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The Technology Master Plan is an integral part of both the Allan Hancock College decision-making process, as well as planning and budgeting processes. In accordance with the Councils and Committees Pathways to Decisions (CCPD) manual, the Technology Council has primary responsibility for the development of the technology plan. The Technology Council is a shared governance body co-chaired by the director, information technology services and an academic senate nominee. The council develops the plan with assistance from many departments and groups, including its three committees. The plan is reviewed and adjusted on a regular basis to address evolving technology and planning priorities. The Technology Master Plan supports both the Educational Master Plan and the other functional plans.
Development of the Plan

In the 2020-2021 academic year, Technology Council reviewed the goals from the previous Technology Master Plan and proposed a revised list of goals for constituent review. Constituent groups reviewed the draft list of goals in spring 2021, and Technology Council representatives have provided updates to their constituents as this plan has developed.

As part of the development of the previous Technology Master Plan, Technology Council distributed a survey to all college employees asking about their use of technology and priorities in 2013. In spring 2021, Technology Council distributed an updated version of this survey. These two surveys provide a snapshot of how technology at the college has changed in the last eight years and the current practices, priorities, and concerns of our employees.

In fall 2021, the Technology Council hosted two technology planning town halls attended by over sixty faculty, staff, and students. Facilitators guided discussion, documented responses and ideas, and provided these notes to Technology Council to help guide this plan.

Implementation of the Plan

This plan is intended to be active until 2026. It is cliché but true to note that technology is rapidly changing and that it is difficult to anticipate technology needs years from now. The goals of this document are intended to guide technology planning at the college until the expiration of the plan. The specific activities in the plan will change. The first publication of this plan contains anticipated activities for the next few years. Technology Council will revisit the list of activities every year and update the status of each activity. They will also add new activities, considering the institutional needs at the time and based on constituent feedback. This feedback loop is especially important when it comes to our goal of integration – this plan should support the initiatives recommended by the educational and facilities master plans. The educational master plan will be revising its list of activities each year, and the facilities master plan is still being developed at the time of this writing. Thus, we will need to continually review the evolution of these plans to ensure that we adequately support them through this Technology Master Plan.
The spring 2021 survey and our town halls provide insight into the current state of technology at the college. We will review each of these in turn, along with other internal conditions influencing technology planning.

**Technology Survey**

The 2021 survey was an updated version of a survey distributed in 2013. Both surveys asked about institutional priorities for technology resources over the next six years. Most of the top priorities remained the same between 2013 and 2021. In both surveys, the top three priorities were financing the replacement of aging technology, providing adequate technical support, and hiring/retaining qualified technology staff members. However, one priority that jumped in importance was providing online/distance education (from 2.98 to 3.31 on a 1-4 scale of importance).

Both surveys asked about satisfaction with the types of hardware the college uses. One notable trend is the drop in satisfaction for the classroom smart podiums. This indicates a need to revise and modernize classroom technology. This need is also apparent in the responses to questions about technology infrastructure: satisfaction with multimedia/AV drops from 2.55 in 2013 to 2.10 in 2021. In addition, the 2021 survey separated opinions about the hardware from opinions about support for the hardware. This allows us to see that although satisfaction with Apple hardware is very high, there is a need to improve support for these devices.

The spring 2021 survey was administered during a global pandemic, and most courses during this time were conducted using remote meeting tools, especially Zoom. Remote meeting tools were indicated as the most important item in technology planning and the most frequently used technology resource. Also in the 2021 survey, we added a new question that asked employees to rate their satisfaction with various pieces of software. The LMS system, Canvas, had the highest level of satisfaction. See Appendix A for a complete list of survey results.
Technology Planning Town Halls

In November 2021, Technology Council hosted two town hall meetings open to all members of the campus community. Participants discussed four questions with their peers:

- What challenges have you experienced with technology at Hancock College?
- How can technology help contribute to student success?
- What would you like to see from technology in the next six years?
- What kinds of technology training opportunities would you like to see?

Facilitators compiled notes on these discussions, which Technology Council reviewed, and are reproduced in full in Appendix B below. In our list of activities, we indicate which ones were proposed at the town halls.

Changes in Course Modalities

In the spring 2020, the emergence of COVID-19 resulted in many courses moving to a new, synchronous online format (now called “OnlineLIVE”). In spring 2022, the college still offered courses with this format and has also added hybrid courses with some students attending in the classroom and some joining through Zoom. To support hybrid courses, ITS staff modified dozens of classrooms and integrated new equipment into the rooms. This has often been challenging due to the age of the existing technology in the classroom.

Technology Funding Sources

In 2006, the voters in the Allan Hancock Joint Community College District approved Measure I, a $180 million general facilities bond. This included $11.3 million for technology modernization, such as a new phone system and the decommissioning of a mainframe data system and migration to Ellucian’s Banner ERP. In addition, the bond provided $1 million/year for ten years to update classroom technology. By the end of 2018, all bond funds for technology were expended.

The COVID-19 pandemic resulted in emergency federal funding (HEERF) for the college, which we used to finance several technology initiatives. Among others, it financed the purchase of hundreds of laptops and hotspots for students to borrow, the upgrading of classrooms for remote and hybrid instruction, and the installation of improved fiber and cabling at the Lompoc Valley Center.

By spring 2022, both the Measure I and HEERF funding had been exhausted for technology projects. Currently, the primary funding sources for technology are district funds, restricted lottery funds (which can be used to support instructional technology), and grants for specific programs, such as Strong Workforce.

In the 2022-23 budget, the Chancellor’s Office has allocated $50,000 of funding for each district to improve cybersecurity measures. Additional cybersecurity funding may be released to districts later in the year.

