

Oregon Coast Community College
Ad Hoc Report to Address Recommendation 5 from the
NWCCU Fall 2019 Self-Evaluation Initial Accreditation Report



Submitted to the Northwest Commission on Colleges and Universities (NWCCU)

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INTRODUCTION

Following submission of its Self-Evaluation for Initial Accreditation Report, Oregon Coast Community College hosted a seven-member NWCCU evaluation committee over the period of October 16-18, 2019. In its February 2020 letter granting OCCC initial regional accreditation, the Commission issued five commendations and five recommendations. Of the five recommendations, the Commission asked OCCC to address Recommendation 5 in an “Ad Hoc Report without visit in Spring 2021.”

Recommendation Five reads: Develop, implement, and review a comprehensive technology infrastructure plan (2020 Standards: 2.1.1)

2020 Standard 2.1.1: *Consistent with its mission, the institution creates and maintains physical facilities and technology infrastructure that are accessible, safe, secure, and sufficient in quantity and quality to ensure healthful learning and working environments that support and sustain the institution’s mission, academic programs, and services.*

At the time of the 2019 NWCCC self-evaluation and visit, OCCC was in the final stages of implementation of a five-year Technology Infrastructure Plan initiated in 2015. That plan had brought about significant change in the IT environment of OCCC, moving the College forward in a manner not seen before in the history of the institution. As a result of that plan, the College updated and improved IT infrastructure, entirely revamped its IT staffing structure, improved and stabilized wireless access, migrated from Google to a Microsoft environment, replaced an ineffective LMS, introduced student email, deployed an effective system of video-conferencing, and enhanced data integrity and security. In 2019 the portions of the 2015 plan that had yet to be fully implemented were the result of changing conditions that occurred within the planning timeframe, and they were significant. A cyber-attack in 2018 (which was successfully thwarted) and the discontinuance by the vendor of the ERP (SharkNet) both required a much deeper commitment of time and resources (human and fiscal) than had been envisioned in 2015. It was clear to leadership that, given the magnitude and changed nature of the implementation, the fulfillment of the five-year plan would now extend at least into 2021. It was also clear that the outcomes of these major endeavors should be carefully assessed as inputs to the next IT infrastructure planning process. And then, in March 2020, the pandemic arrived, overnight profoundly changing how OCCC could and should serve our students.

Information Technology is now a more strategic aspect for the future of OCCC than ever before. We are at a uniquely opportune (or potentially perilous) moment in time to consider the long-range role and design of IT at OCCC. The pandemic brought into stark relief the criticality of effective remote learning, teaching, and operations along with the gaps in technology access for many of those it is our mission to serve. This occurred as the College was part-way through a once-in-a-decade culture and infrastructure change of moving from an antiquated server-based ERP to a cloud-based 21st century system. Finally, along with every other college, but perhaps even more challenging due to our small size and IT resources, we are grappling with how to keep our students, data, and employees secure in an increasingly dangerous cyber-world.

For the past six years, we have approached IT in a very methodical and intentional way. The improvements implemented in this timeframe (including new LMS, improved wireless, technology enhanced classrooms, IT staffing structure, student IT hardware loan programs) enabled us to adapt and respond more quickly as conditions shifted. We remain confident in our judgement that outputs from the 20-21 IT supported initiatives are essential inputs to our planning of the next long-term IT infrastructure plan, and that it would be imprudent to finalize the next long-term plan without assessing the impacts of these major systemwide changes. The planning and development process for the long-term plan is underway. Those aspects of the IT infrastructure plan less dependent on outputs (for

example, life-cycle replacement plans for end-user devices) are more fully developed. There is also a completed bridge plan for 20-21 to guide our work past the end of the 2015-2020 plan.

Three themes highlighted in this introduction: remote services/on-line learning, ERP migration, and cyber security are themes connecting our three iterations of planning (2015-2020, 20-21 Bridge, anticipated 2021-2026) of IT Infrastructure described in this status report.

