January 7, 2014

To: Jennifer Watada, Leeward CC

From: John Morton, Vice President for Community Colleges

Subject: FY 2013-14 Innovative Developmental Education Initiatives Round 2

The UHCC system is pleased to support the project, "Under-100 (Re-) Alignment and Acceleration" in the amount of $9,405.00. The project will fund a thorough review and appropriate selection of the course content of Leeward CCs newly created/modified MATH 22 and MATH 82 that will be used in every section of the respective course.

The project funding is subject to the following requirements:

1. Implementation will occur in AY 2013-14.
2. All funds must be expended, not just encumbered, by June 30, 2014.
3. The project final report (in the form attached) must be submitted in electronic form to Gayle Ishii (gaylei@hawaii.edu) with a copy to Suzette Robinson (suzetter@hawaii.edu) and to Laurie Kuribayashi (laurieak@hawaii.edu) not later than September 30, 2014.

Tuition and Fee Special funds will be transferred to your campus for this project after January 1, 2014.

Based on the information provided in your final report, funds may be re-purposed. The project proposal and reports will be published on the UHCC website.

Thank you for your work in developing innovations to increase student success in developmental education. We look forward to working with you as the project unfolds.

cc: Manuel Cabral, Chancellor
    Peter Quigley, AVPAA
    Michael Pecsok, VCAA
    Mark Lane, VCAS
    Cecilia Lucas, Fiscal Officer
    Suzette Robinson, Director for Academic Programs
    Gayle Ishii, Academic Support
    Lisa Tsuchako, Budget Specialist
    Laurie Kuribayashi, Developmental Education Committee Chair

Att: Final Report template
AY 2013-14 UHCC Developmental Education Project Proposal Form  
Deadline for Proposal Submission: 12:00 p.m. on October 24, 2013

Project Title: Leeward CC Under-100 Math (Re-)Alignment and Acceleration  
Date: October 17, 2013

Budget Request: $ 9,405.08  
College: Leeward CC

Proposer's Name: Jennifer Watada  
Proposer's Email Address: jwatada@hawaii.edu

1. Project Summary (3 points)

In fall 2011, as a participant College in the Changing the Equation program administered by the National Center for Academic Transformation and funded by the Bill and Melinda Gates Foundation, Leeward CC's Developmental Math Program fully implemented the Emporium model for all of its courses. A large part of this program change was to leverage course redesign to shorten the legacy course sequence of four, 3-credit, semester-long courses (MATH 1B, 22, 73, and 83). This was done by creating 3 courses (MATH 9 - Whole Number Skills, 1 credit, part-of-term; MATH 18 - Essential Mathematics for Algebra, 3 credits; and MATH 82, 4 credits, Accelerated Algebraic Foundations), that could reasonably be completed in two semesters or less. Encouraging results have been recorded thus far:

AY 2010-2011 baselines for legacy semester-long lecture courses
Basic Mathematics (MATH 1B) success rate: 57%
Prealgebra (MATH 22) success rate: 59%
Algebra (MATH 73-83 sequence) success rate: 40% times 56% = 27% effective yield.
No mechanism existed for a student to complete more than one course in a single semester.
603 out of 2154 developmental math students successfully completed the developmental math sequence.

AY 2011-2012 Emporium Redesign Full Implementation, year 1
Whole Numbers (MATH 9) success rate: 61%
Prealgebra (MATH 18) success rate: 71%
Algebra (MATH 82) success rate: 57%
49 students completed both MATH 18 and MATH 82 in a single semester.
952 out of 2198 developmental math students successfully completed the developmental math sequence.

AY 2012-2013 Emporium Redesign Full Implementation, year 2
Whole Numbers (MATH 9) success rate: 68%
Prealgebra (MATH 18) success rate: 73%
Algebra (MATH 82) success rate: 55%
90 students completed both MATH 18 and MATH 82 in a single semester.
902 out of 2367 developmental math students successfully completed the developmental math sequence.