Collective Bargaining Agreements

The current collective bargaining agreement with the faculty association, which represents full-time faculty, specifies broad technology equipment standards for full-time faculty at the college. This agreement states that faculty may choose a device running either Windows or MacOS operating systems.
The landscape of information security threats has dramatically changed over the last decade. Ten years ago, ransomware was viewed as a nuisance for an individual computer. Now it has evolved into a near-existential threat for any organization. Modern ransomware encrypts the files on infected devices rendering them unusable. Attackers offer the keys to decrypt your files in exchange for a sum of money, usually to be paid in cryptocurrency. Although the average ransom paid is around $170,000, paying the ransom does not always successfully restore access to the encrypted files and the average total cost of recovery is $1.85 million dollars as of 2021 (Sophos). The total impact of ransomware includes damage from systems being offline for potentially weeks, attackers exfiltrating sensitive data (a data breach), and the time involved rebuilding or restoring systems.

In light of these threats, new paradigms have emerged for security. The most prominent new approach to security is called “Zero Trust.” According to a recent memo from the Department of Defense, zero trust security means “that no actor, system, network, or service operating outside or within the security perimeter is trusted. Instead, we must verify anything and everything attempting to establish access. It is a dramatic paradigm shift in philosophy of how we secure our infrastructure, networks, and data, from verify once at the perimeter to continual verification of each user, device, application, and transaction” (Zero Trust Reference Architecture). For an organization like a college, this means that authentication does not only occur when someone tries to connect to our network; instead, there must be processes that check users as they move within our network to minimize the ability for an attacker to access college resources. In addition, best practices for data backups now include the requirement that backups are "immutable", meaning that the backups cannot be altered. This is to prevent an attacker from destroying backups and precluding the victims from restoring from clean backups.

Ransomware attacks have impacted other California Community Colleges, including Sierra College, Lassen College, Ohlone College, and College of the Desert in just the last couple years. Any technology planning at a college must scrutinize the security impact of initiatives and should ensure that the college is mitigating ransomware risk as much as possible.
Cloud Technology and Software as a Service (SaaS)

The last decade has seen a rapid increase in the adoption of cloud-hosting platforms, such as Amazon Web Services (AWS), Microsoft Azure, and Oracle Cloud. Although the college currently has a footprint in AWS and Azure, the biggest impact of the increase in cloud hosting is with our third-party vendors. The college uses software from a variety of vendors to manage everything from financial aid to employee recruitment to counseling services to student jobs. Less and less of this software is hosted by the college in our data center. Instead, the vendors provide the software through a subscription model and typically host the software themselves or, more commonly, in a public cloud like AWS or Azure.

The impact to the college is that we are gradually decreasing the number of servers that we manage in our data center, and as we adopt SaaS software, the total number of servers that we directly manage at all is also decreasing. This has the benefit of reducing the amount of software that college ITS staff directly maintain and support, but it does dramatically shift the funding model for software. Instead of paying for software as an upfront capital expense, software is now typically an operating expense, with increasing subscription costs each year.

Accreditation

Allan Hancock College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges. To maintain this accreditation, our technology resources must meet standards. The five standards concerning technology currently are:

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

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

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

4. The institution provides appropriate instruction and support for faculty, staff, students, and administrators, in the effective use of technology and technology systems related to its programs, services, and institutional operations.

5. The institution has policies and procedures that guide the appropriate use of technology in the teaching and learning processes.

Any technology plans for the coming years should look for opportunities to strengthen our capabilities in these areas.
1. **Governance:** Integrate shared governance practices in the technology governance structure and planning processes.

2. **Integration:** Support technology initiatives that work towards the goals of the Facilities Master Plan and the five goals of the Educational Master Plan.

3. **Infrastructure:** Keep our systems reliable and secure and ensure that technology needs are identified as part of facilities projects.

4. **Preparation:** Ensure that there is sufficient professional development and training on technology for students, faculty, and staff.

5. **Equity:** Provide students with accessible technological resources across social, economic, and physical barriers in support of their educational goals.

6. **Sustainability:** Develop sustainability plans for technology that include infrastructure, staffing, annual replacement needs, and ongoing costs.

7. **Instruction:** Ensure currency and relevancy of technology in instructional spaces and support emerging technology to meet the needs of faculty and students.
Technology Council Members and Guests 2020-2022

Laura Becker
Loren Bradbury
Stephanie Crosby
Mary Dominguez
Roger Hall
Phil Hamer
Early Murray
Pedro Navarrete
Robert Nourse
Fred Patrick
Alberto Restrepo
Shelda Reyes
Andy Specht
Bridget Tate
Jeffrey Velasquez
Marcela Viveros
Nany Jo Ward
Jake Zent

