July 23, 2013

TO: Douglas Dykstra, Chancellor  
Windward Community College

SUBJECT: Career & Technical Education Award

Windward Community College is awarded $59,796 in 2013-2014 Title I Career and Technical Education funds to support the titled project:

Assistive Technology Lab $59,796

The award period for the project is from July 1, 2013 to June 30, 2014 and the award number for the project is: WIN2013/14(1)-T1-03 and should be referenced on all future correspondence and reports. These funds must be expended and goods received by June 30, 2014. A completion report is due on October 10, 2014.

Please call Dominic (Nic) Estrella at 956-3865 if you have questions.

Sincerely,

[Signature]

Peter Quigley
Assoc. Vice President for Academic Affairs

Cc: E. Ishida-Babineau, VCAA  
K. Ishida, VCAS  
S. Nakagawa, FA  
L. Tsuchako, FA  
S. Robinson, Dir. of Academic Programs
1. College: University of Hawai‘i – Windward Community College

2. (Descriptive) Strategy Title: Assistive Technology Lab

3. Proposer’s Name: Ann Lemke  E-Mail: lemke@hawaii.edu

4. Proposal Period: July 1, 2013 through June 30, 2014
   Is this proposal a part of a multiple-year strategy? Yes
   If this is a multiple-year strategy, for what year is this proposal requesting funding?
   Third year.

5. Brief Statement of identified problem area and reason for selection:
   a) Provide relevant program and/or college data to support the need to address this problem. 
   b) Describe alignment of problem to one or more Perkins Core Indicators, and as appropriate, goals from the UHCC Strategic Plan, Achieving the Dream, and/or other UHCC projects. (See pages 2 - 4 of UHCC College Plan Guidelines for FY 2013-14)
   c) Include narrative that is supported by data. Be brief and succinct.

This Perkins grant continues to be a joint effort between Windward Community College and University of Hawai‘i Maui College to establish and develop assistive technology computer labs on both campuses.

At the inception of this project, there was no easily accessible equipment for students with disabilities. Beginning in September 2012, the Assistive Technology Lab was staffed and operational, providing students with easily accessible technology and a private space in which to use the equipment. By the time equipment, software, and personnel were established, however, about half of the funding period had elapsed; nevertheless, 24 students have been served by the Assistive Technology Lab since September 2012. In Fall 2012, 7 students were helped, with a total of 8 sessions. As of March 11 in the Spring semester of 2013, 20 students have been helped (some repeat customers from the previous term), with a total of 35 sessions. The increase in sessions is due to an increase in the number of repeat visitors, who report being satisfied with the services and training they have received. In addition, the Echo Smart Pen has become a popular device, and has been rented out to 11 students who report that the technology is an enormous help to them with helping with their note-taking and organizational skills.

This proposal aligns with Perkins core indicator 1P1: Technical Skill Attainment, one area where WCC does not meet the standards. Increasingly the ability to access the technological components of many CTE programs and the foundational coursework for them
are difficult without improved assistive technology support. The following are three examples that illustrate the difficulties with accessing science, math, and technology classes – 1) a STEM student who has low vision is taking a computer class that requires him to use his magnification program on the computer to complete the work, while at the same time magnifying his text book using a CCTV – there is no space for him to do this; 2) a student with dyslexia is having difficulty accessing all of the required materials of his program, in part because the majority of the program materials are on Laulima in an inaccessible format; 3) all developmental math classes are now taught via My Math lab – students with visual impairments, physical disabilities, and math learning disabilities have difficulty accessing this computer based learning system. The APT funded under this proposal has begun discussions with the instructional designer, web master, and other IT staff to ascertain the best ways to make distance learning content more accessible. This has resulted in the recommendation to purchase captioning software.

Additionally, in establishing the lab, it is apparent that veterans with disabilities are hesitant to self-identify themselves as persons with disabilities. However, when presented the opportunity to use technology that will enhance their learning independence (i.e., Dragon Naturally Speaking and the Echo Smart Pen), they seem eager to embrace the use of such technologies. This is consistent with the goal of enhancing technical skill attainment.

Additionally, this grant aligns with Perkins core indicator 3P1: Student Retention or Transfer by incorporating the tenants of universal design. By expanding the availability of Kurzweil, a literacy tool used by students with disabilities, to a campus-wide web-based system, other student populations, such as developmental English and English Language Learner (ELL) students, could benefit, leading to improved retention and persistence rates across campus. Utilizing Smart Pens has enhanced note-taking skills and exam preparation in foundational courses. Dragon Naturally Speaking will continue to enhance writing efficiency for those with dysgraphia. All of these assistive technology strategies coupled with support of a specialist will increase student success and retention, therefore, supporting the goals of Achieving the Dream.

