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Pathway out of Poverty: A Values-Based College-Community Partnership to Improve Long-Term Outcomes of Underrepresented Students

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Abstract

Background: Native Hawaiians, representing 25% of Hawai'i's population, suffer socioeconomic and health strains as evidenced by overrepresentation in low-wage jobs without health insurance and a higher prevalence of chronic disease compared with Hawai'i's other ethnic groups. Native Hawaiians are more likely to attend community colleges than 4-year colleges and have high dropout rates.

Objective: To describe a culturally relevant, community-based action research approach to build a program to keep Hawaiians in college to advance career options and improve long-term health and socioeconomic outcomes.

Methods: Culturally relevant approaches that depended on participation from a variety of community partners were used to evaluate needs and design interventions.

Results: The Pathway Out of Poverty Program uses Hawaiian values and traditions of healthy living to lead students through a nursing pathway from nurse aide (NA) to licensed practical nurse (LPN) to registered nurse (RN), with inherent

increases in wage-earning potential. In the first 3.5 years, 150 students enrolled in NA training, and 135 students (90%) graduated and were certified. Of the 135, 77 (57%) transitioned to higher education and 79% transitioned to jobs that offered health insurance (20% were in both groups). Of the 77 entering higher education, 33 (43%) aimed for a degree in nursing. Students expressed growing interest in health promotion for themselves, family members, and others.

Conclusion: Community partners were key to developing a successful community college-based Pathway Program to help marginalized and other underrepresented students move from low-wage to living-wage jobs and improve their long-term health outcomes.

Keywords

Community-based participatory research, education, nursing, students, Pacific Islanders, socioeconomic factors, vulnerable populations

With colonization, Native Hawaiians lost land and language.¹ Key elements of their collectivist lifestyle were devalued, including indigenous approaches to self-sustenance and health promotion.² About 25% of Hawai'i residents identify as Native Hawaiian; many have lost touch with their traditional culture but do not fully embrace or benefit from westernization. The resulting marginalization of Native Hawaiians is evidenced by the high prevalence of poverty related to poor educational attainment and low-wage jobs and the high prevalence of chronic diseases

related to food insecurity, poor dietary habits, physical inactivity, obesity, and limited access to healthcare.^{2,3} Socioeconomic and health disparities experienced by Native Hawaiians have long-range consequences. Native Hawaiians have the shortest life expectancy of the state's five largest ethnic groups, 74 years, compared with 79 years for Caucasians and 83 years for Japanese.⁴

The literature demonstrates a strong interrelationship among education, income level, and health outcomes, especially for minorities.⁵⁻⁸ The World Health Organization identi-

fied low educational attainment, illiteracy, and unemployment or underemployment as key risk factors for chronic disease.⁹ However, interventions targeting social determinants tend to focus on one problem at a time (health, education, or employment), rather than helping people to advance their standard of living.^{10,11} When disadvantaged students access college, it usually is junior college, with graduation rates below 50%.¹² Barriers include lifelong exposure to racism and low socioeconomic status, which can limit development of study skills, success in primary and secondary schools, and opportunities for higher education.¹³⁻¹⁵

People designing interventions, however, often base them on their own values, and sometimes these interventions do not fit or are not embraced by the target population.¹⁶ An important traditional Hawaiian value is *lōkahi*, a holistic balance or well-being, inclusive of emotional, social, cultural, physical, cognitive, spiritual, environmental, and economic domains.¹⁷ Another is *kuleana*, which refers to individual and collective responsibility for the functioning and advancement of society. The gift of education is not free, but requires the recipient to mature into the new role and give back to society by performing well and graciously in it. Finally, Native Hawaiians, like other indigenous groups, want to be engaged collaboratively with researchers (or better yet, as researchers) in the development and testing of holistic interventions that fit their culture.¹⁸⁻²¹ Inclusivity empowers marginalized groups to improve life conditions and increases leadership skills and work readiness.²²

This paper describes steps taken by an academic–community partnership to develop a holistic intervention that incorporates key cultural values to improve income-earning capacity and well-being of Native Hawaiians. The resulting “Pathway Out of Poverty” program was developed to support students from NA to LPN to RN. The curriculum emphasizes Native Hawaiian traditions, fosters cultural pride, and promotes healthy-living behaviors while helping students toward long-term socioeconomic stability.

