

CELTT Technology Resources System Program Review Fall 2010 to Summer 2011

BACKGROUND

Kap'iolani Community College is developing a new ecology of learning that connects classrooms, labs and centers, campus, community, and cyberspace. [Strategic Plan 2008-2015: Framework, Process, and Context, p. 15] This learning ecology opens many avenues to faculty innovation in meeting the diverse learning styles of our students. Within this ecology, strong faculty commitment to indigenous, multicultural, international, and civic learning has helped prepare students for effective engagement and leadership in a globalizing era. The central force driving College innovation is the faculty's collective commitment to high quality student learning and success realized in degree programs and cross-curricular emphases, and supported by an active Center for Excellence in Learning, Teaching and Technology (CELTT). [Title III Grant Application, PR # P031W08004-09A]

MISSION

Using learning college principles, CELTT provides leadership and support for the improvement of teaching and learning. CELTT advances the college's mission through the application of appropriate technologies and is committed to enhancing and expanding learning opportunities for students, staff, and faculty.

FUNCTION

The Center for Excellence in Learning, Teaching and Technology (CELTT) is responsible for planning, developing, and delivering high quality computing and media resources and services for student learning, administrative operations, faculty and staff development, and delivery of instruction and services. CELTT:

- Coordinates, develops, and implements the College's technology plans;
- Develops and maintains the College's voice, data and video networks;
- Develops and supports local area networks within instructional and administrative facilities;
- Develops and coordinates faculty and staff professional development activities;
- Conducts demonstrations to familiarize faculty and staff with equipment available and to enable them to operate equipment;
- Supports the development and delivery of distance education using a variety of media, such as broadcast television, cable television, web-based instruction, or other forms of digital delivery;
- Supports curriculum innovation using computers or media technology in the classroom;
- Develops and maintains computing programs and services for both academic and administrative uses;
- Works with College program heads to formulate budget requirements especially in the area of technology and technology uses;
- Evaluates and makes recommendations on the purchase of technology;
- Maintains and repairs media and computing equipment, including the development and implementation of preventive maintenance programs;
- Trains faculty and staff in various computer applications and use of media;
- Provides telephone/telecommunication services; and
- Develops and implements applicable policies and procedures.

[Functional Statements, Reorganization Proposal, March 20, 2008, p. 5]

OUTCOMES AND PERFORMANCE MEASURES

Since CELTT operates as a support unit for the campus, we have adopted the following outcomes and attendant performance measures set forth in the 2008-2015 Strategic Plan:

1. Increase total fall enrollment of Native Hawaiian students by five percent annually, from 840 to 1,303. [Outcome A Performance Measure 1]
2. Increase by six percent per year the number of Native Hawaiian students who complete certificates and degrees, or transfer to baccalaureate institutions, while maintaining the percentage (71%) of transfers who achieve a GPA of 2.0 or higher at the transfer institution. [Outcome A Performance Measure 4]
3. Increase by three percent per year the number of students who successfully progress and graduate, or transfer to baccalaureate institutions, while maintaining the percentage (78%) of transfers who achieve a first year GPA of 2.0 or higher at the transfer institution. Increase in certificate and degree completers from 641 to 885, and increase in transfers is from 561 to 828. [Outcome B Performance Measure 4]
4. Using effective distance and offsite learning, increase enrollment of students from under-served regions from 1,103 to 1,481, and increase degrees awarded to these students from 74 to 110. [Outcome B Performance Measure 4]
5. Recruit, renew, and retain a qualified, effective, and diverse faculty, staff, and leadership committed to the strategic outcomes and performance measures. Increase professional development funding by three percent per year from \$776,000 to \$995,000. Funds allocated should support achievement of these performance measures and improvement of CCSSE Support for Learners Benchmark to the 80th percentile. [Outcome E Performance Measure 1]
6. Establish minimum technology standards for all campus learning and administrative spaces. Bring all classrooms, labs, and offices into compliance by 2015. Secure advanced technologies for student engagement. [Outcome F Performance Measure 2]

Performance measures, strategies, means of assessment, positions responsible, synergies with others, key community partners, resources needed, data collected, and use of results are all provided in CELTT’s Tactical Plan.

