Technology Plan 2018-2022

Updated October 2017

Table of Contents

Vision:

Skyline College has an integrated state-of-the-art information technology environment that:

A. Supports the College's mission *"To empower and transform a global community of learners"*

B. Assists Skyline College students to *"Get in, Get Through, and Get Out on Time*".

C. Creates an environment where accessible technology is used to enhance teaching and learning.

D. Streamlines administrative processes.

E. Provides timely and accurate information.

F. Improves campus-wide communication.

G. Maintains a safe and secure environment for students and staff.

H. Promotes learning from any location using a variety of modalities.

I. Is a leader in innovative uses of technology to support learning and student services.

J. Supports educational access to non-traditional students

Philosophy:

Skyline College enjoys an institutional culture that appreciates and respects the opportunities and solutions available in technology and online instruction. In doing so, Skyline College believes:

- Technological resources should facilitate and enhance effective, as well as efficient work, teaching and learning.

- Students, faculty and staff should have access to the technological tools that allow them to fully express the best they have to offer in their respective roles in the institution.

- Technology serves a supporting role in facilitating the educational processes led by the faculty to connect to human history and broad areas of human knowledge and expressions of creativity.

- Allocation of resources that supports the infrastructure, hardware, software and development of faculty, staff and students in order to maximize the potential benefit of our technological resources.

- That effective and cost efficient institutional technology should complement and build on the pervasive technology that our students, faculty and staff possess.

Goals: (Correlated with College vision)

- Utilize technology to enhance teaching and learning, provide accessibility, improve communication, and deliver instruction in a variety of modalities. (A), (B), (E), (F)*

- Provide universal access to technology across the campus environment by ensuring that assistive technology hardware and software for individuals with disabilities is integrated into the planning and delivery of all instruction and services including online instruction and services. (B), (D), (G)

- implement Early Alert [E]

- Provide faculty and staff with training, support and access to technology resources to enhance teaching and learning activities and student support services. (A), (B) (E)

- Provide secure, reliable, timely data in a format that can easily be accessed and analyzed by administrators and staff. (C), (D), (G)

- Provide students with efficient and intuitive online student business services. These services will be available to students 24/7 from anywhere. Emphasis will be placed on student self–service. (C), (D), (G)

- Work with the San Mateo Community College District (SMCCD) ITS to develop a technological infrastructure to support faculty and staff development and increased access to learning and support opportunities using emergent and existent technologies for distance learning and other technology dependent innovations in teaching and learning. (A), (G), (H)

- Develop a stable, long-term plan and funding source to meet the ongoing need for renewing and upgrading technology resources in campus computer laboratories and for faculty, staff and administrative functions. (A – H)

- Continually assess effectiveness of technology programming and planning in meeting institutional needs. (A-H)

- Utilize and enhance technology to ensure that the campus is a safe and secure environment. (F)

- Facilitate communications with students, faculty, staff, alumni and the general public.(G), (E)

- Include campus technology needs as an integral part of the campus planning and budgeting process. (A-H)

- Provide the network infrastructure to support and enhance instruction and the College's administrative services. (A-H)

- Maintain a vital Technology Advisory Committee (TAC) as defined in the College's Shared Governance Structure. (A-H)

- Monitor educational trends and related research, evaluate emerging hardware and software tools, continue to assess faculty needs, and track student technology trends. (A-H)

- Develop and support instructional and student services delivery system that provides all students with technological skills necessary to be successful in an increasingly technological society, and will provide equal and easy access to technology for all students in pursuit of their educational goals. (A-H)

*Letters reference Vision statements above.

San Mateo Community College District Strategic Goals:

District 1**: Develop and strengthen educational offerings, Interventions, and support programs that increase student access and success.

District 2**: Establish and expand relationships with school districts, 4-year college partners, and community-based organizations to increase higher education attainment in San Mateo County.

District 3**: Increase program delivery options, including the expanded use of instructional technology, to support student learning and success.

District 4**: Ensure necessary resources are available to implement this strategic plan through sound fiscal planning and management of allocations.

** Items B-O listed in the Technology Work Plan (pages 19-55) will reference which District Strategic Goal(s) they support using District 1, District 2, District 3, and District 4 as reference.

STUDENTS FIRST

Operational Efficiency Through Integration

- Eliminate digital silos created by disparate systems
- Promote data sharing across functions
- Record student interactions across the student lifecycle
- Automate manual processes
- Avoid duplicate data entry/data collection
- Redesign business processes to align with technological integration

Expanded Use of Data

- Build comprehensive data for research and decision-making purposes
- Leverage and utilize data strategically
- Develop robust reporting systems
- Employ predictive analytics, sophisticated modeling, and other progressive approaches
- Enable data informed, responsive student communication (systems respond to as well as encourage student actions)
- Incorporate solutions which help keep students on track towards their goals

Ease of Use for Students and Employees

- Streamline and consolidate processes
- Empower students through self-service options
- Equip employees to provide timely and accurate responses
- Incorporate modern technologies which meet and exceed student expectations
- Prioritize improving systems that students encounter first (inquiry to application to enrollment)
- Enhance systems used for professional development
- Signal alerts to support services for students at risk

ORGANIZATIONAL EFFECTIVENESS

STUDENT ACCESS AND COMPLETION

"To empower and transform a global community of learners." – Skyline College Mission

STUDENT LIFE CYCLE

Inquiry (Prospect)　　Admission (Applicant)　　Enrollment (Student)　　Completion (Alumni)

CRM
(Salesforce, Starfish, or other solution)

ERP
(Banner XE with enhancements such as workflow)

| MOBILE | ADMISSION APPLICATION | PORTAL (comprehensive online services replacing WebSMART and adding functionality including enhanced registration tools) | APPOINTMENT MANAGEMENT and LIVE CHAT | LMS (CANVAS) | STUDENT ACTIVITY TRACKING | ACADEMIC SCHEDULING / PERSONNEL MGMT. / CURRICULUM and SLO MGMT. |

ODS
(replaces existing data warehouse)

Reporting and Analytics
(SAP, Civitas, etc.)

ANTICIPATED RESOURCE COMMITMENTS

The substantial scale of this project will require a significant commitment of resources from the District. An overview of the necessary resources includes:

- Technology Acquisition
  - Initial evaluation and acquisition of products and technological solutions
  - Ongoing licensing costs of technology adopted
  - Any necessary infrastructure upgrades to support implementation
- Technology Implementation
  - Vendor implementation support costs (e.g., consultants)
  - Reassignment of existing personnel to project implementation team (backfill needed)
  - Release time for faculty and staff in key areas to participate in training prior to technology launch
- Project Management
  - Full-time project manager
  - Executive sponsorship: This is a major initiative which will disrupt current practices and result in transformative change. As such, it needs a sponsor at the executive level who is willing to act as spokesperson for the initiative and ensure necessary resources are available to the team. Ideally, the project manager would report to the executive sponsor.
  - Marketing/communication support for regular project updates to campus community and marketing of new technology "go live" plans

PROJECT MANAGER ROLE

The project manager would plan and direct all project activities, lead the project implementation team, and act as the liaison between ITS (technical) and college interests (non-technical). Qualities that would be beneficial include:

- Extensive project management experience including multi-site implementations (district/college)
- Familiarity with higher education
- Ability to manage multiple project strands seamlessly while maintaining cohesiveness throughout a transformational project
- Ability to communicate effectively with the implementation team, ITS, and various stakeholders
- Ability to ensure training and documentation for new systems including data element dictionaries, user guides, and training materials

COMPOSITION OF PROJECT IMPLEMENTATION TEAM

Project staffing should be comprised of a core team (completely reassigned) to ensure continuity and integration across all components of the project. Other individuals can be assigned to specific product implementations if additional expertise and input is needed.

- Project manager
- District: Technical expertise from ITS
- Colleges: Function expertise from Enrollment Services, PRIE, Counseling, Online Education (for integration of online services with Canvas), and other student support services (tbd), as well as academic experts as needed to provide input on innovative pedagogy and instructional technology.

The goal is to launch all necessary software for Fall 2018 cycles (e.g., admission cycle for fall). The proposed timeline below is a rough estimate as product choice will necessitate adjustments based on product implementation schedules, availability of vendors, and other considerations.

Fall Admission Cycle: launch solution by September 2017   Fall Registration Cycle: launch solution by April 2018

Solution	2017 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CRM, Phase I									Go Live															
CRM, Phase II																					Go Live			
Appt. Mgmt. and Live Chat							Go Live																	
Admission Application									Go Live															
ERP Upgrade																Go Live								
Portal																Go Live								
Mobile																			Go Live					
Registration Enhancement																Go Live								
ODS																			Go Live					
Reporting																								Go Live
ID Tracking																								Go Live
Other solutions – Go Live TBD																								
Product demos																								
RFPs as needed																								
Allocate resources																								
Hire Project Manager																								
Assign Team																								
Marketing																								

Campus Technology Environment

Technology resources are used throughout the College to support and increase the effectiveness of student learning outcomes, safety, and the quality of services provided to students. Skyline College in cooperation with the District provides a technology infrastructure and technology resources that include:

- 92 Smart classrooms and labs. 93% of all campus classrooms and labs are Smart. (Smart classrooms include: projectors, screens, sound systems, wireless internet, video players, and in most rooms document cameras)

- 100% of the campus has wireless Internet access

- 22 program specific instructional computer and drop-in labs

- 7 Student Services, Career and Transfer computer labs

- 2 Library based labs

- 20 Smart conference /meeting rooms

- An experimental Learning Space room equiped with a variety of technologies for faculty to experiment with.

- 1388 campus computers

- 478 campus printers

- Campus-wide digital signage system

- Campus-wide security camera network

- Campus-wide Event Announcement System (EAS)

- Laptop computers for all full-time faculty and limited number of check-out laptop computers for part-time faculty

- Convenient faculty and staff access to printing

- A streaming internet radio system primarily used to broadcast College athletic events.

- A streaming internet video system used to broadcast College activities that have included guest speakers and graduation.

- A comprehensive set of administrative software services to assist with communication, budgeting, planning, and research.

- A comprehensive set of student enabling software services to assist with degree audit, scheduling, communications, on-line instruction, and paying of fees.

Administrative and Student Support Software and Services

Administrative technology is provided and supported by District ITS. Examples of the administrative services provided to the College by District ITS include:

- **Banner®** - The ERP system utilized at SMCCD is SunGard Banner®. It was initially installed in 1991-92 and has undergone significant major upgrades over the years. Banner® is extensively used by all faculty, staff, and students and includes major modules for: student registration, faculty grading, transcript production, student accounts payable, financial accounting, budget development, purchasing, student financial aid, payroll and human resources. The Banner® web interface, locally called WebSMART, is accessed by students and staff to conduct a variety of self-service tasks such as registration, payment of fees, faculty grading, etc. Mandated state and federal reporting is largely based on information residing in the Banner® database.

- **Faculty and Staff eMail** - ITS maintains a comprehensive unified messaging service for the staff of the Colleges and District Office which includes voicemail and email. The system is based on Microsoft Exchange Server 2007 and Siemens Xpressions products. The District is also using Microsoft Office 365 and Sharepoint. There are more than 3000 email accounts currently supported by the system. To reduce and control email spam, ITS is using Pure Message Spam filter.

- **Argos**® –The web based reporting tool used to provide users with a variety of reports and data extracts from the Banner® transactional or data warehouse Oracle databases is Argos®. It is a product licensed from Evisions, Inc., a company based in southern California. The application is also intended to provide end-users with the ability to more easily create ad-hoc reports.

- **Hyperion**® - Extensive enrollment statistics are available from the web-based Hyperion® dashboards. These academic term-based dashboards compare enrollment statistics against the same period in the semester to the previous year's registration cycle. The historical dashboard takes a snapshot of the enrollment statistics at various key points in time throughout the term. Decision makers throughout the institution access these reports for timely and accurate information throughout the term. The dashboards are built from the local data warehouse using the Hyperion® Developer Tool.

- **CCCApply**® – Students use CCCApply® to apply for admission and enrollment at any of the three colleges.

- **Banner**® **Document Management System** – BDMS is a comprehensive document imaging system that is tightly integrated with Banner®. It allows

users to scan, index and retrieve documents in an efficient manner. Documents can be retrieved directly from Banner® or through Xtender's user interface. Student Services, the Financial Aid offices, Purchasing and Finance offices are all heavy users of document imaging to greatly reduce document storage and filing costs. As of January 2012, the system stores almost 1.4 million documents and 3.8 million images.

- **Degree Works** – Degree Works is a web-based academic advising and degree audit tool that the District implemented in 2011. Students and advisors are able to check academic progress and receive advice on courses needed to satisfy requirements towards achieving academic goals. The system also provides an electronic education plan that is currently being implemented.

- **Tracdat** - is a web-based software that automates the assessment process by providing a structured framework for continuous quality improvement for both our instructional and non-instructional programs.   The software uses multi-layered structure to handle various hierarchical levels of an organization.

- **SARS** - At all three colleges SARS Software Products are used for counseling appointments and record keeping to enhance student services. Currently supported products include: SARS-GRID, SARS-CALL, SARS-TRAK and eSARS. The SARS servers utilize an MS SQL Server database and are maintained and backed up in the data center. Interfaces between SARS and Banner® are supported by ITS.

- **GWAMAIL** –This is a locally developed application that is integrated into Banner® and was launched in the summer of 2007. GWAMAIL allows selected users to send email messages to targeted student populations.

- **Text Messaging** - Students are able to subscribe to receive important campus-wide emergency announcements via text message. Alert-U was contracted to provide this service.

In addition to administrative services, District ITS also provides several technology services in direct support for students. Examples of the technology services to students:

- **WebSMART** - is the web interface to Banner® that enables students to register for classes, view grades, pay fees, request transcripts and apply for financial aid. WebSMART is supported by the Admissions and Records departments at the individual colleges.

- **MySmccd** - provides all students a @my.smccd.edu Google email account, calendaring and docs as part of the Google Apps for Education suite of products.

- **eSARS** - provides a self-service interface to the SARS-GRID appointment system. Students can make appointments for a variety of services, including placement.

- **Early Alert** – As part of a District initiative to increase student retention and success, a locally created software package was designed and implemented to enhance the ability for faculty to send students an "alert" message indicating the student needed additional support.

- **Electronic Transcript Interchange** – Credentials is an internet-based system for requesting, transmitting, tracking, downloading, and viewing academic transcripts among authorized educational institutions and their trading partners. By implementing Credentials we were able to save time, save money, reduce paper consumption, improve customer service to our students and reduce workload demands on our staff.

