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# TECHNOLOGY MASTER PLAN 2013 – 2015

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# **Information Technology Strategic Plan 2013-2015**

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**HAWAII COMMUNITY COLLEGE  
INFORMATION TECHNOLOGY STRATEGIC PLAN  
2013 - 2015**

**Introduction: The Context for Information Technology Planning**

Hawaii Community College (HawCC), with the main campus located in Hilo, Hawaii, and an educational center in West Hawaii, found itself in need of an analysis of its technology use and implementation in the fall of 2011. With an accreditation visit scheduled for the next calendar year, the college wanted outside experts to provide an analysis so that it could better understand how its technology equipment, implementation, and support currently meets the needs of the college and how it could improve in this critical area. The analysis was conducted in April 2012 and a final report was issued on May 9, 2012.

One of the key recommendations from the analysis was that the college needed to become more strategic about technology and follow through to develop a master plan which would guide it in the utilization and implementation of technology. Subsequently, consultants were also retained to provide guidance in the creation of a strategic plan for technology. During the fall term of the 2012-13 academic year, they guided participants, made up of a representative group of faculty, staff, and managers from the college community, through a process of identifying their mission, vision, assumptions, goals and strategies for technology. Fundamental to the planning process was the goal of developing a strategic plan that aligned with the mission, vision, and culture of the College, as a whole.

The analysis report also pointed out that the challenge for those responsible for providing, managing and supporting technology is how to be astute about the needs of the college, intelligent about its priorities, and shrewd with available resources in order to deliver quality service and support that satisfies the constituent users. This planning document responds to that challenge by defining changes to structures, approaches, policies, processes and procedures that can lead to a more cohesive and well-planned technology environment.

This document is a result of that planning process and is intended to serve as the blueprint or road map for the college's use of technology during the next three years. It is deliberately designed to be a strategic plan, not a tactical plan (in which each step is carefully laid out for implementation). The plan recognizes that technology changes, often quickly, while institutions do not adapt as quickly. And although this plan lays out specific goals and strategies it also recognizes that three years is often a lifetime (or more!) for some technologies; therefore, some of the recommendations within the plan should be viewed as malleable over the course of the three years, and not carved in stone.

The planning process encouraged, and, to be effective, required, widespread participation and representation from many different constituencies within the college. HawCC sought to encourage widespread participation, but probably had an

overrepresentation of technical and administrative staff and an underrepresentation of faculty and senior managers. Every effort was made to correct these imbalances, but the deviation from the desired milieu must be acknowledged because some interests within the college may not find their needs fully met within this planning document. For this reason and others, the plan must be seen as a living document that must be able to shift in response to changing campus needs.

The planning approach required the following steps:

- Develop a “future state” vision of how the use of information technology, in its broadest definition, should add value in support of the College’s vision, mission and goals.
- Develop guiding principles that should govern the decisions and actions of the organization.
- Develop planning assumptions describing the environment in which the College currently exists.
- Develop goals and strategies to enable the College to move forward toward the desired “future state” in accordance with the guiding principles.
- Identify dependent factors that may be required to fully and effectively implement the plan.
- Assign responsible parties who will effectively accomplish the specific goals and strategies outlined in the plan.

The planning process ran through the fall term of the 2012-2013 academic year. At three separate day-long sessions during this time period, specific activities related to development of the plan took place. Planning team members were asked to share the process and development of the plan with others. Participants were also asked to contribute to discussions via a discussion board set up in Lualima (the college’s course management system) specifically for discussion and communication between meetings to provide more information, edit proposed mission and vision statements or propose various wordings for strategies. In total twenty-five (25) members of the HawCC community took part, including some faculty, a large number of staff, and a few administrators. The consultants guided the process, but members of the HawCC provided the content and direction of the plan.

This plan would not be possible without the thoughtful input and hours of effort by those who participated during its development, as well as those who provided guidance to them as the process moved forward. A list of those who participated in the development of this plan can be found in the Appendix to this document.

### **The Strategic Planning Process**

The purpose of effective information technology strategic planning is to connect institutional priorities with technology trends and goals. This approach looks at strategic planning as a process that seeks to clarify what the institution is, what it wants to be and how it can successfully make the transition. The focus of this planning process is on the needs of the various stakeholders of the institution, particularly students, faculty, staff,

and management rather than on technology itself or the information technology organization. The goal of the planning process is to align the plans for technology with the College's vision, mission and goals, and focus on what the College needs to do with technology rather than on what technology the College needs to acquire. This technology plan seeks to provide directions and a management strategy within the context of changing internal and external environments, while it sets the philosophy and direction for the use of information technology within the larger College context.

The planning process used for the development of this strategic plan is based on the methodology used at Foothill-De Anza Community College District, as designed and developed by Jan Baltzer of Baltzer-Sutton Associates, and located in the South San Francisco Bay Area in California, often referred to as Silicon Valley. That plan was a modification of the methodology described in *Organizational Transition*, 2<sup>nd</sup> edition, by Beckhard and Harris and is based upon the principle that:

“. . . a core dilemma for executives and leaders is how to maintain stability in their organizations and, at the same time, provide creative adaptation to outside forces; stimulate innovation; and change assumptions, technology, working methods, roles and responsibilities, and the culture of the organization itself.” (*Organizational Transitions*, p. 1)

The planning approach that was adapted for use, from the methodology proposed by Beckhard and Harris, requires the following steps:

- Develop a “future state” vision of how the use of information technology, in its broadest definition, should add value in support of the College's vision, mission and goals.
- Develop guiding principles that should govern the decisions and actions of the organization.
- Develop planning assumptions describing the environment in which the College currently exists.
- Develop goals and strategies to enable the College to move forward toward the desired “future state” in accordance with the guiding principles.