This strategy also aligns with the following WCC Strategic Outcomes:

2.1 Increase enrollment, particularly in regions and with groups who are Underserved… .

2.5 Increase the number of students who reenroll in the Spring semester and persist until Fall…by 5% per year.

Enhancing the availability of and the use of assistive technology by students with disabilities will both promote retention of these students and enrollment of new students who are aware that WCC has these resources. Many colleges and universities who offer comprehensive services to students with disabilities report a minimum enrollment of 7% of their total enrolled student population is represented by students with disabilities. Based on these trends, WCC would expect to have a minimum of 189 students with disabilities enrolled. As of the Spring 2013 semester, WCC has a minimum of 190 verified student with disabilities, and no longer falls short of this statistic. This represents slightly more than 25% underrepresentation in this population. This technology support will provide a valuable support to strengthen student capacities to succeed in basic academic courses that will promote success in college-level academic and technical courses.
Providing enhanced assistive technology support will strengthen academic achievement and contribute to retention from fall to spring as well as subsequent fall enrollment.

Increasing the availability and use of assistive technology will better equip students with disabilities to participate in and benefit from Supplemental Instruction and Learning Communities, both key components of WCC’s systemic implementation of the Achieving the Dream initiative.

Students with disabilities reflect the same ethnic and cultural diversity represented by the WCC population as a whole. Therefore, enhancing technology skills in the population of students with disabilities specifically contributes to strengthening academic preparation in all ethnic, cultural, and socioeconomic strata of our student population.

6. Strategy Description:
   • Answer the question: What do you want to do based on information provided in item #5 above?
   • If this strategy is a continuation of a current strategy, indicate rationale for continuance. Strategies will not be considered for continued funding unless supporting data and rationale demonstrate impact effectiveness.
   • Include supporting data i.e. effectiveness measures. Data on student needs, student impact (number served last year and anticipated number to be served in current year), and effectiveness must be provided below.
   • Evidence of industry support.
   • Include a short description on all proposed personnel to be paid for by these funds. The description should include:
     o the position(s) FTE,
     o if the hire will be regular or casual,
     o the position’s/positions’ classification(s) (e.g., counselor, lecturer, APT, etc.),
     o the position’s/positions’ job duties and how the duties will benefit the project,
     o the intended number of months of funding for each position. Please take into consideration the recruitment time for new hires.
   • Itemize supplies valued at more than $500 and have a shelf life of 1 year or longer.
   • Itemize equipment, whose description is an article of nonexpendable, tangible personal property having a useful life of more than one year and an acquisition cost which equals or exceeds $5,000.
   • For travel, provide a breakdown the estimated cost including airfare, lodging, per diem, conference fees, and ground transportation. Include the conference name, description, location, and dates. If possible, include the conference flyer and/or agenda.
   • For services, if the name of the specific vendor is known, please include that information. Also include a breakdown of service cost (cost per day, hour, etc.)
   • For software, include the type of software package, the estimated costs and how the software will enhance the project.

The goal of this proposal is to improve access to technology based educational material and the technical skills attainment of individuals with disabilities in the educational and work settings. A lab dedicated to assistive technology in a study area of the Ka Piko Center on campus will encourage students to efficiently learn and use the technology available to them. The Specialist will assess students’ knowledge of technology, making appropriate
recommendations and providing training in use of the technology. With support students will become increasingly efficient and independent in their use of these strategies. Providing assistive technology to students with disabilities so that they can perform in career fields is an industry and legal standard.

As reported on the first proposal, there were 139 students registered with the disabilities counselor as of the Fall 2011 semester, with 40 of them having a disability that may limit their access to technologically-based educational materials (e.g. vision, hearing, cognitive). As of March 2013, 23 students have used assistive technology, which is half of what the original estimated group had been. Currently, there are a minimum of 190 students registered with the disabilities counselor, about 50 of who have a disability that may limit their access to technologically-based educational materials. Even with these larger overall numbers, usage of the lab has increased. An open house event was held in February 2013, giving students and faculty/staff a chance to come and see the lab. Five students and four faculty/staff members came in and were given demonstrations of the technologies. The open house was a useful opportunity to educate the faculty, staff and students to become familiar and aware of the services available in the lab. The Assistive Lab Specialist and her assistant also arranged to interview for an article to be published in the March 2013 issue of the school’s newspaper, Ka ‘Ohana, as another measure to increase campus awareness of assistive technology.