Mission

At Oregon Coast Community College we equip students for success by providing educational pathways and supports in response to the diverse needs of our community. Through accessible and engaging programs, we enrich the economic and civic vitality of Lincoln County and beyond.

Current Environment: Technology Planning Bridge Year 2020-21; COVID-19

The Bridge Year of 2020-21 was originally envisioned to be a period of progress assessment and identification of needs, subsequent to the completion of the 2015-20 technology planning period and the formulation of the new five-year 2021-26 technology plan. A month after receiving notification of independent accreditation, in March 2020 the COVID-19 pandemic forced an immediate and drastic alteration in virtually every aspect of the College's operations. These changes were accompanied by new demands on College resources, combined with rising costs and revenue constraints, and set the stage for the 2020-21 Bridge Planning Year. The magnitude and immediacy of the shift to technology-based learning and services, while challenging, has also provided the College with an ideal environment to assess its progress in effective technology implementation and usage, and to identify gaps and needs in providing service to its students and its community.

Due to operating restrictions implemented in March 2020 as a result of COVID-19, in a period of two weeks OCCC shifted the lecture component of all scheduled Spring 2020 term courses to remote instruction. Wherever feasible, courses with a laboratory component were also migrated to remote instruction. Those laboratory courses unsuitable for effective remote instruction were either cancelled or modified to allow for small-group, socially distanced in-person instruction. As of Winter 2021, most lectures remain remote, but medical, science, and some industrial technology laboratory components have returned to campus. The unprecedented demands on IT support and equipment for classroom and remote instruction remain high, as does the need for remote student supports and services.

After experiencing rising enrollment throughout the 2019-20 academic year, student enrollment began to decline in the Spring 2020 term, the first term in which new COVID restrictions and remote instruction went into effect. The declining trend in enrollment continues and is being experienced by Colleges state-wide. Currently, OCCC's Summer and Fall 2020 and Winter 2021 Full Time Enrollment is down 17% over the same time-period from the prior year. Oregon is entering a two-year budget biennium process and early indicators signal that funding from the state is likely to be flat over the previous funding period. Declining enrollment in conjunction with state funding constraints foreshadow a possible decline in community colleges' share of the state funding allocation in the 2021-23 biennium. This potential, combined with anticipated tuition loss and ongoing cost escalators in health care, retirement, and negotiated personnel expenses, informs the College's assessment and review of the Technology Infrastructure Plan (2015-2020), formulation of planning assumptions, and development of inputs for the 2021-26 Plan.

Critical to technology planning is the identification and effective use of supplementary funding streams. The Coronavirus Aid, Recovery, and Economic Security Act (CARES) and the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) were enacted to provide financial support to educational institutions in implementing changes necessary to continue operations under COVID

restrictions. OCCC, newly independent, was nevertheless under-funded through these acts due to the funding formula used to calculate allocations, which was based on 2018 FTE and Financial Aid eligibility prior to OCCC independence or Title IV eligibility. During the 2018 timeframe, OCCC was still viewed by the Department of education as a campus of Portland Community College (PCC). Consequently, due to the use of the 2018 enrollment data, OCCC was reliant on negotiations with PCC to receive its allocation and was not eligible for the federal stabilization funding which brought small Colleges up to a \$500k minimum CARES funding distribution. Local state legislators were eventually able to secure the shortfall as part of a state block grant that was passed back to the College.

Having not been included in the CARES Act funding, OCCC was also passed over for CRRSAA funding, and is again reliant upon PCC for allocation of funding. The discrepancy between CARES Act funding between what OCCC received from PCC compared to what a smaller neighboring college received from the Department of Education continues to highlight the challenges faced by OCCC regarding receipt of equitable funding to support pandemic related expenses (often linked to technology infrastructure). Resource planning has also been negatively impacted, as each new potential federal funding augmentation has lacked initial clarity as to what funds might flow to OCCC, and whatever funds were issued were considerably delayed by the extra process steps of funds diverted via another college. These shortfalls and challenges are likely to continue through CRRSAA funding and through the newly announced American Rescue Plan Act funding. OCCC's president has thoroughly researched alternative application avenues for federal relief funding, and while not optimum for the reasons stated above, working through PCC for our allotment remains the approach that will most quickly bring the much-needed relief funds to students and OCCC.

