

ALASKA NATIVE AND NATIVE HAWAIIAN-SERVING INSTITUTIONS PROGRAM

FISCAL YEAR 2008 GRANTEE ABSTRACTS

P031N080001 - Prince William Sound Community College

Project Abstract: Prince William Sound Community College (PWSCC) is a small, rural, public two-year institution located in the historic community of Valdez, with extension sites in the remote areas of Copper Basin/Glenn Allen and Cordova. The PWSCC service area is 44,000 square miles (roughly the size of Ohio) in south-central Alaska, which includes 22 communities, five of which have no road access outside the summer months. Extreme weather conditions – e.g., up to 350 inches of snow and temperatures reaching 50 degrees below zero – make travel dangerous, when not impossible. Known worldwide as the site of the 1989 Exxon Valdez oil spill, the area suffers lasting economic and environmental impacts. Founded in 1978, PWSCC is the only independently accredited community college in Alaska (accredited by the Northwest Commission on Colleges and Universities and affiliated with the University of Alaska System). The college offers certificates leading to employment, the Associates of Arts, four Associate of Applied Science degrees, and access to additional Associate’s degrees in conjunction with the University of Alaska Anchorage.

Students and Faculty: Alaska Native/American Indian students at PWSCC more than doubled in the last 14 years – from 11 percent to 23 percent in fall 2007. Among all students, 95 percent are nontraditional – either by age, GED, or work and family responsibilities. Among incoming students, 93 percent scored at the remedial level for math, and 70 percent for reading. The faculty at PWSCC includes a very stable core of seven full and 49 part-time professors. Five of the full-time faculty are tenured, and most have been with the college over 10 years.

Student Profile 2007	
Headcount	1,302
Alaska Native	23.2%
Male	33.8%
Average Age	26
Part-Time	92%
Underprepared	93%
Faculty Profile 2007	
Full-time	7
Adjunct	49
Faculty to Student Ratio	1:12
Master’s/Higher Degree	33%
Source: PWSCC Database	

Significant Problems: Transition to college for rural and Alaska Native students requires relocation since so few Alaska communities have college campuses. But relocation is not just a matter of adapting to a new academic environment or a move to town; it is a dramatic, and often traumatic push into a fast-paced, overpopulated, over-stimulating world with which they have little or no experience. Prince William Sound Community College is in a unique position to address their need because we have existing student housing in a two-year college environment (one of only two in the state). However, our aging facilities (built in the mid-1960s) have reached “crisis maintenance management” condition in all major mechanical systems, and institutional funds are insufficient to address these critical structural deficiencies.

Proposed Solution: For the college to be able to continue to offer this critical service, we must reduce the costs of “crisis maintenance management” by addressing the infrastructure problems we currently face. For that purpose, we request \$3,998,494 for Energy Efficient, Cost-Effective Student Housing Improvements, including replacement of sewers, electrical systems, weatherization, security, lighting, and mechanical systems and installation of related energy efficiencies. These improvements will reduce ongoing maintenance and energy costs, allow us to increase occupancy rates overall as well as occupancy of Alaska Native students, and therefore better support the critical need for college housing for these students. A Comprehensive Evaluation Plan will ensure the cost-effective accomplishment of project goals and objectives.

P031N080003 - Bristol Bay Campus

Project Abstract: Strengthening Our Institution Through Education and Adaptation

Level and Affiliation: The Bristol Bay Campus (BBC), Dillingham, Alaska, an extended campus of the University of Alaska Alaska Fairbanks is a nonresidential, four-year public institution that serves 32 Alaska Native villages in a 40,000 square-mile region comparable to the size of Ohio.

Student Characteristics:

Fall 2007	Male Age	29 Years	Age 30	AK Native	Other
684 Students	38%	21%	79%	58%	42%

Faculty Characteristics: As of fall 2007, BBC has four full-time professors appointed to the campus. Of these, three are full-time tenure track: Professor of English, Assistant Professor of Mathematics, and Associate Professor of Rural Development; one is term-funded: Assistant Professor of Earth and Environmental Science; and the campus shares an Assistant Professor of Chemistry with the main campus in Fairbanks. In addition, BBC has 50 part-time or adjunct instructors. The average faculty to student ratio during fall semester was 1:15 among full-time faculty and 1:12 among adjunct faculty.

