Issues Central to the Inclusion of Hawaiian Culture in K–12 Education

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Curriculum for Hawaiians that integrates facets of Hawaiian culture has evolved during the past 30 years. This article includes a theoretical perspective on the work, provides an overview of these initiatives as program models, proposes a framework identifying program aspects common to the models, and identifies challenging questions that are inherent in the work to include Hawaiian cultural content and pedagogy in curriculum for K–12 learners.

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The development of effective and relevant education for Native Hawaiian learners has been a focus of educators since the late 1970s (Kawakami, 1999). In the past 30 years, various initiatives have addressed the integration and infusion of Hawaiian culture into curriculum for learners from preschool through graduate school. The purpose of this article is to present a review of initiatives that incorporate aspects of Hawaiian cultural knowledge into educational programs. The article begins with a theoretical perspective on the importance of this work, provides an overview of these initiatives as program models, proposes a framework identifying program aspects common to the models, and identifies challenging questions that are inherent in the work to include Hawaiian cultural content and pedagogy in curriculum for K–12 learners.

A Theoretical Perspective

Support for inclusion of Hawaiian culture in educational programs may be articulated from different perspectives, all focusing on the need to develop educational programs poised to maximize effective learning for Hawaiian learners. Among the reasons for this work are concerns for the development of positive identity and self-esteem, the perpetuation of Hawaiian values, the revitalization of the Hawaiian language and culture, the reclamation and stewardship of endangered natural habitat, and the perpetuation of Hawaiian cultural arts. In addition to these driving forces is one close to the issue of effective learning for Hawaiian students. In curriculum research conducted to identify factors necessary for Hawaiian learners, Kawakami and Aton (2001) surveyed individuals who had been identified by their community as successful educators of Hawaiian students. The results of this study pointed to two factors for effective learning by Hawaiian students: (a) learning that is experience based, and (b) learning that takes place in authentic environments. This concept of the interaction between learner and context is not new. The idea of the learner being influenced by the environment not only is central to Hawaiian perceptions of learning but is articulated by writings on constructivism, social learning theory, and critical pedagogy (Vygotsky, 1978; Wink, 2000).

Hawaiian education is clearly connected to the learning environment (Native Hawaiian Education Council, 2002). Social constructivist learning theory described in the work of Lev Vygotsky (1978) provides a useful theory for understanding the

dynamics of that interaction. "In social constructivism, learning is not seen only in terms of the individual. Rather, learning is seen in terms of the interactions of the individual with other people" (Au, Carroll, & Scheu, 2001, p. 12). Learning is viewed as holistic and embedded within a social and cultural context, much like the connections to Hawaiian values, identity, and place that are core components of many Hawaiian programs. Vygotsky (1978) pointed to the impact of the social world around the learner and identified the "zone of proximal development" as the environment where learning takes place. This zone represents the "difference between the child's actual level of development and the level of performance that he achieves in collaboration with the adult" (p. 209). Education experiences within this zone are critical to any learner because below the zone, task completion is too easy and the child will not learn anything new. Above that zone, the child meets frustration and similarly will not learn. Providing experiences within that zone is critical for effective and engaging education. Learning occurs in a specific situation and changes from moment to moment as interactions among environmental conditions, the learner, and the more competent other. This theory also describes the critical role of the adult or "more competent other." If these instances of learning are to be effective, they must be guided by a more competent other, a more experienced peer, a *kumu* (teacher), or a *kupuna* (elder).

In his book, *Teachers as Cultural Workers: Letters to Those Who Dare to Teach*, Freire (1998) wrote about the learning of teachers:

> Their learning in their teaching is observed to the extent that, humble and open, teachers find themselves continually ready to rethink what has been thought and to revise their positions. Their learning lies in their seeking to become involved in their students' curiosity and in the paths and streams it takes them through. (p. 17)

Freire exhorted teachers to be reflective about their practice and to focus on engaging learners by honoring the learner's own curiosity and by making learning useful and purposeful within the sociocultural environment. This perspective points effective teachers to focus instruction within their students' zones of proximal development while becoming aware of their own (teachers') learning during

the process. The implications of the work in Hawai'i, as well as by the learning theorists, point to the need for teachers trained in knowing how to develop engaging, dynamic learning opportunities that are enriched by the cultural context of the learners. Commentary on this type of learning that is alive in the moment is described by Wink (2000) in her book on critical pedagogy. It does not apply to "teacher-proof" scripted curricula designed and developed far from the context of Hawai'i. It also does not describe decontextualized curriculum that ignores the richness of students' real lives and the time and place of the culture in which they live.