Changes in operations due to COVID-19 are forecast to continue for an unspecified period of time as the College plans for its 2021-2026 Technology Infrastructure Plan (TIP), accompanied by the potential for funding constraints paired with rising costs. Even with mitigation of the pandemic-related constraints it is unlikely that OCCC will be able to regain an enrollment decline of 17% as quickly as it was lost. Identification of 2020-21 as a "Bridge" year in technology planning has proven to be prescient and valuable to the College as current and future needs are identified and integrated in preparation for the next five-year plan.

OCCC RESPONSE TO RECOMMENDATION 5

Recommendation #5: develop, implement, and review a comprehensive technology infrastructure plan. (2020 Standards: 2.I.1)

Overview

In 2015 as part of the College's long-term, comprehensive planning process, the College initiated an external review of OCCC's Technology Infrastructure which revealed a need to strengthen the college's administrative data systems and cybersecurity. OCCC initiated steps to address those findings, which formed the basis of the 2015-20 plan and provided a focus for technology improvements during that time.

The February 2020 NWCCU evaluation committee's recommendation to "develop, implement and review a comprehensive infrastructure technology plan" coincided with the end of the College's current technology planning cycle (2015-20) and confirmed for OCCC the need to prioritize the College's assessment of current progress and needs, and formulate a new five-year 2021-26 TIP. The 2020-21 academic year was designated as a "Bridge" year between the two plans, to provide for this assessment and evaluation of the prior plan and development of planning assumptions for the new planning period.

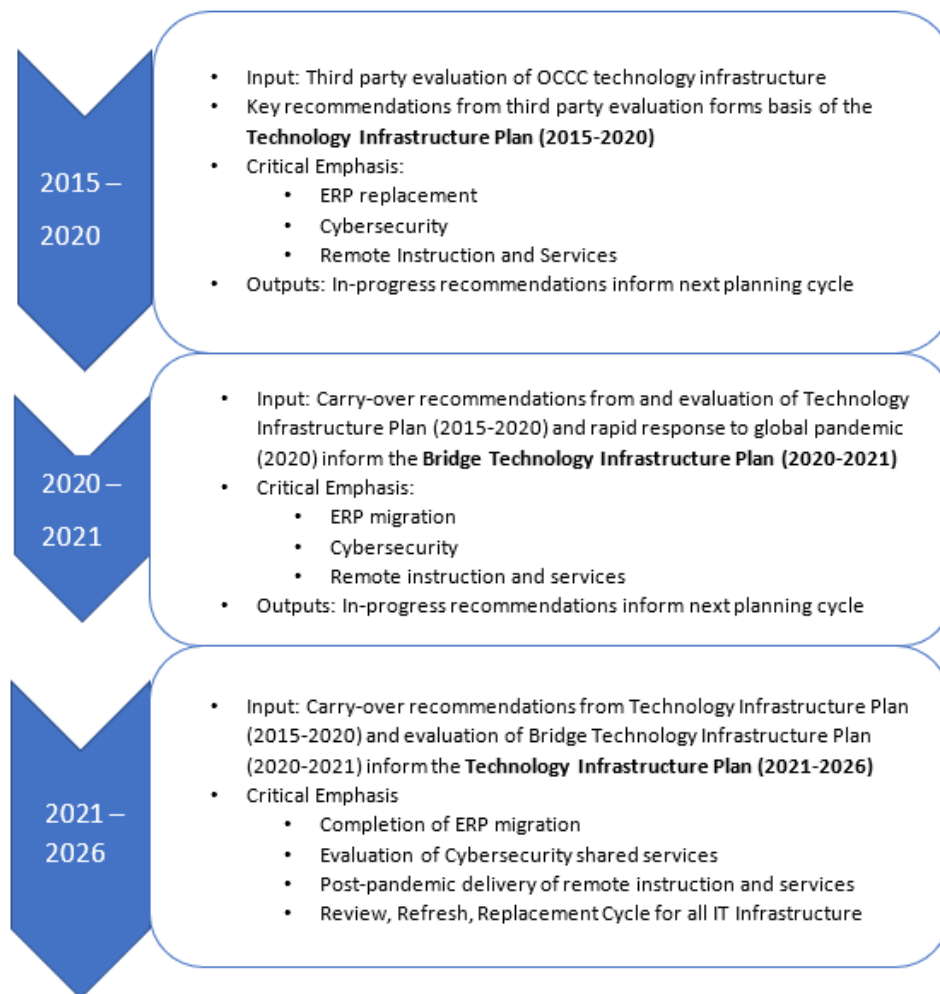
Below is a summary of the steps OCCC has taken leading up to and since the site visit to address technology infrastructure planning and to respond to the continually changing landscape of technology planning during the current pandemic. More detailed descriptions follow.