Programs of study: Degree programs offered by the campus include the Associate of Arts degree, Community Health, Early Childhood Development, Environmental Science, Renewable Resources, and other career and technical education Certificates and Associate of Applied Science degrees, and baccalaureate programs including the B.A. in Education, Rural Development, and Social Work.

Project Overview:

Activity 1 - Building Student Capacity.

Component 1: Create a culturally-responsive Student Bridging Program that aids students in navigating through developmental courses and persisting into college level classes for academic success.

Activity 2 - Strengthen Curriculum and Faculty & Staff Development.

Component 1: Design culturally-appropriate curriculum applicable to real life in rural Alaska.

Component 2: Provide faculty training and staff development to ensure cultural understanding and adaptation to life in rural Alaska.

Component 3: Design academic offerings for faculty and staff in culturally-appropriate applications of technology, and for student training in access and use of technology tools.

Activity 3 - Developing and Adapting Academic Resources.

Component 1: Develop an Alternative Energy/Adaptation Research and Resource Laboratory connected to the University of Alaska Fairbanks Bristol Bay Campus Environmental Science Program.

P031N080004 - Interior Aleutians Campus, University of Alaska Fairbanks

Interior-Aleutians Campus (IAC)
College of Rural and Community Development
University of Alaska Fairbanks

“Ft. Yukon Center Renovation: Linking Energy Efficiency Improvements with Construction Trades Technology Program Development.”

Project Abstract: The proposed project seeks to transform a significant energy efficiency and related operational cost “threat” at our Ft. Yukon Center (located in Ft. Yukon, Alaska) into a teaching and learning “opportunity” for Interior-Aleutian Campus’ Construction Trades Technology (CTT) students through an energy efficiency improvement project.

Interior-Aleutians Campus recently learned that fuel costs alone for our Ft. Yukon Center exceeded \$40,000 over a one-year period. With oil prices at more than \$124 per barrel, it is clear that operational costs for our lovely, but inefficient log building are going to continue to rise. It is for this reason that IAC proposes to link energy efficiency improvements with an appropriate teaching opportunity for CTT students. This project will have two phases:

The first phase (Objective A) will involve weatherization to increase insulation in roof and walls, plus more efficient windows and doors at the Ft. Yukon Center. The second phase will involve the design and installation of a renewable energy electrical project involving solar energy. Through this overall project, students in Ft. Yukon will have an opportunity to gain hands-on experience with a major efficiency improvement project and a large photovoltaic design and installation project.

Importantly, the state of Alaska is currently investing in community-based energy efficiency improvements through a variety of weatherization and renewable energy grant and loan programs for individuals. This project will give local residents who are former or current CTT certificate and Associate’s students an opportunity to work on the efficiency phase of the project. These individuals will be hired by the contractor who will oversee their work. They will leave the project with valuable experience in providing weatherization services for other residents in the future.

The photovoltaic phase (Objective B) of the project will be conducted under the guidance of IAC’s electrician faculty member (who has a Master’s degree in Electrical Engineering). This faculty member will design a four-credit class in Renewable Electrical Energy for a group of CTT Associate of Applied Science students. Students will take the class and learn about solar, wind, and hydro-renewable energy and then use this project as a hands-on learning (practicum) project to design the solar energy system and install it. University of Alaska Fairbanks’ Department of Design and Construction will be responsible for ensuring that the finished project meets state standards for safety.

P031N080005 - Interior Aleutians Campus, University of Alaska Fairbanks, College of Rural and Community Development

“Today is the Future: Innovation for Education in Rural Alaska”

Interior-Aleutians Campus (IAC)

College of Rural and Community Development

University of Alaska Fairbanks

Project Abstract: This project looks to the future of college education in Alaska in order to prepare for and address incipient opportunities for our campus and our students. This project will have two phases. The first phase will address opportunities for the development of an Early College/Tech Prep program for students in the school districts served by IAC. The second phase will involve a long range, comprehensive planning process involving IAC faculty, staff, Rural Center coordinators, Advisory Council members, and other key community-based stakeholders.