- **WebSchedule** – Provides students with a publically available web interface of the schedule of classes that is dynamic and searchable. Easily identifies courses that have open seats or waitlisted. In addition, students can opt in to be notified when the next semester schedule is posted via email.

- **Canvas by Infrastructure** – The new learning management system (LMS) provided by the District.

Technology Work Plan 2018 – 2022

A. Existing Challenges

Concern	Issue	Potential Solution
Lack of Integration	The multitude of disparate systems, spreadsheets, paper lists, and other methods create a clunky experience for students and employees. Lack of integration also requires labor to be allocated to manual tasks such as duplicate data entry rather than direct student support.	Enterprise customer relationship management (CRM) software such as Salesforce or Starfish layered on top of the enterprise resource planning (ERP) software with focused effort to integrate other systems where feasible (e.g., integration of student tracking system with ERP; integration with Canvas)
Prospect management	Systems are not available to collect and manage prospect data in combination with recruiting/outreach tools.	CRM/ERP Solution – explore potential options in Salesforce, Starfish/Hobsons Radius, Banner XE, etc.
Inquiry/question management	Inquiries may go unanswered during peak times due to high volume of email/phone calls and inadequate tools to optimize staff time.	CRM such as Salesforce or Starfish
Admission application	CCCApply does not accommodate program-specific applications, has limited flexibility for customization, can be difficult to use, and assigns a separate CCC-ID that confuses some students. There is also no ability to interact with the prospective student while the application is in progress.	Alternate college application such as Target X or Enrollment Rx or an improved version of CCCApply in alignment with efforts of the OEI to increase access. *Note: Need to determine whether CCC-ID will eventually be required for CCCCO reporting. If so, explore potential work arounds to assign the ID.*
Appointment scheduling and chat	Need to upgrade to self-service system that can be used across multiple functions and ideally would integrate with Banner for reporting of SSSP activity. Tools to facilitate remote appointments and/or chat-based communication are also needed.	SARS Anywhere (needed for Cranium Café), or possibly other solutions such as Starfish Connect, Schedule Once or queue management system such as QLess. Solutions should also support or work in conjunction with live chat and Canvas.
Student activity tracking	We currently do not have a consistent method of collecting data on usage of support services and event attendance for use in analyzing student engagement and program effectiveness.	Implement student ID card tracking system such as CI-Track or a OneCard system (similar to SFSU's OneCard) which would also provide other functionality.

ERP interface and functionality	The current Banner functionality and interface is not intuitive, records insufficient data (365 view), and generally does not meet user expectations for modern technology.	Upgrade to Banner 9; supplement with CRM Explore options to enhance integration and automate tasks (e.g., workflows) ==Banner 9 upgrades will be implemented in stages, beginning summer 2017 with completion fall of 2018==
Online services and mobile interfaces	Current student portal (WebSmart) is not user friendly or intuitive. Use of Canvas functionality could be expanded. Mobile app is nonexistent. Ensure that all college web sites and student-facing systems are designed are mobile friendly, responsive, and accessible.	Implement new portal with suite of online services – explore Ellucian products and others; integrate with Canvas and consider products such as College Scheduler, EduNav, etc. Additionally, implement mobile app solution such as Dublabs. Review all college web sites and online services for mobile responsiveness and accessibility.
Educational planning and degree audit	Degree Works is currently not being utilized to maximum potential as older version is in use and self-service features have not been implemented.	Upgrade Degree Works or explore other degree audit/educational planning options. ==Degree Works upgrades will be implemented in stages, beginning fall 2017 with completion fall of 2018.==
Academic Scheduling	Sophisticated tools are currently not available to support academic schedule development, efficient facility use, and other room/course scheduling needs including multi-term scheduling.	Adopt an enterprise class scheduling solution such as Ad Astra. ==As of May 1, 2017 implementation of Ad Astra has begun and is targeted to launch (go live) on December 1, 2017.==
Registration	Enhanced registration tools are needed. Ability to conduct multi-term scheduling and registration is desired. Close integration of registration with educational plans (SEPs) is also necessary.	Explore Ellucian and other options to facilitate registration tasks. Any solution should seamlessly integrate with the existing ERP (Banner), new portal (see Online Services), new mobile interface, and academic scheduling systems.
Communications, dashboards, and alerts	There are limited options available that allow automated communication to students and alerts to employees who support them. Ideally communication would be responsive to student behaviors, prompt desired actions as well as signaling intervention needed by employees in support services.	Combination of CRM and learning analytics solutions to be determined but might include products such as Civitas, Ellucian Advance, Starfish, or Salesforce. Solution should be flexible enough to support various interactions such as proactive [intrusive] advising and early alert. Canvas also has tools which should be considered as part of the solution.

Improved classroom management and delivery of curriculum	Moodle, branded as WebAccess for SMCCD, ceased being used by the District as of June 2017. The new LMS for the District is known as Canvas by Instructure. The District phased Canvas into use over an 18-month period from April of 2016 to June of 2017.	1) Development of an "online version" of the training for Teaching in Canvas and Online Pedagogy (which has previously only been offered in F2F mode) 2) Development of trainings that address advanced skills and tools using Canvas. 3) Planning and development of technology additions to Canvas. These tools would be ones meant improve student experience in Online/Hybrid courses. (for example; Anti-plagiarism tools, online education accessibility tools). As of May 1, 2017 implementation of VeriCite (an anti-plagiarism tool) has begun and went live June, 2017. As of May 1, 2017 implementation of online education accessibility tools has begun and was launched Summer, 2017.
Improving student retention including transformative initiatives.	In order to move the needle on retention rates, Skyline College needs to increase the development and uses of transformation pedagogy.	1) Students need assistance with their studies beyond the hours of the campus, and their professor's office hours. We recommend Link Systems Internationals' NetTutor platform because they have been vetted by the state Online Education Initiative and and will provide 24/7 online tutoring. This platform is fully integrated with our new LMS, Canvas. As of April 1, 2017 implementation of NetTutor began and was launched Summer, 2017. 2) The Skyline College Technology Support provides user support for Skyline College students, staff, and faculty and is located in the Library's Drop-In Computer Lab. Assistance with printing, scanning, photocopying, computers, software (Microsoft Office, Google Apps, etc.), and college technologies (Canvas, WebAccess, WebSmart, etc.) is provided. As of May 1, 2017 implementation of the Skyline College Technology Support desk began and has been launched. 3) Live Formative Feedback. Several studies have shown that relevant and meaningful learning occurs when instructors use formative assessment throughout a course to gauge student learning. Technology can

<table>
<tr><td></td><td></td><td>provide a platform for formative assessment within the classroom to occur more frequently and effectively. Enter Blue Pulse 2 © "a live formative feedback platform that gauges student sentiment, understanding, and progress to drive success".

As of March 1, 2017 implementation of Blue Pulse 2 began and was launched Summer, 2017.

4) Lecture capture is the audio and video recording of lectures. Lecture capture is not a new concept; however, it has been gaining widespread use due to a variety of reasons, including expansion of WiFi access and speed, online and hybrid learning, and budget considerations. Universities and Colleges have also increased their interest in lecture capture in face-face courses, as a tool to increase student learning and ultimately, retention. Given the numerous studies that have reported the positive influences of lecture capture, it is recommended that Skyline College move forward with adopting this technology.

As of May 1, 2017 implementation of Lecture Capture began and was launched Fall, 2017.</td></tr>
<tr><td>**Monitoring faculty and staff professional development**</td><td>Faculty are required to plan, engage in, assess, and track their professional development activities, regardless of whether the activities are on- or off-campus. Currently, there is no system in place for faculty to do all that is required related to their professional development activities. Staff can also benefit from professional development, and they would benefit from tracking and planning of their activities. The campus also needs a system that supports broader professional development monitoring and serve as accreditation evidence.</td><td>It is recommended that Skyline College acquire Frontline Professional Management System, software particularly designed to assist in the implementation of professional development programs and the tracking of professional development activities.

As of February 1, 2017 implementation of Frontline Professional Management System began and is targeted to launch (go live) Fall, 2017.</td></tr>
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B. Technology Solutions to Support the Student Experience[District 1, 2 and 4]

a. Background

The San Mateo County Community College District is requesting proposals (RFPs) from qualified vendors to engage in an evaluation and recommendation of technology solutions to support the student experience. The final RFP has recently been posted on the District Website.

b. Purpose (excerpted from District RFP)

The San Mateo County Community College District (District) is seeking a firm (Firm or Vendor) to develop a comprehensive study to evaluate and recommend an integrated suite of technological solutions to enhance and modernize the student and staff/faculty experience across the entire student life cycle. The study and recommendation will include an examination of software packages and services designed to add functionality to the District's enterprise resource planning (ERP) system, Ellucian Banner. The assessment is expected to include information on system requirements and architecture, features and benefits, and costs as well as examples of best practices and innovative approaches. The study will address how proposed solutions will impact students both in performing administrative tasks and proactive engagement; increase operational efficiency for employees; and leverage data to promote student success and informed decision making. It is not expected that a single solution can fulfill all of the District's needs, and recommendations should include an "order of implementation" to ensure the most efficient rollout of multiple solutions as possible. Integration of new solutions with existing systems is viewed as a "must have", but it is also understood that existing functionality is insufficient to meet District needs and that transformative technological change is necessary. Technologies which provide a seamless interface, eliminate digital silos, and automate processes are highly desirable. Solution proposals should also include metrics that can be used to evaluate their success in advancing the mission of the District and Colleges. The project will result in a staff report for consideration by the District's Chancellor.

The report will provide guidance to the District's Chancellor. The successful Firm will be expected to explore and present a report on all facets of the current market for student support solutions, with a particular emphasis on California Community Colleges. The selected Firm will also convene and engage District stakeholders including students, faculty and staff, college administration, to gather information about stakeholders' perceptions, opinions and concerns with regard to system functionality and usability. Based on this research, the selected firms will propose various portfolios of solutions. Given the nature of the analysis requested it is highly preferable that firm be "product neutral" rather than closely associated with a specific vendor.

c. Statement of Work and Deliverables

The Selected Firm will develop a comprehensive study of the current market and environment in the area of student facing computer applications and systems in Higher Education including Community Colleges. The study will include an examination and recommendation of vendors, products and services needed to improve operational efficiency through integrated and transparent business processes, expanded use of data, and greater ease of use for students and employees. Recommended software solutions and service providers' systems must integrate with existing and newly proposed systems, eliminate or reduce data and business process silos, offer intuitive, easy-to-use, self-service interfaces.

The study will include company profiles for each vendor. The firm will work closely with the Technology Taskforce consisting of District and College staff. The selected Firm will also convene and engage District stakeholders including students, faculty and staff, college administration, to gather information about stakeholders' perceptions, opinions, and wants and needs in identifying proposed solutions.

Based on this research, firms will propose various portfolios of products and services to advance the District's service to and interactions with students via technology.

The following deliverables will be expected from the Firm

- A Research Report about the current student support software and services market
- A Communications Plan to craft appropriate messages to stakeholders about the study and to gather input from stakeholders to be included in the recommendation.
- A Staff Report for administration review and presentation to the Chancellor and/or Board of Trustees consisting of portfolios and solutions to support the District and Colleges' strategic plans.
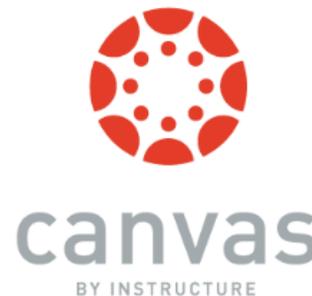
d. Budget

Cost TBD once solution is chosen and ongoing consulting and licensing costs are distributed between the District and College.

C. Learning Management System^{District 1 and 3}

a. Background

Moodle, branded as WebAccess for SMCCD, ceased to be used by the District as of June 2017. The new LMS for the District is known as Canvas by Instructure. The District is phased in Canvas over an 18-month period from April of 2016 to June of 2017.

Training for the new LMS began with workshops offered by the CTTL in which attendees were introduced to the basic tools of Canvas for face-to-face courses. In April of 2016, Skyline College began a set of trainings in a 'Pilot' form for those faculty who were to teach online and hybrid as a part of a pilot in the summer of 2016. The training program "Teaching online/hybrid in Canvas:" consisted of 21-24 face-to-face hours of training that covered both technology and pedagogy.

The first group to receive trainings was a pilot group of seven faculty. These faculty were then part of the initial group of 20 from the entire District who taught in Canvas. Approximately 35 faculty completed the training. Workshops were created and delivered to students at the Learning Center, and Modules in Canvas to support students were also created for student support during summer 2016.   These Canvas modules were made available District-wide for faculty to embed into their course in the fall of 2016. Skyline College opened a Technology Support Desk in spring of 2017 as an on-campus support for first-level questions.

During Fall of 2016 and Spring of 2017, the number of courses offered in Canvas increased and as faculty designed and developed courses they were reviewed by the CTTL using the OEI rubric as the standard adopted by the Academic senate. During Fall 2016, Spring and early summer of 2017, cohorts 3,4 and 5 completed the training. As of Spring 2017 nearly 100 percent of the faculty who were teaching online/hybrid in Webaccesss have been trained to use the new LMS. Additionally, faculty who had not taught online previously have also completed this "initial phase" of training in anticipation of scheduling issues when Building 1 goes off line in 2018. In the new Respiratory Therapy Bachelors degree program all faculty have received Canvas training and extensive assistance with course design and development .

With the completion of the transition and adoption of Canvas, new goals need to be set, which will ensure not only success with the new system, but that support the mission, goals and vision of Skyline College, and the Skyline promise.

b. Recommendation

- Development of an "online version" of the training for Teaching in Canvas and Online Pedagogy (which has previously only been offered in F2F mode).
- Development of trainings that address advanced skills and tools using Canvas.
- Planning and development of technology additions to Canvas. These tools would be ones meant improve student experience in Online/Hybrid courses. (for example Bluepulse, Zoom, Confernow).
- The need for training of faculty, staff and administrators has grown and continues to grow. The CTTL lacks the personnel to adequately offer all the training and administer LMS, to the fullest degree. The use of technology in both the online and F2F modes is an integral part of the classroom experience. Therefore, Skyline College would benefit from the hiring of a second Instructional Designer or Instructional technologist. The addition of a second Instructional Technologist/Designer will help Skyline ensure that quality standards of teaching and learning are met.

c. Implementation and Timeline

- Design and develop Online version of Canvas training: Spring/Summer 2017
- Online/Hybrid version of Canvas training: start early Fall 2017.
- Advanced skills training in Canvas: start Fall 2017, with Spring 2018.
- Training in the new technologies such as Bluepulse to begin with a pilot (Summer or Fall 2017) and with trainings for faculty and others, offered by the CTTL in Fall 2017.
- Request a position for Instructional Designer/Technologist (Fall 2017).
- Hire Spring 2018.

d. Budget

Currently budgeted:

- 1 @ 0.40 Faculty DE coordinator.
- 1 @1.0 FTE Instructional Designer.
- 1 @1.0 FTE Instructional Technologist.