Activities
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>GOALS</th>
<th>RESPONSIBLE</th>
<th>PROPOSED TIMELINE</th>
<th>DESCRIPTION</th>
<th>STATUS</th>
<th>TOWN HALL IDEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a Dedicated Information Security Position</td>
<td>Infrastructure</td>
<td>Director ITS</td>
<td>2021-22</td>
<td>Create a job description for a security position housed in ITS and recruit and hire for the position</td>
<td>In Progress</td>
<td></td>
</tr>
<tr>
<td>Implement Deep Freeze Cloud on shared computers</td>
<td>Infrastructure, Equity</td>
<td>ITS</td>
<td>2021-22</td>
<td>New version of software will allow applications like Zoom and web browsers to stay up-to-date</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Implement Jamf for Mac and iPad management</td>
<td>Infrastructure, Equity</td>
<td>ITS, Faculty</td>
<td>2021-22</td>
<td>Software will allow remote management and better experience using AHC-provided Apple products</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Redesign Public Website Menu Structure</td>
<td>Equity</td>
<td>Web Services</td>
<td>2021-22</td>
<td>Consolidate menu options and provide easy-to-understand links to students</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Assess moving Banner to the Cloud</td>
<td>Infrastructure</td>
<td>ITS</td>
<td>2022-23</td>
<td>Evaluate options for self-hosting or hosting with Blackboard</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Notifications to Students with Degrees Almost Complete</td>
<td>Integration</td>
<td>Banner Student Committee</td>
<td>2022-23</td>
<td>EMP Prioritized Activity: Automate review and notification of students who have 45+ units and have not seen a counselor and those who are close to degree completion to help keep students on track in attaining their goals.</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>High Quality Cyber Security Training</td>
<td>Preparation</td>
<td>ITS</td>
<td>2022-23</td>
<td>Find and implement online cyber security training module that meets the needs of the college</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>One-Stop Shop for Training Videos/Courses</td>
<td>Preparation</td>
<td>HR/ITS</td>
<td>2022-23</td>
<td>Establish a central location for employees to complete professional development and trainings</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>Add Wireless Access Points to more areas with weak signal, including outdoor areas</td>
<td>Equity, Infrastructure</td>
<td>ITS</td>
<td>2022-23</td>
<td>Review existing coverage and add/replace access points</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>Improve Public Website Search Functionality</td>
<td>Equity, Infrastructure</td>
<td>Web Services</td>
<td>2022-23</td>
<td>Test current functionality and search history to make sure relevant results are returned</td>
<td>New</td>
<td>Yes</td>
</tr>
<tr>
<td>Implement New myHancock Portal</td>
<td>Infrastructure</td>
<td>Web Services</td>
<td>2022-23</td>
<td>Implement Pathify portal. Current portal software is end of life</td>
<td>In Progress</td>
<td></td>
</tr>
<tr>
<td>Investigate Options for Mobile App for Students</td>
<td>Infrastructure, Equity</td>
<td>Web Services</td>
<td>2022-23</td>
<td>Implement Pathify mobile app</td>
<td>In Progress</td>
<td>Yes</td>
</tr>
<tr>
<td>Evaluate new Room/Course-Scheduling Softwares</td>
<td>Integration</td>
<td>Innovative Scheduling</td>
<td>2021-22</td>
<td>Review and recommend a software to improve the course scheduling process</td>
<td>In Progress</td>
<td>Yes</td>
</tr>
<tr>
<td>Establish new classroom technology standards for new modalities</td>
<td>Instruction</td>
<td>edTac/Technology Council</td>
<td>2022-23</td>
<td>Standards should include implementation, testing, training, and support processes</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Develop prioritized list of classrooms to upgrade</td>
<td>Instruction</td>
<td>edTac/Technology Council</td>
<td>2022-23</td>
<td>Identify classrooms, funding, and timeline each year</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Change the Culture of File Storage</td>
<td>Infrastructure, Equity</td>
<td>ITS, Faculty</td>
<td>2022-23</td>
<td>Improve employee and student file storage practice to embrace backups and the cloud</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Re-Evaluate Major Software Commitments</td>
<td>Infrastructure</td>
<td>ITS, Technology Council</td>
<td>2023-24</td>
<td>Review and assess current enterprise software</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Implement Managed Print Services</td>
<td>Infrastructure, Equity</td>
<td>ITS, Library</td>
<td>2023-24</td>
<td>Centralize and streamline printing process for students</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Review and Update Computer Standards</td>
<td>Sustainability</td>
<td>edTac/Technology Council</td>
<td>On-going</td>
<td>Standards will be presented to and approved by Technology Council each year</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Identify and Budget for Computers to Replace Each Year</td>
<td>Sustainability</td>
<td>ITS</td>
<td>On-going</td>
<td>Identify computers, funding, and timeline each year. Will go to Technology Council as information</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Implement Zero Trust Security Model</td>
<td>Infrastructure</td>
<td>ITS</td>
<td>On-going</td>
<td>Develop security practices to accord with zero-trust practices</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Annual Technology Townhalls</td>
<td>Governance</td>
<td>Technology Council</td>
<td>On-going</td>
<td>Prioritize technology needs and plan for next year</td>
<td>New</td>
<td></td>
</tr>
</tbody>
</table>
2021
Technology Survey
Finished

<table>
<thead>
<tr>
<th>Field</th>
<th>Choice Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>False</td>
<td>51</td>
</tr>
<tr>
<td>True</td>
<td>187</td>
</tr>
</tbody>
</table>

Q2 - I am a(n) - Selected Choice

Q3 - I use the following devices for work:

Q4 - Which of the following technologies do students need to function in your courses at AHC?

Q5 - As you think about institutional priorities for technology resources and services over the next six years, how do you rate the importance of the following issues?
Expanding technology training for students 1.00 4.00 3.08 180
Upgrading administrative/ERP systems such as Banner 1.00 4.00 3.04 170
Providing training on existing applications such as Banner and Office 365 1.00 4.00 2.99 185
Upgrading/replacing emergency communications 1.00 4.00 2.89 177