The current ongoing system wide initiative to align MATH courses numbered under 100 resulted in Leeward CC's replacing MATH 18 with MATH 22 and modifying the description and SLOCs of MATH 82 to incorporate the common elements, effective with the fall 2014 semester. An independent pilot currently underway is to enroll students who would otherwise have placed into MATH 9 into MATH 18 with concurrent enrollment in a math study skills course. This practice is an adaptation of a Complete College America recommendation of using co-
requisite courses rather than pre-requisites. The formative results suggest that most of the students are likely to succeed in MATH 18:

Number of students: 20
Number meeting MATH 18 week 7 objective expectations: 10
Number significantly exceeding MATH 18 week 7 objective expectations (at least 2 weeks ahead): 5
Number significantly below (all less than 70%) MATH 18 week 7 objectives: 5

This project seeks to fund a thorough review and appropriate selection of the course content of Leeward CC’s newly created/modified MATH 22 and MATH 82 that will be used in every section of the respective course. This review and selection requires the examination of 635 individual competency items in the Prealgebra ALEKS course for MATH 22 and 965 individual competency items in the Beginning/Intermediate Algebra ALEKS course for MATH 82. Items for inclusion in each course will be chosen for alignment with the revised course descriptions and common and additional SLOs. Selections for MATH 82 will ensure that the legacy UHCC System articulation agreement regarding course content of elementary algebra courses continue to be honored and that student needs observed over the past two years of full implementation of the Emporium model will be taken into consideration. Selections for MATH 22 items will incorporate material that facilitates a smoother transition for students who otherwise would have placed into MATH 9 as well as addressing the needs observed over the past two years of full implementation of the Emporium model. New and modified topics will require the creation of companion instructional videos so production equipment (Livescribe pen and appropriate computer) are required.

Funding and implementation of this project would accomplish both the system alignment goal and reduce the Leeward CC developmental math sequence to two courses regardless of a student’s initial placement.

2. Effectiveness Indicators/Outcomes and Benchmarks (3 points)

The success rate of students taking MATH 22 with the co-requisite study skills class will be tracked and compared to the baseline MATH 9 success rate of 65% (composite from AY 2012 & AY 2013). The sequence shortening portion of this project will be a success if this rate is met or exceeded since successful students would have only one additional developmental math course.

While system alignment is difficult to measure, the comprehensive examination and selection of the course content should yield measurable improvements in effective success rates since student needs observed over the past two years of full implementation of the Emporium model will be addressed. The AY 2012-2013 success rates are baselines:

Pre-algebra (MATH 18/22): 73% (does not include students placing into MATH 9)
Algebra (MATH 82): 55%

Reasonable benchmarks indicating project success are:
- Maintaining the 73% success rate for pre-algebra (MATH 22) in AY 2014-2015. It would be reasonable to predict some drop in the success rate due to the inclusion of students who otherwise would have missed the cut score but will be enrolled in the next course; however, the benefits of careful topic examination and selection should negate that decrease.
- Increasing the 55% success rate for algebra (MATH 82) to at least 60.5% in AY 2014-2015. The inclusion of topics that address student needs should improve the course success rate by 10% (110% of 55% = 60.5%).
3. Background Research (1 point)

Long-term success using the Emporium redesign model is well documented by the National Center for Academic Transformation (www.thencat.org). In addition, Leeward CC's developmental math program is featured on their web site as an exemplar model (http://www.thencat.org/PCR/Proj_Success_all.htm).

Both the UHCC system under-100 math course alignment initiative and the co-requisite model are championed by Complete College America:

"Require colleges to find consensus on course content and develop a common course numbering system," from Essential Steps for States: Reduce Time and Accelerate Students

"Provide help as a co-requisite, not a prerequisite," from Remediation: Higher Education’s Bridge to Nowhere

4. Relationship to Campus and UHCC Strategic Plans (1 point)

The formative pilot data cited above, the improved success of developmental math students enrolled in the Emporium model compared to traditional lecture models, and the reduction of the legacy four semester sequence of developmental math courses to two courses addresses these strategic plan outcomes:

Leeward CC Strategic Plan Update outcome B.2.b: Modify the traditional structure and delivery of programs to accommodate the full-time employed adult student and that shortens student time to degree.

UHCC Strategic Outcome Update and Performance Measures B: Hawaii's Educational Capital - Increase the educational capital of the state by increasing the participation and completion of students, particularly low-income students and those from underserved regions. Increase the number and percent of students enrolled in developmental intervention that successfully complete at least one course in the developmental sequence within their first academic year thus making progress towards degree applicable instruction.

5. Scalability (1 point)

The Emporium model is already being fully implemented in the developmental math program at Leeward CC. This project will continue the full-scale implementation, shorten the developmental math sequence to exactly two courses in an academically responsible way, and ensure compliance with UHCC system agreements regarding course alignment.