New budget request:
- 1@1.0 FTE Instructional Designer or 1 @1.0 FTE Instructional Technologist.
  - 1.0 FTE Instructional Designer: Salary - $99K; Benefits - $34K; Total - $133K.
  - 1.0 FTE Instructional Technologist: Salary - $97K; Benefits - $43K; Total - $140K.

- **Summer Hours for Faculty Instructional Designer**: estimated at 165 hours to cover trainings directly related to CMS trainings and Support.
  - Salary - $10K; Benefits - $2K; Total - $12.
- **Summer Hours for DE coordinator**: 27 for Canvas Cohort training .
  - Salary - $1.9K; Benefits - $0.2K; Total - $2.1K.

D. Data Management Solution[District 1 and 4]

a. Background

Overview:

The PRIE Office has a strong interest in developing the District's data storage and retrieval capacity for research purposes. The existing District data warehouse, commonly known as WARE, is inadequate to support the PRIE Office's efforts to provide data and analysis in a timely manner. Skyline College uses SAP® Business Objects as the primary tool for reporting and analytics, but cannot fully leverage this powerful tool without a more robust data management solution.

Educational institutions, and particularly Skyline College, have transitioned from the use of static metrics to a culture of inquiry which demands nimble data management. In order to support the long-term strategic initiatives which are underway at Skyline College and across the District, it is no longer sufficient to rely upon the limited set of transactional and descriptive data available in WARE. Strategic initiatives hinge on the ability to provide comprehensive historical comparisons and future-focused analytics which marry disparate data sets with predictive and prescriptive methods to create a highly responsive toolset which can be used to foster student success.

Limitations of the Exisiting Data Warehouse:

Much of the data currently collected about students and college endeavors is not housed in WARE or is only represented in pre-calculated summary values. There are four components involved with this issue:

- **District Data Sources –** The District data warehouse is not comprehensive and relies primarily on limited data from Banner®. While District ITS has been responsive in adding individual fields or modifying tables upon request, this method is problematic as it delays data access and the missing historical data cannot be replicated. Another issue that complicates the situation is that a current data element dictionary is not available for the data warehouse (last updated 2009).
- **College Data Sources –** Technologies which are used solely at Skyline College to collect data are not represented in WARE. This gap represents multiple data sources and often inhibits the ability of PRIE to conduct research on campus initiatives and services. This limitation will become more problematic as the college moves forward with substantial campus innovations such as guided pathways and the ASAP replication. Similar to the District-level documentation issue mentioned above, data element dictionaries are needed for many of the local data sources to identify how the data is collected, updated, and stored.
- **Emerging and Replaced Data Sources –** As new systems are implemented, (e.g., scheduling and student support solutions), the data warehouse

infrastructure and documentation should also be considered to ensure that data from newer systems is integrated in an intentional manner to support analysis related to enrollment management, student success, and other topics. Specialized data sources such as the potential new PEEP database desired by the Kinesiology, Athletics, and Dance Division should also be considered for inclusion (see item N, page 53).

- **External Data Sources –** External data is often necessary to study transitions of students from high school through college program to transfer and career. Incorporating key external data sets into a data warehouse on an annual basis would support this type of research.

b. Recommendation

Because this issue involves both District and College needs, there should be a more extensive assessment of options to determine the specific path forward. There are four general recommendations:

Recommendation 1: Substantially Expand, Supplement, or Replace the Data Warehouse

Ideally, there would be a centralized mechanism which provides both an extensive repository and scheduled data retrieval method to compile multiple sources of data for analytic purposes. The ideal configuration would include:

- Daily snapshots of key enrollment data elements down to section and student-level detail
- Ability to retrieve and manage large data sets from disparate data sources (including external sources) such as:
  - Banner® and DegreeWorks full data set
  - High school data sharing agreements
  - CCCApply full data set
  - Data from educational planning, assessment, CANVAS, student tracking, SARS, and other systems
  - National Student Clearinghouse data
  - Specialized division or departmental databases
- Standard use of actual rather than pre-calculated values when possible; documented methodology for pre-calculated values

One option would be to significantly expand and document the existing data warehouse. However, the ideal functionality described above suggests consideration of other technologies such as the Ellucian Banner® Operational Data Store (ODS). With either solution, the data stored should not be limited to District-level sources but should also include College and external data sources which are necessary for institutional research.

Recommendation 2: Create Documentation of All Data Sources, Elements, and Data Collection Processes

Based on the multitude of data sources and lack of documentation which currently exists, it is expected that it would take substantial effort to build comprehensive documentation for either the District or the College. The scope of this project is likely to be beyond the capacity of existing ITS contracts or PRIE staffing levels. It is recommended that additional external resources be acquired to create current documentation of all data sources, data elements, and process mapping related to data collection and usage. The assessment should also evaluate whether local College databases have appropriate security for risk management and backups for disaster recovery as there is currently no college-wide inventory that documents this information. Once created, ITS and Skyline PRIE could become the owners of the documentation in their respective areas of responsibility, and update it as changes occur.

Recommendation 3: Develop Standard Practice for Adding Emerging Data Sources

Currently there is no mechanism by which the College can add data sources to the data warehouse nor is there an understanding of how new District data sources will be incorporated. Development of a standard practice or service level agreement on this topic would be beneficial.

Recommendation 4: Fully Leverage SAP® Business Objects

Upon implementation of Recommendation 1, the myriad of disparate data sources would become accessible for research and reporting purposes, which will make it possible to fully leverage the existing SAP® Business Objects platform. It would be necessary to modify the current configuration to access the chosen solution for Recommendation 1, develop additional reports based on newly accessible data sources, and expand licensing to support increased usage.

c. Implementation and Timeline

The implementation and timeline are highly dependent upon the solutions chosen for Recommendation 1, but should be a high priority for Skyline College due to the rapidly increasing need for access to disparate data sets. However, the documentation of College-level data sources could begin as early as 2017-2018 in preparation for the eventual implementation of a different data storage and retrieval solution.

A tentative four-year timeline proposed for further discussion is as follows:

2017-2018
- Work with District ITS and the District Technology Task Force to assess options and develop implementation plan *(Recommendation 1)*

- Acquire and use external expertise to assess and document Skyline College data sources in preparation for more robust data management capacity *(Recommendation 2)*

2018-2019
- District ITS begins implementation of the chosen solution *(Recommendation 1)*
- Identify which Skyline College data sources and data elements will be incorporated into the chosen solution *(Recommendation 1)*
- PRIE works with the stakeholders for each local data source to determine report needs and develops a prioritized reporting inventory *(Recommendation 4)*
- District ITS utilizes external expertise to develop the data element dictionary and related documentation for the chosen solution *(Recommendation 2)*
- College addresses any concerns related to risk management and/or disaster recovery which surfaced during assessment of the Skyline College data sources *(Recommendation 2)*

2019-2020
- District ITS incorporates Skyline College data sources into the chosen solutio*n (Recommendation 1)*
- In collaboration with all three colleges, District ITS develops standard practice for adding new data sources to the chosen solution *(Recommendation 3)*
- Working with District ITS, Skyline College's external consultants modify the SAP® Business Objects platform to migrate from using WARE as the primary source to using the chosen data management solution as the primary source *(Recommendation 4)*
- Begin SAP® Business Objects report development for the newly accessible data sources based on the reporting inventory created in 2018-2019 *(Recommendation 4)*
- Increase SAP® Business Objects concurrent licensing to accommodate additional users *(Recommendation 4)*

2020-2021
- Finish SAP® Business Objects report development based on the reporting inventory *(Recommendation 4)*
- PRIE conducts training for new Skyline College SAP® Business Objects users *(Recommendation 4)*

e. Budget

Continuation Budget (Critical to Maintain Current Level of SAP Usage)

1. Annual SAP BusinessObjects Licensure Costs (approximate): $21,500.00.
2. Annual SAP BusinessObjects Consulting Services and Support (approximate): $60,000.00.

Enhancement Budget (Essential to Support Skyline College's Planned Strategic Initiatives)

Recommendation 1:

The budget is dependent on the data warehousing solution selected at the District level and the approach to creating the documentation. While the cost of this item is expected to be substantial, it is anticipated that the cost of this item would be primarily shared at the District level. The College may need to release staff to be involved in the implementation of the solution.

Cost TBD once solution is chosen

Recommendation 2:

Documentation of College-level data sources could be completed independently or in conjunction with a District documentation project. Cost would depend on how the project is approached and the number of data sources to be assessed.

Cost TBD based on project approach

Recommendation 3:

No cost to develop a standard practice

Recommendation 4:

Consulting and licensing costs are dependent on the amount of time involved with migrating to the chosen solution; volume and complexity of reports to be developed; and number of new users.

Cost TBD once solution is chosen and report inventory is created

E. Strategic Planning OnLine (SPOL): A Means to Strengthen the Accreditation Self Study Process and the Integrated Planning and Resource Allocation Cycle[District 4]

a. Background

Two issues came to light preceding and following Skyline College's 2013 accreditation visit: (a) gathering and organizing the evidence that supports the self-study, and (b) strengthening the integrated planning and resource allocation cycle.

Prior to the visit, individuals tasked with writing the self-study searched for pertinent evidence that often was housed in a particular area and/or with specific individuals, some of whom had moved on from the College and therefore took with them the institutional memory. And once evidence was gathered, organizing the evidence on a very limited platform like Sharepoint was challenging since many were pertinent to multiple standards.

Following the visit, Skyline College received a recommendation to evaluate the effectiveness of the integrated planning and resource allocation cycle. A survey to employees confirmed that they didn't understand how the newly implemented Annual Program Plans (APPs) align with the Comprehensive Program Reviews (CPRs), nor how the APPs and CPRs connect with the Administrative Leadership Unit Reviews (ALURs). Respondents also requested that there be a closing of the loop regarding resource requests, and to make the APPs less cumbersome, for instance by auto-populating responses that rarely change.

In 2015, Skyline College pursued two avenues to address these issues. The College researched database solutions, choosing Strategic Planning OnLine (SPOL). The College also secured technical assistance and a $150,000 grant from the California Community College Chancellor's Office Institutional Effectiveness Partnership Initiative. Much of the grant was deployed to purchase a site license, work with the vendor to configure it, and launch its use in Spring 2017. The Planning, Research, and Institutional Effectiveness (PRIE) office is leading the implementation efforts. After working with Administrative Services to configure the budget module, they provided training for faculty and staff to upload their APPs, who were required minimally to upload their objectives and resource requests; they also trained administrators to upload their ALURS and forward approved objectives and resource request to the next level. Training in the form of workshops and personal assistance amounted to about 30 hours.

b. Recommendation

The IEPI grant helped to initiate SPOL's use. The next step is to continue the implementation of the Comprehensive Program Review and the upcoming self-study. In

the long run, it is important to institutionalize the ongoing costs, including maintaining our site license.

c. Implementation and Timeline

A four-year timeline was established:

<u>2016-2017: Launch SPOL</u>
- Faculty and staff upload Annual Program Plan (APPs) objectives and resource requests.
- Administrators upload Administrative Leadership Unit Reviews (ALURs).
- Administrators review and forward budget requests.
- Planning, Research, and Institutional Effectiveness (PRIE) system administrator configures and manages the database, and PRIE provides ongoing training.

<u>2017-2018: SPOL Phase II</u>
In addition to the 2016- 2017 goals,
- Faculty and staff upload Comprehensive Program Reviews (CPRs).
- Faculty, staff, and administrators align and upload accreditation evidence and begin to draft the narrative.

<u>2018-2019: SPOL Phase III</u>
In addition to the 2016- 2018 goals,
- Faculty, staff, and administrators draft the narrative and continue to align and upload accreditation evidence.

<u>2019-2020</u>
The ongoing implementation of the 2016- 2019 goals will lead to the College:
- continuing to fully integrate SPOL into College planning and resource allocation processes;
- using SPOL as a means to sustain and complete the self-study process and provide requested information to the accreditation visiting team.

d. Budget

Total for Phases II and III (until Spring 2019):	**$28,300**
• Implementation Consulting (for Phases II and III—approximately 120 hours per year):	$10,800
• Technical Assistance for Upgrades:	$2,500
• SPOL's recurring annual costs for the planning, budgeting, and accreditation modules:	$15,000
Total for subsequent years (Fall 2019 onward):	**$17,500**
• Technical Assistance for Upgrades:	$2,500
• SPOL's recurring annual costs for the planning, budgeting, and accreditation modules:	$15,000

F. Professional Development Management System<superscript>District 1, 3, and 4</superscript>

a. Background

Skyline College is part of the statewide Flexible Calendar Program. As part of the program, Skyline College faculty are required to plan, engage in, assess, and track their professional development activities, regardless of whether the activities are on- or off-campus. Currently, there is no system in place for faculty to do all that is required related to their professional development activities.

Participation in the Flexible Calendar Program (also known as Flex Days in the SMCCCD) requires faculty to complete a specific number of contractually mandated "flex hours" (professional development hours) each academic year. Per the *Guidelines for the Implementation of the Flexible Calendar Program*, written by the Faculty Development Committee of the Academic Senate for California Community Colleges and the State Chancellor's Office Program Staff:

The purpose of the flexible calendar program is to provide time for faculty to participate in development activities that are related to "staff, student, and instructional improvement" (title 5, section 55720). The flexible calendar program is a component of the staff development program and the major vehicle for faculty participation in development activities.

The flexible calendar program allows faculty (full-time, part-time, instructional and non-instructional) the time to work individually or with groups to achieve improvement in three distinct areas,

- *Staff improvement*
- *Student improvement*
- *Instructional improvement*

In addition to providing time to conduct these activities, the flexible calendar program also allows institutions some flexibility in scheduling configurations (e.g., offering an intersession with two 16-week semesters) (title 5, section 55722).