Q6 - Are you satisfied with the current hardware you use at AHC?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple laptop</td>
<td>1.00</td>
<td>3.00</td>
<td>2.78</td>
<td>18</td>
</tr>
<tr>
<td>Apple office desktop</td>
<td>1.00</td>
<td>3.00</td>
<td>2.68</td>
<td>19</td>
</tr>
<tr>
<td>HP printer</td>
<td>1.00</td>
<td>3.00</td>
<td>2.66</td>
<td>140</td>
</tr>
<tr>
<td>Apple iPad</td>
<td>1.00</td>
<td>3.00</td>
<td>2.65</td>
<td>20</td>
</tr>
<tr>
<td>Dell office desktop</td>
<td>1.00</td>
<td>3.00</td>
<td>2.65</td>
<td>156</td>
</tr>
<tr>
<td>Canon Copier</td>
<td>1.00</td>
<td>3.00</td>
<td>2.57</td>
<td>127</td>
</tr>
<tr>
<td>Dell laptop</td>
<td>1.00</td>
<td>3.00</td>
<td>2.57</td>
<td>75</td>
</tr>
<tr>
<td>Apple student lab computer/laptop</td>
<td>1.00</td>
<td>3.00</td>
<td>2.43</td>
<td>7</td>
</tr>
<tr>
<td>Dell student lab computer/laptop</td>
<td>1.00</td>
<td>3.00</td>
<td>2.38</td>
<td>40</td>
</tr>
<tr>
<td>Microsoft Surface</td>
<td>1.00</td>
<td>3.00</td>
<td>2.33</td>
<td>49</td>
</tr>
<tr>
<td>Epson data projector</td>
<td>1.00</td>
<td>3.00</td>
<td>2.32</td>
<td>60</td>
</tr>
<tr>
<td>ShoreTel Phone</td>
<td>1.00</td>
<td>3.00</td>
<td>2.27</td>
<td>132</td>
</tr>
<tr>
<td>Chromebook laptop</td>
<td>1.00</td>
<td>3.00</td>
<td>2.19</td>
<td>16</td>
</tr>
<tr>
<td>Smart Podium</td>
<td>1.00</td>
<td>3.00</td>
<td>2.16</td>
<td>75</td>
</tr>
<tr>
<td>Other</td>
<td>1.00</td>
<td>3.00</td>
<td>2.00</td>
<td>5</td>
</tr>
</tbody>
</table>

Q7 - Are you satisfied with the support for these devices at AHC?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell laptop</td>
<td>1.00</td>
<td>3.00</td>
<td>2.86</td>
<td>72</td>
</tr>
</tbody>
</table>

Q8 - How often do you use the following technology resources in your role at the college?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote meeting tools such as Zoom or Microsoft Teams</td>
<td>1.00</td>
<td>5.00</td>
<td>3.63</td>
<td>180</td>
</tr>
<tr>
<td>Online document storage systems, such as OneDrive, SharePoint, or Teams</td>
<td>1.00</td>
<td>5.00</td>
<td>3.29</td>
<td>180</td>
</tr>
<tr>
<td>Smartphone</td>
<td>1.00</td>
<td>5.00</td>
<td>3.28</td>
<td>177</td>
</tr>
<tr>
<td>Web cameras</td>
<td>1.00</td>
<td>5.00</td>
<td>3.19</td>
<td>175</td>
</tr>
<tr>
<td>Computer-equipped classroom or lab</td>
<td>1.00</td>
<td>5.00</td>
<td>2.97</td>
<td>177</td>
</tr>
<tr>
<td>Online video resources such as YouTube</td>
<td>1.00</td>
<td>5.00</td>
<td>2.93</td>
<td>183</td>
</tr>
<tr>
<td>Smart Podium (entire unit – podium, computer, doc cam, etc.)</td>
<td>1.00</td>
<td>5.00</td>
<td>2.93</td>
<td>181</td>
</tr>
<tr>
<td>Mobile apps</td>
<td>1.00</td>
<td>5.00</td>
<td>2.87</td>
<td>174</td>
</tr>
<tr>
<td>Field</td>
<td>Min</td>
<td>Max</td>
<td>Mean</td>
<td>Responses</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>-----------</td>
</tr>
<tr>
<td>Ebooks and electronic textbooks</td>
<td>1.00</td>
<td>5.00</td>
<td>2.83</td>
<td>174</td>
</tr>
<tr>
<td>Open education resources (OER)</td>
<td>1.00</td>
<td>5.00</td>
<td>2.80</td>
<td>174</td>
</tr>
<tr>
<td>Canvas plugins or LTI’s</td>
<td>1.00</td>
<td>5.00</td>
<td>2.78</td>
<td>171</td>
</tr>
<tr>
<td>Tablet device (iPads, Surface, etc.)</td>
<td>1.00</td>
<td>5.00</td>
<td>2.75</td>
<td>170</td>
</tr>
<tr>
<td>Computer simulation or exercise</td>
<td>1.00</td>
<td>5.00</td>
<td>2.73</td>
<td>172</td>
</tr>
<tr>
<td>Anti-plagiarism software for written assignments such as Turnitin</td>
<td>1.00</td>
<td>5.00</td>
<td>2.64</td>
<td>171</td>
</tr>
<tr>
<td>Commercial courseware/instructional resources such as Pearson’s My Math Lab, Plato, ALEKS</td>
<td>1.00</td>
<td>5.00</td>
<td>2.63</td>
<td>175</td>
</tr>
<tr>
<td>Online test proctoring</td>
<td>1.00</td>
<td>5.00</td>
<td>2.62</td>
<td>171</td>
</tr>
<tr>
<td>MOOCs (Massive open online course)</td>
<td>1.00</td>
<td>5.00</td>
<td>2.61</td>
<td>171</td>
</tr>
<tr>
<td>Personal web pages or blogs for class materials, work material, resources</td>
<td>1.00</td>
<td>5.00</td>
<td>2.59</td>
<td>175</td>
</tr>
<tr>
<td>Cloud hosting platforms, such as Amazon Web Services or Microsoft Azure</td>
<td>1.00</td>
<td>5.00</td>
<td>2.53</td>
<td>170</td>
</tr>
<tr>
<td>&quot;Clickers&quot;/classroom response system</td>
<td>1.00</td>
<td>5.00</td>
<td>2.45</td>
<td>168</td>
</tr>
<tr>
<td>Podcasting</td>
<td>1.00</td>
<td>5.00</td>
<td>2.37</td>
<td>172</td>
</tr>
</tbody>
</table>