The planning process took place over the fall term of the 2012-2013 academic year. At three separate, day-long sessions during this time period specific activities related to development of the plan took place. Planning team members were asked to share the process and development of the plan with others. Participants were also asked to contribute in discussions via a discussion board set up in Lulima (the college's course management system) specifically for discussion and communication between meetings to provide more information, edit proposed mission and vision statements or propose various wordings for strategies. In total twenty-five (25) members of the HawCC community took part, including faculty, staff, and administrators.

## **Our information Technology Vision**

The first step in the planning process was to develop a vision of the future state of technology utilization for the college. The Planning Team spent considerable time during the first session envisioning the future of technology at HawCC, working to develop their view of the future.

The team broke up into small groups to each develop a vision statement, which were then blended into a single statement that all could agree upon. During discussions about their vision, and as the planning process unfolded, the Planning Team saw many common elements to the future of technology at HawCC. Among those were the general beliefs that (in no prioritized order):

- student learning was paramount vis-à-vis technology use in the college
- a wide range of the HawCC community needed access to effective, efficient, and current technology
- the HawCC community had broadly diverse skill-sets related to use of technology
- technology should be widely available and universally accessible
- planning for technology should be focused, coordinated, thoughtful and effective
- the HawCC community should have the skills to use the technology effectively and efficiently
- technology would continue to evolve and improve, facilitating even more universal and sophisticated use within the college, while at the same time providing new challenges

The value of a vision statement in this context is that it provides a clear idea of what the future technology and its service should be. It also provides a common understanding of what the goal is for technology in the college and help guide future decisions about technology. Conversely, such a vision statement also helps identify efforts and projects that don't lead to the vision; they should not be considered for implementation.

With this future scenario in mind, the Planning Group's vision for how information technology can be used to add value to the College, in support of the College's mission and goals, was expressed as follows:

### **OUR TECHNOLOGY VISION STATEMENT**

In the spirit of "E 'Imi Pono" (Seeking Excellence) and to provide educational opportunities island-wide, Hawaii CC will embrace the effective and appropriate use of existing and emerging technologies to support student success and enhance college functions.

This vision statement can be challenging for the College. Progress towards this vision will be made as the College begins to implement the goals and strategies contained in this strategic plan and in the operational plans that will follow. There will be challenges ahead. However, the Planning Team committed to this vision as the college moves into the future with technology.

There were other beliefs that were common across the planning group. In general, they believed that the technology available on the campus should focus on supporting student success as its primary mission.

They also envisioned a future environment in which technology would continue to be current and acquired in a planned, open, and collaborative way.

They recognized that this vision would consume time, energy, and resources, but that a dedicated and unified budget for technology, frequently reviewed and revised as needed, would facilitate the attainment of their vision.

Finally, the planning group realized that this vision can only be effectively implemented if there is a strong commitment by the college to innovative approaches to resolving the many challenges it currently faces.

### **Our Information Technology Guiding Principles**

If the College is to be successful in achieving its information technology vision and accomplishing its strategic objectives, it would not be sufficient simply to do things right; the College must do the right things. A useful technique for being certain that individuals responsible for IT organizations are “doing the right thing,” is to establish a set of guiding principles, with “principles” being defined as “simple, direct statements that describe what is determined to be good practice.” These principles should describe the fundamental values or criteria against which the institution is prepared to make decisions regarding the acquisition and use of information technology.

Guiding Principles should clearly articulate the following:

- What the college values
- How technology supports those values

The following is a list of Guiding Principles for the use of Information Technology at HawCC, as developed by the Planning Team during this planning process. These principles are based on the vision statement developed by the Planning Team and are intended to provide direction in overseeing the decisions and actions of the IT organization as it pursues the acquisition and implementation of information technology. Following each principle is a word or phrase to encapsulate the concept of that principle.

#### **The College:**

- promotes and supports greater access to technology and digital resources island-wide; (*Island-wide Access*)
- believes in the values of shared governance that facilitate decision-making, evaluation, and implementation of technology planning; (*Technology Decision-Making and Governance*)

- values a continuous process of evaluation and college-wide feedback that ensures the effective use of technology resources; (*Ongoing Feedback/ Evaluation and Assessment*)
- recognizes the need for ongoing and effective training and support in the use of current and emerging technology; (*Training and Support*)
- supports active research and development to support new and emerging technologies; (*Emerging/Innovative Technology – R&D*)
- understands that adequate resources are important for the effective use, development, maintenance, and support of core technologies and that it needs to seek opportunities to fund emerging and innovative technologies; (*Funding*)
- recognizes its role in the community and that it needs to encourage access to technology within the community; (*Community Partnerships*)
- knows that quality use of technology depends upon a high level of technical support in all levels and areas of the college; (*Quality Outcomes through Technology*)
- acknowledges the importance of distance learning with technology and seeks quality opportunities to educate students through those technologies (*Distance Learning*)

### **Our Planning Assumptions**

The following is a list of planning assumptions about the environment in which HawCC exists. These assumptions are based upon the observations and opinions of the Planning Team, as a reflection of the roles and responsibilities they represent, and are intended to reflect the current factors that have a bearing on the development and implementation of this information technology strategic plan. As assumptions change, resulting goals, strategies and objectives will need to be reviewed and possibly modified as well.

The Planning Team sees this occurring through an annual review process of the College's Information Technology Strategic Plan. Please note that there is no priority attributed to the order in which the assumptions are listed.

#### *Assumptions about our Students*

- A growing number of students would like more learning options using technology, including distance education.
- Not all students have access to consistent and reliable technology which may be due to affordability issues and could have an adverse impact on student learning.
- Many students could benefit from basic computer application skills training.
- Many students lack, or don't use, critical thinking skills.
- Many students have portable or mobile devices and are more likely to use mobile communication and social media to supplement face-to-face communication.
- Many students tend to have short attention spans.
- There is a greater expectation for faster results and instant gratification.
- Students have diverse modes of learning.
- A large number of students use technology differently than faculty and staff.