As a College within the SMCCCD, Skyline College is required to do the following per the Flexible Calendar Guidelines:

- *Perform an annual update of its survey (needs assessment) of the most critical staff, student, and instructional improvement needs in the District.*

- *Carry out a plan of activities to address those critical needs.*

- *Maintain records on the description, type and number of activities scheduled and the number of District employees and students participating in these activities.*

- *Evaluate annually the effectiveness of conducted activities and update the plan to reflect needed changes.*

- *Hold regular meetings of an advisory committee composed of faculty, students, administrators and other interested persons to make recommendations on kinds of instructional improvement activities.*

- *Provide documentation of these activities to the Chancellor upon request.*

As a participant in the Flexible Calendar Program within the SMCCCD, Skyline College must also report the following to the California Community College Chancellor's Office (CCCCO):

- *The total hours of teaching time which instructors were required to teach.*

- *The total faculty contact hours (credit and noncredit) of instruction for which flexible calendar program activities are being substituted.*

- *The number of faculty contact hours of instruction for which instruction during the designated days is being substitute may be claimed for apportionment; and the faculty contact hours shall not be eligible for adjustment.*

- *Any additional data as deemed necessary by the Chancellor to compute FTES adjustment (title 5, section 55728 (b)).*

It is also worth noting that the recent passage of AB 2558 in 2014:

[eliminated] the Community College Faculty and Staff Development Fund and instead [established] the Community College Professional Development Program. The bill [requires] any funding appropriated for this program to be allocated, in accordance with rules and regulations adopted by the board of governors, to community college districts that provide professional development opportunities for both faculty and staff. The bill would require community college districts receiving this funding to include the employee's time used participating in the Community College Professional Development Program in the employee's contractually obligated hours. The bill would also make nonsubstantive changes to these provisions.

The passage of AB 2558 means that once the details of classified staff participation in the Community College Professional Development Program are established, classified staff, like their faculty counterparts, will also be required to account for their professional

development hours, as these reports are collected by the College and reported to the CCCCO.

Currently, the District Academic Senate requires faculty to complete what is called the "Flex Reporting Form," an end-of-the-year paper document containing an account of Flex activities faculty have completed to satisfy their contractual Flex obligation for the academic year. Skyline College does not currently have a system in place that allows for faculty and staff to plan, register for, evaluate, and track their professional development activities.

Additionally, Skyline College does not have in place a system whereby applications for professional development funding can be streamlined for approval, nor does it have in place an automated system whereby the professional development application process and completion of professional development activities can be electronically tracked and referenced. Software that allows employees to plan, evaluate, and track their professional development activities is essential in keeping Skyline College in compliance with the CCCCO's Flexible Calendar Guidelines. Additionally, such software would prove invaluable should information and data about College's professional development activities be required for future reports and/or audits.

b. Recommendation

It is recommended that Skyline College acquire Frontline Professional Growth, software particularly designed to assist in the implementation professional development programs and the tracking of professional development activities. Key features of this software would allow:

- Compliance with state mandated professional development reporting and tracking required per CCCCO's Flexible Calendar Program Guidelines
- Facilitation in the planning, registration, evaluation, and tracking of workshops for all employees
- Development of professional learning plans that allow for intentional and reflective practices
- Tracking of professional development plans and the completion workshops
- Online creation and calendaring of workshops
- Online registration for workshops
- Gathering and disaggregation of workshop data for reporting
- Streamlining and facilitation of the faculty professional development application process

c. Implementation and Timeline

Fall 2016
- Investigate software options

Spring 2017
- Purchase Frontline Professional Development Management System

Summer/Fall 2017
- Install Professional Development Management System

Fall 2017
- Train the trainers

Fall 2017
- Provide workshops to train faculty/staff users

Spring 2018
- Full implementation of Professional Development Management System

d. Budget

Frontline Professional Growth Software & Implementation

Startup Cost	$ 1,500.00
Instructional Users	5,400.00
Non-instructional Users	4,000.00
48% Program Services Coordinator (Classified Staff) to manage software usage & provide training	33,886.00
Total	$ 44,786

G. Live Formative Feedback System[District 1 and 3]

a. Background

The Skyline College Promise represents a comprehensive approach to ensuring that students "Get in, get through, and get out… on-time" according to their educational goals. In support of the Skyline College Promise, the college has begun to implement and explore many programs focused on student services, student readiness and preparation for college, and alignment of educational pathways that ensure students timely progress toward their educational goals. One of the ways that has yet to be explored thoroughly are ways to enhance student engagement and learning outcomes within the classroom so that the "get through" portion of the Skyline Promise ensures that students are experiencing relevant and meaningful learning at all times.

Several studies have shown that relevant and meaningful learning occurs when instructors use formative assessment throughout a course to gauge student learning (Collier, 2013; McMillan, 2007; William, 2010). Additionally, studies support the use of formative assessment and student feedback as a means to inform teaching and ensure that meaningful and relevant learning occurs as often as possible (Heritage, 2007; Pinchok & Brandt, 2009; Tovani, 2011). When incorporated into classroom practice, the formative assessment process provides information needed to adjust teaching and learning while they are still happening. The process serves as practice for the student and a check for understanding during the learning process. The formative assessment process guides teachers in making decisions about future instruction.

Technology can provide a platform for formative assessment within the classroom to occur more frequently and effectively. To explore how technology is currently being used to foster formative assessment and overall student engagement, Skyline College's Center for Transformative Teaching and Learning (CTTL) in partnership with the Dean of Academic Support & Learning Technologies (ASLT) sought out information on software and/or technology that allows instructors to collect student feedback and conduct formative assessments within courses in support of teaching and learning. Findings indicated that there are many low-cost software options on the market such as Poll Everywhere, Kahoot, PollDaddy, and Qwizdom. However, these products do not offer full anonymity, tracking of student responses over time, and easy analytics for reviewing responses received and using those responses to inform teaching.

Enter Blue Pulse 2 © "a live formative feedback platform that gauges student sentiment, understanding, and progress to drive success" and provides several analytic options that support instructors' ability to make sense of the feedback and formative assessment data received and act upon to improve/inform teaching and meet students where they are. For more information about the Blue Pulse 2 © product and how it works, please visit their website: https://explorance.com/bluepulse/

Some advantages of the Blue Pulse 2 © software that support the work of Skyline College faculty and students are:

- Integrates with Canvas LMS
- Can be utilized to support teaching and learning in face-to-face, hybrid, and online courses.
- Allows for versatility of communication with students
- Faculty can customize formative assessment and solicit feedback within courses as often as necessary to ensure relevant and meaningful learning.
- Students can submit confidential feedback
- Mobile app is available (IOS and Android)
- Provides sophisticated analytics for instructors.
  - Provides breakdown of student responses and allows instructor to target feedback based on student responses.
- Offers versatility in assessment types; informal questions, questions types - drop down, ratings, open-ended response

*Timeline of Blue Pulse 2 © demo for CTTL, demo for Deans, Live demo, one-on-one demo with ID. Service Contract. Blue Pulse kickoff.

b. Recommendation

Implement Blue Pulse 2 © to foster real-time student engagement and support responsive teaching. Blue Pulse 2 © would be used to help faculty gather real-time formative feedback to both improve and inform teaching and learning. Other recommendations include:

- Begin with piloting Blue Pulse 2 ©with selected Skyline College Faculty before large-scale implementation.
- Develop training/orientation program to introduce Skyline College faculty to the Blue Pulse 2 © software and its capabilities both online (web-log-in) and within the Canvas Learning Management System (LMS). Training would need to be developed for multiple modalities to fully support faculty adoption. Training subjects would include but not limited to the following;
  - What is Blue Pulse 2 © and how can it support teaching and learning
  - Utilizing Blue Pulse 2 © within the Canvas LMS.
  - Best practices for implementing Blue Pulse 2 © to support formative assessment of student learning in real time.
  - The value of real-time student feedback within courses.
  - A recommended list of common assessment questions specific to gauging learning among Skyline College student and populate the Blue Pulse 2 © software with the recommended list of assessment questions.
  - Interpreting student feedback and using feedback to modify/improve teaching.
- Develop and provide training targeted for students on how to use Blue Pulse 2 © to respond to instructor feedback.

- Follow up with implementing Blue Pulse 2 © within larger faculty-base.
- Encourage faculty to use Blue Pulse 2 © within courses to support formative assessment and foster responsive teaching.

c. Implementation and Timeline

Blue Pulse 2 © was purchased by Skyline College during the Spring 2017 semester. Work has begun to integrate Blue Pulse 2 © with the Canvas LMS system. Troubleshooting is currently underway and a test environment has been established. Next steps for implementing Blue Pulse as a tool that supports both teaching and learning include:

- Selecting a small group (4-6) faculty to pilot using Blue Pulse 2 © within the Canvas LMS to support formative assessment and foster student engagement during live courses – Summer 2017.
- Begin training/orientation for pilot faculty – Summer 2017.
- Create and deliver short training for students on how to respond to instructors using Blue Pulse 2 ©.
- Develop benchmarks for measuring success of Blue Pulse 2 © pilot.
- Review results for Summer 2017 pilot and revise implementation plan – before Fall 2017.
- Expand Blue Pulse 2 © pilot into Phase II, including approx. 20 faculty across disciplines and modalities (online, hybrid, and face-to-face). – Fall 2017.
- Review results for Fall 2017 pilot and revise implementation plan – before Spring 2018.
- Full implementation of Blue Pulse 2 © for use by full Skyline College faculty community – Spring 2018.
- Over ongoing training and support for Skyline College faculty who want to use Blue Pulse 2 © - ongoing.
- Encourage faculty to use Blue Pulse 2 © to support formative assessment and responsive teaching – ongoing.

d. Budget

Skyline College signed a contract/service agreement with Blue Pulse 2 © for 3 years. Blue Pulse 2 © services include: 9,000 FTE users for a term of three years, beginning March 15, 2017 through June 30, 2018. Skyline College has agreed to invest $15,000/year for three years.

Initial training materials will be provided by Blue Pulse 2 © as part of our service agreement. Additional training regarding Blue Pulse 2 © implementation, and pedagogy centered on formative assessment and student feedback will be created, developed, and delivered by the staff of the Center for Transformative Teaching and Learning (CTTL) as part of ongoing professional development service delivery.

H. Anti-Plagiarism Tools[District 1 and 3]

a. Background

For several years, the District has funded a license for Turnitin, an anti-plagiarism software. Recently, the District announce that they would fund the license for Turnitin for one more year (until May 2018), but there is uncertainty whether or not they will fund it after the end of that yearly license. In the past, there were issues of double billing due to some faculty using Turnitin through the LMS (Moodle), and others using it directly through the Turnitin website. Whenever this happened, it would trigger double invoices. In terms of usage, several faculty have expressed disapproval of Turnitin as an effective/efficient tool for their needs. Overtime, other software solutions have entered the field (e.g. VeriCite). In 2016, the Online Education Initiative (OEI) vetted a number of antiplagiarism tools, and VeriCite came out on top. Using the namesake of its parent company, VeriCite is a plagiarism detection tool designed for full integration with Learning Management Systems (LMS), including Canvas. The OEI's decision to adopt VeriCite came about as the OEI team, with guidance from its Steering Committee and Academic Integrity Workgroup, conducted an extensive search for a partner to provide online originality and plagiarism detection services. In June 2016, their search concluded with the endorsement of the Steering Committee and our posting of a Notice of Intent to Award a contract to VeriCite, Inc.

The OEI has negotiated a rate of $1.05 per FTES for any California Community College that wishes to use VeriCite. In comparison, Turnitin is about $2.45 per FTES.

Colleges can register for the free trial of VeriCite at http://www.vericite.com/ to set it up in their course management system.

b. Recommendation

Our District's Distance Education Advisory Committee (DEAC) and the Instructional Technologists and Web Services Group are interested in pursuing the adoption of the VeriCite antiplagiarism tool. Additionally, faculty in the OEI report that VeriCite is an excellent antiplagiarism tool that outperforms Turnitin.

Therefore, the Technology Advisory Committee recommended the adoption of VeriCite as Skyline College's LMS-integrated plagiarism detection tool.

c. Implementation and Timeline

- June 2017: Install VeriCite trial version in Canvas.
- June 2017 – December 2017: Pilot test in Canvas with a small number of faculty volunteers.
- Spring 2018: Pending results of the pilot test, purchase VeriCite license and deploy tool campus-wide.

d. Budget

- Student FTE/Headcount: 5859
- Total Annual Cost: $ 6151.95 ($1.05 per FTES)

I. Online Education Accessibility Tools^{District 1 and 3}

a. Background

Skyline College strives to create an inclusive environment for all individuals. In the last few years, the College has been proactively moving towards a universal approach to accessibility on campus through the following actions:

- Include Client side of networked Assistive Technology Software on images for computers used by students (e.g. campus computer labs, library, and the Learning Center), on computers in other locations (e.g. JAWS, ZoomText Magnifier) and Kurzweil 3000 (a web-based license that is accessed through the Kurzweil 3000 cloud-based server using a username and password given to faculty/staff and students).

- Increase the accessibility of Skyline College's website and its content for students with disabilities who rely on using Assistive Technology (for example: online forms)

- Continue to explore software options that improve or workaround the accessibility issues of electronic materials in publisher-based course management systems (for example, Course Compass and MyMathLab).

- Allow instructors to make appropriate extended time adjustments to WebAccess exams and quizzes for students with approved extended time accommodations.

b. Recommendation

With the adoption of a new LMS (Canvas), new opportunities and challenges emerge. We recommend continuing the ongoing effort towards universal accessibility on campus, and to add two more tools and actions to improve accessibility in all courses using the new LMS.

- Train faculty and staff to use Amara, an open source video captioning solution.
- Encourage faculty to apply for 3C Media Captioning Grant (underwritten by State Chancellor's office).

c. Implementation and Timeline

- Begin Amara training during Summer 2017 and offer ongoing trainings

- Continue to encourage faculty to apply for 3C Media Captioning Grant (ongoing)

d. Budget

- Amara: The Campus will use the free version. No other associated costs.
- 3C Media Captioning: 3C Media Captioning is fully supported by a grant through the State's Community College Chancellor's Office. Individual faculty fill out a simple form within Canvas and their videos in the course shell are captioned by 3C contractors. No cost to the Campus. If State support ends, then the Campus will have to evaluate alternative options for captioning.