Objective A: Early College (EC) (or dual credit) and technical preparation (“tech prep”) are important new innovations for high school students wishing to earn college credit. In rural Alaska, unfortunately, small schools cannot justify support of a large faculty all of whom are “highly qualified” for all the subjects they are required to teach. For this reason, combined with high turnover in rural schools, not all students receive the quality of instruction that will allow them to pass high school qualifying and exit exams. Once these students decide to try to get in to college, IAC struggles, along with the student, to make up for lost time and prepare them for the “core” English and Math coursework required for a certificate, associates or higher level degrees.

For the past 18 months IAC has participated in an Early College pilot program with an Alaska Native-serving charter high school and one school district. While challenging, we feel that there is great promise in Early College and tech prep programs because, through IAC, students will have access to the “highly qualified” instruction they need. Moreover, students are motivated by the prestige and challenge of taking college courses and they understand the advantages of reducing the cost and time commitment of their college education. Finally, it is to IAC’s advantage to register better qualified students into our programs. For all these reasons, IAC will embark on a project to formally develop memoranda of agreement with as many of our 10 school districts as possible to pursue EC and tech prep with their students. This project will involve the development of tracking and information sharing systems, student and parental support protocols and a great deal of relationship building within the school districts.

Objective B: Thanks to Title III and other funding, IAC has experienced an unprecedented period of growth over the past five years. In order to address incipient opportunities, reorganize our campus, create a long-range plan for programs and funding and to celebrate our past successes, IAC envisions engagement in a comprehensive planning process involving IAC faculty and staff, community members, and business and agency stakeholders. This process would occur over a one-year timeline with four meetings. The project will result in a five to 10 year plan that will guide the development of a Title III application that is the product of a comprehensive community planning process to ensure IAC’s responsiveness to opportunities and threats within our large service region that will be addressed over the next several years.

P031N060006 – University of Alaska Southeast – Sitka Campus

Project Abstract: Renovation and Expansion Of Health Sciences Educational Facilities

The Sitka Campus of the University of Alaska Southeast (UAS) is a public institution located in the rural portion of Southeast Alaska. The college serves a two-year, community college role, providing education and training opportunities to the residents of Sitka as well as students scattered all over the state using a variety of cutting edge, Web-based, distance education technologies. The Sitka Campus has been tasked with primary responsibility for UAS' distance delivery of health sciences education and pre-nursing lab-based science classes. It is one of three campuses comprising the University of Alaska Southeast which, in turn, is part of the University of Alaska Statewide System of Higher Education.

Enrollment for spring 2008 reflected a headcount of 834 students, 76 percent of whom were women. The average student age was 29.6 years. Our Alaska Native and Native Hawaiian eligibility data shows 23 percent Alaskan Native enrollment. There are 15 full-time faculty and 64 adjunct faculty for a faculty to student ratio of 10:5.

Activity One

The major objective of this project is to design two high-tech, multi-purpose classrooms, a lab-based science prep and storage space and renovate the World War II-era hangar space that houses the UAS Sitka Campus by September 30, 2010 to the proposed design, according to the terms of this Title III program opportunity.

State Department of Labor Statistics consistently show significant, unmet needs in healthcare-related occupations in Alaska. It is the largest industry in the state--more than one in every 12 jobs in Alaska are in the health care industry. Employment in the field has grown more than three times as fast as all other industries since 2000—40 percent as compared to 13 percent for all other industries which is five times as fast as the state's population.

Vacancies in the field are legendary and can be as high as 20 percent in some rural areas. This project will provide two large "smart" classroom spaces, versatile and multi-purpose in nature, to help the Sitka Campus keep up with the dynamics of rapid growth and constantly changing curricular demands. It will also provide desperately needed support space for lab-based science classes (anatomy and physiology, microbiology, chemistry) that are included in the statewide delivered pre-nursing program, room for supply storage and assembly, as well as final evaluation of the dozens of innovative lab project kits that are sent out to approximately 150 students per semester.