The challenge is then to determine models of Hawaiian education that are engaging for students within a variety of educational and institutional contexts to accommodate and support effective learning for all Hawaiian students. In addition to K–12 curriculum and programs, the challenge also includes the development of skilled teachers to implement these programs.

Innovative Models in Hawaiian Education

A number of programs in both English and Hawaiian language media have been designed to acknowledge the critical educational value of Hawai'i's culture and language. In this section, programs are described (generally in chronological order) as models along a continuum of change from the status quo of Western educational institutions. The section proposes aspects common to each of these programs. While all of the programs share the common goal of educational success for Hawaiian learners, each program was also grounded in specific purposes that utilize various strategies for program design. Programs are described in terms of the institutional contexts in which they operate, the medium of instruction, content focus, pedagogical style, and perspectives on data and accountability.

The Kamehameha Elementary Education Program

In the 1970s, the Kamehameha Schools pioneered the first interdisciplinary research effort to design curriculum specifically for Hawaiian learners. The Kamehameha Elementary Education Program (KEEP) was established on O'ahu to

develop an effective elementary reading curriculum for Native Hawaiian students. Curriculum research and development was conducted in a laboratory school and disseminated to public schools in communities with high percentages of Hawaiian families on the islands of O'ahu, Kaua'i, and Hawai'i (Darvill, 1981).

At that time, Native Hawaiian students' lack of academic achievement was attributed to a mismatch between home and school culture. A multidisciplinary team of researchers, educational psychologists, cultural anthropologists, linguists, and teachers worked on the development and dissemination of the curriculum. The resultant curriculum was based on a "least change" model (Jordan & Tharp, 1979, p. 277); that is, it was designed to bring Hawaiian students to parity with other public school students by raising their achievement (on standardized achievement tests) with as little disruption to the existing public education system as possible. Jordon and Tharp described the benefits of the least change model as (a) avoiding having the children culturally changed in values, attitudes, social relationships, and the like, and (b) being the most acceptable to the public schools, which KEEP hoped to influence. The KEEP program provided modifications to the daily setup and cleanup of the classroom; classroom organization to facilitate peer teaching interactions; participation structures in instructional settings to encourage focused discussion of text ideas; and small-group comprehension lessons to relate basal reader textbook contents in meaningful ways to the lives of students. These modifications to pedagogy and classroom organization were designed to decrease the mismatch of home and school culture for these students.

These efforts were accompanied by substantial in-service teacher training and on-going collaborative curriculum refinement to establish learning communities among the teachers at the public schools implementing the program. KEEP provided a model for recasting literacy curriculum, instruction, and assessment within a classroom setting and included a support network for professional development and renewal (Asam et al., 1993). The creation of a community of learners among teachers was a critical component of the program. The social context of the program became the setting for developing not only student competencies but also teacher knowledge, skills, and professional dispositions.

While KEEP operated as a partnership between the Kamehameha Schools and the Hawai'i Department of Education, change was limited to classroom organization and pedagogy. A student assessment system was based on data from norm- and criterion-referenced tests. Hawaiian language and cultural practice were not a part of this early initiative.

Kupuna Program and Hawaiian Studies in the Hawai'i Department of Education

In the early 1980s the Hawai'i Department of Education took steps to include Hawaiian culture and language in the existing structure of the public schools. In 1978, the Constitution of the State of Hawai'i was amended to include Article X, Section 4:

> The State shall provide for a Hawaiian education program consisting of language, culture and history in the public schools. The use of community expertise shall be encouraged as a suitable and essential means in furtherance of the Hawaiian education program.