J. Lecture Capture^{District 1 and 3}

a. Background

Lecture capture is the audio and video recording of lectures. Lecture capture is not a new concept; however, it has been gaining widespread use due to a variety of reasons, including expansion of WiFi access and speed, online and hybrid learning, and budget considerations. Universities and Colleges have also increased their interest in lecture capture in face-face courses, as a tool to increase student learning and ultimately, retention. The use of video in online or hybrid courses at Skyline College is not unheard of, but the use of lecture capture in face-to-face courses in realistically non-existent. There are several reviews of the use of lecture capture, and specifically for use in face-to-face courses. O'Callaghan et al. 2017 provides an excellent and current review (O'Callaghan, F., D. Neumann, L. Jones, and P. Creed. Educ. Inf. Technol (2017) 22:399-415). In O'Callaghan's review, numerous studies are referenced detailing the positive aspects of lecture capture, including;

- Positive student response to the availability of lecture capture and its correlation to course satisfaction.
- Contributes to learning by making it easier to understand content.
- Increased effectiveness of studying and learning. Several studies have reported that students believe lecture capture has improved their academic performance and grades,
- Increased depth of notes.
- Individualized pace of learning.
- Reviewing for exams.
- Source of lecture material if a student misses class.
- Improving equity, for example ESOL students, international students, and students with learning disability.

There is one main concern regarding lecture capture, and that is its effect on absenteeism. Several studies have reported mixed results on whether lecture capture encourages students to miss lectures. Because of this, and the need for more research, we cannot predict in advance, the effect of lecture capture on attendance, although professional development can help minimize its impact (e.g. lecture techniques that increase the value of face-to-face meetings, and the encouragement of lecture capture as a study tool).

b. Recommendation

Given the numerous studies that have reported the positive influences of lecture capture, it is recommended that Skyline College move forward with adopting this technology. However, adopting a system that requires a hard-wired system would not be prudent given prohibitive costs, and unknown demand. As such, it is recommended that the College adopt a mobile low-cost lecture capture system that will allow us to pilot its use across campus. During this pilot phase, we can analyze the effectiveness of lecture capture on learning and on absenteeism. We will also determine demand and other uses of lecture capture other than in a classroom setting.

c. Implementation and Timeline

- Phase I: Pre-Initiation
  - AY 2016-17
  - Research possible lecture capture devices.
  - Purchase a limited number of lecture capture devices to use in Phase II: Initiation

- Phase II: Initiation
  - Fall 2017
  - Recruit early adopters to use and experiment with lecture capture for use in face-to-face courses.
  - Analyze early adopters use and recommendations to determine cross-campus utilization of lecture capture.

- Phase III: Implementation Phase
  - Spring 2018
  - Determine policies and procedures of shared use of lecture capture devices for cross-campus use.
  - Obtain input from campus divisions on the strategic direction and use of lecture capture device.

- Phase IV: Institutional Phase
  - AY 18-19
  - Determine current and future demand based on Phase II, and develop a schedule for increasing the capacity of lecture capture devices.
  - Determine classrooms where lecture capture needs to be a permanent fixture (as oppose to sharing the lecture capture devices).

d. Budget

Hardware: $24,527.40

- 2016-17

    - 10 C-Series Robots by Swivl; lecturer capture devices ($620.26 each): $6202.60
        - Reference: https://www.swivl.com/c-series/
        - 10 iPads ($606.10 each): $6061.00
        - Total: 12,263.70

- 2017-19 (depending on demand)

    - 10 C-Series Robots by Swivl; lecturer capture devices ($620.26 each): $6202.60
        - Reference: https://www.swivl.com/c-series/
        - 10 iPads ($606.10 each): $6061
        - Swivl Pro Annual Cloud Subscription (30 Users): $1,200
        - Team Adminstrator: $225
        - 10 Swivl Floor Stands ($99.00 each): $999
        - 2 Additional Marckers: $229
        - 1 Expanded Lens: $78
        - Total: 15K

K. Network and Wireless Infrastructure^{District 1, 2 and 3}

a. Background

Since start 2015, there were several initiatives in network telecommunication projects throughout Skyline College. A campus core network upgrade was completed, which is expected to place the Skyline campus with leading-edge networking. Depending on the respective building's infrastructure, the core upgrade should provide 10 to 20 Gigabites network throughput. Likewise, the core upgrade also provided the opportunity to integrate a new District-wide telephone system. The network backbone, which ties Skyline campus to District infrastructure, was recently upgraded from 1Gig to 5Gig.

Additionally, new network equipment is being installed throughout Skyline buildings, designed to deliver 1Gig connections to each desktop, allowing students, faculty, and staff the capacity to utilize more bandwidth-intensive applications from their individual workstations. Moreover, the newly selected network gear features "power-over-Ethernet" (PoE), a process of delivery of low-level power to remote, network-connected devices such as VoIP phones, wireless access points, remote cameras, near-field communication (NFC) solutions, etc. Campus wide wireless network access is also being upgraded throughout Skyline College, initially in buildings with the most classrooms and student services. The new wireless access point (WAPs) solution is designed to scale and accommodate educational needs as well as the widespread use of mobile devices accessing educational resources.

As of April 2017, table below shows the status of network and wireless upgrade for Skyline College.

Building	Upgrade Status	Building	Upgrade Status
1	70% Complete	8	Summer 2017
2	Complete	9	Summer 2017
3	60% Complete	10	Summer 2017
3-Portables	60% Complete	11	Summer 2017
4	Completed	14 LomaChica	Summer 2017
5	Completed	19 PacHeights	Completed
6	Completed	21-24 FMC	Summer 2017
7	Completed	Press Box	Completed
7A	Summer 2017	Team House	Completed

Skyline College also recently upgraded its perimeter network security with a next-generation firewall (NGFW), to safely prevent modern threats. This network security device will monitor incoming and outgoing network traffic and decides whether to allow or block specific traffic based on a defined set of security rules.

Finally, even with these improvements, Wi-Fi access has been an increasing concern on the Skyline College campus. The main complaints have been lack of signal or extended times to gain access to the internet (or not being able to connect at all). There are a variety of reasons why the issues with Wi-Fi access have increased over time. These include a rapid expansion of Wi-Fi devices (computers, laptops, tablets, and smart phones), greater use of Wi-Fi in classes, the absence of access points, insufficient access points to accommodate increased usage, and device malfunctions.   Issues associated with Wi-Fi are ongoing and to remedy these issues, continued reporting of these issue to District IT is needed.

b. Recommendation

It is recommended that District IT continue its efforts to install new network equipment and upgrading wireless access throughout the Skyline Campus.

To improve communications between Skyline College and District IT in identifying specific trouble spots of Wi-Fi access, in Fall of 2016, the Dean of ASLT developed a form to catalog Wi-Fi issues across Skyline College. Trouble spots were obtained from campus leadership and enter into the table below.

Person Reporting	Building	Location	Reported to IT	Comments
Roumbanis	1	1207	New	difficulty receiving Wi-Fi
Houpis	1	Bldg 1 Theatre	New	
Gutierrez	1	Bldg. 1 Lower Floor	New	
Gutierrez	2	Bldg. 2	New	Building 2 has been enhanced, but instructors are not able to get enough students on wifi for instructional purposes.
Morello	3	3102	New	
Morello	3	3104	New	
Morello	3	3201	New	
Morello	3	Bldg. 3 All 1st Floor Office	New	
Gutierrez	4	Bldg. 4 Lower Floor	New	
Roumbanis	4	Cosmetology - Esthetic lab floor/dispensary area	New	
Vangele	6	6106	New	test the area near Dept. of Public Safety (6-106)
Roumbanis	8	8226	New	Wi-Fi issues
Roumbanis	8	8306	New	Wi-Fi issues
Roumbanis	8	8317	New	Room 8-317 is the EPICenter which is a hub for student study, for classes day/night/Saturday, and for regular division meetings and Saturday events/conferences.
Chak	8	Bldg 8 Top Floor Fac Staff Server	New	
Gutierrez	8	Bldg. 8 is difficult throughout	New	
Minnich and Morello	Other	Athletic Fields	New	
Vangele	Other	Fireside Dining area	New	Occasionally we (DPS) encounter WIFI slow-downs, and the Fireside Dining area regularly attracts a high concentration of students with electronic communication devices.
Gutierrez	Other	Pacific Heights	New	Poor Wifi access.
Minnich	Other	Parking Lots	New	
Minnich	Other	Quad	New	

This information was sent to District IT. District IT began to resolve these issues as part of their ongoing effort to improve and upgrade Wi-Fi access, and they provided an update prior to the start of Spring 2017. The District IT Wi-Fi update is presented in the following Table.

Person Reporting	Building	Location	Reported to IT	Comments	ITS Comments
Roumbanis	1	1207	New	difficulty receiving Wi-Fi	No infrastrucute in or around this space. ITS is working with contractor to run new data drops, then add wireless access points (Aps) accordingly.
Houpis	1	Bldg 1 Theatre	New		No infrastrucute in the theater. ITS is working with contractor to run new data drops, add wireless APs accordingly.
Gutierrez	1	Bldg. 1 Lower Floor	New		Emailed Mary Gutierrez requesting for specific location information (1/13/2017) and waiting to heard back
Gutierrez	2	Bldg. 2	New	Building 2 has been enhanced, but instructors are not able to get enough students on wifi for instructional purposes.	B2's network was recently upgraded. Many Wireless APs were added on 2nd and 3rd floors. To be sure certainl we're not missing anything, we've emailed Mary Gutierrez requesting for specific location information (1/13/2017) and waiting to heard back
Morello	3	3102	New		Buidling hasn't been upgraded yet. ITS plans to perform the upgrade Spring 2017
Morello	3	3104	New		Buidling hasn't been upgraded yet. ITS plans to perform the upgrade Spring 2017
Morello	3	3201	New		Buidling hasn't been upgraded yet. ITS plans to perform the upgrade Spring 2017
Morello	3	Bldg. 3 All 1st Floor Office	New		Buidling hasn't been upgraded yet. ITS plans to perform the upgrade Spring 2017
Gutierrez	4	Bldg. 4 Lower Floor	New		Building 4 network was upgraded and number of wireless APs were added for enhanced coverage. To be sure certainl we're not missing anything, we've emailed Mary Gutierrez requesting for specific location information (1/13/2017) and waiting to heard back
Roumbanis	4	Cosmetology - Esthetic lab floor/dispensary area	New		Checking with Christine Roumbanis for additional informaiton.
Vangele	6	6106	New	test the area near Dept. of Public Safety (6-106)	Plan to test and confirm then possibly add additonal Aps.
Roumbanis	8	8226	New	Wi-Fi issues	Wireless access point (AP) was added to this room recently. We will need to learn more about the wirless coverage issue, whether if it is caused as a result of system error or poor signal stregnth.
Roumbanis	8	8306	New	Wi-Fi issues	Wireless access point (AP) was added to this room recently. We will need to learn more about the wirless coverage issue, whether if it is caused as a result of system error or poor signal stregnth.
Roumbanis	8	8317	New	Room 8-317 is the EPICenter which is a hub for student study, for classes day/night/Saturday, and for regular division meetings and Saturday events/conferences.	Wireless access point (AP) was added to this room recently. Considering the usage, ITS will look into adding addition device(s).
Chak	8	Bldg 8 Top Floor Fac Staff Server	New		Checked with Kevin and confirmed this area has adequate coverage. However, we will monitor during peak useage.
Gutierrez	8	Bldg. 8 is difficult throughout	New		Checked with Kevin and confirmed this area has adequate coverage. However, we will monitor during peak useage.
Minnich and Morello	Other	Athletic Fields	New		There is no network infrastructure district wide parking lots; however, ITS will be addressing these needs during future construction projects.
Vangele	Other	Fireside Dining area	New	Occasionally we (DPS) encounter WIFI slow-downs, and the Fireside Dining area regularly attracts a high concentration of students with	B6 network was recently upgraded so we will make futher assessment and add wireless APs accordingly.
Gutierrez	Other	Pacific Heights	New	Poor Wifi access.	PacHeights network was upgraded during winter recess and wireless network was expanded. We would like to ask for feedback once spring term is underway.
Minnich	Other	Parking Lots	New		There is no network infrastructure in parking lots; however, ITS is addressing these needs during building construction projects.
Minnich	Other	Quad	New		There is no network infrastructure in the quad; however, ITS will address these concern from perimeter of B6 as well as during upcoming building construction projects.

Given that Wi-Fi issues are beginning to be resolved, it is recommended that the above process be continued into the near future.

c. Implementation and Timeline

Implementation:

Fall 2016
- Initial survey of Wi-Fi issues.
- Campus leadership identify Wi-Fi issues and locations.
- Identified issues are compiled into table format and sent to District IT for action.

January 2017
- District IT provides Skyline College an update of progress on resolving Wi-Fi issues.

Timeline:

Every Fall Semester from 2017-2021
- Early in the Fall semester, campus leadership is surveyed regarding progress on previously reported issues and to identify new issues. This information is compiled into table form and sent to District IT.

Every January from 2018-2021
- District IT provides Skyline College an update of progress on resolving Wi-Fi issues.

d. Budget

Resolving Wi-Fi issues currently does not require funds from Skyline College. All costs are covered by District IT.

L. Online Tutoring^{District 1 and 3}

a. Background

Increasing our online tutoring support is part of our broader effort to create quality online instruction and support services for students that links academic support tools to course success. It is also an accreditation priority to provide equivalent academic support services for in-person and online students, respectively.

b. Recommendation

The Learning Center recommends Link Systems Internationals' NetTutor platform. NetTutor has been vetted by the State Online Education Initiative. Additionally, the learning center managers across the District have reviewed alternatives and found that NetTutor provided good coverage of subjects at a competitive price and with a proven record of providing appropriate and professional tutoring support. This platform is also fully integrated with our new LMS, Canvas.

c. Implementation and Timeline

Summer 2017
- Secure funding to purchase block of tutoring hours (see below for detail).
- Provide additional training for tutors and TLC staff and test the student engagement interface.
- Confirm priority courses and faculty.
- Plan outreach and awareness-building campaign for students and faculty with MCPR support.