- Some courses need to include a prerequisite that students have basic computer-related knowledge and skills because lack of this knowledge will likely have an adverse impact on student learning and productivity.
- Instructor use and expectations of technology in the classroom may differ from that of students.
- Some students may overestimate their technology-related skills, abilities and understanding, and may not seek help when necessary.

#### *Assumptions about our Faculty*

- Faculty are diverse in their use of technology and should have regular training opportunities to identify and use (new/emerging) technology in the classroom.
- Faculty must be conversant with the technology used in their classes and should provide resources and assistance for students.
- Faculty may incorrectly assume that students will have basic technological skills and will know where to seek help when needed.
- Faculty are increasingly using technology for instruction, testing, organizing, archiving, communicating, researching, etc. that results in a desire for greater access to technology resources.
- Many faculty believe that technology makes it easier for students to plagiarize or to let someone else do the work.
- Some faculty may not have the skills necessary to use technology effectively in the classroom.

#### *Assumptions about our Staff and Administrators*

- Administrators and staff rely on technology to provide information for making decisions, communicating, and measuring progress.
- Staff and administrators have diverse technological skill levels.
- Training and technical support expectations are very high.
- Administrators and staff have misunderstandings about support responsibilities.
- Staff and administrators frequently expect immediate resolution of technology problems and issues.
- Administration recognizes the importance of technology in education.
- Staff would like to increase the use of technology to automate office processes to manage workflow and increase efficiency.
- Staff and administrators need more training and support with new and existing technology.
- Staff and administrators are not clear about where to get assistance with the effective use of technology.
- Staff needs access to new and emerging technology in a timely manner.
- There needs to be better communication with other colleges and the UH System in relation to technology.

#### *Assumptions about our Culture*

- Technology can enable, support and preserve Hawaiian culture and its initiatives.
- Our culture supports a diverse population, large geographic area and wide range of programs.

- The college has a strong sense of community that may impact how the technology is used, or not used.
- The UH System drives many decisions about technology.
- In general, the college has been reactive rather than proactive vis-à-vis technology.
- Technology permeates many aspects of the college function, culture and processes.
- Technology can be used to advance the mission and culture of the college.
- Teaching and learning is a central part of the college culture.

#### *Assumptions Related to Technology*

- Technology is always evolving; there is a continual need for updating equipment and software, support, servicing, and troubleshooting for which technology staff must be consulted.
- Up-to-date technology is key to the college remaining competitive.
- Technology helps us increase our island-wide and world-wide access and to expand programs currently being offered.
- Technology can increase college efficiency and effectiveness if it is well implemented, appropriately used, and supported with necessary resources and training.
- The effective use of technology requires a commitment to building skills for both those who use it and support it.
- The college attempts to standardize hardware and software.
- Technology can enhance and support instruction.
- Technology can improve learning.

#### *Assumptions about our Budget*

- The budget influences what, and how much, technology can be acquired.
- The technology budget may need to include additional funding for staff and technological resources.
- Technology funding is incorporated into the overall college budget in various line items.
- There may be an over-reliance on grants to acquire technology-related resources at times.
- Communication about technology funding needs to be improved and be more transparent.
- There is a perceived lack of cooperation and communication between units about their technology needs.
- There is a need for proactive planning and prioritization for when unspent funds might become available for technology initiatives and acquisitions.
- There needs to be better communication between grant writers and those who will be affected (including technology staff and other appropriate stakeholders).

## Our Information Technology Goals

The following is a list of the Information Technology Strategic goals and strategies (for reaching those goals) for the three-year period from 2012-2015. The goals are intended to be longer-term, major targets or end results related to the survival, value, and growth of the College. These goal statements were developed by the planning team during the third day of the planning sessions and were based on the information technology vision, guiding principles and the implications of the planning assumptions for the College. All goals are derived from a Guiding Principle (as stated along with each Goal).

**Goal 1:** Expand the availability and enhance the quality of distance learning across communities to increase access to remote educational opportunities and learning success.

**Guiding Principle:** The College promotes and supports greater access to technology and digital resources island-wide. (*Topic: Island-Wide Access*)

Strategies
1.1 Expand DE support staff.
1.2 Provide resources for ongoing training of DE staff.
1.3 Provide additional opportunities for training of faculty, staff, and students in the appropriate and effective use of technology for their work in the College.
1.4 Update equipment as needed to stay abreast with technological and user demands/needs.
1.5 Increase DE course offerings.
1.6 Annually assess for effectiveness.

**Goal 2:** Create and maintain a formal technology governance structure that will comprehensively guide decision-making for HawCC.

**Guiding Principle:** The College believes in the values of shared governance that facilitate decision-making, evaluation, and implementation of technology planning. (*Topic:* Technology Decision-Making and Governance)

Strategies
2.1 Reconvene Technical Task Force.
2.2 Formalize a single Technology Department.
2.3 Establish a Technical Director.
2.4 Tighten controls over grants involving technology.
2.5 Establish greater communication with UH System and within the college.
2.6 Establish a timely and responsive process for implementing technical purchase priorities.
2.7 Establish a process for requesting and receiving training.

**Goal 3:** Develop an ongoing process of feedback and evaluation to determine effective use of technology and help prioritize future initiatives.

**Guiding Principle:** The College values a continuous process of evaluation and college-wide feedback that ensures the effective use of technology resources. (*Topic:* Ongoing Feedback and Evaluation)

Strategies
3.1 Identify measurable outcomes for review.
3.2 Measure the selected outcomes.
3.3 Evaluate the results.
3.4 Develop a plan to implement desired changes per evaluation results: keep as is, modify, replace, or remove.
3.5 Redefine the outcome if necessary.
3.6 Return to “Improve Outcomes” and repeat for re-evaluation.