P031N080007 – The Kuskokwim Campus

Project Abstract: The Kuskokwim Campus (KuC) in Bethel, Alaska, is the largest rural, semi-independent extended campus in the University of Alaska Fairbanks (UAF) system. The Kuskokwim Campus is a branch campus of UAF's College of Rural and Community Development. A residential, public institution with a Federal Minority designation, the campus serves 46 remote Alaska Native villages and 56 tribes in a 57,827 square-mile, roadless area the size of the state of Illinois.

Activity: Physical Plant Renovations to update Information Technology (IT) network wiring infrastructure; complete classroom renovation with new drop ceilings and energy-efficient lighting; install ceiling mounted LCD projectors and screens in classrooms to support technology assisted instruction.

The five-year plan for Serving Alaska Native Students (2004) is a long-term, regional effort to increase recruitment, retention and matriculation of Science, Technology, Engineering and Mathematics students (STEM) in the Yukon-Kuskokwim Delta. This renovation project will assist that effort by completing the renovation of the classrooms begun under a previous Title III grant. The renovation will create a physical climate of excellence and support instruction through updated IT wiring and the installation of LCD projectors and screens in the classrooms.

Part of the KuC's five-year plan states that "improvements at the Kuskokwim campus must keep pace with the campus planned expansion of...program academics." The Title III renovation grant will enable the campus to "keep pace" by providing a campus environment, which contributes to academic success.

A renovation project sponsored by the University of Alaska will install a new roof and new siding on campus buildings in summer 2008. The new roof and insulation will eliminate the problem of serious leaks and make possible the final steps in classroom renovations, including:

- Installation of drop ceilings in the classrooms;
- Replacement of damaged and inefficient lights with recessed energy efficient fixtures;
- Installation of ceiling mounted LCD projectors and screens in the classrooms;
- Replacement of IT wiring infrastructure throughout campus buildings; and
- Upgrading of electrical outlets in classrooms.

P031W080001 - Chaminade University of Honolulu

Chaminade University of Honolulu located in Hawaii is a four-year private institution affiliated with the Catholic Church serving Hawaii and other Pacific Island populations. It offers professional and academic degrees at the undergraduate and masters level. Our entire student body consists of approximately 2600 students and our faculty consists of 74 full-time and 153 part-time or adjuncts, which result in an average class size of 14. The table below is a breakdown of our student body characteristics:

DEMOGRAPHIC CHARACTERISTICS OF THE STUDENT BODY									
Race (%)						Gender (%)		Age	Class Size
Asian/Pacific Island	Caucasian	Hispanic	African-American	American Indian/ Alaska Native	Other	F	M		
50	29	8	6	0.8	5.4	59	41	28	14

In the years since 2000 Chaminade has increasingly distinguished itself for its success in supporting the success of students of Native Hawaiian, Pacific Island and other underrepresented students in the sciences with an emphasis on those preparing for careers in biomedical, biochemical and forensic sciences. This spring, for the third consecutive year, a science student from Chaminade was selected as the State of Hawaii's representative to "Posters on the Hill" in Washington, D.C., sponsored by the Council on Undergraduate Research. Each is of Hawaiian descent. Native Hawaiian students comprised approximately 14 percent of our incoming fall 2007 class of 255. Of those students, 30 percent indicated intent to major in one of the sciences.

