August 27, 2012

TO: Leon Richards, Chancellor
    Kapi'olani Community College

SUBJECT: Career & Technical Education Award

Kapi'olani Community College is awarded $197,216 in 2012-2013 Title I Career and Technical Education funds to support the entitled project:

Health Sciences Clinical Simulation Improvement $197,216

The award period for the project is from July 1, 2012 to June 30, 2013 and the award number for the project is: KAP2012/13(1)-T1-03 and should be referenced on all future correspondence and reports. These funds must be expended and goods received by June 30, 2013. A completion report is due on October 10, 2013.

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

Sincerely,

Peter Quigley
Assoc. Vice President for Academic Affairs

Cc: L. Pagotto, VCAA
    M. Higa, VCAS
    F. Haas, CTE Dean
    C. Masutani, FA
    L. Tshahoko, FA
    S. Robinson, Dir. of Academic Programs
CARL D. PERKINS VOCATIONAL AND TECHNICAL
EDUCATION ACT OF 2006

Perkins IV Intervention Strategy Proposal Form
(revised January 2012)

Strategy # 1
Program Year 2012-13

1. College: Kapi‘olani Community College

2. (Descriptive) Strategy Title: Health Sciences Clinical Simulation Improvement (rev.)

3. Proposer’s Name: Robert Brumblay  E-Mail: brumblay@hawaii.edu

   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?
   Year 1

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 pg. 2 of Instructions)
   c) Include narrative that is supported by data. Be brief and succinct.

   a) Statement of Problem

   While the Health Sciences programs (particularly the Practical Nursing, Nursing, Respiratory Care, and Emergency Medical Technician programs) require clinical experience, recent changes in the health care industry have dramatically reduced the number facilities offering clinical experience and the size of the cohorts. Specifically:

   * Two O‘ahu hospitals closed at the end of 2011
   * Hospitals which continue to offer clinical training have significantly reduced available slots (by as much as 50%) due to concerns about liability and the requirement for higher ratios for faculty/student supervision.

   As a result, there is an immediate need to supplement the diminished level of actual clinical experience with clinical simulation.

   b) Alignment to Indicators and Goals

   This initiative is most directly aligned with Perkins Core Indicator 1P1: Technical Skill Attainment. UHCC Strategic Plan Goals 2008-15 that are addressed include B: Hawaii’s Educational Capital, and B1: Globally Competitive Workforce.
   c) Supporting narrative.
The primary Kapi'olani Community College Health sciences programs requiring clinical experience include:

- Practical nursing: 53 majors
- Nursing: 156 majors
- Respiratory Care: 29 majors
- Emergency Medical Technician: 40 majors

Insufficient access to "hands on" learning through clinical experience or clinical simulation, can adversely affect currently high levels of Skills Attainment (1P1) and Completion (2P1) for these demanding programs. Current indicators for the affected Health Sciences programs are:

<table>
<thead>
<tr>
<th>Program</th>
<th>Technical Skills (1P1)</th>
<th>Completion (2P1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Nursing</td>
<td>100.0%</td>
<td>61.82%</td>
</tr>
<tr>
<td>Nursing</td>
<td>100.0%</td>
<td>87.95%</td>
</tr>
<tr>
<td>Respiratory Care</td>
<td>92.86%</td>
<td>64.29%</td>
</tr>
<tr>
<td>Emergency Medical Tech.</td>
<td>100.0%</td>
<td>0.0%*</td>
</tr>
</tbody>
</table>

* Credentialing for the EMT program does not require an AS degree; the associated certificate is not counted in the current completion report, but is required by workforce standards.

6. Brief 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:
  - the position(s) FTE,
  - if the hire will be regular or casual,
  - the position's/positions' classification(s) (e.g., course/or, lecturer, APT, etc.),
  - the position's/positions' job duties and how the duties will benefit the project,
  - 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 proposal is to obtain, set up, use and maintain advanced clinical simulators using enhanced control and audio-visual equipment in an existing facility. Onsite installation, faculty training, and a warranty will be purchased for each unit due to the very complicated nature of the equipment. The equipment and services to be purchased include the following:

1. Laerdal Simman 3g Adult Simulator with control computer and software, $67,850.

2. Laerdal Simmom Birthing Simulator with control computer and software, air compressor, $31,706.

3. Laerdal SimJunior Child Simulator with control computer and software, installation, onsite instructor training, and extended warranty, $25,429.