**Goal 4:** Provide technology training to faculty, staff, and managers.

**Guiding Principle:** The College recognizes the need for ongoing and effective training and support in the use of current and emerging technology. (*Topic: Training and Support*)

Strategies
4.1: Conduct survey of campus faculty & staff needs for tech training. Establish a baseline of training needs.
4.2: Prioritize training needs and determine if support can be supplied in-house, contracted, or online.
4.3: Develop expected outcomes of training and assessment process for the effectiveness of training.
4.4: Develop on-going needs assessment and training framework for new hires, and existing faculty/staff learning new technologies.
4.5: Review and evaluate organizational structure of current IT staff & consider reorganization into a single group.
4.6 Provide technical staff with training, as needed, so that they can maintain current and relevant skills.

**Goal 5:** Provide resources for research and evaluation of emerging and innovative technology for use at HawCC.

**Guiding Principle:** The College supports active research and development to support new and emerging technologies. (*Topic:* Emerging and innovative technology)

<b>Strategies</b>
5.1 Establish advisory groups (R&D committees) to provide guidance and organization on determining and using emerging and innovative technology.
5.2 Survey HawCC, the Community (including business sector), other schools and entities to assess needs and identify areas of research and areas of emerging/innovative technologies. If needed, additional subcommittees can be created to conduct research, etc.
5.3 Conduct research, collaborate with other entities and individuals to share information to pool research efforts.
5.4 Acquire technology solution in small test amounts, e.g. 1 or 2 units. Conduct real-world tests. Evaluate results.
5.5 If technology solution is viable, make a small environment deployment of the technology, e.g. a single classroom or office deployment. Run real-world tests. Evaluate.
5.6 If technology solution is successful, deploy to wide group of users. Create and conduct training for users. Continue to evaluate.
5.7 Maintain the technology solution. Adjust, adapt and refine the appropriate use of the technology solution. Continue to evaluate.

**Goal 6:** Create an ongoing process to articulate, plan, and prioritize college technology needs to determine optimal funding.

**Guiding Principle:** The College understands that adequate resources are important for the effective use, development, maintenance, and support of core technologies and that it needs to seek opportunities to fund emerging and innovative technologies. (*Topic: Funding*)

Strategies
6.1 Convene regular meetings.
6.2 Submit technology requests in program reviews.
6.3 Convene technology committee.
6.4 Communicate proper channels for technology related requests.

**Goal 7:** Collaborate and partner with leaders in the Hawaii Island Community to provide resources, learning opportunities, and professional expertise.

**Guiding Principle:** The College recognizes its role in the community and that it needs to encourage access to technology within the community. (*Topic: Community Partnerships*)

Strategies
7.1 Identify areas of need to determine candidates for advisory board.
7.2 Develop advisory board composed of community partners.
7.3 Solicit board members for ideas and recommendations pertaining to technology.
7.4 Annually assess for effectiveness.

**Goal 8:** Improve the outcomes of the college community thru the effective use of existing and evolving technologies.

**Guiding Principle:** The College knows that quality use of technology depends upon a high level of technical support in all levels and areas of the college. (*Topic:* Quality Outcomes through Technology)

Strategies
8.1 Define an outcome for measurement.
8.2 For each outcome measurement: Develop a plan to acquire measurable values related to the defined outcome.
8.3 Implement feedback and evaluation cycle.

**Goal 9:** Improve the technology portfolio to satisfy all educational needs with appropriate and diverse solutions.

**Guiding Principle:** The College acknowledges the importance of distance learning with technology and seeks quality opportunities to educate students through those technologies. (*Topic:* Learning with Technology)

Strategies
9.1 Assess the current technology portfolio to identify strengths, weaknesses, and opportunities for improvement.
9.2: Determine what types of technologies faculty and staff would like to deliver (not just computer related, can be new equipment, tools, etc).
9.3 Investigate and explore distance education and online delivery options that are available (programs, vidcon, freeware, etc.)
9.4 Survey HawCC students and community members to determine demand and potential for enrollment in online, remote, vidcon classes.
9.5 Provide train-the-trainer sessions for faculty & staff interested in offering classes online.
9.6 Provide support & training to students who need help accessing/navigating online or distance classes.
9.7 Acquire equipment and programs identified as important for instruction and delivery of courses.



### **Alignment with College Strategic Plan and the UH-Community College System**

In order for this plan to be an effective tool for directing the acquisition and use of information technology within the College, it must be aligned with the overall strategic planning efforts of the College and the UH-Community College System. This section of the planning document illustrated the alignment of the Information Technology Plan with the College Strategic Plan and the UH-Community College System Plan.

#### *Alignment with the HawCC Mission Statement*

As demonstrated in the table below, the HawCC IT Vision is aligned with the College Mission, in committing to the spirit of E 'Imi Pono, as well as providing educational opportunities island-wide and promoting student success and enhancing college functions.

<b>HawCC Mission Statement</b>	<b>HawCC IT Vision Statement</b>
Hawai'i Community College promotes student learning by embracing our unique Hawai'i Island culture and inspiring growth in the spirit of E 'Imi Pono. Aligned with the UH Community Colleges system's mission, we are committed to serving all segments of our Hawai'i island community.	In the spirit of "E 'Imi Pono" (Seeking Excellence) and to provide educational opportunities island-wide, Hawaii CC will embrace the effective and appropriate use of existing and emerging technologies to support student success and enhance college functions.