As is typically the case in a smaller, undergraduate-focused Title III designated university, Chaminade's ability to fully serve its students is constrained by limited resources – a condition especially the case in such an infrastructure intensive area as the sciences. From 2003 to the present, we have invested over eight million to renew our teaching laboratories and for the first time have a modest amount (approximately 500 square feet) of appropriately furnished student and faculty research space. This request of Title III, College Cost Reduction and Access Act/Alaska Native-Serving and Native Hawaiian-Serving (CCRAA/ANNH) funding seeks to build on the work to date through the renovation of: (1) a laboratory to be used for physics and forensic sciences; (2) student and faculty research and support space; (3) securing the sophisticated equipment needed to teach Trace Evidence techniques in our undergraduate and graduate Forensic Science courses, and to provide undergraduates in the biomedical and biochemical fields with experience using advanced analytical instrumentation that are common features of research laboratories, in the biotechnology and pharmaceutical industries, and diagnostic laboratory settings; and (4) increase the speed, bandwidth security and reliability of our campus data network and storage – capacities so essential to instruction and research in the sciences and throughout the campus. These investments in infrastructure will support not only existing science students and degree offerings but also all undergraduates, since every student is required to take two science courses and the associated laboratories, and be an important part of the preparatory resources needed for the initiation of a baccalaureate degree in nursing projected for fall 2010.

All investments to be made are consistent with the directions set in the university's newly-revised Strategic Plan 2008-2013: *Live Fully Our Transformation*. All renovations are as proposed in our campus master plan for facilities. In particular, it is grounded in our commitment to increase our service to students of Native Hawaiian descent.

P031W080002 - Chaminade University of Honolulu

Chaminade University is a Catholic, comprehensive, master's level university serving the people of Hawaii and the U.S.-affiliated Pacific Island states since 1955.

Located on the Island of Oahu, Chaminade enrolls approximately 2,600 degree-seeking students in twenty-three undergraduate and seven graduate programs. Regionally accredited since 1960, Chaminade fulfills a commitment to underrepresented student populations through twelve off-campus locations and a growing distance education program focusing on military service-members, their families, and their surrounding communities. Seventy-four full-time faculty and approximately 153 part-time/adjunct faculty each semester enable Chaminade to offer degree programs in business, behavioral science, education, natural science and math, and humanities and fine arts with a moderate student to faculty ratio of 14:1.

ABSTRACT TABLE CHAMINADE OVERVIEW - FALL 2007 (N=2,637)											
Race				Level		Gender		Attendance		Avg. Age	Class Size
Asian/Pacific Islander	Caucasian	Hispanic	African-American	Under-grad.	Grad.	F	M	Full-Time	Part-Time		
50%	29%	8%	6%	75%	25%	59%	41%	67%	33%	28	14

As a tuition-driven private institution, Chaminade must seek to develop and support high-quality academic programs that are in demand by college-oriented, career-oriented students. As a Hawaiian-serving institution, we also are mindful of our commitment to assist the students of the Pacific Islands in their quest for higher education, and to be a partner in addressing the challenges faced by our community. With the help of Title III, Chaminade University will initiate a much-needed Bachelor of Science in Nursing degree program that will meet all of the criteria outlined in the sentences above.

Building upon our nationally recognized forensic science program, Chaminade will develop a program that enrolls, at its full capacity, 158 nursing degree candidates. The program will be built upon the forward-thinking Oregon Nursing Model, which focuses on competency, genomic-genetic medicine, and advanced simulation techniques to provide the broadest possible range of experiences to students. The program itself will increase enrollment by 6 percent. The high-quality curriculum structure and the academic support included in the program will help insure a high percentage of student persistence to graduation. The program also will open a new direction for academic growth (and therefore, fiscal stability) for the university, and it will extend Chaminade's reputation as a valued community partner in Hawaii and the U.S. Pacific Island states.

P031W080003 - University of Hawaii

Primary Service Population: Any high school graduate or person 18 years of age or older. The majority of the students attending Hawaii Community College come from Hilo and Puna on the east side and from Kailua-Kona on the west side of the island.

Programs of Study: Accounting, Administration of Justice, Agriculture, Auto Body Repair and Painting, Automotive Mechanics Technology, Carpentry, Diesel Mechanics, Drafting and Engineering Aide, Early Childhood Education, Electrical Instillation and Maintenance Technology, Electronics Technology, Food Service, Hawai'i Life Styles, Hotel Operations, Human Services, Information Technology, Liberal Arts, Nursing, Office Administration and Technology, Marketing, Welding and Sheet Metal, and Tropical Forest Ecosystem and Agroforestry Management.