The 1978 amendment to the Hawai'i State constitution fostered the idea that the students of Hawai'i are in need of a consistent and sequential program that develops an awareness of and appreciation for their state and its heritage. In the 1979–1980 school year, the Queen Lili'uokalani Children's Center sponsored the Hawaiian Language program in the Windward school district on O'ahu. This program transitioned over to the Department of Education in 1980–1981 as its first pilot program in the Windward O'ahu District. Native-speaking *kūpuna* (elders) were chosen to enter into Department of Education public school classrooms because they were *mānaleo* (native speakers). The Hawaiian Studies program was implemented based on the primary importance of Hawaiian language study as an essential component in studying and understanding Hawaiian culture.

> The goal of the language component is to provide all students with exposure to the proper pronunciation, enunciation and phrasing of Hawaiian names of people and places, expressions and songs that play such an important part in

> the lives of all people living in Hawai'i. The emphasis of the Hawaiian Studies program was to help students develop knowledge, understanding, appreciation and internalization of fundamental aspects of Hawaiian culture, including values, concepts, practices, history and language which will be of value to people trying to live happy, productive and culturally enriched lives in harmony with our island environment. (Office on Instructional Service, 1981)

The pilot project began at Blanche Pope, Waimānalo, and Hau'ula elementary schools on Windward O'ahu. These schools were selected because at the time they had the highest percentage of Hawaiian enrollment in the district. The kūpuna were to help enrich the program, and the Department of Education teachers were supposed to guide and implement the Hawaiian Studies curriculum. In this effort, language and cultural experts were able to provide children with small doses of exposure to Hawaiian culture and language within the context of the public school system. While these periods of culture and language instruction continue to be available to students in the public schools, the programs did not exert enough pressure to effect substantive change to the institutional structure or the culture of schooling.

Hawaiian Language Immersion Program

In 1983, a small group of Hawaiian-speaking educators took the daring step of opening a preschool on Kaua'i where the last community of native-speaking children could be mixed with English-speaking Hawaiian children to be educated exclusively through Hawaiian language. This type of school was called a Pūnana Leo, "nest of voices" or language nest ('Aha Pūnana Leo Web site, http://www.ahapunanaleo.org/MU.htm#Beginnings). This was the origin of the Hawaiian language immersion movement.

The next step in increasing access to Hawaiian language and culture took place in 1986, with the first Hawaiian language immersion program, Ka Papahana Kaiapuni Hawai'i, which began in two Hawai'i Department of Education schools (Office of Instructional Services, 1994). The program's goal was and continues to

be the revitalization of the Hawaiian language in the K–12 institutional setting by "providing quality education based on knowledge of Hawaiian language and culture as the foundation upon which individuals become responsible, sensitive, and productive adults who contribute significantly to all levels of Hawai'i's community" (p. 4). Program goals are to assist students in developing high levels of proficiency in comprehending and communicating in the Hawaiian language, developing a strong foundation of Hawaiian culture and values, and becoming empowered individuals who are responsible and caring members of the community.

The first cohort of students in Hawaiian language medium education completed the pre-K to 12th-grade program in 1999. This remarkable feat has created an educational model for Hawaiian education that operates a statewide alternative parallel to the English language medium public education system. This system incorporates Hawaiian language, culture, and values. Unlike the KEEP work, the 'Aha Pūnana Leo created a Hawaiian language context within the Department of Education. This might be viewed as a program closer to the "most change" end of a continuum of models of change within the context of public education. It is designed to grow a contemporary Hawaiian language educational system within the established public school system.

Public Charter Schools

In 1999, Hawai'i legislators passed a bill for the establishment of charter schools. Hawaiian communities have become active in pursuing opportunities to obtain grants and funding for community-based initiatives to establish and sustain charter schools (Kawakami, 1999). Subsequently, there has been an increase in programs in both English and Hawaiian language environments targeting Native Hawaiian students. Charter schools focusing on Hawaiian ways of knowing and the Content and Performance Standards of the Hawai'i Department of Education have begun to serve students as part of Hawai'i's New Century Public Charter Schools (Hawai'i Department of Education, 2000). In 2002 Senate Bill 2662 was passed, making it possible for nonprofit organizations to collaborate with the Department of Education in the operation of public charter schools and to provide new educational expertise in curriculum development, educational and cultural materials, equipment, support for professional development, and much needed additional funding (Pauahi's Legacy Lives, 2003). In 2003, Kamehameha Schools

established the Hoʻokākoʻo Corporation to provide expertise and resources for charter schools interested in working in partnership with Kamehameha Schools.