#### *Alignment with the UH-Community College System Goals*

The UH-Community College goals and those of the HawCC Technology Plan should also correlate. There is also significant overlap between the college's IT goals and the UH-Community College System goals. The table on the next page lists the goals of both, and a summary of the correlation is as follows:

- UH-CC System Goal A is addressed in HawCC Goals 1, 3, 4, 5, 7 & 9
- UH-CC System Goal B is addressed in HawCC Goal 2, 7
- UH-CC System Goal C is addressed in HawCC Goals 1, 7, 9
- UH-CC System Goal D is addressed in HawCC Goals 2, 4
- UH-CC System Goal E is addressed in HawCC Goals 1, 3, 5, 9

UH-CC Goals	HawCC IT Goals
<p>A. Promote Learning &amp; Teaching for Student Success</p> <p>B. Functions as a Seamless State System</p> <p>C. Promote Workforce and Economic Development</p> <p>D. Develop our Human Resources: Recruitment/Retention/ Renewal</p> <p>E. Develop Sustainable Infrastructure for Student Learning</p>	<ol style="list-style-type: none"> <li>1. Expand the availability and enhance the quality of distance learning across communities to increase access to remote educational opportunities and learning success.</li> <li>2. Create and maintain a formal technology governance structure that will comprehensively guide decision-making for Hawaii Community College.</li> <li>3. Develop an ongoing process of feedback and evaluation to determine effective use of technology and help prioritize future initiatives.</li> <li>4. Provide technology training to faculty, staff, and managers</li> <li>5. Provide resources for research and evaluation of emerging and innovative technology for use at HawCC</li> <li>6. Create an ongoing process to articulate, plan, and prioritize college technology needs to determine optimal funding.</li> <li>7. Collaborate and partner with leaders in the Hawaii Island Community to provide resources, learning opportunities, and professional expertise.</li> <li>8. Improve the outcomes of the college community thru the effective use of existing and evolving technologies.</li> <li>9. Improve the technology portfolio to satisfy all educational needs with appropriate and diverse solutions.</li> </ol>

**Critical Efforts**

This IT Strategic Plan focuses on providing a roadmap for HawCC to use technology to help the College achieve its mission and goals. Each technology goal and its accompanying strategies provide clear direction for appropriate departments and divisions within the College.

All nine of the Guiding Principles and their related goals in this plan are important, as are all of the strategies identified for each goal. However, not all goals can be reached simultaneously; some necessarily have priority over others, some are dependent on

others before they can be acted upon, some can, or should, be prioritized for later. Thus, it is incumbent upon any planning process to set priorities for what needs to be done when (based on a schedule).

To this end, the list of strategies (as associated with their goals) were presented to the Planning Team (via a poll at [surveymonkey.com](http://surveymonkey.com)) to gather input on what strategies were most important to them for implementation. Altogether there were 50 strategies that could be implemented within the nine goals the planning team established. Participants were asked to vote no more than ten times for strategies they thought were most important to implement early. They could vote for a single strategy twice if they thought it was critical, but were told not to cast more than a total of ten votes.

The goals that were identified as most critical by the Planning Team were Funding, Governance, and Training/Support. These goals match the conversations that occurred throughout the assessment and the strategic planning phases of this process, as individuals of the HawCC community expressed concerns about the ways that the College allocates resources to the use of technology and how decisions are made. Improvements made in these areas will have a multiplier effect for the entire technology environment. In addition, most involved in the process also understood that improvements to training and support would be critical to helping members of the HawCC community maximize those investments that the College was able to make in technology.

At the strategy-level, the individual strategies of formalizing a Technology Department and providing it with effective leadership (by a Technical Director) were among the highest-rated strategies (3<sup>rd</sup> and 1<sup>st</sup> respectively). It is also important to note that attempts to bring technology staff together as an organization has not been effective in the past (although everyone seemed to agree that it was the right thing to do), and that providing full-time leadership for it will be critical for its overall success. In addition, individual strategies surrounding training for the technical staff and conducting a survey of overall campus training needs rounded out the strategies that were listed as the highest four priorities.

This information is provided as guidance for the decision-making process about technology implementation as the college moves forward. And the findings of the survey roughly parallel the findings of the consultants during the spring term, 2012. It is important to note that the results of the survey strongly parallel the overall opinions of the consultants who have experienced the entire assessment and strategic planning processes along with the members of the College community who have chosen to be involved.

However, it is critical to point out that these data are skewed by the fact that participants in the process do not represent the full spectrum of interests within the college – in particular, faculty rarely participated. Those who did participate did so primarily online. So the faculty voice was not well represented in the three planning sessions or the resulting survey of priorities. As a result, the technical staff may have been

disproportionally represented in the survey, with the results skewed toward the technical end of the spectrum. This was a concern expressed multiple times during the planning process to the lead administrator and our primary contact.

That said, significant opportunities were available for full participation by all interests within the college and, for whatever reason, the key members did not choose to participate at levels we expected (and have seen elsewhere). This same concern was also voiced in the analysis project conducted last spring.

The full articulation of this strategic plan and the survey of priorities is a starting place for the College's future changes to its technology environment. It is most critical, in our opinion, to carefully define the Technology Advisory Committee with members who are interested in the broad use of technology at the College (what outcomes does the College need to affect), and augment the committee with key technical people who can help explore best practices and effective uses. The advisory committee needs to focus on how technology is used at HawCC, and it will be critical to populate it with members who can understand the College's larger goals and make College-wide decisions. With the appropriate membership, the Technology Advisory Committee can help adjust priorities and compensate for any limitations that might result from the lack of participation by key College stakeholders.

This section of the planning document is labeled "Critical Efforts," and its intent is to identify projects resulting from the planning process that can have immediate positive impact for the college. It is clear that the Planning Team sees formalizing a Technology Department and providing it with strong leadership as an important first project. That should be the focus of the first initiative. But of equal importance is the effective utilization of a technology advisory committee, made up of a representative group of faculty, staff, administrators, and students to provide policy guidance to the college on technology. That should be the second "critical effort."