1. Reviewed prior Technology Infrastructure Plan (2015-2020) and identified financial and human resources necessary to accelerate full implementation of any remaining initiative items in 2020.
2. Developed and implemented the Bridge Technology Infrastructure Plan (2020-21) which addresses the capacity for substantial remote delivery of instruction and student support services in response to the global pandemic.
3. Strengthened cyber-security infrastructure and planning.
4. Continued assessment of outcomes from items 1 – 3 (above) to form the inputs to the next high-level 5-year Technology Infrastructure Plan (2021-2026)

Three planning phases in Technology Infrastructure Planning have therefore been delineated:

- The Technology Infrastructure Plan 2015-20
- The Bridge Technology Infrastructure Plan 2020-21
- The Technology Infrastructure Plan 2021-26

Figure 1. Inputs and outputs of Technology Infrastructure Planning Cycles



1. Prior Technology Infrastructure Plan (2015-20)

In 2015 OCCC contracted for an external review of its technology infrastructure. The resulting report provided the basis for the College's Technology Infrastructure Plan (2015-20). The recommendations and strategies embedded in that report were extensive and outlined a minimum of a five-year implementation. Some recommendations would take longer as the full extent of resources needed, barriers to be encountered, and the need to adapt the recommendations as technology and society changed could not be fully foreseen in 2015. Key recommendations from the report and current project status are listed in the following tables (Table 1, items completed; Table 2, items in progress or new).

Table 1. Completed or Near-Completed Recommendations from 2015-2020 Plan

Recommendation	Status
2. Consolidate servers, implement server best practices.	Completed
3. Data integrity: improve & secure data back-up	Completed
4. Reorganize IT staffing	Completed
5. Review & potentially replace LMS	Completed, implemented Canvas
6. Migrate from Google (email & applications) to Microsoft	Completed
7. Deploy a web-based software for video conferencing	Completed, Zoom is institutionalized; Microsoft Teams adopted internally 2020
8. New college website	Completed
9. Student email	Completed
11. HR Digital Forms	Significant portions completed, payroll automation (Paylocity).

Table 2. In-Progress Recommendations and New Priorities from 2015-2020 Plan

Recommendation	Evolution of Items In-Progress
1. Enhance security of IT systems	Holistic enhancement of College's cyber security environment. A continuing major recommendation. Significant budget implications.
10. Staff Training	More systemic consideration of PD needs overall and need to integrate with HR tracking systems.
12. Users' group for ERP (2015 ERP: SharkNet)	In 2018 Rogue CC, the host of OCCC's student information system, announced plans to sunset SharkNet by June 2020. This ERP-focused recommendation evolved into an RFP process followed by the full migration of the entire ERP to a commercially available cloud-based ERP by Anthology. SIS system is 90% implemented, next will be Finance and then Engage (CRM) module. Target completion of ERP migration is the 21-22 academic year.
NEW	Pandemic conditions of 2020-2021 necessitated a comprehensive and extensive pivot to remote access and delivery. During that time, IT infrastructure planning and implementation has now been focused on the support of this shift.