A majority of the Hawaiian-focused charter schools build on a foundation of Hawaiian language and culture to provide learning opportunities in Hawaiʻi's natural environment (Nā Lei Naʻauao Web site, http://home1.gte.net/laara/mission.html). These schools, such as Hālau Kū Māna, Ke Ana Laʻahana, and Kanu o ka ʻĀina, are able to provide students with access to core curriculum focusing on traditional Hawaiian content and pedagogy. These efforts may implement culturally realistic themes and unit activities based on stewardship of fishponds and other culturally significant areas, as well as the construction of *waʻa* (canoes) for the study of celestial navigation and voyaging. These rich contexts provide culturally meaningful and relevant activities for teaching to national standards and the Hawaiʻi public schools' standards for educational attainment.

Other K–12 Hawaiian Culture and Language Programs

Over the past 20 years, various groups have developed programs that provide Hawaiian culture and language learning for students and communities outside of formal educational institutions. The Polynesian Voyaging Society (with two waʻa—*Hōkūleʻa* and *Hawaiʻiloa*) and Nā Kālai Waʻa Moku o Hawaiʻi (with the waʻa *Makaliʻi*) provide opportunities to learn about science and voyaging traditions, as well as issues of current environmental and cultural impact. Kaʻala Farm in Waiʻanae, Oʻahu, has a long history of educational programs implemented through community access and stewardship of the land, cultural wealth, and language of their *ahupuaʻa* (land division reaching from the mountain to sea). The Kamehameha Schools has initiated a number of land-based partnerships that will act to preserve and restore balance to Kamehameha lands and provide natural classrooms for educational programs (Hannahs, 2003; Learning from the Sea, 2003).

For over 10 years, the federal government has funded the University of Hawaiʻi at Hilo's Nā Pua Noʻeau, Center for Gifted and Talented Native Hawaiian Children (NPN) through the Native Hawaiian Education Act (NHEA). This center provides supplemental programs for students interested in learning about careers through culturally grounded enrichment experiences (Nā Pua Noʻeau, 1999). An NHEA curriculum development grant provided support for the identification of a curriculum

framework used by NPN. That curriculum was found to be grounded in Hawaiian cultural values and included identity, protocol, place, and artifacts (Kawakami & Aton, 1999). It was derived from interviews with respected Hawaiian educators and observations of NPN programs as they were implemented across sites on different islands. NPN's institutional advantage was that it was able to operate outside of the restrictive environment of a formalized K–12 educational institution while being based at a university. Thus the program was implemented consistently in authentic environments and employed teachers and community members to lead experience-based service learning projects honoring and incorporating the places and people of the Hawaiian Islands (Kawakami & Aton, 2001).

These projects have been successful in bringing together the *'āina* (land) and *kai* (sea) as the contexts for learning. These models of Hawaiian education operate in tandem with the more traditional educational institutions and offer intense, focused, cultural learning experiences that have lifelong impact on program participants and their communities.

Teacher Development: Beyond K–12 Education

Preservice Teacher Development

Preservice teacher education plays a critical part in the development of future educators for Hawai'i. Teachers who are trained to become teachers exclusively in institutional contexts bound by Western views of learning will become teachers who perpetuate those views. Teacher preparation programs that include cultural learning as part of their curriculum must address accountability issues of both Hawaiian culture and mainstream society, to meet criteria of the Hawai'i Teacher Standards Board that licenses new teachers. The programs described below provide future teachers with rare postsecondary educational experiences that acknowledge the cultural context of Hawai'i and its communities.

As early as 1990, the Kamehameha Schools began to address preservice teacher education through a partnership with the University of Hawai'i at Mānoa in the development of Preservice Education for Teachers of Minorities (PEToM). This effort is described in an article by Picard and Young (1993) as a multidisciplinary, coordinated approach to preservice teacher education

focused on "walking the talk" and incorporating pedagogy relevant to minority learners. The curriculum focused on bridging the gap between educational research and the practice of preservice teacher development. A significant contribution of this program was the linking of direct experience in classrooms with reflection during the development of preservice teaching skills.