### **Information Technology Governance**

The Planning Team was created to move the college forward with its technology planning and implementation with a single charge to create a plan and this planning document. Its membership consists of representatives from many different constituency groups in the college, but was "light" on faculty, with very few faculty participating. There also was no student participation.

The following characteristics are emblematic of the Planning Team:

- They had a clearly defined mission.
- Members understood that they should review everything in light of what is best for the College; personal or special interest agendas were left outside the meetings.
- The team met consistently at regularly scheduled times and locations, with a pre-determined agenda.
- The team membership was dedicated, worked very well together, and understood the mission of the committee.

The Planning Team believes that the success of this plan will be measured by how well it is communicated to the larger College community. Therefore each Planning Team member should share the plan, and the values developed during the planning process, with others in the college.

Additionally, for the plan to be effective it cannot be a “shelf document.” It should be referred to frequently and used as a guide for action. There are specific job titles called out within this document which will have responsibility for implementation of certain parts of the plan.

To ensure success, several entities at the College should take an overarching responsibility for success of this plan. The technology governance group should be responsible for setting the higher level goals and modifying them, as necessary. It is up to the senior managers, however, to take the lead in ensuring the implementation of the strategies, assigning resources (including staff) to each, and evaluating the effectiveness upon their implementation. Finally, someone will need to take overarching responsibility in managing the work of the technology organization (whether that is a new position or conceived as a role of someone currently at the College).

The College should carefully consider the composition and mission of the Technology Advisory Committee required to move this strategic plan forward and to continually update it in response to changing needs. The former “Technical Task Force” was useful on some level, but became inactive; an attempt to reconvene it provided limited benefit. The consultants want to underscore the importance of this group in providing firm guidance about policies and priorities for technology, negotiating with the senior staff for the allocation of necessary resources, and providing some level of oversight to technology plans and services. The technology organization should have representation on this group (perhaps in an ex officio role), but the committee should be seen as a College committee that considers technology issues from the perspective of serving the College’s needs. The conversations should be about the application of technology as a tool to accomplish campus goals, rather than about the technologies themselves.

### **Next Steps**

This plan provides the strategic vision for technology that the College should follow as it moves forward with technology. As illustrated above, it is based on the mission and goals of the College. The participants in the planning process developed this plan with the belief that the College will make a good faith effort to follow its recommendations. However, they also recognize that the College faces challenges that may compromise or alter the recommendations contained herein. It is therefore recommended that this plan be reviewed annually and be closely linked to the budgeting process so that it is clear what resources are required for successful completion of the plan.

The Implementation Grid that is included below was developed working closely with the Planning Team. It contains a column indicating the individuals or groups that have

major responsibility for implementation of each of the IT strategies identified during this planning process. It will be the responsibility of these individuals or groups to develop the appropriate policies, budget requests, and annual operating plans for each of the assigned strategies. The technology governance group should take the lead on policy; the HawCC senior managers and leadership team need to take the lead in creating the culture for success and putting in place the operational plans, as well as initiating budget lines for approval through the normal budgetary processes.

On a regular basis, the College, through its governance groups and processes, should also revisit the planning assumptions and the College’s accomplishments against the strategic plan, and update or modify this strategic action plan as required by the continuously evolving College environment. It is recommended that this review process occur on an annual basis.

### Implementation Grid

For each of the goals and strategies identified in this technology Strategic Plan, an individual or group in the College has been identified as the responsible party to ensure that the strategies are appropriately implemented. For the responsible party to be successful in completing the strategy, the matrix also proposes certain events and/or conditions (Dependencies) that need to be accomplished before the strategy can be successfully completed.

**Topic:** *Island-Wide Access*

**Goal 1:** Expand the availability and enhance the quality of distance learning across communities to increase access to remote educational opportunities and learning success.

Strategies	Dependencies	Responsible Parties
1.1 Expand DE support staff.	Dependent on available funding.	Deans, Directors, VC Academic Affairs
1.2 Provide resources for ongoing training of DE staff.	Dependent on available funding.	Staff Development Coordinator, Deans, Directors, VC Academic Affairs
1.3 Increase training opportunities for faculty, staff, and students. (This was questioned previously so changes noted may not be appropriate.)	Dependent on available funding.	Staff Development Coordinator, Deans, Directors, VC Academic Affairs

<b>Strategies</b>	<b>Dependencies</b>	<b>Responsible Parties</b>
1.4 Update equipment as needed to stay abreast with technological and user demands/needs.	Dependent on creating a complete equipment replacement cycle and reconciling it with available funding.	Chancellor's Senior Staff
1.5 Increase DE course offerings.	Dependent on creating efficiencies in approach or adjusting staff.	VC Academic Affairs
1.6 Annually assess DE for effectiveness.	Include technology questions in DE survey.	Institutional Researcher, Assessment Coordinator, DE Coordinator

**Topic:** *Technology Decision-Making and Governance*

**Goal 2:** Create and maintain a formal technology governance structure that will comprehensively guide decision-making for Hawaii Community College.