Part I. Quantitative Indicators for Program Review

TECHNOLOGY RESOURCES DATA

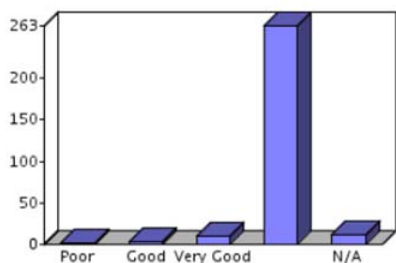
2011 Annual Report of Academic Support Services Program Data			
COLLEGE :	Quantitative Measure 2008-2009	Quantitative Measure 2009-2010	Quantitative Measure 2010-2011
Technology Resources (Overall Health)			

Technology Resources Demand	(Health)			HEALTHY
Number of online courses per year per total number of courses (live and online)		0.272	0.287	0.191
Number of student, faculty and staff computers per IT desktop support staff		252.33	490.33	533.33
Number of technology workshops for faculty, staff, and students per faculty FTE, staff FTE, and student FTE. <i>NOTE: Student workshop data not included here as student workshops are not offered by CELTT, but offered through LLR and other units.</i>		0.33	0.18	0.11
Technology Resources Efficiency	(Health)			HEALTHY
Average response time for Help Desk calls		Not available	Not available	Not available
Average processing time for work orders		4.81	5.4	4.05
Total number of computers per Computer Services Budget		0.003	0.006	0.008
Technology Resources Effectiveness	(Health)			HEALTHY
<i>Common survey questions</i>				
1. I am satisfied with the customer service of the Help Desk/computer services staff.				98%
2. I am satisfied with the response time of the Help Desk/computer services staff.				see report for survey results
3. The computers on campus meet my needs.		Not available	Not available	Not available
4. I am satisfied with the quality of work of the instructional design faculty and staff.		Not available	Not available	Not available
<i>CCSSE Indicators</i>				
4.j. Used the Internet or instant messaging to work on an assignment		Not available	Not available	90%
9.g. Using computers in academic work		Not available	Not available	94%
12.g. Using computing and information technology		Not available	Not available	87.10%
13.h. Computer lab (frequency, satisfaction, importance)		Not available	Not available	62.70%

After each online request has been completed, clients receive an email invitation to evaluate the service received. The results shown below are for the Help Desk/Customer Care Center, the group responsible for technology trouble-shooting. Similar surveys are being developed for other work groups.

Fall 2010 to Summer 2011 Customer Satisfaction Survey Results

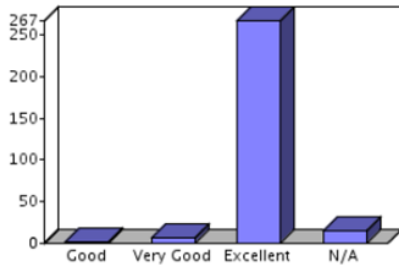
1. How would you rate the effectiveness of the Help Desk in solving your computer problem?



Option	Count	Percent	Cum. count	Cum. percent	Cum. sum
1. Poor	2	0.69%	2	0.69%	2
2. Good	4	1.38%	6	2.07%	10
3. Very Good	10	3.45%	16	5.52%	40
4. Excellent	263	90.69%	279	96.21%	1092
5. N/A	11	3.79%	290	100.0%	1147
Total	290	100%	290	100%	1147

Median: 4.0 Minimum value: 1
Total responses: 290 Maximum value: 5

2. How would you rate the Help Desk Staff's computer related knowledge?



Option	Count	Percent	Cum. count	Cum. percent	Cum. sum
2. Good	2	0.69%	2	0.69%	4
3. Very Good	6	2.07%	8	2.76%	22
4. Excellent	267	92.07%	275	94.83%	1090
5. N/A	15	5.17%	290	100.0%	1165
Total	290	100%	290	100%	1165

Median: 4.0 Minimum value: 2
 Total responses: 290 Maximum value: 5

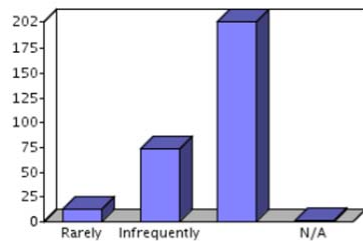
3. How would you rate customer service of the Help Desk Staff?