Fall 2017
- Students will access NetTutor at Skyline College via the Canvas course shell for our LSKL 803 course, a non-credit, zero-unit course required for students who utilize TLC services such as tutoring. Over 1,000 students enroll in this course each fall and spring semester.
- Flex Day activities: Meet the NetTutor representative in TLC (geared towards faculty).
- MCPR Office support: GWAMAIL, campus info screen advertisements, class schedule ads.
- Department/Division meeting presentations by TLC rep to promote online tutoring via NetTutor.

d. Budget

- NetTutor hours at $23.50 per hour for 100 hours = $2,350.00
- Purchasing ad space in campus publications = $250
- Food/beverages for trainings and informational meetings = $250
- Print advertising such as flyers = $150

   Total Annual Cost = $3,000.00

M. Skyline College Technology Support^{District 1 and 3}

a. Background

The Skyline College Technology Support provides user support for Skyline College students, staff, and faculty and is located in the Library's Drop-In Computer Lab. Assistance with printing, scanning, photocopying, computers, software (Microsoft Office, Google Apps, etc.), and college technologies (Canvas, WebSmart, etc.) is provided. With the college's migration to Canvas, Skyline College Technology Support, in consultation with CTTL/Online Education, has taken a lead role for a student Canvas migration marketing campaign, student Canvas workshops, and providing basic Canvas support in-person, by phone, and email. Skyline College Technology Support is staffed by an Instructional Aide II (1.0 FTE) and student assistants; direction and support is provided by the Director, Learning Commons.

b. Recommendation

In order to provide adequate Canvas support and other technology support, the following recommendations for software, marketing, and staffing:

- 0.48 FTE Instructional Aide II for evenings and Saturdays
- Student assistants to staff the Technology Support
- Statistical tracking software for Technology Support
- Chat/instant messaging software
- Marketing budget for Canvas and Technology Support campaign

c. Implementation and Timeline

The Canvas student campaign will begin in May 2017 and continue through the AY 17-18. The Instructional Aide II will develop and deliver Canvas student workshops open to all students and provide assistance to faculty that request instruction during class times. The Instructional Aide II will develop marketing print and digital marketing materials including banners, brochures, flyers, campus-wide emails, and social media posts. Additional information for Canvas and other technology support will be distributed through Skyline Shines and the Skyline View. Additional staff for the Skyline College Technology Support will need to be hired, trained, mentored, and supervised for AY 17-18 and through AY 20-21.

d. Budget

Staffing: $50,000
- Student Assistants ($22,000 annual), 0.48 FTE Instructional Aide II ($28,000 annual)

Software: $1,000
- Chat software ($500 annual), Statistics software ($500 annual)

Marketing: $800
- Banners, brochures, flyers, Skyline view ads, other marketing materials

N. Technology Plan Request: Kinesiology, Athletics and Dance^{District 1 and 3}

a. Background

The Physical Education Evaluation Program (PEEP) is now in its 36th year. Over 40,000+ records have been collected regarding student progress towards outcomes related to the five major components of fitness. These data are used as part of SLO assessment and to compare student performance based on demographic characteristics (ethnicity, age, gender). PEEP would like to be able to provide this data to PRIE for greater analysis. Also, PEEP wants to make this information more accessible for students. Currently, faculty and students receive results via paper at the start of the fourth week and at the end of the semester. PEEP needs assistance in developing an on-line system where students can access pre and post test results, and measure changes that not only for their current semester but over their time at Skyline College (i.e. in case they take multiple classes). A system that requires the student's G number plus a password system would be a secure mechanism for students to view their results. Additionally, the online system would meet a sustainability goal of the campus by reducing the use of paper. Ideally, multiple tablets would be used at each assessment station, allowing students to enter their G number and result as they receive them, rather than requiring dozens of hours of data-entry to be done after each round of testing. PEEP currently has the required tablets now. PEEP needs assistance in developing a means to put the system on-line in a manner similar to how students access Websmart.

b. Recommendation

The current PEEP database is quite inaccessible, in terms of creating reports that allow faculty members to analyze statistical results easily. It is recommended that the new system should not be created from scratch, (i.e. the last version was created from scratch, and left PEEP without support or ways to alter it), but should use a database created on a system with technical support on campus, such as an ACCESS or mySQL database. Therefore, PEEP is requesting assistance in the selection of a database system supported by the District, construction of the database so it can compile the data from the PEEP program in reports for both students and staff, and a means to have the data available to students in the current Websmart system.

c. Implementation and Timeline

Fall 2017
- Select database.

Spring 2018
- Construct the data base and work with District IT to make the data accessible to students and staff

Fall 2018.
- Data accessible to students and staff

d. Budget

We have no budget to do any of this. Our hope is to leverage the expertise in the CTTL and District IT for steps 1 (selecting the data base system) and 3 (making results available to students and staff via websmart). The construction of the data base is beyond our scope, and we do not have any type of price to form a budget estimate.

O. Organization and Communication Software^{District 1}

a. Background

Skyline College is preparing to launch an innovative program that has been proven to help students graduate at higher rates and more quickly than most community college students. The Accelerated Studies in Associate Program (aptly referred to as ASAP) will launch in Fall 2018 with 500 full-time Skyline College students. ASAP consists of financial support, intensive academic advising, expedited course scheduling and other advantages for students.

ASAP is also part of the Skyline College Promise, which is a comprehensive strategy of scholarships, academic programs and a restructuring of majors and curriculum designed to remove barriers to student success. ASAP, as well as the Skyline College Promise program require a large cross functional team (faculty, staff, and administration) from across Skyline College to coordinate the many facits of these projects. In order to ensure a successful on time completion of these project, a strong online communication tool is required. This tool will allow the entire cross-functional team to stay connected, well informed, ability to work on shared documents, and house meeting notes.

b. Recommendation

Representatives across the campus and reviewed a variety of software options. It was recommended that the College purchase Basecamp (https://basecamp.com/how-it-works).   Basecamp will allow all team members to communicate effectively with one another, organize efforts, and a common storage space for documents and resources.

c. Implementation and Timeline

Fall 2017
- Select software
- Purchase software and install.

d. Budget

Software: Basecamp $999/year
- Unlimited users.
- Unlimited projects

Appendices

Appendix A

Skyline College 5 Year Technology Plan Budget

It is the responsibility of the Technology Advisory Committee to develop and put forward a realistic budget to support campus technology.

Item	2017-18	2018-19	2019-20	2020-21	2021-22
Computer Replacement from Refresh List	$125,000	$100,000	$100,000	$100,000	$100,000
Smart Classrooms	$30,000	$30,000	$30,000	$30,000	$30,000
Printers	$25,000	$25,000	$25,000	$25,000	$25,000
TV – Cable & Streaming	$5,000	$5,000	$5,000	$5,000	$5,000
Media Services A/V Equipment	$10,000	$10,000	$10,000	$10,000	$10,000
Repair/Replacement/ Emergency Fund	$40,000	$40,000	$40,000	$40,000	$40,000
Lecture Capture	$15,000	$15,000	$15,000	$15,000	$15,000
BluePulse - Formative Assessment	$15,000	$15,000	$15,000	$15,000	$15,000
Professional Development Management System	$12,000	$12,000	$12,000	$12,000	$12,000
Anti-Plagarism Software	$6,152	$6,152	$6,152	$6,152	$6,152
NetTutor	$3,000	$3,000	$3,000	$3,000	$3,000
Skyline Student Technology Support - Chat and Statistical Software	$1,000	$1,000	$1,000	$1,000	$1,000
Organization and Communication Software	$1,000	$1,000	$1,000	$0	$0
Tech Innovation & Growth	$11,848	$36,848	$36,848	$37,848	$37,848
Skyline College Funds	$300,000	$300,000	$300,000	$300,000	$300,000
Instructional Lab Replacement (District)	$280,000	$280,000	$280,000	$280,000	$280,000
District Funds	$280,000	$280,000	$280,000	$280,000	$280,000
Total Technology Plan Budget	$580,000	$580,000	$580,000	$580,000	$580,000

Appendix B

2016-2019 Faculty and Staff Computer Replacement Schedule

Guiding Principles

- The use of technology by all Skyline faculty and staff is critical to realizing the vision of Skyline College.

- All full-time faculty and staff will have **<u>one</u>** state-of-the-art computer and **<u>one</u>** task appropriate monitor that will allow them to complete their tasks in an efficient manner.

- All full-time faculty and staff will have convenient access to black and white printing.

- Part-time faculty and staff will have access to quality computers and black and white printers in offices conveniently located around campus.

Schedule Placement Criteria. (In priority)

1. Faculty or staff unable to efficiently perform tasks as a result of an outdated computer.
2. Computer is 4 or more years old
3. Computer has a history of more than usual number of work orders.
4. Staff or faculty member wants a new computer.

Faculty and Staff Computer Replacement Schedule F2016/SP2017

Location	Last	First	Division / Department	Computer / DESKTOP, MAC, LAPTOP	ST / SN
1311G	FLORES	RICARDO	ASLT	iMac (27-inch, Mid 2011)	D25HG0T8DHJW
5200	LIBRARY CIRCULATION AREA	LIBRARY CIRCULATION AREA	ASLT	HP Z210	2UA1260TJV
5200	LIBRARY CIRCULATION AREA	LIBRARY CIRCULATION AREA	ASLT	HP Z210	2UA1260TJS
5200	REF DESK	REF DESK	ASLT	HP Z210	2UA1260TJT
5200	REF DESK	REF DESK	ASLT	HP Z210	2UA1260TJR
5116	MEDIA	MEDIA	ASLT	MAC-BOOKPRO LT	W86471MPW0L
5110	STAFF	STAFF	ASLT	HP Z210	2UA1411DWM
8303	Browne	Kathryn	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK 8460p LT	CNU1141TMY
4254	STAFF	STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1321RZC
8313	Ortiz	Guillermo	BUSINESS, ED. & PROF. PROGRAMS	MACBOOK PRO (15-inch, Late 2011)	C02GM3U9DV7N
4134	WIMMER	RONDA	BUSINESS, ED. & PROF. PROGRAMS	MacBook Pro (15-inch, Early 2011)	C02FR1GVDF8Y
4120	STAFF	STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP TOUCHSMART 9100	3CR1111LPM
4122	ESTHETICIAN LAB	LAB	BUSINESS, ED. & PROF. PROGRAMS	HP TOUCHSMART 9100	3CR1111LVH
4216	STAFF	STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JBH
4224	NGUYEN	CAT	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JB3
4224A	JACKSON	KYM	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220J9Y
4230A	STAFF	STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JB8
4230B	NOLAN	INGER	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JBC
4120	STAFF	STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JB9
4134	WIMMER	RONDA	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JBG
4134	STAFF	STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JB2
4136	STAFF	STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JB0
4210	BIAGI	LAURIE	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JBG
4210	SMITH	EVELYN	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JB4
4212	RICHARDSON	CARMEN	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JB5
4214	ADJUNCT	ADJUNCT	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JPZ
4216	CALDERON	TAMMY	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA1220JB7
4110	STAFF	STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA13105YX
4122	ESTHETICIAN LAB	LAB	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA14121QZ
5100	ADJUCNT FACULTY	ADJUCNT FACULTY	COUNSELING	DELL LATITUDE 13 LT	1TMH5L1
4247	STAFF	STAFF	COUNSELING	HP Z210	2UA13105YY
1217C	STAFF	STAFF	COUNSELING	OPTIPLEX 980	H9PYKN1
4245	STAFF	STAFF	COUNSELING	HP Z210	2UA13105YT
4245	STAFF	STAFF	COUNSELING	HP Z210	2UA13105YW
4258	STAFF	STAFF	GLOBAL LEARNING	HP Z210	2UA1340V8Z
4242	STAFF	STAFF	HONORS TRANSFER	HP Z210	2UA13105YZ
3113	Simmers	Kevin	KINESIOLOGY/ATHLETICS/DANCE	DELL OPTIPLEX 980	GWTBNN1
3134	Corsiglia	Kevin	KINESIOLOGY/ATHLETICS/DANCE	HP ELITEBOOK 8460P	CNU1181JZK
3203	Piergrossi	Justin	KINESIOLOGY/ATHLETICS/DANCE	MacBook Pro (15-inch, Early 2011)	C02G32CCDF8Y
3E	Bonilla	Jose	KINESIOLOGY/ATHLETICS/DANCE	iMAC	D25GC1UTDHJR
8309	FACULTY	FACULTY	LANGUAGE ARTS	DELL LATITUDE E6410 LT	HBKXVM1
8112A	Gutierrez	Mary	LANGUAGE ARTS	HP Z210	2UA1220JBD
8215	FACULTY	FACULTY	LANGUAGE ARTS	MACBOOK PRO (15-inch, Early 2011) LT	C02G525PDRJL
4329B	CHERIE	COLIN	MARKETING	DELL OPTIPLEX 980	6XBBNN1
4329	STAFF	STAFF	PUBLIC INFORMATION	HP Z210	2UA1211XW2
4329	STAFF	STAFF	PUBLIC INFORMATION	HP Z210	2UA13105YV
1311B	GULLI	RITA	SMT	LT - DELL XPS	3VNJWL1
1311B	WILCHER	AARON	SMT	MacBook Pro (15-inch, Late 2011)	C02GN3ZHDV7N
1219	JOE	LIDYA	SMT	OPTIPLEX 980	BLZMLM1
7222	DANIEL	BRIAN	SMT	DELL LATITUDE E6410	GQXR2M1
7324D	LEACH	EVAN	SMT	MACBOOK PRO LT	C02GJ3WCDRJM
7108B	RUECKHAUS	PAUL	SMT	MACBOOK PRO	C02G525NDRJL
7326C	HASSON	DAVID	SMT	MacBook Pro (15-inch, Early 2011)	C02GF3L2DRJL
1120	BRUNO	ZACHARY	SOCIAL SCIENCE / CREATIVE ARTS	iMAC	D25FX1FCDHJT
2319	MICHAEL	MOYNIHAM	SOCIAL SCIENCE / CREATIVE ARTS	MACBOOK PRO 15 INCH, MID 2009	W80022Y97XK
2319	JAMES	WONG	SOCIAL SCIENCE / CREATIVE ARTS	MacBook Pro (15-inch, Early 2011)	C02G91CLDRJL
1219	SPARKPOINT	SPARKPOINT	SPARKPOINT	DELL VOSTRO 320	29J3KK1
1221A	SPARKPOINT	SPARKPOINT	SPARKPOINT	OPTIPLEX 960	DH7WTL1
1222	STAFF	STAFF	SPARKPOINT	OPTIPLEX 980	BLYPLM1
1221A	STAFF	STAFF	SPARKPOINT	OPTIPLEX 980	H9R0LN1
2242	GREG	FRAUNFELDER	STUDENT SERVICES	DELL OPTIPLEX 960	49338K1
2225	ADRIANA	ARMAS	STUDENT SERVICES	HP Z210	2UA1211XW5
2226	FACULTY MAIL ROOM	FACULTY MAIL ROOM	STUDENT SERVICES	HP TOUCHSMART 9300 ELITE	4CS12809W4
2225	ADMISSIONS AND RECORDS	ADMISSIONS AND RECORDS	STUDENT SERVICES	HP Z210	2UA1340V90
2225	ADMISSIONS AND RECORDS	ADMISSIONS AND RECORDS	STUDENT SERVICES	HP Z210	2UA135049S
2225	JORGE	MURILLO	STUDENT SERVICES	DELL OPTIPLEX 980	DBJ1PM1
2225	MINERVA	VELASQUEZ	STUDENT SERVICES	DELL OPTIPLEX 980	DBJ2PM1
1218	ENGLISH LANG INSTITUTE	ENGLISH LANG INSTITUTE		DELL VOSTRO 320	JNJ3KK1
1219	EMPLOYMENT SERVICES CENTER	EMPLOYMENT SERVICES CENTER		DELL VOSTRO 320	2PJ3KK1
4330	STAFF	STAFF		HP Z210	2UA14126K9