Coming at the end of the 2015-20 Technology Infrastructure planning cycle, the currently in-progress NWCCU Recommendation 5 and the new (pandemic response) priority that arose at the end of the 5-year cycle (Table 2) have been integrated into the 2020-21 Bridge Technology Infrastructure Plan and will continue to be priorities in the 2021-26 planning cycle. Two major themes, cybersecurity and transition to the new ERP system, remain constant and continue to be prevalent as a focus for current operations and for future planning.

ERP Migration: In 2018, OCCC concluded the RFP process for a replacement Enterprise Resource Planning system. As part of a five-college consortium, the College successfully selected a vendor, and began implementation. OCCC negotiated a contract within the means of the college, working with the Board to provide the additional funding needed over the two years of transition. The College also implemented a data archiving plan, configuration, training, and business process review. Go-live of various modules was scheduled to begin in February 2020, starting with financial aid packaging for AY 2020-2021.

The actual migration to and implementation of a new ERP, particularly as a consortium member with five colleges and as a newly independent College and in the times of a pandemic, has been necessarily extended beyond the anticipated implementation period. Consortium colleges have needed to reach agreement on standardized, common practices to reduce customization needs in the software. In some cases, this has required a change in internal practices at participating colleges, which has lengthened the time to implement software modules or configuration methods. The integration of external applications and learning management systems has also contributed to extensions, particularly when consortia colleges are not uniform in the external applications they are using. OCCC has utilized the extended implementation time to repeatedly seek input from students, faculty and staff on the ease of use or suggestions for improvement. This input and user testing has led to planned vendor modifications to the system, with these improvements scheduled in a series of phases into the 2021-22 academic year. While these delays were not reflected in the initial planning process, OCCC is confident that the extended time to full implementation will yield a higher level of system effectiveness and “user-friendliness” than could have been achieved without the benefit of this additional assessment and evaluation period. This recommendation from the 2015 external review integrated into the 2015-20 Plan, continued as a priority into the Bridge Technology Infrastructure Plan (2020-21), and will be a critical component of the 2021-26 plan, with ongoing assessment and continual improvement as a goal.

2. Bridge Technology Infrastructure Plan (2020-21) and Pandemic Response

Provisions from the 2015-20 Technology Infrastructure Plan (TIP) and the College’s Continuity of Operations Planning related to its Disaster Preparedness Strategy were targeted to ensuring continuity of instruction for students in the event of an emergency. These provisions included:

- A College mandate in 2017 that all courses, regardless of modality, have a Canvas (LMS) shell attached to the course in which (at a minimum) faculty would post grades and maintain a course syllabus and course schedule. The use of the learning management systems ensures continuity of, and access to, course information and materials for students in the event the College cannot operate in person. The College provided (and continues to provide) training to all Faculty on the effective use of the LMS to support course delivery and maintains Canvas information and guidance pages on its College website for students.
- Additionally, in 2018, the College invested in the infrastructure to remotely deliver livestreamed instruction between its North Center (Lincoln City) and Main Campus (Newport), and began training faculty on the effective use of Zoom to tie together remote sites. Agreements

negotiated with a neighboring College to provide simultaneous, shared instruction in programs in Education and Nursing were implemented.

The 2015-20 TIP established the groundwork and technical framework for OCCC faculty, staff, and students to respond to a sudden conversion to remote instruction with some agility that might not have been feasible without the TIP provisions, and the College was able to make this conversion in a matter of two weeks. This quick conversion and the ongoing maintenance of remote instruction, however, was accompanied by the need to immediately adjust technology infrastructure planning and spending to prioritize the institutional delivery of and student access to remote instruction, remote student supports, and remote student services.