> Theories take on meaning as they provide frameworks for student observations and teaching experiences. Reflecting on the consequences of practice leads to modified theory—theory that is informed by practice. The combination of theory, practice, time to reflect, self-study, and cooperative learning is rarely in more traditional pre-service programs. (Picard & Young, 1993, p. 35)

While this effort did not include Hawaiian language and culture directly in instruction, it did implement pedagogy based on research on minority learners within a university setting that was extended into real classrooms in Hawaiian communities. Although this might appear to be conservative in the current educational milieu, it was groundbreaking work at that time.

Ka Lama o ke Kaiāulu's Education Academy and Education Cohort, based at the College of Education at the University of Hawai'i at Mānoa, currently sets the pace with its fifth cohort of preservice teachers. It has created and implemented an elementary teacher education cohort in which the curriculum and location of preservice courses are linked to schools and communities on the Leeward coast of O'ahu (Au & Maaka, 1999). Many of the graduates of this program seek and gain employment in the partner schools, thus providing teachers who have knowledge of and relationships to the communities they serve.

The University of Hawai'i at Hilo's Ka Haka 'Ula o Ke'elikōlani College of Hawaiian Language established a teacher education program to train teacher candidates for licenses to teach in Hawaiian language environments from kindergarten to 12th grade (Kahuawaiola Web site, http://www.olelo.hawaii.edu/dual/orgs/kahuawaiola/). At the University of Hawai'i at Mānoa, the first cohort of Kaho'iwai provides teacher training for individuals at charter schools and those committed to working in schools focusing on Native Hawaiian students, their culture, and

language (K. A. Hewitt, personal communication, October 10, 2003). Common to these teacher development programs are links to Hawai'i's communities and participation in learning through practice of Hawaiian traditions and stewardship of Hawai'i's places.

In-service Teacher Development

In-service teacher development is often the responsibility of individual schools and districts. Given the current push for accountability in terms of student achievement on standardized tests, educational institutions have little time or resources to implement teacher development initiatives that include strategies to integrate cultural knowledge into curriculum. The need for ongoing teacher development in the area of relevant, engaging initiatives linked to the culture of these islands still exists but takes a back seat because of political and economic realities of the Western perspective.

Nevertheless, in 2001, the National Aeronautical and Space Administration (NASA) funded minority university outreach programs to focus on the integration of culture and space science education. The New Opportunities through Minority Initiatives in Space Science (NOMISS) grant was awarded to the University of Hawai'i at Hilo (UHH) and provided resources to modify the existing UHH astronomy curriculum to include elements of cultural knowledge related to Mauna Kea (NOMISS Web site, http://www.hubble.uhh.hawaii.edu). It also provided professional development opportunities for K–12 teachers focusing on Hawaiian cultural traditions and modern space science. These teachers, in turn, develop curriculum for students in their schools and classrooms based on the continuum of knowledge, skills, and dispositions encompassing culture and science. This approach to the integration of culture into curriculum is constrained by the school context in which the teacher operates, as well as the classroom teacher's interest and abilities to introduce culturally grounded learning to their students. A primary function woven throughout the NOMISS classrooms is the development of students' ability to observe in the cultural sense as well as the Western scientific sense. NOMISS teachers in the early grades expose their students to Hawaiian values and protocol as they develop awareness of the sea, earth, and sky from both Hawaiian and scientific views. In the fourth and fifth grades, Polynesian migration, voyaging, and early astronomers are covered. In the middle grades, the most culturally inclusive curriculum, in a Department of Education school, was

based on a year-long voyaging theme. The year included presentations by space scientists and noninstrument celestial navigators, field trips to the voyaging canoe *Makali'i,* a mock voyage, and *kīhei* (cloak used during protocol) ceremony. Thus, NOMISS teachers developed curriculum content for the implementation of culturally grounded pedagogy, empowering them to negotiate its implementation within their curricula.