Faculty and Staff Computer Replacement Schedule F2017/SP2018

Location	Last	First	Division Department	Computer DESKTOP, MAC, LAPTOP	ST / SN
1311G	FLORES	RICARDO	ASLT	Mac mini (Late 2012)	C07K134TDWYL
1311G	FLORES	RICARDO	ASLT	MacBook Pro (15-inch, Mid 2012)	C02KL17FF1G3
5110	STAFF	STAFF	ASLT	HP Z1e	2UA2201HNZ
5116	MEDIA	MEDIA	ASLT	HP ELITEBOOK 8460p LT	CNU2202G6D
5116	MEDIA	MEDIA	ASLT	HP ELITEBOOK 8460p LT	CNU2230C6D
5200	LIBRARY CIRCULATION AREA	LIBRARY CIRCULATION AREA	ASLT	HP TOUCHSMART 9300 ELITE	MXL2230R4N
5200	LIBRARY CIRCULATION AREA	LIBRARY CIRCULATION AREA	ASLT	HP TOUCHSMART 9300 ELITE	MXL2230R4M
5209	BRENNER	ERIC	ASLT	HP TOUCHSMART 9300 ELITE	MXL2230R4B
5207	STAFF	STAFF	ASLT	HP TOUCHSMART 9300 ELITE	MXL2411900
5108	REED	DAVID	ASLT	HP Z220	2UA3020SWT
5116	MEDIA	MEDIA	ASLT	MAC-BOOKPRO LT	W86451CNW0K
5207	DRISCOLL	CAROL	ASLT	HP Z220	2UA3280RHF
5211B	STAFF	STAFF	ASLT	HP Z220	2UA33018PM
8305A	Roumbanis	Christine	BUSINESS, ED. & PROF. PROGRAMS	HP Z210	2UA2030B5J
8119A1	FACULTY/STAFF	FACULTY/STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP TOUCHSMART 9330	MLX2230R4V
8119A1	FACULTY/STAFF	FACULTY/STAFF	BUSINESS, ED. & PROF. PROGRAMS	HP TOUCHSMART 9330	MLX2230R4H
8317B	FACULTY	FACULTY	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK 8470P LT	CNU2251ZDV
8305	Gorostiza	Angelica	BUSINESS, ED. & PROF. PROGRAMS	HP Z220	2UA3020SX2
8209A	Whitten	Linda K.	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK 8570P LT	5CB32201Q6
8119A2	Del Castillo-Brown	Teresita	BUSINESS, ED. & PROF. PROGRAMS	HP Z220	2UA328124Y
8111	Johsonn	Julia	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK 8570p LT	5CB3250S2G
8206	Ming	Dan	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK FOLIO 9470m LT	CNU3379S7N
8206	Ming	Dan	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK FOLIO 9470m LT	CNU3379S18
8-111	Johsonn	Julia	BUSINESS-AUTOMOTIVE	HP ELITEBOOK 8570P	5CB3250S2G
2352	STAFF	STAFF	GLOBAL LEARNING	HP ENVY SPRECTRE ULTRABOOK	SCD22324W4
3126	Hatzistratis	Sandra	KINESIOLOGY/ATHLETICS/DANCE	HP Z210	2UA22016JN
3134	Nomicos	Dino	KINESIOLOGY/ATHLETICS/DANCE	HP ELITEBOOK 8570p	5CB32201QW
3130	Morello	Joe	KINESIOLOGY/ATHLETICS/DANCE	HP TOUCHSMART 9300 Elite	MXL2230R4T
3146	STAFF	STAFF	KINESIOLOGY/ATHLETICS/DANCE	HP ELITEBOOK 9470m	CNU334B8LX
4325B	KAREN	WONG	LANGUAGE ARTS	HP FOLIO 13 LT	CND208M41M
4247	NATHAN	JONES	LANGUAGE ARTS	MacBook Pro (Retina, Mid 2012)	CO2J47MADKQ4
8210	Floro	Nina	LANGUAGE ARTS	MACBOOK PRO (15-inch, Mid 2012)	C02KL17FF1G3
8218	Williams	Rob	LANGUAGE ARTS	HP ELITEBOOK 8570P LT	5CB3250S3X
8112	Ruiz	Kennya	LANGUAGE ARTS	HP Z220	2UA3280RHG
7302	CHU	SERENA	LANGUAGE ARTS	HP FOLIO 9470M	CNU320B47N
8210	Castro	Luciana	LANGUAGE ARTS	MACBOOK PRO (15-inch, Mid 2012)	C02L33MTF1G3
8110	Kaplan-Biegel	Nancy	LANGUAGE ARTS	HP ELITEBOOK FOLIO 9470m LT	CNU332BMTN
8212	Feinblum	Kathleen	LANGUAGE ARTS	HP ELITEBOOK FOLIO 9470m LT	CNU332BLTH
8218	Silva	Paula	LANGUAGE ARTS	MACBOOK AIR (13-inch,Mid 2013) LT	C02L614KF6T6
8112B	Jones	Raymond	LANGUAGE ARTS	HP ELITEBOOK 8570P LT	5CB3220JYJ
4329	STAFF	STAFF	MARKETING	DELL OPTIPLEX 980	2W7JDP1
4329A	STAFF	STAFF	MARKETING	HP Z220	2UA3280RH9
6106	PUBLIC SAFETY	PUBLIC SAFETY	PUBLIC SAFETY	HP Z210	2UA2030B5L
5132E	STAFF	STAFF	SESP	HP TOUCHSMART 9300 ELITE	MXL2100BJ8
5132E	STAFF	STAFF	SESP	HP Z210	2UA212041L
5132F	MATTHEWS	MELISSA	SESP	HP TOUCHSMART 9300 ELITE	MXL2230R4S
5132H	STAFF	STAFF	SESP	HP TOUCHSMART 9300 ELITE	MXL2230R4C
5107	WANG	MIRANDA	SMT	iMac (27-inch, Mid 2011)	D25HT0KWDHJV
8236	Bates	Alec (A.J.)	SMT	MACBOOK PRO (mid 2012) 15" LT	C02L60BUF1G3
1219	FACULTY	FACULTY	SMT	HP Z220	2UA3020SWK
7324A	HOUGH	RICK	SMT	IMAC	D25H30LDDHJT
7326D	RIVERA-CONTRERAS	JOAQUIN	SMT	HP FOLIO 13 LT	CND208M412
7324C	ZAMANI	SOODI	SMT	MACBOOK PRO LT	C02KP2TAF1G3
7312	KOSKELO	ILKKA	SMT	HP ELITEBOOK 8570P LT	5CB3250S37
7320	WINDHAM	ADAM	SMT	HP ELITEBOOK 8570P LT	5CB3250S4P
7340	GHANMA	MOUSA	SMT	HP Z220	2UA33018SL
7324B	MOSS	CINDY	SMT	HP ELITEBOOK 8570P LT	5CB3250S3W
7209	ERSKINE	ALICE	SMT	HP ELITEBOOK FOLIO 9470M	CNU320B1D1
7322	WILLIAMS	PHILLIP	SMT	HP FOLIO 9470M LT	CNU320B3Q1
7216	FREEDMAN	JON	SMT	MACBOOK PRO	C02L40VEF1G3
7322	CHOI	YOUNGA	SMT	MACBOOK PRO LT	C02L60BTF1G3
7216	TSUSHIDA	TADASHI	SMT	MACBOOK PRO	C02L60BYF1G3
7314	ANTILLA-SUAREZ	CARINA	SMT	MACBOOK PRO LT	C02KR4AZDV33
7324E	STAFF	STAFF	SMT	HP ELITEBOOK FOLIO 9470M LT	CNU3209V7M
7214	CASE	CHRISTINE	SMT	iMAC	D25LL2NMF8J3
1308	BRIDENBAUGH	PAUL	SOCIAL SCIENCE / CREATIVE ARTS	MacBook Pro (Retina, 15-inch, Early 2013)	C02L60B2FFT4
1308	ESFAHANI	AMIR	SOCIAL SCIENCE / CREATIVE ARTS	MACBOOK PRO	C02L60B1FFT4
1318	RASKIN	JESSE	SOCIAL SCIENCE / CREATIVE ARTS	MacBook Pro (Retina, Mid 2012)	C02J47M9DKQ4
1101B	SOC SCIENCE	SOC SCIENCE	SOCIAL SCIENCE / CREATIVE ARTS	HP TOUCHSMART 9300 ELITE	MXL2230R4K
1101B	SOC SCIENCE	SOC SCIENCE	SOCIAL SCIENCE / CREATIVE ARTS	HP TOUCHSMART 9300 ELITE	MXL2230R4K
1101B	SOC SCIENCE	SOC SCIENCE	SOCIAL SCIENCE / CREATIVE ARTS	HP T00UCHSMART 9300 ELITE	MXL2230R4K
1104	WORK ROOM	WORK ROOM	SOCIAL SCIENCE / CREATIVE ARTS	HP TOUCHSMART 9300 ELITE	MXL2230R4R
1132	NAVARI	JUDE	SOCIAL SCIENCE / CREATIVE ARTS	MACBOOK PRO LT	C02JH169F1G3
1108	FITZPATRICK	KATHY	SOCIAL SCIENCE / CREATIVE ARTS	HP Z220	2UA3141182
1110	BESTOCK	DONNA	SOCIAL SCIENCE / CREATIVE ARTS	HP COMPAQ ELITE 8300	MXL31712X0
1110	BESTOCK	DONNA	SOCIAL SCIENCE / CREATIVE ARTS	HP ELITE 8300 AIO TOUCH	MXL31712XO
1102	BELL	ROSEMARY	SOCIAL SCIENCE / CREATIVE ARTS	iMAC	C17JV1A4DNCR
1122	HAWKINS	MICHELLE	SOCIAL SCIENCE / CREATIVE ARTS	MACBOOK PRO LT	C02L60C1F1G3
2317	JENNIFER	MERRILL	SOCIAL SCIENCE / CREATIVE ARTS	HP ELITEBOOK 8570P LT	5CB3220HH7
2317	COLOMBETTI	CARLOS	SOCIAL SCIENCE / CREATIVE ARTS	HP Z220	2UA33018Q0
2301	MASAO	SUZUKI	SOCIAL SCIENCE / CREATIVE ARTS	iMAC 21.5 INCH, LATE 2013	D25LL2X2F8J3
1311E	BRIDGET	FISCHER	SOCIAL SCIENCE / CREATIVE ARTS	Thunderbolt Display (27-inch)	C02KJ3AVF2GC
4242	ULLOA	JOHN	SOCIAL SCIENCE / CREATIVE ARTS	MacBook Pro (15-inch, Mid 2012)	CO2L33MUF1G3
1214	EIFLER	KEVIN	SPARKPOINT	HP COMPAQ ELITE 8300	MXL2461T1T
1212	STAFF	STAFF	SPARKPOINT	HP Z220	2UA3020SWR
2225	STAFF	STAFF	STUDENT SERVICES	DELL OPTIPLEX 980	2CTW9P1
2350	STAFF	STAFF	STUDENT SERVICES	HP TOUCHSMART 9300 ELITE	MXL2100BH6
2350	GINA	CIARDELLA	STUDENT SERVICES	HP TOUCHSMART 9300 ELITE	MXL2082C7W

Faculty and Staff Computer Replacement Schedule F2017/SP2018 (Continued)

Location	Last	First	Division Department	Computer DESKTOP, MAC, LAPTOP	ST / SN
6212	STUDENT LIFE	STUDENT LIFE	STUDENT SERVICES	HP TOUCHSMART 9300 elite	MXL2100BHH
6212	STUDENT LIFE	STUENT LIFE	STUDENT SERVICES	HP TOUCHSMART 9300 elite	MXL2100BKG
2118	Lee	Goldie	STUDENT SERVICES	HP Z210	2UA212041J
6212A	CARIADUS	AMORY	STUDENT SERVICES	HP Z210	2UA2120417
6210	RESOURCE ROOM	RESORUCE ROOM	STUDENT SERVICES	HP Z220	2UA3220MB7
6214	ASSOCIATE DESK	ASSOCIATE DESK	STUDENT SERVICES	HP Z220	2UA3220MBD
6214A	ASSOCIATE TREASURE	ASSOCIATE TREASURE	STUDENT SERVICES	HP Z220	2UA3220MB6
6214B	ASSOCIATE PRESIDENT	ASSOCIATE PRESIDENT	STUDENT SERVICES	HP Z220	2UA3220MB0
2234	Financial Embassador	Financial Embassador	STUDENT SERVICES	HP Z220	2UA33018S4
2216	STAFF	STAFF	STUDENT SERVICES	HP Z220	2UA328124V
2225	STAFF	STAFF	STUDENT SERVICES	HP Z220	2UA328124X
2208	STAFF	STAFF	STUDENT SERVICES	HP Z220	2UA33018QZ
2225	MARIANO	ELNORE	STUDENT SERVICES	HP Z220	2UA33018RG
2236	IMELDA	HERMOSILLO	STUDENT SERVICES	HP Z220	2UA33018PL
4324	ELOISA	BRIONES	VPA	DELL OPTIPLEX 9020	BGF3122
4326	STAFF	STAFF	VPA	DELL OPTIPLEX 980	2W7GDP1
4326	ON FLOOR	ON FLOOR	VPA	DELL OPTIPLEX 990	95SPDQ1
1219B	CAREER CENTER	CAREER CENTER		HP TOUCHSMART 9300 ELITE	MXL2100BHL
1219B	SKY CAREER CENTER	SKY CAREER CENTER		HP TOUCHSMART 9300 ELITE	MXL2100BJ6
1214	SPARPOINT RECEPTION	SPARKPOINT RECEPTION		HP COMPAQ ELITE 8300	MXL2461T24