In the initial proposal, student comments regarding their non-use of the assistive technology indicate that they 1) don’t feel comfortable using it where it is currently located; 2) the computers have not been available when they have come for training; and 3) scheduling time to meet with the part-time APT has been unsuccessful. These issues have been addressed by designating a specific office space for the lab, having two computers available, and having an Assistive Technology Specialist available throughout the week. One of the current users of assistive technology has expressed that she is grateful to have a quiet, private space to use the technology, and has also found the assistance from the Specialist and assistants in the lab to be useful in supporting learning.

As established at the inception of this project, while 2009-10 data show strong retention and degree completion rates for students with disabilities, these rates are in jeopardy as more classes add technological components to their courses that may not be accessible to students with disabilities. Even in the current term, many professors have switched to technology-based methods, and thus the need for assistive technology services increasing and ever-changing.

A need that the 2012-2013 grant did not address is the need for captioning of video or audio media for use by hearing-impaired students. The 2013-2014 grant proposal seeks to remedy this situation. An additional need is ability for students to read electronic copies of Hawaiian language text. There is currently no text-to-speech software that can perform this service, but it may be possible for Windward CC staff to incorporate linguistic and technical rules into existing software that will allow for clear, intelligible pronunciation of Hawaiian words by speech synthesis programs.

**Personnel**

APT – Band A (1) – AT/IT Support - Oversee assistive technology lab, includes set up and monitoring of computers, troubleshooting technical problems, researching assistive technology – keeping updated in new technology and making recommendations for upgrades when needed, working with instructional designer to assist faculty in making technological
educational materials accessible (e.g. Laulima content, web pages), converting print text materials into alternate formats when not available elsewhere, collect data regarding assistive technology usage, collect data regarding technology usage as it related to educational materials. This person will need the following skills - Working knowledge of Windows (XP, Vista) and Mac OS X (10.4 and higher) operating systems; Knowledge and experience with assistive technology (AT) tools such as Kurzweil, Dragon Naturally Speaking, Jaws, Assistive Listening devices, and other AT tools built into operating systems; Knowledge of ADA, postsecondary environment; A clear understanding of academic accessibility issues and alternative media with two or more years of production experience, understanding of and experience in the direct management of Learning Management Systems (preferably Sakai), experience designing and producing technical support documentation (Wiki, WordPress, podcast, videos, etc.), knowledge of file format accessibility for PDF, HTML, Microsoft Word, captioning and other publishing formats, experience with both PC and Mac operating systems, and experience with ABBYY Finereader and Adobe Acrobat Professional. Knowledge of the process and software needed to add captioning to videos needed for students in classes who may require captions for successful usage of class materials.

**Supplies**

Headsets with built in microphone x 4: $50  
Captioning software - $3,000  
PC tablets (16GB, Wi-Fi) x 2: $1,060  
Tablet Cases x 2: $105  
Tablet applications (i.e., e-books, educational applications) - $500

*Total Supplies: $3,925.00*

**Travel**

Disability Counselor and APT attend Pacific Rim Conference on Oahu – Organized by University Hawaii Manoa Center for Disability Studies – April or May 2014 – conference includes pre & post activities – usually 3-4 days total – wide variety of information including trends in disability and higher education, newest assistive technology innovations, updates on legal issues in disability (education & employment).  
Conference Registration - $400 x 2 = $800