2020-21 Bridge Year Technology Enhancements

Instruction: Significant investment and support needed to be provided to facilitate the immediate transition to remote instruction. While 2015-20 TIP provisions ensured all faculty had achieved at least a basic familiarity with Canvas and Zoom, there remained some faculty who were less prepared to rapidly shift modalities and required additional institutional supports. In these cases, academic administrators and support staff were attached to courses as Teaching Assistants who assisted the faculty in navigating the Zoom environment (e.g., sharing screens and monitoring chat) and enhancing the remote delivery of instruction (developing assessments within the LMS, creating videos, etc.). Additional resources for faculty on effective remote instruction and retaining student engagement were made available to all faculty and posted on the website. Successful online faculty served as mentors for other faculty and shared tips on presentation and course setup. 2015-20 TIP investments in instructor laptops and USB camera/microphones (originally acquired to enhance student access by providing livestreamed office hours) were re-deployed to faculty lacking reliable technology infrastructure at home. To ensure security for online testing and to protect student confidentiality, the College invested in Respondus Lockdown Browser and Respondus Monitor. In response to solicited student feedback, a faculty group was formalized to establish online standards for instruction, course design in Canvas, and course navigation.

Student Supports and Services: COVID-19 restrictions have had a particular impact on the delivery of student services and support services, previously personalized by a strong face-to-face component, a hallmark for small colleges. The required shift to remote delivery of student services was facilitated by the College's online appointment system, ScheduleOnce. Advisors and frontline staff working remotely manage student appointments and then set-up student meetings through Zoom. The Financial Aid office created "Open Zoom" hours via Zoom, allowing students to drop-in to the zoom office and talk to a financial aid staff member. Additionally, the College invested in pre-paid phones and Zoom phones to allow students to call in to the college for assistance and be transferred to or receive a call back from a staff member working remotely. On-site, the College invested in rolling computer carts with monitors that allowed students to come to campus and engage with a staff member working either remotely or in-person elsewhere in the building. As the College primarily utilized volunteer tutors (the availability of which declined to near-zero during the early months of the pandemic), the College invested in pre-paid hours with TutorMe.com. The College also purchased tablets and styluses for math tutors in order to develop a remote MathLab where students could Zoom in for drop-in assistance. Through a considerable investment in financial and human resources in the support of this increased demand for technology, the College was able to provide access to comparable advising, financial aid, registration, transfer and career counseling, library and tutoring services as had been available pre-pandemic.

Oregon Coast Community College continued to support prospective and new students through the OCCC Navigate Program, utilizing the video-conference tool adopted as a recommendation of the 2015-20 TIP.

Zoom supplies a platform for online advising, orientation, and registration sessions for students enrolled at local high schools. A comprehensive online First-Year Experience course and Zoom sessions with the OCCC Navigate Outreach Specialist are now available by appointment or Zoom drop-ins, increasing access to students who may not have been reached through scheduled on-site high school visits.

Student engagement opportunities have been developed and are offered in a remote environment. OCCC's Associated Student Government meets via Zoom and offers all students engagement activities throughout the academic year, including student forums, health wellness activities, and an online trivia night. Nursing students engaged in extra-curriculum and academic support activities using Microsoft Teams. Students communicate via Teams calls, chat messages, and video calls. Within Teams, students are able to share notes, study guides, meet in groups to discuss course work, and form study groups.

Students: The 2020-21 Bridge year provides a powerful reminder that technological enhancements and services may be effectively delivered but this effectiveness is tempered by the user's facility with and access to technology. While the College may have been well-positioned to move to remote instruction, a significant portion of the student body was not as well-prepared. Large portions of rural Lincoln County lack access to reliable, high-speed internet, and students participating in remote instruction often faced intrafamily competition for limited computer resources and bandwidth. In response, the College expanded and deployed its Chromebook and laptop fleets, an initiative from the 2015-20 TIP, for students indicating resource challenges. CARES Act funds (see "Current Environment") were utilized to purchase enough new Chromebooks to cover student demand. The College also purchased sufficient "hot spots" and contracts to connect students without reliable home internet. Additional laptops and hotspots were made available to students during the winter term while computer workstations and study rooms with computers remain available to students who need to come to campus to utilize these resources.