METHODS

The partnership included underserved students, community college officials, community members/partners, and workforce leaders, and employed a culturally based action research approach to build a program to help students escape poverty and lead healthier lives. Action research involves part-

ners in problem-solving cycles of exploration, planning, and evaluation.²³ A tenet of action research is equitable involvement of stakeholders, regardless of their backgrounds and titles. This is compatible with Native Hawaiian approaches of engaging community in problem solving, as reflected in this saying, *E malama i ke kanaka nui, i ke kanaka iki* (Take care of the big man and the little man alike).²⁴

The program’s Advisory Panel (AP) included 18 members. The chair (JKB) was a Native Hawaiian faculty member of Windward Community College (WCC), one of ten campuses of the University of Hawai‘i (UH) system. Other members were three WCC students (including SAKK), a teacher at a nearby high school who coordinates the school’s health careers pathway program, two individuals from programs providing scholarships for Native Hawaiian students, five individuals working as nurses and/or supervisors in community health centers or healthcare facilities where graduates could be employed, two WCC counselors, and five representatives from other UH campuses teaching in health-related fields and/or promoting Hawaiian health (including KLB).

The action research process of the AP included six steps: (1) Explore evidence pertaining to education, employment, and health, (2) learn about barriers to accessing and completing college and getting living-wage jobs, (3) build a program incorporating traditional Hawaiian values, (4) expand partnerships and secure funding, (5) evaluate, and (6) develop a sustainability plan.

Step 1: Explore Evidence

Employment. The AP learned that healthcare is one of the fastest-growing industries. Training programs for entry-level positions, such as the NA, can be as short as 6 weeks, and the Department of Labor estimates that Hawai‘i needs 180 new NAs each year.²⁵ Although NA salaries are low, about \$20,000/year, NAs can earn an income as they continue academic nurse training. With an additional year of training, the NA can become an LPN, earning \$45,760 per year. With another year of training, the LPN can become an RN, earning \$72,000 per year. Thus, the AP decided to build a career pathway from NA to LPN to RN.

Education. In Hawai‘i, Native Hawaiians comprise 25% of the state’s population, but only 5% of the nursing workforce. According to the University of Hawai‘i, which enrolls 50,000

students across ten campuses, Native Hawaiians are underrepresented in science and health. Although entrance to NA training requires students to have ninth-grade reading and math skills, expectations for students who progress beyond the NA are much higher. For example, applicants to UH nursing programs require a 3.8 grade point average (GPA) from high school. The AP realized that many Native Hawaiians, who have historically not fared well in the academic system, would not meet the GPA criterion for advanced training in nursing. Thus, the Pathway Out of Poverty program needed to collaborate with academic nursing programs to expand admission criteria beyond the GPA. The Pathway program also needed to help NA students develop study skills.

Health. Traditional Native Hawaiian culture places high value on health and the healing arts. Thus, the AP felt that Pathway curriculum should impart indigenous, as well as western, knowledge of nutrition, exercise, and health promotion. The training should educate and encourage students to make healthier choices for themselves, their families, and their patients; and it should emphasize the very positive role of the healer in Hawaiian culture.

Step 2: Learn About Barriers

The AP reviewed the literature on supports and barriers to college entry and completion. From this literature, a survey was drafted and then was revised based on feedback from students participating in a series of focus groups. Through the process, the AP learned about the types of support students needed to succeed, including help completing college and financial aid applications, finding funds for college tuition and supplies, resolving housing and safety issues, finding affordable transportation, locating services to help them care for dependent children and grandparents, accessing healthcare and health insurance, building new social networks, and developing computer, time management, and coping skills.²⁶ Findings were used to plan interventions and support applications for funding.

Step 3: Build the Intervention

The Pathway Out of Poverty program started with a NA Training Program, an 8-week course with 100 hours of didactic and 50 hours of clinical training in long-term care. Students in the Pathway program receive tuition assistance and waivers, academic and career counseling, peer mentoring, tutoring,

and job placement services, in addition to training in required NA skills. The curriculum teaches both western and Hawaiian healing concepts (Table 1). Examples of the latter include: *'Aiola* (Hawaiian healthy nutrition knowledge), *ho'oma'ema'e* (good digestion and cleansing), *lomilomi* (Hawaiian massage), *lā'au lapa'au* (Hawaiian herbal remedies), and *ho'oponopono* (Hawaiian conflict resolution). The inclusion of traditional knowledge honors and leverages cultural and indigenous knowledge to help us to meet the demands of preparing students to succeed in academia.

