Non-Instructional	$1,600.00	34	6	5	$54,400.00	$9,600.00	$8,000.00
OEC	Mac	Non-Instructional	$2,500.00				$0.00	$0.00	$0.00
OEC	Mobile	Non-Instructional	$950.00				$0.00	$0.00	$0.00
Total OEC				103	152	47	$164,800.00	$243,200.00	$75,200.00
Grand Total				298	619	124	$411,100.00	$807,100.00	$175,800.00

APPENDIX C – RSCCD Classroom Audio/Visual Hardware Standard

A/V equipment list for retrofitting an existing classroom for standard mediation.

1. Podium furniture - Spectrum Freedom eLift Lectern w/ ADA compliant height adjustable switch
2. Utelogy Software
3. Projector – 3500 lumens or higher WXGA digital VGA & HDMI inputs
4. Screen - (8 FT Manual) Da-Lite widescreen 16:9 Format
5. Document Camera - Elmo Document Camera TT-12i
6. Speakers - ceiling and/or wall speakers- SAC pair of ceiling speakers - JBLCONTROL26C or pair of wall speakers - JBL Control25AV or JBL Control28AV. SCC - "Bose" 191 Wall/In-Ceiling Speakers 031509 "Virtually Invisible".
7. Blu-Ray/DVD player - Sony Blu-Ray Player – Model # Sony BDP S5200
8. Locking device - BMS Security Lock
9. Projector mount - Ceiling Plate Panel and cable lock for computer and all other AV components
10. Surge protection - Furman power conditioner 15 Amp – Part # CN-1800S
11. Wall plate - External A/V inputs plate for laptop, IPAD/IPOD, camera, Internet and other A/V inputs (HDMI required)
12. System Controller - Crestron 3-Series 4K Digital Media Presentation
13. Touch Screen - Crestron 5" Touch Screen
14. Standard desktop PC & monitor
15. Network port – for projector and podium
16. Switch - Cisco 8 port 10/100 PoE SF-302-08P
17. Power receptacles – projector and podium
18. Raceway for cables
19. Misc. cables, connectors, and hardware

Options below:

1. Microphone - Shure ULX Wireless Systems (Lavalier and Handheld microphone) suggested for large lecture halls
2. PA System - Stand Alone "PA" System w/Speakers mounted in back of classroom to avoid "Feed-Back" & "Maximizing Volume Control" suggested for large lecture halls
3. Cisco IP Phone

APPENDIX D – Sample SCC Classroom Audio/Visual Upgrade Costs

Below is a quote (03/16/2017, Quote# 008177) for updating the A/V for classrooms B-201 and B-207 by GST (gstes.com). The cost proposal includes:

- Supply and install the Campus standard Spectrum instructor's desk with equipment rack. An over-the floor raceway system will be used to run the cables from the rack to the wall.
- Install a desktop PC and monitor furnished by RSCCD. Monitor will be mounted on an articulating arm.
- Supply, install and configure a Utelogy System with network control converter for AV system control. Utelogy configuration includes:
- Supply and ceiling mount a projector. GST will install an electrical outlet at the projector location.
- Supply and wall mount a manual projection screen with a viewable area of 57x92"
- Supply and install an Extron digital AV switcher with built-in audio amplifier.
- Supply and ceiling mount 4ea ceiling speakers.
- Supply and install one wireless Lavalier microphone system and one wired gooseneck microphone.
- Supply and install a cable cubby in the top surface of the desk and create aux HDMI, VGA/Audio and network input cables.
- Supply and install an 8-port unmanaged gigabit network switch. GST will run 1ea network cable from this switch to the IDF. GST assumes there is an available port in the IDF.
- Supply and install a Blu-Ray player.
- Supply and install a document camera.

QUOTE SUMMARY

DESCRIPTION	AMOUNT
AV Firm Fixed Price Services	$5,617.31
Hardware	$23,572.96
Shipping	$216
E-Waste 2017	$18
Subtotal	$29, 424.27
Tax	$1,878.04
2 Classroom Total	$31,302.31
1 classroom estimated total	**$15,651.16**

APPENDIX E – SCC Mediated Room Annual Refresh Costs

SCC Mediated Room Refresh Costs based on 8-year Cycle

LOCATION	USE	QTY	COST	REFRESH FACTOR	2017/2018 COSTS	2018/2019 COSTS	2019/2020 COSTS
SCC	Instructional	127	$ 15,651.00	0.125	$ 248,459.63	$ 248,459.63	$ 248,459.63
TOTAL SCC					$ 248,459.63	$ 248,459.63	$ 248,459.63

Notes:
Noncredit OEC room counts were not available at the time.
SCC non-instructional room counts were not available at the time.
Every year that goes by without refreshing some mediated classrooms, the amount rolls over to the next year.
This creates an insurmountable situtation of ageing, poorly functioning rooms.