During the 2020-21 academic year the College has sought student input regarding the impact of remote instruction on their learning and recommendations for additional supports and services the College can provide to enhance their learning experience and opportunities for student engagement. Students have participated in small groups in In-Service functions and in All-Managers Group meetings to share their insights on the challenges and benefits of technology usage in learning and service delivery. Input provided by students influenced the increased availability of computer equipment on loan to students, the purchase and support of "hot spots" throughout the county to increase access, and increased efforts to provide opportunities for student engagement in a remote setting. Student input during this period has also led to the formation of the Online Standards group, a faculty group developing best practices for OCCC faculty in online course presentation and course design. This promotes some uniformity across online courses in terms of format and setup, easing student navigation between courses as they pursue their online coursework.

ERP Migration: Despite and in the midst of the high demands placed on a small College by pandemic-related changes, the College was able to go live with its new Student Information System in the Summer of 2020. This coincided with the completed integration of the new ERP with the third-party financial aid processor's system. Implementation of the ERP Finance Module and the Customer Relation Management Modules are planned for Summer 2021. The ongoing migration to the new Enterprise Resource Planning system (from SharkNet to Campus Nexus) will include the eventual replacement of virtually all automated student and employee systems, and the review and enhancement of all existing business processes. As previously stated, it has been a large focus during the 2020-21 Bridge year and will continue as a priority into the 2021-26 technology planning cycle.

3. Cybersecurity infrastructure and planning

Subsequent to a cyber-attack incident, OCCC contracted with Portland Community College in the Summer of 2018 to review the College's existing cybersecurity infrastructure. This study resulted in the replacement of the College's firewall and the allocation of additional funding for IT contracted services to support the enhancement of College cybersecurity. However, as a small institution OCCC remains challenged to develop and house the internal expertise to independently prepare for, respond to, and mitigate the myriad of ever changing and increasing threats to institutional cybersecurity.

As such, in 2019-20, the OCCC President introduced cybersecurity as a strategic focus to the Oregon Presidents Council (representing all 17 Community Colleges) which ultimately led to the concept of developing a shared services approach for a "Security Operations Center as a Service" (SOCaaS). SOCaaS' goal is to create a standard set of products and services that can be leveraged by an Oregon member college or any authorized agency under a permissive cooperative contract, on an agreed-upon rate schedule. The RFP was issued in August 2020 (through Portland Community College), and the Oregon Presidents Council has agreed to prioritize the use of its 2021-22 strategic funds to subsidize at least the first-year costs of a statewide SOCaaS, after which time OCCC will evaluate its return on investment for the service.

The shift to primarily remote instruction and services has increased the vulnerability of all educational institutions to security breaches and hacks. This vulnerability will remain regardless of the level of remote services that is sustained into the future. Cybersecurity infrastructure and planning, a focused recommendation of the 2015-20 TIP, continues to be a focus during the 2020-21 Bridge year and will be retained as a priority in the 2021-26 plan.

4. Next Technology Infrastructure Plan (2021-26)

While student success rates declined for certain demographics (particularly among first time students younger than 19 years of age), other students elected to not pursue their educational goals with OCCC during the pandemic. Nevertheless, student surveys and feedback from student panels have indicated that the selective shift of some programs to distance delivery has expanded access to educational programming for students in more remote locations within the service area and remote instruction has mitigated transportation and childcare barriers for a portion of the student body. During the 2020-21 Bridge year, and as the College moves from pandemic response to intentional planning around the future of the structure and delivery of education in Lincoln County post-pandemic, the College is continuing to evaluate student success data, student and faculty surveys, engagement with local school districts (technology fluidity), and partnership opportunities with neighboring community colleges (resource sharing).