Option	Count	Percent	Cum. count	Cum. percent	Cum. sum
2. Good	1	0.34%	1	0.34%	2
3. Very Good	10	3.45%	11	3.79%	32
4. Excellent	271	93.45%	282	97.24%	1116
5. N/A	8	2.76%	290	100.0%	1156
Total	290	100%	290	100%	1156

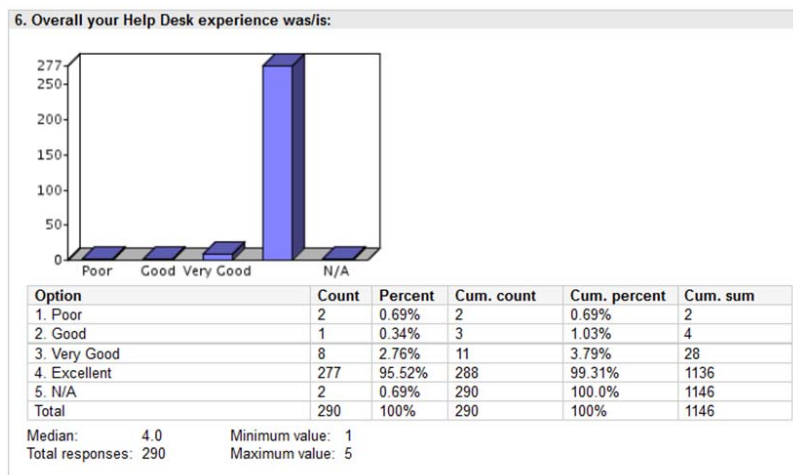
Median: 4.0 Minimum value: 2
 Total responses: 290 Maximum value: 5

4. How often have you asked for help from the Help Desk?



Option	Count	Percent	Cum. count	Cum. percent	Cum. sum
1. Rarely	13	4.48%	13	4.48%	13
2. Infrequently	74	25.52%	87	30.0%	161
3. Frequently	202	69.66%	289	99.66%	767
4. N/A	1	0.34%	290	100.0%	771
Total	290	100%	290	100%	771

Median: 3.0 Minimum value: 1
 Total responses: 290 Maximum value: 4



Part II. Analysis of the Unit

CELTT is a complex unit comprised of faculty, professional and clerical staff, student interns, and volunteers. As demonstrated by high demand for services and client satisfaction, CELTT is a productive and efficient unit given its level of funding and staffing. Resources in the department are effectively applied toward the campus' mission. Resources are reallocated and workgroups reorganized as appropriate to fit campus demands. Although the unit has distinct working groups, staff cross-train and collaborate to maintain a wide breadth of knowledge. A wide array of technology and telecommunications assets are managed by CELTT. This enables the department to develop and deploy innovations across the campus and to maintain a high level of support with a small workforce. Client satisfaction with services is very high as evidenced by surveys of individual clients. Additional measures of satisfaction and effectiveness are being developed for the subsequent academic year.

STAFFING and DEMAND

The campus has an annual student FTE of 4,978 and employs 258 faculty, and 448 staff. CELTT operates with the following full-time permanent staff:

- 2 faculty
- 2 secretarial/clerical (1 vacant)
- 8 IT specialists (5 vacant)
- 1 Educational Support Specialist
- 2 Electronics Technicians
- 1 Graphic Artist

It is supplemented by the following temporary or s-funded staff:

- 1 Media Specialist (trust fund)
- 1 Educational Specialist (trust fund)
- 2 IT Specialists (1 unbudgeted temp, 1 budgeted temp)

The department is currently organized into the following work groups:

- Help Desk & Telecommunications
 - 4 employees (2 permanent, 2 temporary)
- Instructional & Multimedia
 - 5 employees (2 permanent, 2 temporary)
- Institutional Web Services
 - 1 employee
- Unit Clerical & Secretarial
 - 1 employee in a temporary assignment
- General Campus Support (eWaste, graphics)
 - 2 employees

The bulk of work requests are handled by the first three units which are sorely understaffed. The unit implemented online request form systems that permit clients to report technical problems and request technology support services from these three work groups. The online system was slowly implemented for the Instructional & Multimedia workgroup during the reporting period; workload data for this group is higher than what the data shows. The same is true for the Institutional Web Services group which only began a pilot of their online request system in summer 2011.

WORK REQUESTS

The workgroup with the most widely adopted Online Request Form system and thus the most accurate data is the Customer Care Center/Help Desk. For the reporting period, 1,197 work requests were received via this group's online request system. The breakdown of support areas is shown below:

Issue	# Requests
Hardware Repair & Support	123
Software Support	221
AV Repair & Setup	142
Computer Setup	86
Consulting	9
eWaste	9
Loan	142
Networking, Servers	124
Other	71
Phone	99
Printer	115
Virus/Spyware	56
TOTAL	1197

As stated above, the adoption of the online tracking system for the Instructional Multimedia and Distance Learning work group has been slow and data collected (see below) does not accurately represent the true workload. As clients are still learning about the system and how to use it or remain resistant to adoption, many work requests are received in person, via email, and via telephone.