Profiles of Education Programs

This article could not have been written 20 years ago. At that time, there were too few programs in place to have provided information for this type of review and analysis. The following aspects of programs are proposed for consideration:

- institutional contexts in which they operate
- medium of instruction
- content focus
- pedagogical style
- perspective on data and accountability

On the continuum of instructional contexts, "least change" models slip Hawaiian education into the existing structure of schools and educational bureaucracy. "Most change" models create their own institutional contexts by utilizing existing cultural environments. The medium of instruction in a status quo model is English. On the other end of the continuum, Hawaiian language is the medium of instruction. The content focus varies from structured curriculum content based on national standards, devoid of Hawaiian content, to the other end of the spectrum with curriculum content based on the *Nā Honua Mauli Ola: Hawai'i Guidelines for Culturally Healthy and Responsive Learning Environments* articulated by the Native Hawaiian Education Council (2002) and cultural work necessary to the Hawaiian community in each location. Status quo on the continuum of pedagogical style is characterized by instruction separated from the context of the learning environment. It is exemplified by scripted teachers' guides and virtually "teacher-

proof" curriculum. On the opposite end, teachers characterized by high cultural competence ("more competent than others") are essential because instruction is specific to the moment; who the learners are (genealogy), where they are (historical and cultural relationship to place), and when learning occurs (moment-to-moment events in the cultural context). Teaching becomes specific to the place and the societal context, utilizing community locations and cultural resources. Finally, each program applies assessments aligned with its educational philosophy and political obligations. Achievement data might be standardized test scores as well as anecdotes of effectiveness rendered by a committee of community members and kūpuna. A least change model would provide assessment and evaluation data on criterion- and norm-referenced standardized tests. Models of "most change" may be multifaceted owing to political realities and funding requirements. In addition to formal test results, evaluation of students' progress may be demonstrations of mastery of content through projects and performances. In reality, political and societal mandates often call for accountability data based on non-Hawaiian cultural views of knowledge. This brief description of the aspects considered in Table 1 represents a tentative means of framing the discussion that is critical to understanding strategies for program development in Hawaiian education.

Table 1 illustrates this framework with three programs I have worked in. KEEP, NPN, and NOMISS are placed at points on the continuum in an effort to begin applying the framework to develop profiles of Hawaiian education programs. These program profiles may then be used to facilitate the identification and discussion of strategies used to address challenges of including cultural learning in curricula. Programs with different profiles increase the variety of options available to meet the needs of the diverse Hawaiian community with varying goals for their children and varying degrees of familiarity with Hawaiian language and cultural practice.

In a least change model, curriculum constraints limit the extent of integrating cultural elements by the very nature of institutional structures and policies. Curriculum goals and assessments, as well as pedagogy and instructional materials, are often set for mainstream cultural standards and norms. With the early work of KEEP, adaptations were limited to classroom organization, interaction patterns, and instructional techniques. Hawaiian culture and language were not a focus of the curriculum content, although once a week Hawaiian language and culture specialists did teach the children. The interdisciplinary researchers of KEEP succeeded in creating a classroom environment that included elements and functions that were present in local homes without introducing the actual language of the

Table 1. Framework for KEEP, NPN, and NOMISS

Least change model	◄• • • • • • • • • • • • • • •►			Most change model
Context: Western educational	KEEP	NPN NOMISS	NOMISS	Context: Hawaiian environment cultural
Medium of instruction: English	KEEP NPN NOMISS			Medium of instruction: Hawaiian
Curriculum content: Focuses on commercial instructional materials and content	KEEP NOMISS	NPN NOMISS		Curriculum content: Focuses on Hawaiian cultural knowledge, skills, and dispositions
Pedagogy incorporates culturally grounded instruction	KEEP	NPN NOMISS		Pedagogy follows traditional cultural instruction
Assessments goals tied to state standards and/or standardized tests	KEEP	NPN: not applicable NOMISS: not applicable		Curriculum tied to Hawaiian standards
Data: Curriculum is "data-driven" in Western educational sense	KEEP	NPN NOMISS		Data: Curriculum is "values-driven" and includes cultural/spiritual beliefs portfolios and hōʻike (performances)

Note: KEEP = Kamehameha Elementary Education Program; NPN = Nā Pua No'eau, Center for Gifted and Talented Native Hawaiian Children; NOMISS = New Opportunities through Minority Initiatives in Space Science.

land and traditions of ancient Hawaiian culture.