Q9 - How important do you see the following items in the overall technology planning over the next 6 years?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>User support services</td>
<td>1.00</td>
<td>4.00</td>
<td>3.18</td>
<td>175</td>
</tr>
<tr>
<td>Computer networks</td>
<td>1.00</td>
<td>4.00</td>
<td>3.07</td>
<td>172</td>
</tr>
<tr>
<td>myHancock portal</td>
<td>1.00</td>
<td>4.00</td>
<td>2.87</td>
<td>173</td>
</tr>
<tr>
<td>Hancock public web site</td>
<td>1.00</td>
<td>4.00</td>
<td>2.79</td>
<td>170</td>
</tr>
<tr>
<td>Computer resources to support your job functions</td>
<td>1.00</td>
<td>4.00</td>
<td>2.54</td>
<td>170</td>
</tr>
<tr>
<td>Telecommunications and phone system</td>
<td>1.00</td>
<td>4.00</td>
<td>2.53</td>
<td>169</td>
</tr>
<tr>
<td>Wireless networks</td>
<td>1.00</td>
<td>4.00</td>
<td>2.43</td>
<td>169</td>
</tr>
<tr>
<td>Emergency communications / notification system(s) (RAVE)</td>
<td>1.00</td>
<td>4.00</td>
<td>2.45</td>
<td>172</td>
</tr>
</tbody>
</table>

Q10 - How would you rate the technology infrastructure at AHC?
Q11 - What are barriers to using technology at AHC? Check all that apply.

- Training
- Access
- Funding
- Too confusing
- Other

Q12 - Do you think that district-owned desktops and laptops are replaced frequently enough?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative/staff offices</td>
<td>1.00</td>
<td>4.00</td>
<td>2.04</td>
<td>158</td>
</tr>
<tr>
<td>Faculty offices</td>
<td>1.00</td>
<td>4.00</td>
<td>1.91</td>
<td>159</td>
</tr>
<tr>
<td>Student labs</td>
<td>1.00</td>
<td>4.00</td>
<td>1.77</td>
<td>156</td>
</tr>
</tbody>
</table>

Q13 - How do you think the district should fund the replacement of technology (check only two boxes indicating the most important sources)?

- District funds
- Grants
- Endowments and donations
- Bonds
- Restricted funds such as special...
- Other

Q14 - How important is information security to you when using campus technology?

- Very important
- Somewhat important
- Not important

Q15 - How concerned are you about the following security issues occurring at Hancock?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ransomware attack across campus systems</td>
<td>1.00</td>
<td>3.00</td>
<td>2.42</td>
<td>174</td>
</tr>
<tr>
<td>Phishing and other malicious emails</td>
<td>1.00</td>
<td>3.00</td>
<td>2.41</td>
<td>177</td>
</tr>
<tr>
<td>Breach of sensitive AHC data (student, personnel, financial)</td>
<td>1.00</td>
<td>3.00</td>
<td>2.41</td>
<td>177</td>
</tr>
<tr>
<td>Other</td>
<td>1.00</td>
<td>3.00</td>
<td>2.10</td>
<td>10</td>
</tr>
<tr>
<td>Theft of computers</td>
<td>1.00</td>
<td>3.00</td>
<td>1.88</td>
<td>173</td>
</tr>
</tbody>
</table>
Q16 - How useful are the following electronic communication methods for your job duties?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>2.00</td>
<td>3.00</td>
<td>2.95</td>
<td>180</td>
</tr>
<tr>
<td>Zoom, Microsoft Teams, or other video conferencing</td>
<td>2.00</td>
<td>3.00</td>
<td>2.87</td>
<td>178</td>
</tr>
<tr>
<td>myHancock portal</td>
<td>1.00</td>
<td>3.00</td>
<td>2.66</td>
<td>179</td>
</tr>
<tr>
<td>Other</td>
<td>1.00</td>
<td>3.00</td>
<td>2.60</td>
<td>5</td>
</tr>
<tr>
<td>Canvas</td>
<td>1.00</td>
<td>3.00</td>
<td>2.48</td>
<td>113</td>
</tr>
<tr>
<td>Hancock public website</td>
<td>1.00</td>
<td>3.00</td>
<td>2.47</td>
<td>175</td>
</tr>
<tr>
<td>Telephone</td>
<td>1.00</td>
<td>3.00</td>
<td>2.40</td>
<td>176</td>
</tr>
<tr>
<td>Text messaging or phone apps (e.g. WhatsApp, Remind)</td>
<td>1.00</td>
<td>3.00</td>
<td>2.18</td>
<td>157</td>
</tr>
<tr>
<td>Instant messaging</td>
<td>1.00</td>
<td>3.00</td>
<td>2.14</td>
<td>155</td>
</tr>
<tr>
<td>Facebook, Twitter, Instagram or other Social Media Platform</td>
<td>1.00</td>
<td>3.00</td>
<td>1.82</td>
<td>153</td>
</tr>
<tr>
<td>Newsletters</td>
<td>1.00</td>
<td>3.00</td>
<td>1.73</td>
<td>153</td>
</tr>
</tbody>
</table>

Q17 - Which electronic communication methods do you use to communicate with students?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>5</td>
</tr>
<tr>
<td>Email</td>
<td>1.00</td>
<td>3.00</td>
<td>2.79</td>
<td>163</td>
</tr>
<tr>
<td>Zoom, Microsoft Teams, or other video conferencing</td>
<td>1.00</td>
<td>3.00</td>
<td>2.54</td>
<td>145</td>
</tr>
<tr>
<td>Telephone</td>
<td>1.00</td>
<td>3.00</td>
<td>2.23</td>
<td>151</td>
</tr>
<tr>
<td>Canvas</td>
<td>1.00</td>
<td>3.00</td>
<td>2.12</td>
<td>129</td>
</tr>
<tr>
<td>myHancock portal</td>
<td>1.00</td>
<td>3.00</td>
<td>1.99</td>
<td>130</td>
</tr>
<tr>
<td>Text messaging or phone apps (e.g. WhatsApp, Remind)</td>
<td>1.00</td>
<td>3.00</td>
<td>1.83</td>
<td>136</td>
</tr>
<tr>
<td>Hancock public website</td>
<td>1.00</td>
<td>3.00</td>
<td>1.80</td>
<td>126</td>
</tr>
</tbody>
</table>

Q18 - How would you rate the quality of the following websites/applications?