Issue	# Requests
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ADA Support	5
Illuminate	7
E-Portfolio	2
Faculty Lab	7
HITS/ITV	2
Instructional Training	13
Laulima	96
Other	4
Software Support	58
Video Conferencing	6
Video Production	4
TOTAL	204

OPERATING HOURS

Clients may submit service requests 24/7 via our online request form systems; these systems cover the majority of our services. We also provide support via the telephone, email, and a BlackBoard Collaborate virtual help desk. Our in-person hours of operation for the front office are Monday to Friday, 9am to noon and 1pm to 4pm. The help desk employees work shifts that cover the period of 7:00a.m. to 5:30pm, Monday through Friday. Most employees operate on a standard schedule (7:45am to 4:30pm), though some work is done at other times to minimize interruptions in technology services to the campus.

PROFESSIONAL DEVELOPMENT SUPPORT

CELTT's professional development programs support the unit's Tactical Plan which is closely aligned with the campus Strategic Plan. There is alignment with strategic outcomes, performance measures and potential strategies of the 2008-2015 Strategic Plan; these are covered in detail in the latest Tactical Plan and we highlight some below.

Strategic Outcomes Supported by Professional Development

Strategic Outcome E

Recognize and invest in faculty and staff resources and develop innovative and inspiring learning environments in which to work.

Professional development opportunities contribute to a positive work environment and represent an investment in human resources. Professional development offerings whether in group or individual settings, often promote innovative practices such as adoption of Illuminate (now called BlackBoard Collaborate!) which is a web based conferencing system that is used for online office hours and online synchronous tutoring and technical support.

Strategic Outcome F, part II

Exercise exemplary stewardship over all of the University's resource for a sustainable future.

In addition to encouraging innovative practices, professional development offerings can also support adoption of more sustainable technologies, such as thin client computers in teaching labs that consume less power and are less costly to maintain.

Potential Strategies Supported by Professional Development

1. Improve outreach to Native Hawaiian students by developing better communication technologies and appropriate distance learning courses. [A1B]

We provided one-on-one professional development support for faculty teaching distance learning courses in HWST 107, PACS 108, and Hawaiian Language courses. We taught them how to use web-page templates to provide information to students with professional-looking and visually engaging web pages. We also taught them how to integrate a student readiness website into their courses – the site is called the Orientation to Distance Learning at Kapi’olani Community College. These faculty were mentored by CELTT to incorporate a variety of media when presenting information to online students.

AY 2010-2011 Professional Development Program	
Date	Event
8/18/2010	New Faculty Orientation
9/24/2010	SARS Demo with Therese Nakadomari
10/22/2010	Death to E-Mail
10/29/2010	Protect Sensitive Information with Jodi Ito
11/5/2010	Distance Education is So 21st Century Dude
12/14/2010	Illuminate Introduction Workshop
12/15/2010	Illuminate Introduction Workshop
1/4/2011	Illuminate Moderator Training Part 1
1/5/2011	Illuminate Moderator Training Part 2
1/24/2011	Illuminate Introduction Workshop
1/26/2011	Illuminate Moderator Training Part 1
1/28/2011	Illuminate Moderator Training Part 2
2/1/2011	Illuminate Introduction Workshop
2/3/2011	Illuminate Moderator Training Part 1
2/4/2011	Illuminate Moderator Training Part 2
2/23/2011	Illuminate Introduction Workshop
2/24/2011	Illuminate Moderator Training Part 1
2/25/2011	Protecting UH Sensitive Information
2/25/2011	Illuminate Moderator Training Part 2
3/8/2011	Cyber Safety Demo: How to Protect Your Computer and Yourself
3/14/2011	Illuminate Introduction Workshop
3/16/2011	Illuminate Moderator Training Part 1
3/18/2011	Illuminate Moderator Training Part 2
3/29/2011	Illuminate Introduction Workshop
3/31/2011	Illuminate Moderator Training Part 1
4/1/2011	Illuminate Moderator Training Part 2
4/11/2011	Illuminate Introduction Workshop
4/13/2011	Illuminate Moderator Training Part 1
4/15/2011	Illuminate Moderator Training Part 2
4/26/2011	Illuminate Introduction Workshop
4/26/2011	Protecting UH Sensitive Information
4/28/2011	Illuminate Moderator Training Part 1
4/29/2011	Illuminate Moderator Training Part 2
5/3/2011	Cyber Safety Demo: How to Protect Your Computer and Yourself
5/6/2011	Illuminate Training for Library
5/16/2011	Illuminate Sessions