4. Laerdal SimNewB Newborn Simulator with control computer and software, air compressor, $28,672.

Replacement parts are required for each simulator. This includes IV arm skin/vein replacement, air bladders for arterial pulses, airway and lung assemblies, etc. The total for these accessories, materials and supplies is $13,928.

For SimMan

- Bleeding module (212-0/451) $3,200.00
- IV training arm kit (270-00001), four units $2,400.00
- IM Pad 6 cm (212-25150), two units $418.00
- IM Pad 11.5 cm (212-25250), two units $510.00
- Tibial IO unit 4-pack (212-26150), four units $466.00
- Airway lubricant (250-21050) $11.00
- Simulated blood (300-00750), two units $34.00

For SimMom

- Umbi Cords for cutting (pk 5), four units $220.00
- Post-partum hemorrhage kit (377-14050) $1,345.00
- Gravid abd c-section (377-13550) $535.00
- Cervix (377-15250) $105.00
- Boggy uterus module (377-16750) $230.00
- Retained fragments module (377-16850) $385.00
- Uterine inversion module (377-14150) $305.00
- Hemorrhage hand pump (377-16950) $385.00
- Blood reservoir bag (377-17350) $150.00

For Sim Junior

- IV training arm, pediatric (375-70001), four units $1,600.00
- Pediatric IO leg, right (231-00101) $117.00
- Pediatric trauma modules (277-00001) $1,159.00

For Sim NewB

- Umbilical cords for catheterization (220-00150) 2 units $184.00
- Simulated umbilical blood (240-00250) $17.00
IO leg, right (220-02450) $ 76.00
IO leg, left (220-02350) $ 76.00

Installation and onsite training and instruction is $5,040 for each simulator, or $20,160 total.

Equipment for the simulator control room totals $9,470 and includes:

- Sony EVI D100 CCTV camera, six units @ $769 $4,614.00
- Sony camera cable, 25 ft., six units @ $40 $240.00
- Sony CAMWMBKT wall mount bracket, six units $336.00
- Video monitor with remote camera control, 2 $750.00
- Sony RDR GXD455 DVD recorder, 6 units @ $232 $1,392.00
- Pyramid PR2500 home studio preamplifier, 2 $334.00
- Tripp Lite SR42UB Rack Server Cabinet, 2 $1,098.00
- Rack mount master switch and outlet strip, 2 $184.00
- Push-to-talk mic (Shure 515SBG or similar), 2 $202.00
- Sony SS-B1000 speakers, 4 pair $320.00

Total: $9,470.00

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>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase equipment, install and train instructors</td>
<td>July 1- Sep 30, 2012</td>
</tr>
<tr>
<td>Provide scheduled clinical simulation time for students, phasing in as simulators become ready and instructors are trained</td>
<td>Aug 20, 2012 – Jun 30, 2013</td>
</tr>
<tr>
<td>Obtain feedback from students and faculty for evaluation of effectiveness and program improvement</td>
<td>Aug 20, 2012 - Jun 30, 2013</td>
</tr>
</tbody>
</table>

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.

- Student questionnaires completed after each session in the simulation lab will measure how realistic and useful the clinical simulation experiences are for the students. Data will be collected through questionnaires filled out by students and faculty after each session in the simulation lab. Desired outcomes will be for the experiences to be found to be useful and realistic at a level of 7 on a 0-to-10 scale.

- The program will maintain its current, high levels of technical skills (1P1) and completion (2P1) despite the significant reduction in the availability of live clinical experiences.
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).

<table>
<thead>
<tr>
<th>Personnel Subtotal</th>
<th>$</th>
</tr>
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<tbody>
<tr>
<td>Fringe Benefits (List per position)</td>
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<tr>
<td>0 $</td>
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<td>Material &amp; Supplies</td>
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<td>Rentals</td>
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<tr>
<td>Other</td>
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<tr>
<td>Equipment</td>
<td>153,658</td>
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<tr>
<td>TOTAL COSTS</td>
<td>$197,216</td>
</tr>
</tbody>
</table>

Fringe Benefit Rates (as of)

| Faculty/Staff | 40.25% |
| Casual Hire/Overload | 2.17% |
| Student       | 0.52%  |

7/15/11