<table>
<thead>
<tr>
<th>Field</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canvas</td>
<td>1.00</td>
<td>3.00</td>
<td>2.33</td>
<td>95</td>
</tr>
<tr>
<td>Microsoft Office 365 (SharePoint, Teams, Office Online)</td>
<td>1.00</td>
<td>3.00</td>
<td>2.25</td>
<td>162</td>
</tr>
<tr>
<td>ApplicationXtender Document Imaging System</td>
<td>1.00</td>
<td>3.00</td>
<td>2.11</td>
<td>75</td>
</tr>
<tr>
<td>Employee Self-Service (Leave Reports, Vacation Balances, Pay Stub, etc.)</td>
<td>1.00</td>
<td>3.00</td>
<td>1.99</td>
<td>163</td>
</tr>
<tr>
<td>Banner Administrative Pages</td>
<td>1.00</td>
<td>3.00</td>
<td>1.97</td>
<td>69</td>
</tr>
<tr>
<td>Finance Self-Service and Banner Receiving</td>
<td>1.00</td>
<td>3.00</td>
<td>1.97</td>
<td>98</td>
</tr>
<tr>
<td>Banner Class Search and Registration</td>
<td>1.00</td>
<td>3.00</td>
<td>1.95</td>
<td>130</td>
</tr>
<tr>
<td>Banner Faculty Self-Service (e.g. grades, census rosters)</td>
<td>1.00</td>
<td>3.00</td>
<td>1.91</td>
<td>91</td>
</tr>
<tr>
<td>SuccessNet/Starfish (Early Alert + Counseling Appointments)</td>
<td>1.00</td>
<td>3.00</td>
<td>1.89</td>
<td>81</td>
</tr>
<tr>
<td>ConexEd/Cranium Café</td>
<td>1.00</td>
<td>3.00</td>
<td>1.44</td>
<td>88</td>
</tr>
</tbody>
</table>

Q19 - I am well-informed about district technology changes when they are implemented or under consideration.

```
<table>
<thead>
<tr>
<th>Choice Count</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choice Count</td>
<td>23</td>
<td>64</td>
<td>55</td>
<td>29</td>
<td>7</td>
</tr>
</tbody>
</table>
```
Q20 - I am consulted about district technology changes when they are implemented or under consideration.

![Bar chart showing responses to Q20]

- Strongly agree: 11
- Agree: 33
- Neither agree nor disagree: 75
- Disagree: 44
- Strongly disagree: 16

Choice Count
What challenges have you experienced with technology at Hancock College?

- EGS courses: Limited technology for hybrid modality and equity for Zoomers not having enough interaction with the class. Live labs have not been able accessible. Only 20 students for the whole semester have been able to access the lab. No tech or live feed videos have been able to be used.
- PCPA Technical Theater: Funds were granted for tech labs, but no hardware was purchased. Thus, they are not on par with industry. They have been waiting for 2.5 years for upgrades. Faculty and staff computers and laptops are needed for instruction. The smart classroom has not been set up properly for instruction.
- ENGL: Hybrid modality has not been fully supported, and thus, instruction has been challenging to deliver, and students are struggling. Updates are not being done in the classroom podiums either.
- Requested technology has not been delivered. Faculty are disheartened from teaching hybrid modality because they don’t feel supported.
- (Many departments) F/P and F/Pt Instructors need laptops of their own to get their work done and instead have been relying on student laptop loans. Faculty have been purchasing their own tech because the college is not supporting them.
- Training is nonexistent and faculty do not feel prepared to deliver their classes.
- We need laptops for faculty.
- Internet connectivity is poor in classes on both campuses (Lompoc and SM). For example, the C-21 building laptops, L building smart podiums, desktops, ipads, and more.
- Ensuring that students have the correct technology. I am very happy with the Virtual Desktop and would like that to continue.
- In the LRC they have Office 2016 and I didn’t realize it until just this month and sent in the request to have it updated. That should be on the Radar of the LRC staff and IT as well as instructors.
- New technology gets implemented, often without sufficient training and makes it a confusing experience.
- Technology in classrooms is different in every single classroom, so it is difficult to keep track of what instructions or techniques to use in specific classrooms. It would be nice if there was a quick tour in classrooms to get technology training for specific classrooms.
- Different instructors using the same classroom have different needs and requests for technology.
- I am not able to use my laptop or ipad in the rooms that I teach in. There are not always ways to plug into the projector. It would be nice to have a consistent USB that allows plug ins. Some classes are still using VGA.
- The projectors in my classes are not always able to be seen and used in tandem with the white board. Would be nice to have screens instead of projectors.
- The wifi signal is weak in building I, so it is tough to be able to use certain apps and anything that streams video. It second this issue in building W.
- The "deep freeze" (or whatever it is currently called) wipes anything that we store on the desktop or bookmarked apps each night. We need to reset everything each time we teach.
- I have not experienced support for Mac products. It would be nice to have someone who can help with those issues.
- Technology staff usurps decisions about the request, often without input from faculty or dialog with faculty.
- Technology help tickets often go into a black hole, or are closed before a solution has been made.
- Some technology requests take more time to resolve and student success are affected.
- Deepfreeze on desktops or borrowed laptops causes problems for students who are working on large files.
- Changes to the network, or privacy controls that are not communicated to faculty.
- Better search engine on MyHancock and better indexing of documents on myHancock.
- Podiums that do not work with Macs is a BIG problem.
- It is hard to find particular forms – there should be a forms directory.
- The "one" app for students – all services go through one app, especially with text notifications.
- Ask students to see how they like to be communicated with smaller computer screens make "bouncing" back and forth from documents and tabs difficult.
  a) I’ve experienced this in work and on Canvas as a student and creator.
  b) some person have difficulties with phones and tablets on web, canvas, etc.
  c) Broadband access for student laptop usage in labs.
  d) Inconsistent/nonstandard equipment causes lack of expertise.
- **** departmental support staff feel sometimes "out of the loop" ****
  a) common standards, practices and norms not established, known or understood
  b) dedicated technology specialist such as alternate media specialist for faculty and staff support beyond tradition desktop support.
- Largely in the area of ITS service and responsiveness.
- The on-line ticket system needs to be modified to assist users in consulting or better articulating their needs.
- We need more IT support to assist with increasing student engagement.
- We need laptops for full-time faculty. Faculty are using student loaner laptops and need access to their own computer.
- WIFI in each office space should be strong and stable.
- Effective communication and process between ITS and faculty regarding instructional needs.
- Need charging stations in the classroom.
• True support for Mac—not just "tolerating" them. ITS decisions marginalize Mac users.