6/7/2011	Introduction to Elluminate
6/9/2011	Elluminate Moderator Training I and II
6/27/2011	Introduction to Elluminate
6/29/2011	Elluminate Moderator Training I and II
7/19/2011	Introduction to Elluminate
7/20/2011	Elluminate Moderator Training I and II
8/4/2011	Introduction to Blackboard Collaborate
8/5/2011	Blackboard Collaborate Moderator Training I and II
8/15/2011	Blackboard Collaborate Training for Kahikoluamea
8/17/2011	Blackboard Collaborate Moderator Training I and II

We created a professional development certificate program on Elluminate, a synchronous web-based conferencing tool. Workshops were offered throughout the 2010-2011 academic year and to date over 100 faculty completed initial training and have their own virtual office. Sixty-four have completed the entire training series and have received certificates.

2. Support the development, implementation, evaluation, and improvement of learning materials and pedagogies based on research-based best practice. [E1C]

We delivered professional development a program in Summer 2010 for distance learning and hybrid faculty based on best practices and ACCJC guidelines. We enhanced the program and will begin in October 2011. This program is designed to provide support for faculty as they learn to or continue to deliver hybrid or online courses. Unlike prior programs, this one has been designed around [the TPACK \(Technological Pedagogical Content Knowledge\) Framework](#) for Teacher Knowledge. The framework is based on the notion that technology should not be the sole focus of professional development programs. It must take into account the interplay of three bodies of teacher knowledge: Content, Pedagogy, and Technology as effective teaching with technology is a complex interaction among these three areas. The program also promotes development of courses that employ high-impact practices that foster student learning, student engagement, and student success, while contributing to the advancement of tactical and strategic planning goals.

Program information can be found online at <http://faculty.kcc.hawaii.edu/DE2011/index.html>

We created a professional development certificate program on Elluminate, a synchronous web-based conferencing tool. Workshops were offered throughout the 2010-2011 academic year and to date over 100 faculty completed initial training and have their own virtual office. Sixty-four have completed the entire training series and have received certificates. This provides a vehicle for expand learning environments into cyberspace and engage students more actively in the learning process.

2010-2011 Professional Development Events

Due to a planned 2010 renovation of the building which led to temporary loss of training spaces and staffing shortages in the area of professional development and instructional support, CELTT's professional development program for this academic year was very limited, with primary focus on a new Elluminate web conferencing tool, information security, and cybersafety.

The total attendance at all events was 292 people. This represents an unduplicated headcount of 168 people from 28 department/offices as shown below.

Departments	# attended
A&S - Counseling	7
A&S - Humanities	6
A&S - Language, Linguistics and Literature	19
A&S - Mathematics/Science	16
A&S - Social Sciences	3
Administration Services	1
Auxiliary Services	1
Business Office	1
Business, Legal and Technology Education	17
CELTT	17
College & Community Relations	3
Health - Health Sciences	5
Health - Nursing	5
Honda International Center	5
Hospitality - Culinary	3
Hospitality - Hospitality	5
Hospitality & Tourism Education	1
Human Resources Office	3
ISO (Instructional Services Office)	1
Kahikoluamea Center	6
Kapi`olani Deaf Center (KDC)	6
Kekaulike Information & Service Center (KISC)	6
Library	8
Maida Kamber Center	3
Office for Institutional Effectiveness	4
Office of Community and Continuing Education	2
Single Parents and Displaced Homemakers Program	1
Student Services	13
	168

Technology Planning

Campus technology planning is embedded in the larger planning framework. The campus ensures that operational and student learning needs are supported by appropriate technologies via a comprehensive planning process that encourages connections between the campus Strategic Plan, unit Tactical Plans, course curriculum plans, grant applications, and campus budgets/unit allocations. Technology goals are woven throughout all of these institutional plans and a high level of collaboration exist among those involved in these plans.