6. Sustainability (1 point)

Under this proposal, the course materials are being redeveloped as a result of a UHCC system-wide initiative to align under-100 numbered MATH and ENG courses. Once these courses are fully aligned to the agreements, only relatively minor adjustments would be needed and those could reasonably be assigned as professional development and discipline service activities to full-time faculty. Similarly, most small adjustments are anticipated with regard to the use of the co-requisite model for MATH 18 instead of the pre-requisite MATH 9 course.
SIGNATURE PAGE

AY 2013-14 UHCC Developmental Education Project Proposal
Deadline for Proposal Submission: 12:00 p.m. on October 24, 2013

Project Title: Leeward CC Under-100 Math (Re-)Alignment and Acceleration  Date: October 17, 2013
College: Leeward CC  Proposer's Name: Jennifer Watada
Budget Request: $9,405.08

Certification by Proposer

I certify that I have consulted with and submitted this proposal in a timely manner to the appropriate (A) institutional research office, (B) business office, and (C) human resources office for review of all assessment, budget, and resource commitments. Outcomes have been reviewed and are appropriate for the proposal.
I understand I will have primary responsibility for monitoring any funds awarded and agree to maintain accurate and current records of expenditures consistent with the attached budget.

Signature: Jennifer Watada  Date: October 18, 2013
Name: Jennifer Watada
Title: Assistant Professor/Dev Math Coordinator

Confirmation of Support by Dean or Division Chair

I have reviewed and support this proposal.

Signature:  Date: October 21, 2013
Name: James Goodman
Title: Dean of Arts & Sciences OR Division Chair of

Confirmation of Campus Approval by Chancellor or Vice Chancellor of Academic Affairs

The campus approves the proposal and is committed to advance the amounts, if any, described in the proposal as being funded by the campus and is committed to sustaining the project if evidence of its success is warranted and funding is available.

Signature:  Date: OCT 23, 2013
Name: Michael Pcsok
Title: Chancellor OR Vice Chancellor of Academic Affairs

Attachment 1

UHCC Developmental Education Project Proposal Form
BUDGET SUMMARY
AY 2013-14 UHCC Developmental Education Project Proposal
Deadline for Proposal Submission: 12:00 p.m. on October 24, 2013

Name of Project: Leeward CC Under-100 Math (Re-)Alignment and Acceleration  Campus: Leeward CC

Instructions: Complete the following, inserting and/or deleting rows as needed.

General guidelines: Funds may be used for faculty and staff assigned time; for pilot projects; for consultants; for financial aid audits; for related equipment, software, or curriculum materials; or similar one-time expenses. Funds may not be used to hire new full-time faculty or staff.

For projects involving more than one campus, budget must include a breakdown of costs by campus in addition to a total project budget. Single requests over $2,500 require Superquote.

The relationship between the requested expenditures and the project’s effectiveness indicators/outcomes and benchmarks must be addressed specifically in the project proposal.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>BUDGET</th>
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<tbody>
<tr>
<td><strong>PERSONNEL</strong></td>
<td></td>
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<tr>
<td>A1</td>
<td>Summer 2014 overload: 4 credits at C3 rate of $1,527 per credit</td>
</tr>
<tr>
<td>A2</td>
<td>Overload fringe at 2.26% per ORS (update July 10, 2013)</td>
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<tr>
<td><strong>TOTAL PERSONNEL</strong></td>
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<tr>
<td><strong>SUPPLIES</strong></td>
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<tr>
<td>B1</td>
<td>Livescribe sky wifi smartpen 8gb propack</td>
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<tr>
<td>B2</td>
<td>Desktop multimedia computer system</td>
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<td><strong>TOTAL SUPPLIES</strong></td>
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<td><strong>EQUIPMENT</strong></td>
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<td>C1</td>
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<tr>
<td><strong>TOTAL EQUIPMENT</strong></td>
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<tr>
<td><strong>TOTAL BUDGET REQUEST</strong></td>
<td><strong>$9,405.08</strong></td>
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</tbody>
</table>

1 Personnel: Personnel costs include, but are not limited to, faculty or staff overload, student assistants, casual hires, and/or lecturer replacement. Unlike federal regulations, these funds do not require that the person doing the work be paid from this funding source. Personnel fill requests are required to be in the form of a lecturer B step.

Indicate fringe percentage and cost as a separate line item. Fringe benefits rate (for FY2013) are as follows: faculty/staff 41.49%; graduate assistant 9.55%; casual hire/overload 2.03%; student 0.46%. Please confirm the current fringe benefits rate with your human resources or business office because the rates are subject to change.

2 Supplies: Supplies include, but are not limited to, office supplies, travel, conference fees, mileage, and computers.

3 Equipment: Equipment is defined as any one item costing $5,000 or more.

Attachment 2
UHCC Developmental Education Project Proposal Form