*Total travel: $800.00*

7. **Calendar of Planned Activities:** (add or delete rows as appropriate)  
   In chronological order, briefly describe the procedures/activities planned to achieve stated goal(s) or outcome(s)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Month(s) the Activity will take place</th>
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<tbody>
<tr>
<td>Hire Assistive Technology Specialist</td>
<td>July 2013</td>
</tr>
<tr>
<td>Hire student assistants</td>
<td>August 2013 (ongoing during school year)</td>
</tr>
<tr>
<td>Acquire captioning and new software and hardware</td>
<td>August 2013 – June 2014</td>
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<tr>
<td>Faculty training and awareness of Assistive technology</td>
<td>August 2013 – June 2014 (as needed)</td>
</tr>
<tr>
<td>Orient students to assistive technology and train them in usage of equipment and software</td>
<td>August 2013 – June 2014 (as needed)</td>
</tr>
<tr>
<td>Presentations to instructional faculty of how Kurzweil works and how it can help students</td>
<td>September 2013, February 2014</td>
</tr>
<tr>
<td>Train faculty and students in the use of assistive technology</td>
<td>August 2013 – June 2014 (as needed)</td>
</tr>
<tr>
<td>Attend Pacific Rim conference on Disabilities</td>
<td>April 2014</td>
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<tr>
<td>Analyze data on usage and effectiveness of Assistive Technology Lab</td>
<td>June 2014</td>
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8. Effectiveness Measures: (Refer to the identified problem – item #5, and describe the anticipated quantitative outcomes expected from the implementation of the strategy. Where appropriate, indicate the effectiveness measures that will be reported after year one, year two, etc.) State the effectiveness measures clearly and in assessable terms. The outcomes stated here must be addressed later in the completion report. Confer with your IR office to ensure the appropriateness of the measurement of outcomes.

- Increased usage of assistive technology by students who could benefit – 20%-25% by 2nd year, 30% by 3rd year, and 35% by 4th year.
- Meet the Perkins core indicators for technical skills attainment by students with disabilities by the end of the 3rd year.
- Maintain the current retention rate of student with disabilities in 2nd year, improve retention rate by 3% by end of 3rd year.
- Achieve student satisfaction measures of at least 70% satisfied with assistive technology resources and ability to access their course materials as reported by students on surveys.

9. Budget Summary: For system projects, the budget must include a breakdown of costs by campus along with a total system budget. (Double-click to access Excel Worksheet).
Personnel (List all positions separately) | Budget | Category |
--- | --- | --- |
1.0 APT - Band A (Information Technology Position) | $38,160 | 0 |
12 mo.) | $- | 0 |

Personnel Subtotal | $38,160 | 0 |

Fringe Benefits (List per position) | Budget | Category |
--- | --- | --- |
1.0 APT - Band A (Information Technology Position) | $16,871 | 0 |
12 mo.) | $- | 0 |

Fringe Total | $16,911 | 0 |

Personnel Subtotal | $55,071 | 0 |

Services | Budget |
--- | --- |
Material & Supplies | $3,925 |
Travel | $800 |
Rentals |
Other |
Equipment | $0 |

TOTAL COSTS | $59,796 |

Fringe Benefit Rates (as of) | 7/20/12 |
--- | --- |
Faculty/Staff | 44.21% |
Casual Hire/Overload | 2.06% |
Student | 0.46% |

10. Indicate which Perkins requirements are covered by this proposal? (Check no more than three categories that best describe your proposal):

- [ ] 1. Building of the efforts of States and localities to develop challenging academic and technical standards and to assist students in meeting such standards, including preparation for high skill, high wage, or high demand occupations in
<table>
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<th>current or emerging professions</th>
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<tr>
<td>2</td>
<td>Promoting the development of services and activities that integrate rigorous and challenging academic and career and technical instructions, and that link secondary education and postsecondary education for participating career and technical education students</td>
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<tr>
<td>X</td>
<td>Increasing State and local flexibility in providing services and activities designed to develop, implement and improve career and technical education, including tech prep education</td>
</tr>
<tr>
<td>4</td>
<td>Conducting and disseminating national research and disseminating information on best practices that improve career and technical education programs, services, and activities</td>
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</table>
| X | Providing technical assistance that –
|   | (a) Promotes leadership initial preparation, and professional development at the State and local levels; and
|   | (b) Improves the quality of career and technical education teachers, faculty, administrators and counselors |
| X | Supporting partnerships among secondary schools, postsecondary institutions, baccalaureate degree granting institutions, area career and technical education schools, local workforce investment boards, business and industry, and intermediaries |
| X | Providing individuals with opportunities throughout their lifetimes to develop, in conjunction with other education and training programs, the knowledge and skills needed to keep the United States competitive |
11. **Certifications:**
I certify that this proposal, budget, and certifications are accurate and complete and that this project will be conducted in accordance to Perkins policies and Federal, State, and University regulations and requirements.

I also certify that I have consulted with the appropriate Institutional Research, Business Office and Human Resources Office personnel and that they have reviewed all budgets and resource commitments and have found that they comply with Perkins, Federal, State, and University requirements and policies.

Proposer’s Signature: 

Date: 7/1/2013

Print name: Michael Moser
Director, CCE