Faculty and Staff Computer Replacement Schedule F2018/SP2019

Location	Last	First	Division / Department	Computer DESKTOP, MAC, LAPTOP	ST / SN
5117A	MARCELO	ROGER	ASLT	HP Z230	2UA4320JG7
1311H	CTTL	CTTL	ASLT	HP Z230	2UA4450T76
5208	WOLBERS	DENNIS	ASLT	HP Z230	2UA406290X
5133	HOUPIS	JIM	ASLT	HP Z230	2UA4241XB0
5116	BUCCERI	KAMLA	ASLT	HP Z230	2UA4320SPY
5133	DILAMANTA	KAREN	ASLT	HP Z230	2UA44118NK
5200	STAFF	STAFF	ASLT	HP Z230	2UA44118NT
5133	STAFF	STAFF	ASLT	HP Z230	2UA4450T76
8209C	Zhang	Hellen	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK 840 G1 LT	CNU425CR51
8119A2	Staff 8119A2	Staff 8119A2	BUSINESS, ED. & PROF. PROGRAMS	HP Z230	2UA4421NZQ
8317A	Brower	Kristina	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK 840 G1 LT	5CG45246QC
8207	Motipara	Sita	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK 840 G1 LT	CNU421D22S
8-113	Parra	Ruben	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK FOLIO 9470m LT	CNU403BB91
1311J	VARONA	ALINA	BUSINESS, ED. & PROF. PROGRAMS	HP ELITEBOOK 840	CNU432BFZ3
1210	JEAN	MARILYN	COOPERATIVE ED	HP Z230	2UA4380HSW
1215	ZANASSI	LAVINIA	COUNSELING	HP Z30	2UA44118NY
1220	STAFF	STAFF	COUNSELING	HP Z230	2UA44118NQ
5100	STAFF	STAFF	COUNSELING	HP Z230	2UA4421NZG
2352	ALESSANDRA	ZANASSI	GLPS	HP Z230	2UA4461S94
2352	ZAID	GHORI	GLPS	HP Z230	2UA4461S93
4256	CHIKAKO	WALKER	GLPS	HP Z230	2UA4380TYC
4252	BENNANI	WISSEM	GLPS	HP Z230	2UA40413XZ
3202	Fitzgerald	Michael	KINESIOLOGY/ATHLETICS/DANCE	HP Z230	2UA4421NZZ
3144	Fosberg	Jan	KINESIOLOGY/ATHLETICS/DANCE	MacBook Air (13-inch, Mid 2013)	C02M3SBF6T6
4248	LACHMAYR	LUCIA	LANGUAGE ARTS	HP ELITEBOOK 840 G1 LT	CNU416DFT6
8215	Shaw	Leigh Anne	LANGUAGE ARTS	HP ELITEBOOK FOLIO 9470m LT	CNU403C7NP
7302	CROSS	MICHAEL	LANGUAGE ARTS	HP ELITEBOOK 840	CNU4239H43
8212	Bowsher	Jim	LANGUAGE ARTS	HP ELITEBOOK 840 G1 LT	CNU423BZ8S
8214	Powell	Danielle	LANGUAGE ARTS	MACBOOK AIR (13-inch, Early 2014)	C02N45WVG5RP
8214	Hurless	Jessica	LANGUAGE ARTS	MACBOOK AIR (13-inch, Early 2014)	C02N52XDG5RP
8112B	Program Services Coordinator	Program Services Coordinator	LANGUAGE ARTS	HP Z230	2UA4421NZ3
8114	Language Arts Adjunct	Language Arts Adjunct	LANGUAGE ARTS	iMAC (21.5 inch Late 2013)	C02NC082F8J2
8309	FACULTY	FACULTY	LANGUAGE ARTS	DELL OPTIPLEX GX240	5HFDS11
4329	CONNOR	FITZPATRICK	MARKETING	HP ELITEONE 800	MXL4030KX9
4314	STAFF	STAFF	MARKETING	HP Z230	2UA51313V4
2225	ANNIE	TRINH	OPERATIONS	HP Z230	2UA4210Z3K
2225	NANCY	ARGARIN	OPERATIONS	HP Z230	2UA4210Z3F
1301	HEARNE	STEPHEN	PSYCHOLOGY	HP Elitebook 850	5CG5100RG2
6106	PUBLIC SAFETY	PUBLIC SAFETY	PUBLIC SAFETY	HP Z230	2UA5162H9J
6106	PUBLIC SAFETY	PUBLIC SAFETY	PUBLIC SAFETY	HP Z230	2UA51622H9K
6106	PUBLIC SAFETY	PUBLIC SAFETY	PUBLIC SAFETY	HP Z230	2UA5162H9L
6106-A	PUBLIC SAFETY	PUBLIC SAFETY	PUBLIC SAFETY	HP Z230	2UA5162H9H
7217	BOOKSTAFF	SHARI	SMT	MACBOOK AIR	C02M37E6F5V8
7219	AHMED	IJAZ	SMT	HP Z230	2UA4132QYY
7326B	GRANDY	CARLA	SMT	MACBOOK AIR LT	C02N551VG5RP
7130	UTSUMI	ALANA	SMT	HP Z230	2UA44118NR
7102	ADJUNCT FACULTY	ADJUNCT FACULTY	SMT	HP Z230	2UA4421P05
7102	ADJUNCT FACULTY	ADJUNCT FACULTY	SMT	HP Z230	2UA4421NZF
7102	ADJUNCT FACULTY	ADJUNCT FACULTY	SMT	HP Z230	2UA4421NZB
7102	ADJUNCT FACULTY	ADJUNCT FACULTY	SMT	HP Z230	2UA4421NZS
7130	TARIQ	NADIA	SMT	HP Z230	2UA4421NZL
7245	JOHNSON	KYLIN	SMT	HP Z230	2UA4421NZ9
7340	CHEANG	GARY	SMT	HP Z230	2UA4421NZD
7224	KAPP	NICK	SMT	HP ELITEBOOK 850	5CG51144KH
1307	DAVID	EILEEN	SOCIAL SCIENCE / CREATIVE ARTS	IMAC	QP72271VUW
1309	FISCHER	BRIDGET	SOCIAL SCIENCE / CREATIVE ARTS	LT - MACBOOK AIR	C02MG37YF6T6
2303	GEORGE	BUCKINGHAM	SOCIAL SCIENCE / CREATIVE ARTS	HP Z230	2UA4421NZ6
1311E	BRIDGET	FISCHER	SOCIAL SCIENCE / CREATIVE ARTS	MacBook Air (13-inch, Mid 2013)	C02MG37YF6T6
2112	ARTHUR	TAKAYAMA	SOCIAL SCIENCE/CREATIVE ARTS	iMAC 27-inch all-in-one Late 2013	C02M83TF8J4
1221	STAFF	STAFF	SPARKPOINT	HP Z230	2UA5161G03
2211	CALWORKS/JAVIER	CALWORKS/URENA	STUDENT SERVICES	DELL INSPIRON 15	JXQGSZ1
2225	ADMISSION-TEMP	ADMISSION-TEMP	STUDENT SERVICES	HP Z230	2UA41919NX
2116	SKY PROCTOR 1	SKY PROCTOR 1	STUDENT SERVICES	HP Z230	2UA41919M3
2118	STAFF	STAFF	STUDENT SERVICES	HP Z230	2UA41919M2
2225	MARCELA	ESCOBAR	STUDENT SERVICES	HP Z230	2UA4210Z3G
2224	WILL	MINNICH	STUDENT SERVICES	HP Z230	2UA4271GT2
2225	STAFF	STAFF	STUDENT SERVICES	HP Z230	2UA4271GSZ
2225	COUNSELING DIVISION	COUNSELING DIVISION	STUDENT SERVICES	HP Z230	2UA4320HLH
2225	COUNSELING DIVISION	COUNSELING DIVISION	STUDENT SERVICES	HP Z230	2UA43914Y8
2232	UBUNGEN - OUTREACH COORDINATOR	FLORENTINO -OUTREACH COORD.	STUDENT SERVICES	HP Z230	2UA44118NM
2233	COUNSELING	COUNSELING	STUDENT SERVICES	HP Z230	2UA44118NV
2238	KWAME	THOMAS	STUDENT SERVICES	HP Z230	2UA44118NP
2239	KENT	GOMEZ	STUDENT SERVICES	HP Z230	2UA44118NW
2232	OUTREACH OFFICE	OUTREACH OFFICE	STUDENT SERVICES	HP Z230	2UA44118NN
2229	SUZANNE	POMA	STUDENT SERVICES	HP Z230	2UA4421NZX
2234	Financial Aid - Front Counter	Fin. Aid - Front Counter (MIDDLE SIDE)	STUDENT SERVICES	HP Z230	2UA4421P02
2240	NATE	NEVADO	STUDENT SERVICES	HP Z230	2UA4421P00
5130	NEWKIRK	CAROL	STUDENT SERVICES	HP Z230	2UA4429NZH
5131	ROBINNS	KARMANN	STUDENT SERVICES	HP Z230	2UA4440Z0F
2241	LORRAINE	DEMELLO	STUDENT SERVICES	HP Z230	2UA4450T75
2212	EOPS	EOPS	STUDENT SERVICES	HP Z230	2UA4271GSX
2228	JACQUELINE	ESCOBAR	STUDENT SERVICES	HP Z230	2UA5161FZV
1311C	STAFF	STAFF	WORFORCE DEVELOPMENT	HP Z230	2UA4132QYX
1311B	KOH	KHRISTOPHER	WORFORCE DEVELOPMENT	HP TOUCHSMART 9300 ELITE	MX2082C7X
3C	Muller-Moseley	Claire		HP Z230	2UA4181WRR
223A	SUSAN	LORENZO		HP Z230	2UA4271GST
2230A	COUNSELING	COUNSELING		HP Z230	2UA4421NZ2

Appendix C

2016-2020 Instructional Lab Replacement Schedule

It is expected that changes in College instructional priorities and technology will impact this schedule in future years. Therefore, years 2017-20 are minimal projections. The actual amounts will be more. The details of the replacement schedule will be annually reviewed and updated.

Lab Identification Criteria (In priority)

1. What is the relevance of the program to the College's vision and strategic plan?
2. Does the current equipment and/or software prevent the program from reaching student-learning outcomes?
3. Does the current equipment and/or software restrict effective instruction?
4. Are program enrollment demands exceeding the current lab capabilities?
5. Has there been an excessive number of service calls associated with the lab?
6. Are any of the above conditions likely to occur in the next 18 months?

Lab Replacement Schedule 2016-2017			
Bldg	Room	Program	Qty
7	309	MESA	6
8	101	Automotive	5
11	107	Automotive	12
2	225	Student Services	13
7	241	Biology	36
Lab Replacement Schedule 2017-2018			
Bldg	Room	Program	Qty
7	339	Chemistry	36
7	339	Physics	25
8	202	Automotive	19
8	200	Automotive	10
Lab Replacement Schedule 2018-2019			
Bldg	Room	Program	Qty
5	110	ESL	4
8	110	Journalism	14
2	232	Testing	12
5	100	Learning Center	25
2	117A	Student Computer Lab	43
Lab Replacement Schedule 2019-2020			
Bldg	Room	Program	Qty
8	121	Business	40
8	119	Business	37
5	100C	Language Lab	37
5	131	DRC Classroom	15
7	211	Allied Health Learning Center	7
1	201	Midi Classroom	12
8	103	Automotive	4

Appendix D

Spring 2017 Update: Skyline College Smart Classroom

1ea	Epson PL1975W Projector	1,999.00
	or	
1ea	Epson Pro-6700W	3,000.00
1ea	Chief RPMA027 Custom Proj Mount with (A) Key Lock	189
1ea	JBL CSMA 1120 Amp	450
1ea	JBL CSR-V Volume Control	60
1ea	Cables To Go Trulink A/V Controller	280
1ea	Atlona Scalier Switch AT-UHD-CLSO-601	1,500.00
1ea	Atlona AT-UHD-EX-100CE-RX Receiver for Projector	380
1ea	Apple TV 3rd gen	70
1ea	Maclocks' Apple TV Security Mount 2013 Model	87
1ea	LG BP350 Wi-Fi Blu-ray Disc Player	80
1ea	**Lumens PS751 DocCam**	**1,350.00**
	or	
1ea	**Epson DC-21 Document Camera V12H758020**	**699**

Appendix E

District Technology Standards

Current Projectors and Cameras Used in Skyline Smart Classrooms

Projectors	Document Cameras
Epson EMP 811	Lumens PS760
Epson EMP6001i	Samsung UF-130
Epson Pro GL5350NL	
Epson EMP6010i	

Procurement of Technology

A. The following information serves as a budget planning aid for technology, and to give equipment specifications.

B. All products listed at the following web address are subject to change without notice.
   - http://www.smccd.edu/dsgs/#filter=*

C. Prices are volatile and are subject to change. The prices listed on this web page may not reflect the actual cost at time of purchase.

D. There may be discounts on quantities five or greater.

E. If you do not see the exact product you need, contact your campus technology lead.

Appendix F

District ITS Strategic Plan for Information Technology
2012-2016
Revised April 2013

https://smccd.edu/its-resources/wp-content/uploads/2014/02/its-strategic-plan.pdf

Appendix G

Technology Advisory Committee Member and Contributors
2016-2017

- Bridget Fischer, Social Science/Creative Arts Faculty Division Faculty –Co-Chair
- James Houpis, Dean ASLT Division—Co-Chair
- Jairo Bareto, District IT
- Rachel Bell, Language Arts Division Faculty
- Shari Bookstaff, Science, Math and Technology Faculty
- Tom Broxholm, Business, Education and Professional Programs Faculty
- Yoseph Demissie, District IT
- Amir Esfahani, Social Science/Creative Arts Division Faculty
- Ricardo Flores, ASLT Representative
- Nina Floro, CTTL
- Rich Golz, District IT
- Ray Hernandez, Dean SMT Division
- Pearl Ly, Director Learning Commons
- Wendy Lum, District IT
- Roger Marcelo, Media Services
- Will Minnich, Dean Enrollment Service
- Zahra Mojtahedi, PRIE
- Cindy Moss, Science, Math and Technology Faculty
- Guillermo Ortiz, Business, Education and Professional Programs Faculty
- Danielle Powell, Language Arts Division Faculty
- David Reed, Learning Center
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- Marisa Thigpen, ASLT and Classified Representative
- Kalani Viloria, ASSC Representative
- Karen Wong, PRIE