Both NPN and NOMISS were placed in unique positions because of their affiliation with the university. The administration of both projects fell within the domain of the university system, but program implementation for students (NPN) and teachers (NOMISS) often took place off campus in natural environments at cultural sites or meeting places. In both of these programs, the medium of instruction was primarily English, with some Hawaiian language used in cultural protocols. The content focus of both programs was cultural tradition as a foundation for learning about modern-day applications. NPN sought to increase student aspirations and interest in careers, whereas NOMISS sought to increase the inclusion of Hawaiian cultural knowledge and practice as the foundation for studying modern space science. The pedagogy in both programs was a blend of academics and cultural learning, with many of the learning activities located in community locations with community resource people as leaders and teachers. Although data for program funding purposes required numbers of teachers and students and program evaluations, specified student learning standards did not guide the accountability data. Feedback from the participants in terms of reflections, tracking of impact on the long-term outcomes of postsecondary schooling, and implementation of culturally integrated curriculum constituted relevant data for program leaders.

Although KEEP, NPN, and NOMISS were placed close to the "least change" side of the continuum, the model should also accommodate more traditionally Hawaiian settings, closer to the "most change" end of the educational spectrum, such as Hawaiian language immersion classes. These programs focus on learning cultural practices and skills within the context of authentic sociocultural settings. For example, to learn to raise and lower the sail of the voyaging canoe, students participate in doing the procedures under the watchful eyes of the captain and experienced crew. The "more competent others" are present to cue the novices and step in if safety becomes an issue.

Conclusions

Diverse models of Hawaiian education provide the necessary continuum of educational experiences for the various values and preferences of Hawai'i's people. At the center of this work is the dilemma: How can the integrity of Hawaiian cultural practices be preserved within an institutional education context that is grounded in different views of the world? Between the ends of the spectrum of Hawaiian education, certain issues need to be addressed as realistic learning opportunities are provided for communities. The following issues and questions are proposed as points for discussion in the process of creating curriculum inclusive of Hawaiian culture, language, and values:

1. Hawaiian values and spirituality are integral parts of life and learning. How can values-based education be made available to the majority of Hawaiian students currently enrolled in the Hawai'i public school system?

2. Hawaiian language portrays the deep structure of culture, defining critical relationships among elements of life. Hawaiian language immersion environments exist on one end of this continuum and English medium instruction on the other. How can a continuum of educational contexts featuring varying levels of Hawaiian language and culture be realized?

3. Laws and policies governing educational quality are grounded in a tradition for the most part absent of Hawaiian cultural content, pedagogy, and beliefs. In general, accountability, sanctions, and rewards are unilaterally implemented by mainstream agencies. How can and should programs that include culturally relevant learning opportunities, assessment, and performances address designated levels of adequate yearly progress as measured by test scores?

4. Pedagogy that follows experience-based learning in authentic environments and tasks is integral to culturally grounded learning.

Given time restrictions of the school day and year, as well as restrictions on venturing beyond the physical environment of the school campus, how can cultural learning be accomplished on a continuing basis to include stewardship of cultural environments on land and sea?

5. Cultural learning is personal and context driven. Requirements for teacher preparation and licensure have been recently circumvented by a policy that values kūpuna in the schools. How will other cultural experts be placed in positions to provide the critical learning of generations past?

Recommendations

Educators in present-day Hawai'i are faced with many opportunities to study and understand the role of "more competent others" as reflective practitioners. Hawai'i is positioned to benefit from the work of past decades and the courageous individuals and communities who created the educational options available today. They have stood for the traditions of these islands and the importance of those traditions in the education of its people. Initiatives to develop these options have evolved independently of each other, resulting in the spectrum of educational choices available today. Now is the time to benefit from the lessons learned by the developers of Hawaiian education in the late 20th century as we are poised at the beginning of the 21st century.

Further research on the questions posed above and collaboration in analysis and utilization of the data are critical. Partnerships in curriculum development and teacher development are crucial in assuring that the knowledge, skills, and dispositions of Hawaiian culture are a vibrant and secure core of the educational curriculum across these islands. The questions posed above need to be answered through partnerships based on the common goal of developing a rainbow of educational options for Hawai'i's learners and for the future.

E lawe i ke a'o a mālama, a e 'oi mau ka na'auao.

> He who takes his teachings and applies them increases his knowledge. (Pukui, 1983, #328, p. 40)

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