CELTT collaborates and provides consultation whenever technology is involved -- during renovation and building projects, as grant applications are written or grant awards implemented, when departments purchase equipment, when classrooms are to be upgraded, and in the tactical and strategic planning

processes. CELTT is also consulted when faculty plan curricula, through the use of Curriculum Central. This tool is the primary method in which the institution assures that technology resources are planned for and allocated in a manner that directly supports student learning. The unit head of the Center for Excellence in Learning, Teaching and Technology reviews all course proposals submitted through Curriculum Central. In the process of reviewing proposals, the unit head makes note of any resource implications and communicates these to appropriate support staff. If changes to services or operations may be warranted, the unit plans or implements changes accordingly. The use of Curriculum Central promotes a clear connection between expected learning outcomes with the allocation and application of library, learning, and technology resources to support and improve the achievement of these outcomes.

Technology planning also involves human resources; CELTT reviews position descriptions for all employees who have direct responsibility for technology and/or technology support. This consultation ensures coordinated technology support across the campus that is in compliance with campus and university standards and practices and enables CELTT to provide appropriate support to other campus employees in technology-related jobs.

The current tactical plan and an update are attached to this program review.

Part III. Action Plan

Given the high demand for services and low levels of funding and staffing, we have identified the following action items:

- A. reallocate internal resources as needed to meet client demand
- B. seek extramural funding to supplement our campus allocation and workforce
- C. extend services to the web, expanding our clients' access to support

Reallocation of Internal Resources

In the 2010-2011 academic year, all three action items were addressed and are part of the unit's current tactical plan. Internal resources were reallocated to provide more support for UH and UHCC infrastructure projects planned to reach implementation stages in AY 2011-2012, such as the migration to VOIP and a new campus electronic portfolio system. KCC also reallocated staffing to support increased need to improve campus information security practices. One help desk IT specialist was rebanded and given the new working title, Campus Information Security Specialist. Activities performed in Spring and Summer 2011 include:

- Training program about state and UH information security policies launched. See Appendix D for list of all CELTT-sponsored professional development events in AY 2010-2011.
- Workshops on safe computing, encryption, and virus protection were delivered.
- Campus policies and standard operating procedures were developed with regards to data collection, encryption, and responses to malware.

- Registration of all campus servers with UH ITS began in summer 2011 and should be complete in Fall 2011.

Obtain Extramural Funding

CELTT faculty and staff successfully collaborated on many grant-funded projects which provided direct benefit to the campus and enabled the unit to expand support capacity in several areas.

These grants included:

- Title III Supplemental for Distance Learning to support increases in distance learning course offerings (Expanding Learning into Cyberspace)
- Perkins Professional Development for Distance Learning Faculty
- Native Plants (Digital online project in collaboration with LCC)
- Title III Naio Renovation
- Title III Classroom Renovations to upgrade technology in campus classrooms and labs
- CORE PIG (Curriculum, web support, collateral creation and professional development for in-service and pre-service educational paraprofessionals)
- Geriatric (Provide lecture capture support for Health Academic Programs workshops in Spring 2011 and Fall 2011)
- VPTF (collateral creation for the task force)
- HENC-Olelo (creation of tv/online courses for cable TV delivery)

Extend Departmental Services to the Web

Despite several vacancies, the department was able to expand access to services and make the process of submitting and tracking service requests and trouble calls easier for our clientele.

Some actions taken in this area include:

- Launch Online Request Form systems for KCC Web Services. This was done as a pilot program in the reporting period.
- Implement campus-wide adoption of the Online Request Form for the Instructional Multimedia and Distance Learning work group.

These new systems promote visibility, accessibility, and accountability for the unit and the campus. Since these systems are in the early stages of development or deployment, improvements are planned for the next academic year.

Part IV. Resource Implications (physical, human, financial)

As the campus seeks to enhance and expand educational opportunities for students via the Internet, technologies that support quality rich learning environments and web-based services will become critical. Even more critical is the presence of qualified personnel who can provide direct services to

students, staff, and faculty in the appropriate uses of technology. CELTT's staffing in the areas of web services and instructional/multimedia support are understaffed. Long term plans for the college should include allocation of additional resources in the form of permanent, full time APT staff and an additional faculty position to act as lead for distance learning and professional development programs. The college may also want to consider further centralization of technology support to include procurement and asset management to achieve cost-savings (economies of scale with technology vendors), greater ROI, and less duplication of effort. This recommendation cannot be supported without additional IT staffing.