Strategies	Dependencies	Responsible Parties
2.1 Appoint a Technology Advisory Committee to serve as the governance group for technology policy and priorities.	Develop high-level mission statement for the group and consider appropriate membership.	Chancellor's Senior Staff, College Council?
2.2 Reorganize tech staff into a single Technology Department	Requires definition of leadership role and assignment of reporting responsibilities.	Chancellor and Senior Staff
2.3 Establish a Technical Director	Dependent on available funding and/or position line.	Chancellor and Senior Staff
2.4 Develop policy and procedures for grant-writing involving technology	Policy needs to be created by Technology Advisory Committee.	Chancellor's Senior Staff
2.5 Establish greater communication with UH System and within the college	Empower an individual (preferably the Technical Director) to act on the College's behalf	Chancellor and Senior Staff
2.6 Establish a timely and responsive process for implementing technical purchase priorities	Policy should be defined by Technology Advisory Committee and process improved by Technology Department	Chancellor's Senior Staff
2.7 Establish a process for requesting and receiving training	Designate a person/position responsible for coordinating technology training	Staff Development Coordinator, VC Academic Affairs



**Topic:** *Ongoing Feedback and Evaluation*

**Goal 3:** Develop an ongoing process of feedback and evaluation to determine effective use of technology and help prioritize future initiatives.

Strategies	Dependencies	Responsible Parties
3.1 Identify measurable outcomes for review	Identification of an individual to take responsibility for this strategy	Institutional Research (lead) and Technology Director (support), Assessment Coordinator
3.2 Measure the selected outcomes	Will vary depending on selected methodology	Institutional Research, Assessment Coordinator
3.3 Evaluate the results	Survey created and distributed	Institutional Research, Assessment Coordinator
3.4 Develop a plan to implement desired changes per evaluation results: keep as is, modify, replace, or remove	Survey results completed and analyzed	Institutional Research (lead) and Technology Director (support)
3.5 Redefine the outcome if necessary	Survey results completed and analyzed	Institutional Research (lead) and Technology Director (support)
3.6 Return to “Improve Outcomes” and repeat for re-evaluation	Survey results completed and analyzed	Institutional Research (lead) and Technology Director (support)

**Topic:** *Training and Support*

**Goal 4:** Provide technology training to faculty, staff, and managers

Strategies	Dependencies	Responsible Parties
4.1: Conduct survey of campus faculty & staff needs for tech training. Establish a baseline of training needs.	Survey created	Institutional Research and Technology Director
4.2: Prioritize training needs and determine if support can be supplied in-house, contracted, or online.	Dependent on available funding, if required.	Staff Development Coordinator, VC Academic Affairs
4.3: Develop expected outcomes of training and assessment process for the effectiveness of training.	Completion of survey	Institutional Research and Technology Director, Assessment Coordinator
4.4: Develop on-going needs assessment and training framework for new hires and existing faculty/staff.	Approval by senior managers, designation of responsible party	Institutional Research and Technology Director, Staff Development Coordinator
4.5: Review and evaluate organizational structure of current IT staff & consider reorganization into a single group.	Approval by senior managers, designation of responsible party	Technology Director and VC Academic Affairs
4.6 Provide technical staff with training, as needed, so that they can maintain current and relevant skills	Dependent on available funding for training	Technology Director and VC Academic Affairs, Staff Development Coordinator

**Topic:** *Emerging and innovative technology*

**Goal 5:** Provide resources for research and evaluation of emerging and innovative technology for use at HawCC

Strategies	Dependencies	Responsible Parties
5.1 Establish advisory groups (perhaps an R&D committee) to provide guidance and organization on determining and using emerging and innovative technology	Dependent on available funding. Available and willing HawCC individuals to populate such committees. Full support from administration and departments.	Chancellor, and Chancellor's Senior Staff. Also interested individuals and "Stakeholders" - individual benefactors of tech solution. (R&D committee members drawn from all departments.)
5.2 Survey HawCC, the Community (including business sector), other schools and entities to assess needs and identify areas of research and areas of emerging/innovative technologies.	Available & cooperative individuals and entities of: HawCC, the community, business, other schools, and other organizations. Funds to conduct surveys and research. HawCC support in terms of facilities for meetings, communication, research, data collection and analysis. Full support from administration and departments.	R&D committee, with backing of administration (including Chancellor's office), and departments. Administration entity monitors progress of R&D committee. Institutional Researcher
5.3 Conduct research, collaborate with other entities and individuals to share information to pool research efforts.	Same as 5.2.	Same as 5.2

Strategies	Dependencies	Responsible Parties
5.4 Acquire technology solution in small test amounts, e.g. 1 or 2 units. Conduct real-world tests. Evaluate results.	Active & collaborative R&D committee, active & collaborative HawCC target group (benefactors of technology solution), adequate HawCC R&D funding to acquire technology solution. HawCC support in terms of facilities for testing, communication, research, data collection and analysis.	R&D committee, with full support of administration and departments (support includes funding).
5.5 If technology solution is viable, make a small environment deployment of the technology, e.g. a single classroom or office deployment. Run real-world tests. Evaluate.	Same as 5.4	Same as 5.4
5.6 If technology solution is successful, deploy to wide group of users. Create and conduct training for users. Continue to evaluate.	Same as 5.4	Same as 5.4
5.7 Maintain the technology solution. Adjust, adapt and refine the appropriate use of the technology solution. Continue to evaluate.	Same as 5.4	Target group (for training), HawCC technical support units (for maintenance). R&D committee provides or directs long term evaluation. Administration provides full support.

**Topic:** *Funding*

**Goal 6:** Create an ongoing process to articulate, plan, and prioritize college technology needs to determine optimal funding.

<b>Strategies</b>	<b>Dependencies</b>	<b>Responsible Parties</b>
6.1 Convene regular meetings of the technology advisory committee to discuss & prioritize budgetary needs of technology in the college	Creation of Technology Advisory Committee able to meet on a regular basis.	Chancellor and Senior Staff
6.2 Submit technology requests in program reviews	Department/Division Chairs would need to identify departmental needs then communicate technology implementation requests to College Deans, Directors and VC's as well as document within their respective program reviews.	Deans/Directors/Vice Chancellors
6.3 Convene technology assessment committee	Identification of key personnel within various departments who are able to collaborate, provide ongoing assessment, vision, and direction with regard to current implementation as well as future planning with regard to technology and training.	Department/Division Chairs, Deans, Directors/Vice Chancellors Technology Advisory Committee
6.4 Communicate proper channels for technology related requests	Improve communication between departments and college administration regarding request process. Possible training should be offered for those unfamiliar with the process.	Department/Division Chairs, Deans, Directors/Vice Chancellors Technology Advisory Committee

**Topic:** *Community Partnerships*

**Goal 7:** Collaborate and partner with leaders in the Hawaii Island Community to provide technology-related resources, learning opportunities, and professional expertise.