Early inputs to the 2021-26 Technology Infrastructure Plan include:

- The need for the ongoing, post-pandemic delivery of remote instruction for multiple academic programs across multiple modalities
- The continued integration of new technologies into classrooms, laboratories, and other instructional facilities, creating smart, highly interactive classrooms which may provide for simultaneous instruction to multiple locations.
- The improvement of facilities for Internet or other distance learning academic instruction capabilities (replacement of routers and switches for infrastructure management)
- The provision of professional development opportunities for students, faculty, and staff to support the remote delivery of distributed instruction and student services, accompanied by the integration of professional development and staff training with HR tracking systems.

- The completion of ERP Migration (target 2021-22). The old system, Sharknet, requires the maintenance of a very out-of-date functional level to allow the older software to function. When the migration is complete and the institution is no longer running Sharknet, the College will be able to update its server technology.
- The review of shared services for cybersecurity, continued improvement of network systems, web technologies, databases, and professional development for IT staff on defensive and offensive cybersecurity.
- The development of a review, refresh, and replacement cycle for all IT infrastructures.
- The potential to continue some opportunities for remote work (where consistent with mission) as an important pillar in continuity planning, as an employee benefit strategy, and as a mechanism to increase employee applicant pools.

CONCLUSION

The provisions and recommendations of the 2015-20 Technology Infrastructure Plan helped to position the College to meet the challenges of the pandemic with agility, and the increased demands on technology infrastructure and capacity with success. The implementation of a new ERP is largely completed, with the college working with the vendor and other consortium colleges to implement remaining modules and program/configure improvements to the system. The finalized implementation and ongoing improvement of the College's student information system is thus a continuing priority, named and initiated in the 2015-20 TIP, continuing through the 2020-21 Bridge Technology Planning year, and to be identified as an ongoing priority in the 2021-26 TIP. A high functioning, highly effective student information system that adapts to College and student needs will persist as a priority for any College.

Significant changes to College operations during the pandemic caused a reallocation of resources to support the heightened demand for equipment, training, and supportive applications to maintain service to students and the community and to ensure, to the extent possible, continued system and student information security. The transition to remote learning and services also provided, however, a live experience of potential vulnerabilities and system requirements for security, and of the demands on personnel and system infrastructure in times of crisis. Because the Bridge year is intended to provide a time for assessment, evaluation, and formulation of planning priorities for the 2021-26 TIP, the challenges of the 2020-21 academic year and the pandemic response have helped to inform the In-progress recommendations for the 2021-26 plan. For example, the state-wide initiative on cybersecurity for colleges, developed during the Bridge year, promises to provide a means for smaller colleges to leverage resources and magnify their capacity to manage cybersecurity concerns. The implementation of the contingency plan to move to remote services and in many cases work locations has also proved to be informative to planning.

While the COVID crisis has caused the responsive reallocation of resources, the experience of this past year has confirmed the wisdom of a Bridge Technology planning year, as the operating environment altered drastically and, in some ways, permanently. Planning assumptions that presumed stability in the environment would have been invalidated, and resources might have been allocated in a sub-optimal fashion. By happenstance the Bridge year has served as a powerful means of assessing the effectiveness of implementation of 2015-20 TIP initiatives, the testing and evaluation of current technology initiatives, and the identification of needs that were previously either understated or unanticipated. The invaluable experiences provided during the Bridge year continue to be integrated as inputs into the 2021-26 TIP

recommendations and planning assumptions. The College is confident that the challenges of the past year will better inform and strengthen the new Technology Infrastructure Plan.

The 2021-26 Technology Infrastructure Plan will provide more solid guidance for the college in future years as a result of the 2020-21 year. Given the current shift to higher levels of remote instruction, and the expectation that many of these modality changes will be key to our service delivery for years to come, the College is leveraging Federal pandemic support funds to bolster IT infrastructure, operations, security, student supports, and student learning, and already planning the pursuit of additional funding opportunities. The College looks forward to sharing its 2021-26 Technology Infrastructure Plan and progress on the identified priorities in its mid-cycle report.