Stronger Wi-Fi in Marian
• Cameras on desktops/for offices
• Hybrid meetings have audio issues
• Harder to pick up on non-verbal cues in remote meetings, especially if cameras are off. Need to establish Zoom etiquette
• Slow Wi-Fi in some areas (e.g. building G)
• Speed with which Apple devices are set up (slow)
• Astra is bad
• Transition to going paperless
• Indexing electronic files
• Information standards practices and norms
• ODS implementation/maintenance is frustrating at times with upgrades and how data flows into it from Banner
• Document search difficulty—difficult to find resources through AHC Website search
• Closing the loop as it relates to user access in various software programs. We have mechanisms in place to request, grant, and even remove access. However, staff tend to forget the need to let us know when users need to either have a change of user access, or be altogether removed from certain systems.
• ***TeamDynamix ticket categories are confusing and could be a better fit

Technology seems to be sprawling and overwhelming.
• Software that doesn’t agree or work with other programs in things like classes, student records etc.
• Curriculum dev, degreeworks, learning outcomes... program review... too much too many!
• Transitioning to working remote for COVID. Systems not in place and to adapt to.
• Remoting into work computers. Not having a portable workspace.
• Not knowing what is available e.g. Battery backups,
• Lack of IT support for evening classes.
• Designated point person to support to help with Canvas courses. Or general knowledge of who is available.
• Equipment in classrooms, podiums, etc. not working or user not being sufficiently trained in time to use it.
• Students not having sufficient access to wifi or technology needs.

How can technology help contribute to student success?

• Access to technology can enhance communication and encourage higher order thinking, while removing barriers to learning for students.
• Adequate wifi is needed on campus for student and faculty access.
• Teaching in a hybrid modality (Zoom, recording lectures, etc) can help students especially now during the pandemic. (Having access to more class content.)
• Accessibility of content has improved since covid because students can access linked in learning. For example, several programs like LTIs work with Canvas.
• The laptop and hotspot loaner program helped many students with access to college I said traction, more are needed!
• More funding of software and license agreements for programs help accessibility of instruction, too.
• Videos (Youtube) were really helpful for instruction as faculty came up with ways to deliver curricu-
• The students using the Virtual Desktop really love it! Keep that for Microsoft Office full download products for CBIS and CBOT classes.
• Even though the Room & Zoom dance is challenging, it allows many students to participate that would have dropped the course and disappeared. Having online content options can help students in a variety of circumstances.
• It is critical that students use technology. this is how our world works these days and they need more hands on.
• If utilized well and frequently, Canvas has a lot of tools and features that can boost student engagement and success. Grades, messages, discussions, etc.
• Good WIFI connections and good audio in hybrid courses is vital to student engagement.
• The use of technology prepares students for life outside of Hancock.
• Learning new technology is critical to the future of employment of our students.
• Being current with technology is critical to practice-based work for students and employment.
• Being able to use audiovisual conferencing allows us to invite guest speakers to participate in class even if they can’t physically come to campus. I have had past students who are now working in the industry speak with current students, and really valuable discussions happened.
  • It is hard to find particular forms – there should be a forms directory
  • The “one” app for students – all services go through one app, especially with text notifications
  • Ask students to see how they like to be communicated with
  A) facilitates sharing information and skills with colleagues
  B) Use Xibo signage for campus status – class cancellations, classroom issues, events, etc.
• **** Sign updates need to Wbe a recognized division and departmental time task and policy
How do we get technology updated in specific classrooms? We need a system wherein instructors can articulate what they want to do in the classroom, such as lecture to Roomers and Zoomers simultaneously, and IT translates this into specific technology and connectivity, as all instructors do not speak tech language.

Find a way to add technology to classrooms that provide equitable experience for zoomers and roomers.

Inclusivity—technology can support an inclusive learning environment for our students; e.g., adaptive technology

Stronger Wi-Fi coverage

Parking lot wi-fi coverage is good

More electric car charging stations (better locations)

Customer Management System for Public Affairs to partner with A&G and follow up with applicants

Communicate to students that laptops are available

Scheduling is hard? Vet credit for prior learning

Need for interactive electronic forms that WORK. And share common data.

Better data error correction processes. Manual systems are more error prone.

Data input standards

Gives students more options and access.

Greater access to student services if they are modernized and available.

More time flexibility available remotely.

What would you like to see from technology in the next six years?