Student Body Characteristics:

Race and Ethnicity	Total Number Enrolled
Nonresident Alien	43
Black, Non-Hispanic	16
American Indian or Alaskan Native	20
Asian or Pacific Islander	1,405
Hispanic	46
White, Non-Hispanic	486
Race/Ethnicity Unknown	83
Grand Total	2,099

Faculty Characteristics:

Number of Full-Time Faculty: 66

Number of Adjunct Faculty: 98

Faculty to Student Ratio: 1:12.80

Age/Gender	Male	Female
Under 18	87	98
18-19	264	329
20-21	171	228
22-24	81	200
25-29	102	186
30-34	45	123
35-39	31	97
40-49	48	176
50-64	34	84
65 and over	4	7
Age Unknown	0	1
Grand Total	867	1,529

P031W080006 - University of Hawaii at Hilo

The University of Hawaii at Hilo (UH Hilo) is located on the island of Hawaii, the southernmost and the largest island in the Hawaiian archipelago. Organized in 1970, it is the only public four-year, Native Hawaiian-Serving Institution on the island and is part of the University of Hawaii's ten-campus statewide system of higher education. It primarily serves residents of the island and students from around the state of Hawaii, the United States mainland, and from many other nations, especially from the Pacific Islands and Asia. Enrollment in fall 2007 consisted of 3,573 students with 55 percent being low-income, first-generation college students, and/or students with disabilities. Native Hawaiian students comprised 21.6 percent of the total student population and Pacific Islanders comprised 5 percent. The campus' operating budget for fiscal year 2008 is \$28.9 million.

Activity 1 - (\$1,994,557 for two years). *Establish a Center for Pacific Islander Education and Retention*

To renovate existing UH Hilo facilities to establish a Center for Pacific Islander Education and Retention. The center will serve as a curricular and co-curricular meeting space to promote and facilitate the education and retention of Pacific Islander students at UH Hilo. The center will be utilized for peer mentoring, tutoring and learning communities; for faculty and staff multicultural training, workshops, colloquia, and research; for community cultural experts to teach students and train faculty and staff on cultural traditions and knowledge; and for a library of relevant educational, leadership and cultural materials and resources.

Key measures include an increase in Pacific Islander student success and retention; faculty and staff incorporation of multicultural perspectives in curricula, pedagogy, and support services; an increase in the level of engagement of students in their college educational experience; an increase in educational and leadership resource materials available to faculty, staff and students; and an increase in collaboration with community and cultural resources.

Project Management and Evaluation

The Vice Chancellor for Student Affairs will be the Project Director. Her role and responsibilities for the project will be part of her current UH Hilo administrative duties. She will be responsible for the overall management and evaluations activities of the grant. A 50 percent FTE Project Manager will be hired to assist the Project Director in the plan, design, and renovation phases of the project.

P031W080004 - University of Hawaii at Hilo

Project Abstract: “Renovations for Student Success in Developmental, Digital Media/STEM, and Business Education,” Kapiolani Community College, Honolulu, Hawaii

Purpose: To complete three renovations in the Kahikoluamea Center, Digital Media/STEM Center and Business Learning Center for improved student support, high context learning, retention, continuation, and degree completion by Native Hawaiian and all students.