The Pathway program works to actualize several key Hawaiian cultural values. The overarching value, as mentioned, is *kuleana*, referring to individual and collective responsibility for the functioning and advancement of society. As operationalized, *kuleana* is linked with other Hawaiian values. For example, Pathway students must demonstrate behaviors that are *pono* (doing what is valued and necessary). They must learn both western and traditional healing to *ho'ihō'i* (restore balance). As scholarship recipients, they must *ho'okū*, (anchor themselves in healthcare training and service) and learn through giving service to the program and community. Training is *hana ka lima* (hands-on), both in the classroom and through community service. As interns, students must *mālama* (care for, protect, and honor) the *kūpuna* (elders) on whom they practice and hone their NA skills. As a cohort, they must *ho'oka'i* (direct and uplift) each other so they succeed as a group, as the survival of the collective takes

Table 1. Integration of Western and Traditional Hawaiian Knowledge

Western	Traditional Hawaiian
Nutrition and health promotion	<i>'Aiola</i> , Hawaiian healthy nutrition knowledge, <i>Ho'oma'ema'e</i> , digestive cleansing
Range of motion and mobility	<i>Lomilomi</i> , Hawaiian massage
Alternative and complementary healing	<i>La'au lapa'au</i> , Hawaiian medicinal remedies
Client, family, culture, and spirituality	<i>Ho'oponopono</i> , Hawaiian method of conflict resolution and counseling
Client rights and healthcare ethics	<i>Kuleana</i> , Individual and collective responsibility to family and society

precedence over the success of the individual. As graduates, they must *a'o mai a a'o aku* (teach others) through service as mentors and supporters of incoming students. Finally, the program fosters *ulu pono*, (the drive to succeed and protect the program) knowing they will fill valuable and responsible roles as healers and teachers.

The concept of *kuleana*, collective responsibility, also is used as an admissions criterion, and applicants are selected based on their service records. They must pledge to complete the NA course, pass the state of Hawai'i NA examination, and work in healthcare and/or pursue further education after certification. During the program and after graduation, they must volunteer 16 hours per month with the NA Training Program, the Pathway program (including student governance), the WCC nursing garden (created to teach healthy food production for health promotion), or one of our community partners (e.g., community health centers).

NA graduates interested in advanced training must serve as mentors to newly enrolled students. Having course completers return to the classroom has numerous benefits: (1) Graduates serve as role models and share their experiences in balancing work, family, and school in a way that naturally builds social networks, (2) graduates can alert program staff to potential problems among the new students, improving our ability to intervene quickly to minimize drop out, (3) graduates help teach NA skills, in turn honing their own skills, (4) serving as a mentor/trainer helps graduates reclaim the nearly lost cultural art of using oratory as the primary means of perpetuating knowledge, while improving their verbal communication skills, and (5) unlike other nurse training programs that report shortages of nursing instructors, this practice proactively helps to ready the next generation of instructors.

NA graduates who join the Pathway usually need to take 1 to 2 years of nursing prerequisite courses, for example in anatomy and physiology, chemistry, microbiology, and pharmacology. After completing these courses, they may advance along the Pathway to begin training in an associate level nursing program with our sister college, Kapi'olani Community College (KCC), where space is offered to Pathway students.

Step 4: Expand Partnerships and Secure Funding

Partnerships were expanded to include more community health agencies and programs that provide students and

graduates with volunteer opportunities and entry-level jobs. A key "new" partner was KCC, which offers a 2-year RN degree. After many discussions, KCC leaders agreed to modify its nursing entrance requirements, deemphasizing GPA in favor of Pathway students' ability to demonstrate commitment to collective responsibility (e.g., through work experience as an NA, volunteer service in health and to the Pathway program, and leadership in student governance). GPA becomes a secondary criterion, with a 3.0 minimum for Pathway students compared with 3.8 GPA for other applicants. With an agreement with KCC to pilot the modified admission criteria, we were able to secure grant funds to support ten students enrolling in prerequisites and nursing courses in 2009. Based on good outcomes in the 2009 pilot cohort, KCC agreed to extend the test period through 2012.

Funding. To obtain funding for the Pathway program, we approached organizations with a mission to improve Native Hawaiian and minority health, well-being, education, and income, including the state of Hawai'i's Office of Hawaiians Affairs, the Kamehameha Schools, Alu Like, Inc., and The Queen's Medical Center. Between 2007 and 2009, \$815,000 was raised to support Native Hawaiian and other underrepresented students in the Pathway program. Funds have been used to cover tuition, books, uniforms, and certification costs. WCC also supports the program by covering faculty, staff, and most program supply costs. Funders also became partners, visiting the program at least annually and engaging with the AP to review evaluation findings.

Step 5: Evaluate

In the first 3.5 years, (July 2007 to December 2010), 150 students enrolled in NA training, and 135 students (90%) graduated and were certified (Table 2). Of the 135, 77 (57%) transitioned to higher education, and 79% transitioned to jobs that offered health insurance (20% were in both groups). Of the 77 entering higher education, 33 (43%) aimed for a degree in nursing. So far, 16 (48%) of the 33 have been accepted into the KCC nursing program, and 2 of these have secured their LPN and 2 have secured their RN. In addition to quantifiable gains, students voiced increases in cultural pride and self-esteem in program surveys and demonstrated increases in health knowledge.