- We need MAC and PC parity on campus and with classroom instruction by faculty, for example, smart podiums and overheads must work for both types of platforms seamlessly.
- Innovation with technology and keeping up with industry standards is critical moving forward.
- GREAT WIFI across the campuses and access for all
- Updates to all campus tech (laptops, podiums, desktops, ipads and more) done in a timely manner will aid access moving forward.
- We need continued options for hybrid instruction to accommodate students who wish to use it, but training and guidelines for students are necessary. Many students do not know the basics of using hybrid technology.
- Faculty input and autonomy is critically important as we consider different kinds of instructional delivery.
- Students need access to hardware such as laptops, ipads, hotspots, and more. This means more loaners for all.
- Tech support staff is critical as we maintain, upgrade, and add new technology to our campus. Clone Judy!!!
- Budget must be adequate to support the technology.
- Tech support must be expanded, and maybe get another building with training facilities and one on one help.
- More training.
- More student computer labs.
- Equity with technology available to both Full-time and Part-time faculty (how to connect to podiums, data projectors, monitors.)
- Equal support for the use of PCs and Macs for faculty and students.
- More Apple support staff in ITS.
- Better dialog between ITS and faculty when technology is changed in the classroom.
- Update in classroom technology for teaching as well as hybrid classrooms.
- There are so many interactive tools that would be great to use in class if students had access to technology – laptops, phones etc.
- Move the place where the projector projects so that it doesn’t take up any (or all) of the board space. Teachers still need a place to write on the whiteboard. I agree
- AS to the moving of projectors above, could we add TV screens and/or replace projectors with screens so we don’ t have to turn off all the lights to use them? I have to choose if I want students to see the screen or be able to take notes.
- Annual tech refresh, that aligns with sustainability to ensure technology is up to date to meet the needs of the students, faculty, and staff
- Training, training, training! I would also love to see sharing of best practices / demonstration from faculty that are excited about things that work for them and their students
- I would love to see a thorough assessment of students’ needs for technology (both equipment and training), and plans to address equity issues related to both.
- Create a better search engine for Hancock’s website and for myHancock. Google searches work best.
- Innovation: new equipment and/or new ways of using technology to support instruction and student learning. What is being used elsewhere? What is working well?
- Technology support for student clubs: apps for networking and communication, website pages, audio/video equipment and support for events.
  - More computer labs
  - More places with good wifi where you can do Zoom meetings
  - Mental control of devices
ITS has human and financial resources for resiliency

• Look at eduroam wi-fi

• BETTER PDE TECHNOLOGY ORIENTATION & TRAINING aimed at Hancock specific needs

• WITH RELEASE TIME! faculty, staff, student workers need to develop personal "rugged individualism" with campus technology

• Adequate staffing to support training and services needs for all groups

• Funding mechanism to replace things as they age out, dedicated funding source outside of grants or other soft money

• Staff and faculty training and adoption of Microsoft higher level onedrive, sharepoint, teams, zoom, is a wide spectrum skill level problem

• Classroom phones – preprogrammed speed dials: IT help, police, custodial, etc.

• Smart classrooms, a projector that can be accessed wirelessly or sync with smartphones, etc

• ASAP (before next term) classroom computers need updated Zoom.

• More wire

• New computers

• Replacement plan for all the COVID purchases

• Flying cars

• More automation of office/human tasks

• A list of all software programs on campus, their most up-to-date versions, their purpose, and which programs interact with each other, and how

• Replacement for Banner

• A replacement for Astra? Conference / classroom / space scheduling

• Does it talk to banner???

• Full-time IT support dedicated to the Extended Campus (LVC, Vandenberg, Santa Ynez Valley centers) and all locations.

• A plan for keeping computers and equipment modern and up-to-date. Hardware and software.

• Software to coordinate dynamic web changes universally.

• Mobile app for students

• Security and best practices in place for cyber-attacks. Plans in place for attacks.

What kinds of technology training opportunities would you like to see?

• We need various kinds of training in different modalities: Zoom [video] training, face to face, and

more.

• We need a central place to store “training videos” for reference like a library so people can select what type of training they need when they need it (AHC specific, not just Canvas videos from the community).

• Student training and a “help desk” for students is important as we keep learning and maintaining new tech.

• The availability for training on any new technology item introduced at Hancock.

• I would like to know what interactive apps and tools there are that I can use in the classroom. I would like to engage my students more with technology.

• I would like to see adequate compensation for part-time faculty who are going through training. The minimal amount they are currently allowed is not enough to keep up with changing technology.

• Topics: Canvas, AHC website and portal (where the heck are the things we need?), additional apps or tools for classroom use, how to use an email signature that includes your phone extension and/or other contact info (templates that are easy to copy and paste would be valuable)

• Modalities: in-person or zoom webinars, recorded videos, hands-on workshops (example – record a 3-minute intro video and post it in Canvas), practice/tutorial assignments

• I want to learn how to make a cool Zoom background slide like Jody Derry’s. :-)

• List of all trainings (e.g. Banner financial, HR, etc)

• Make training part of implementation

• Office products tricks and techniques.

• Technology etiquette when emailing

• Room and Zoom teaching: as soon as possible (before next term).

• A presentation from ITS on policies regarding faculty computers and a clear overview of the ticket system. We need a more robust and interactive software system that tracks our technology requests and fosters dialog between ITS and faculty.

• Adobe Acrobat/Sign training

• Incentives for completing trainings (parking lottery entries)

• Technology training from instructors who already teach technology

• Training on meeting room hardware (e.g. Owls)

• Training - we can offer it, but not many people show. We then have staff training other staff on what they heard/understood, and then we have to “fix” things and retrain 1-1 over time. It would be nice to have more admin support and staff accountability.

• Regularly scheduled professional development related to technology for staff.

• Remind employees what to do and not to do for cyber security issues.

• Training on how to use teams, adobe signs, and other software that we have to use now.

• Training in every area of technology available to all employees.