Strategies	Dependencies	Responsible Parties
7.1 Identify areas of need to determine candidates for advisory board.	Designate who will solicit nominees for the advisory board.	Public Relations Coordinator.
7.2 Develop advisory board composed of community partners.	Develop mission, structure, and policies. Hold walaau (talk story) sessions. Develop nomination forms.	Administration, one of the college governing bodies, and/or the HawCC ohana.
7.3 Solicit board members for ideas and recommendations pertaining to technology.	Dependent on the knowledge and resources of the board	Advisory board and coordinator.
7.4 Annually assess for effectiveness.	Create procedure and assessment instrument to assess the board recommendations.	Coordinator, Assessment Coordinator

**Topic:** *Quality Outcomes through Technology*

**Goal 8:** Improve the outcomes of the college community thru the effective use of existing and evolving technologies.

<b>Strategies</b>	<b>Dependencies</b>	<b>Responsible Parties</b>
8.1 Define a technology outcome for measurement	Institutional Research available	Institutional Research and Technology Director, Assessment Coordinator
8.2 Develop a plan to acquire measurable values related to the defined outcome for each outcome measurement.	Will vary depending on outcome/value identified	Institutional Research, Assessment Coordinator
8.3 Implement feedback and evaluation cycle	See ongoing feedback and evaluation	See ongoing feedback and evaluation

**Topic:** *Learning with Technology*

**Goal 9:** Improve the technology portfolio to satisfy all educational needs with appropriate and diverse solutions.

Strategies	Dependencies	Responsible Parties
9.1 Assess the current technology portfolio to identify strengths, weaknesses, and opportunities for improvement	Agreement on participants and approach.	Technology Advisory Committee and/or Technology Director, ITSO
9.2: Determine what types of technologies faculty and staff need to have (not just computer related, can be new equipment, tools, etc).	Technology Advisory Committee and Technology Director available	Technology Advisory Committee and/or Technology Director
9.3 Investigate and explore distance education and online delivery options that are available (programs, vidcon, freeware, etc.)	Faculty willingness and availability, tech support staff assigned to provide assistance	Interested faculty, Technology Director and technology staff, ITSO
9.4 Survey HawCC students and community members to determine demand and potential for enrollment in online, remote, Polycom classes.	Institutional Research	DE coordinator, Institutional Researcher
9.5 Provide train-the-trainer sessions for faculty & staff interested in offering classes online.	Faculty willingness and availability	DE coordinator, Staff Development Coordinator
9.6 Provide support & training to students who need help accessing/ navigating online or distance classes.	Staff time to develop training materials; availability of computer labs for training	DE coordinator, Staff Development Coordinator



<b>Strategies</b>	<b>Dependencies</b>	<b>Responsible Parties</b>
9.7 Acquire equipment and programs identified as important for instruction and delivery of courses.	Availability of funding and technology support	DE coordinator, VC Academic Affairs

## ***Appendix***

### **Members of the Technology Strategic Planning Team**

A special thanks goes to Jim Yoshida, whose calm and quiet leadership made sure that the process ran smoothly. Also, we would like to thank Leanne Urasaki for all the support she provided to us, and to the planning group, in our use of Laulima. A special note of appreciation also goes to Janice Watanabe, who helped with ordering the lunches, arranging for the rooms and setting up the flip charts.

### **Session Attendees and Discussion Board Participants**

The following individuals contributed to the planning process by their participation in one or more of the planning days. Their efforts are greatly appreciated; without their energy, dedication, time, effort, debate, and thoughtful consideration of sometimes widely varying opinions and ideas, this document would not have been completed and no strategic plan for technology would exist.

Chuck Connors	Helen Nishimoto
Renee Dela Cruz	Elizabeth Ojala
Daniel Fernandez	Scot Rosehill
Graceson Ghen	Toni-Ann Samio
Nozomi Kanoho	Jason Santos
Tony Kent	Steve Schulte
James Kiley	Naveen Siriah
Gwen Kimura	Neal Uehara
Guy Kimura	Leanne Urasaki
Rachel Louis	Robert Yamane
Jack Minassian	Noreen Yamane
Sean Naleimaile	Jim Yoshida
Elizabeth Niemeyer	

A special thanks goes to the following individuals, who, although they could not participate in the face-to-face meetings, made contributions online via their comments in Laulima:

Misty Carmichael	Nancy Schein
Kalyan Meola	Kate Sims

**Dates of Planning Sessions**

October 5, 2012

October 26, 2012

November 16, 2012

## ATTACHMENT

Hawai'i Community College Academic Senate  
Recommended edits for  
Hawai'i Community College Technology Master Plan  
Dated October 10, 2013

The Academic Senate met on September 27, 2013 and approved the Hawai'i Community College Technology Master Plan with the following recommended edits. These recommendations appear here as an attachment to the original report.

Below are the recommended edits:

Footer for document should read HawCC Technology Master Plan or Hawaii Community College Technology Master Plan.

Page 11, Goal 4 should read: Provide technology training to faculty, **lecturers**, staff, managers, and **administrators**.

Page 32, add to list of Session Attendees and Discussion Board participants: **Misty Carmichael** and **Ellen Okuma**.

The Senate liked College Council's idea to add a cover page, which will identify the document as the Technology Master Plan.