Kapiolani Community College (the College) is a two-year, public institution providing high quality liberal arts and 21st Century career programs, serving diverse Native Hawaiian and multi-ethnic students and communities. The total enrollment for fall 2007 was 7,463, of which 916 were Native Hawaiians. Data for fall 2006 show 20 percent of students were 18-20 years of age, 40 percent aged 20-24, and 33.3 percent aged 25-59, with a median age of 24.8 years. The College enrolls a majority of female students (57.6 percent). The College is nationally recognized for creating a new ecology of learning that integrates classrooms, labs and centers, campus, community, and cyberspace. This learning ecology opens many avenues to faculty innovation in meeting the diverse learning styles of our students. The College demonstrates substantial academic strength: a commitment to inclusive excellence and research-based best practices; enrollment stability and transfer success; strengthening Hawaiian studies and improved outcomes for Native Hawaiian students; faculty-driven improvements in learning outcomes assessment; an impressive Science, Technology, Engineering and Math (STEM) program; responsive career programs; renovation of Holomua, an integrated approach to developmental education; and the proposed consolidation of Holomua, First-Year Experience and Malama Hawaii into the Kahikoluamea program. Academic weaknesses include the high percentage of students scoring into college-readiness levels as well as lower-than-national success rates in developmental courses for Native Hawaiian and all students, which contribute to low retention and continuation into second-year courses, including the STEM and Business Education programs. In addition, 20-35 year old classrooms, labs and learning centers are not conducive to the new ecology of learning strategies, techniques and technology. The College’s fiscal strength lies in diversified revenue streams and its weakness lies in attrition rates resulting in significant losses in tuition revenue.

To address our academic and fiscal weaknesses, the College is proposing comprehensive renovations modeled on the College’s very successful STEM Center, will incorporate Hawaiian cultural design concepts and result in improved student support services, increased student effort in the active, collaborative, technology-integrated learning of academically challenging Developmental and Business Education curricula, increased peer mentoring and faculty-student interaction, and comprehensive e-Portfolio-based learning outcomes assessment. The renovation of the Digital Media/STEM Center will support the integration of digital media applications into STEM and other degree programs. These renovations, with campus-funded personnel support, will facilitate the College’s efforts to improve pedagogy and student support as measured by higher financial aid participation and course success, retention, continuation, and completion rates for Native Hawaiian and all students in developmental courses, as well as in STEM, Business and other degree programs.

P031W080005 - University of Hawaii

The University of Hawai'i - West O`ahu (UHWO) is undergoing a period of rapid growth and change. As a formerly upper-division campus (juniors and seniors only), it just admitted its first freshman class in fall 2007 and is poised to build a new campus that will open its doors in 2010. The curriculum is also changing. All of this is happening in the context of meeting state needs for a more highly-educated workforce and serving populations who have historically had little or no access to higher education.

University of Hawai'i - West O`ahu has identified two specific problems it intends to address in this proposal:

1. Many students who enroll at UHWO have not internalized expectations for college going; as a result they may be academically unprepared and/or believe they are not "smart enough" or "good enough" to belong or succeed in college.
2. Now that it is a four-year institution, UHWO must fill gaps in its core curriculum, particularly in science, technology, engineering, and math (STEM) disciplines. Student participation in and completion of STEM courses have been poor in this first year and must be increased; new STEM courses and degree programs are needed; and faculty competence in using technology in all disciplines needs to be increased.

Both of these problems can contribute to poor student performance as shown by low grades, high drop out rates, and poor overall retention and graduation rates. In order to address these concerns, UHWO will develop a highly interactive and interpersonal (high touch) learning environment that will maximize use of scientific instrumentation and technological innovation (high tech). This approach will bring needed services and programs to the students rather than requiring them to go to where the services are. It will also require obtaining portable equipment that can be moved easily from place to place, which will in turn alleviate space shortages. Finally, students should be able to graduate in a reasonable time frame with technological competence in a variety of high demand fields ranging from education to environmental science.

Activity 1: High Touch - This activity, which will culminate in the development of a comprehensive First-Year Experience program at UHWO, will have two components that have been shown to contribute to college engagement and success:

- A. Psychosocial Development: Delivering integrated interventions (programs and services) designed to increase first-year students' sense of belonging and self-efficacy at UHWO; and
- B. Academic Skill Building: Delivering tutorial and other learning services to help students overcome academic deficiencies, both actual and perceived.

Activity 2: High Tech - This activity will focus on demystifying scientific and other high tech equipment used largely in STEM-related courses but also across the curriculum. Components of this activity include:

- A. Encouraging students' interest, enrollment, and completion of STEM classes;
- B. Developing new classes in STEM fields and other related disciplines;
- C. Promoting faculty development to use technology more extensively in teaching; and
- D. Developing new academic programs in STEM related fields.