Evaluation findings are used to improve the program.

For example, of the eight NAs who entered the KCC nursing program in 2009, five (63%) did poorly. Areas of weakness in NA students included a poor grasp of human diseases, medical math, and medical terminology, as well as poor critical thinking and study skills. The AP met with students, funders, and KCC instructors to explore solutions. Three RN colleagues volunteered to design and teach a *Preparatory to Nursing* course for NA graduates progressing along the Pathway. This course is taught for 2.5 hours a week, and students spend 30 minutes on each of the five areas. This design was intended to address a concern of KCC instructors that Pathway students were not managing time well, namely, they were focusing too much time in one subject while falling behind in other areas. Based on student feedback, a segment on pathophysiology was added in 2010.

The prep course uses NCLEX-RN practice examinations to assess gains in knowledge. Students must score 70% on practice examinations to transition to the KCC Nursing program. In readying themselves for admission to KCC RN training, the second cohort of nine students took the prep course. Initially, only six passed and transitioned to KCC; three were retained at WCC to continue in the Prep course. In the next 6 months, two more students transitioned to RN training, and one student withdrew.

Step 6: Develop a Sustainability Plan

At this time, the Pathway program is dependent on grant funds. It is hoped that Pathway successes will convince funders to continue their investment. A fund was established through the UH Foundation to accept private donations. The AP also hopes that Pathway graduates, once they secure living-wage jobs, will agree to contribute money as well as volunteer hours to the program.

The AP measures sustainability in other ways. The purpose of the Pathway program is to prepare Native Hawaiian and other underrepresented students to sustain themselves through living wage jobs and in the roles of healer, educator, and leader. In keeping with this goal, students and graduates meet monthly to sustain the Pathway through student governance. The students have created program bylaws, elected officers, and formed several committees—program promotion (working with WCC’s marketing department), fundraising, community partnerships, and volunteer service scheduling—

to manage various aspects of Pathway business. Students have helped by presenting information about the program at college and community meetings. Students are trained to closely track their activity and document achievements and contributions in their *résumés*.

Because no formal graduation ceremony is sponsored for students in vocational training, the Pathway students developed their own ceremony. Thus, they coordinate, fund, and host their own graduation *lū’au* (feast), complete with hula and ‘ukulele playing. WCC supports this event by printing invitations and donating space and labor. Although only ten students graduate from each 8-week NA course, the graduation *lū’au* is attended by more than 100 family and friends, some traveling from the continental United States to witness the first family member to complete a college program. The *lū’au* also provides an opportune time to talk to extended family members about the importance of the Pathway community, engendering their support of graduates.

DISCUSSION

Participation of community partners was key to developing the successful community college-based Pathway Programs to help marginalized and other underrepresented students move

Table 2. Student Enrollment and Progression Through the Pathway Out of Poverty Program, July 2007 to December 2010

	Number	Denominator	Percent
Enrolled	150		
Completed NA training program	135	150	90
Transitioned to higher education	77	135	57
Transitioned to jobs	79	135	59
Transitioned to Pathway to Out of Poverty training	33	77	45
Transitioned to associate degree in nursing	16	33	48
Graduated with LPN degree	2	16	13
Graduated with RN degree	2	16	13

from low-wage to living-wage jobs and improve their long-term health outcomes. The AP included a range of members, from students to administrators, all with equal voices. New partners were identified as the program developed, including partners from agencies providing education, funding, and job placement.

Social justice programs, like the WCC Pathway Out of Poverty program, need to work on multiple fronts, addressing education, employment, healthy-living knowledge, and cultural pride. Broad engagement of stakeholders can build support for such programs and ensure that they “fit” the culture of the individuals it aims to serve. Building such a program requires creative funding and extensive partnerships with committed leaders. Volunteer contributions from students and community partners can strengthen program capacity to meet goals. Our experience shows that Pathway students increase their

skills and confidence when made responsible for the program and all its participants, as well as for their own learning.

We found, however, that funding such interventions can be challenging. Most national funding resources are single-focused, for example on a specific disease (e.g., cancer) or a specific solution (e.g., education). The AP had more success securing funds from entities that shared our mission to improve the well-being of Native Hawaiians than from research funders.

Next steps are to strengthen the evaluation system to better capture changes in healthy-living knowledge, health outcomes, and cultural pride. We also will follow students over time to examine long-term changes in their employment, income, and health status. It is our hope that the individuals who complete the Pathway and become RNs will experience multiple benefits and continue as partners in support of this program.

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